Character Education Values in Web-Based Learning Media in Indonesian History Subjects

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ABSTRACT: In the current digital era, character education is considered very important for the younger generation. This is because technological advances can affect the way of thinking and acting of the nation's golden generation. The application of character education can be integrated into learning in schools, for example in Indonesian history subjects. The purpose of this research is to produce a web-based Indonesian history learning media product that integrates character education. The development model used in this research is the ADDIE development model, with a qualitative descriptive approach.

The ADDIE development model consists of analysis, design, development, implementation, and evaluation. At the evaluation stage, it produced a positive response and, in several aspects, suggestions were made for obtaining learning media. The results of product feasibility reviews by design experts and materials experts were 84.1% and 93.3%, respectively. A peer trial, which resulted in an 85.6% response, After that, the media products produced a good response with 79.3% for individual groups, 77.9% for small groups, and 86.6% for field trials. Therefore, it can be concluded that learning media products are feasible to be used as learning media for learning Indonesian history at the secondary school level.

KEYWORDS: Character Education, Web-Based Learning, Indonesian History Subjects

I. INTRODUCTION

Character education is considered very important to be applied in the digital era as it is today. This is because the younger generation cannot be separated from the use of technology that influences the way they think and act. The importance of character education for students is in line with the many problems that occur in Indonesian society due to the decline in character values. The shift in social feelings to asocial, lack of independence, and lack of a sense of responsibility (Wisada et al., 2019) are examples of declining character values that occur in students.

In the world of education, especially in Indonesia, character education should be designed and implemented in order to shape and strengthen the nation's character (Hartono, 2017). So, educational institutions are not only a place for the transfer of knowledge but also a place for the formation of character, attitudes, behavior, and leadership skills of students. It is hoped that education can reflect some of the culture and character of the Indonesian nation and cultivate it for all future generations to realize the character of the Indonesian nation through education. Learning Indonesian history can train students to think critically and deeply so that they are able to apply all the values that exist in every historical event that is considered important for the formation of the character of students. The results of Sirnayatin's research (2017) show that there is a positive contribution between learning Indonesian history and the character of students. So, in every lesson in Indonesian history, it is necessary to determine the character values that you want to develop based on the level of needs and development of students, various learning methods that are capable of encouraging and motivating students to be better, learning media, and learning resources that are appropriate for students' characteristics.The teacher's role in learning is as a facilitator, tutor, and motivator and cannot be done haphazardly in the learning process. In the learning process, theoretical knowledge, learning principles, and attitudes should be attached to the teacher. So that in the learning process, they can choose the right action to improve the way students learn (Achmad Noor Fatirul; Djoko Adi Walujo, 2020).

The COVID-19 pandemic in Indonesia has had a huge impact on the education system in Indonesia. The implementation of policies such as physical distancing ultimately becomes the basis for the implementation of online learning (Suni Astini, 2020), which is the only option that must be carried out so that the learning process continues. Learning media is one aspect that plays an important role in effective and efficient learning activities, although there are other aspects that have a role in learning success, such as models, strategies, and learning methods. Learning activities are carried out under the control of the teacher and use learning media, so that the media becomes a component that is considered very important (Khaidir, 2016). Choosing the right learning media during the current COVID-19 pandemic is considered very helpful for producing effective and efficient learning. One of the learning media that can be used by Indonesian history teachers to support online learning is web-based learning media. The rapid

development of technology today, especially in the fields of education and learning, makes teachers have to create a learning environment that can meet the needs of all students (Wardani, P., A. et al., 2019). Web-based learning media is an innovation that has a very large contribution to changes in the learning process. The learning process is no longer just listening to material descriptions from educators; students also carry out other activities such as observing, doing, demonstrating and others that are carried out through the internet network, so that it is possible for students to learn. Students who are active or often participate and provide comments when lessons are in progress with e-learning usually improve their understanding of the knowledge being studied (Ichsan et al., 2020). In line with Ichsan (Januarisman & Ghufron, 2016), Setyadi & Qohar, 2017), Sari & Suswanto, 2017), Rohdiani & Rakhmawati, 2017), and Uno & Ma'ruf, 2016), stated that web-based learning media are successful in overcoming the problem of low student learning outcomes and attracting or motivating students in learning.

Based on the explanation above, the purpose of this research is to produce an integrated web-based Indonesian history learning media for character education for vocational high schools. This learning media product is designed to provide alternative learning media that contains character values.

II. RESEARCH METHODS

This research refers to development research with development research steps. The ADDIE instructional development model is used for the product development process. This model includes analysis, design, development, implementation, and evaluation.

The ADDIE stages can be seen in the following scheme.
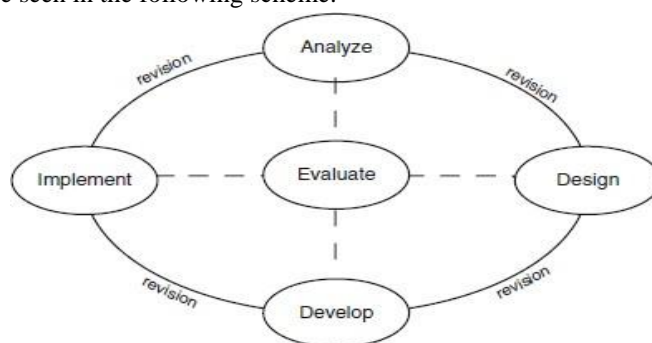
Figure 1. Schematic of the ADDIE development model

The product development carried out is shown at each step of what is done in developing the product. The purpose of product assessment is to obtain accurate data that will be used to make improvements (revisions) and to set goals for the effectiveness and efficiency of the resulting product. The trial subjects in this study were material experts, design experts, colleagues, and potential users through individual trials, small group trials, and field trials.

The instrument used in data collection in this development is a questionnaire. This questionnaire is intended for test subjects. The questionnaires needed are a material expert assessment questionnaire, a learning design expert assessment questionnaire, a peer test assessment questionnaire, an individual trial assessment questionnaire (5 students), a small group trial assessment questionnaire (15 students), and a field assessment questionnaire (30 students). This questionnaire is to describe the suggestions, opinions, and responses of the validators obtained from the criticism and suggestions sheet for the feasibility and perfection of the product developed. The data obtained from the questionnaire is qualitative data which is used to analyze the results of the evaluation of the experts through the provision of questionnaires. The categories of scores on the Likert scale are described in the following table.

Table 1. Categories on the Likert scale.

Score	Information
5	Very good
4	Well
3	Pretty good
2	Not good
1	Not very good

The validation questionnaire test was carried out by comparing the number of scores given by the validator with the ideal maximum score applied in the questionnaire. The formula used in calculating the validation questionnaire test is as follows:

$$P\ (\%) = \frac{\sum X}{SMI} \times 100$$

Character Education Values in Web-Based Learning Media in Indonesian History Subjects

Information:
P = Score Percentage
∑ = Total score
SMI = Ideal maximum score

The following is a table of validation criteria or the level of achievement used in the percentage of validity:

Table: 2. Validation criteria

Achievement Level	Qualification	Information
81% - 100%	**Very feasible**	**No revision needed**
61% - 80%	**Feasible**	**Revised as necessary**
41% - 60%	**Decent enough**	**Enough revisions**
21% - 40%	**Not Feasible**	**Revised a lot**
0 - 20%	**Not Worthy**	**Totally revised**

III. RESULTS AND DISCUSSION

A. Result

The resulting product is an integrated *web-based Indonesian history learning media* for character education that can be used by vocational high school students to study Indonesian history. This media is packaged in the form of a *website*. In its manufacture, this medium was designed using *Notepad++* and *XAMPP software*.

Web learning media in operation requires the help of a computer/laptop/*android* that can produce image (visual) and sound (audio) display devices that can be utilized by at least having *a browser* (*Google Chrome, Mozilla, Opera*, etc.) and an internet connection.

This medium is interactive. There is a menu that can be accessed as desired. The form of this media display is designed to highlight images related to the material. The presentation of the material is packaged as attractively as possible using *e-modules* made using the *FlipBuilder application*, subject matter and practice questions that will be used to measure the level of students' understanding of the teaching material.

Web-based learning media can be used in classical learning as an alternative media or teacher's tool in teaching Indonesian history material to students, or it can be used in *online learning* by using each student's Android or laptop. The interface and the results of making integrated web-based Indonesian history learning media for character education are shown as shown below.
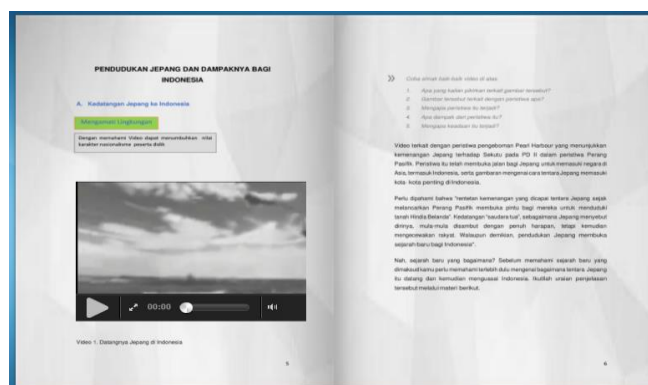

Image 1. First page view

Image 2. Lessons inside

Figure 3. The display of national hero character on the website

B. *Discussion*

Data taken from the development of web-based Indonesian history learning media integrated with character education obtained from ADDIE development steps (analysis, design, development, implementation, and evaluation)

At the analysis stage, the developer analyzes the material needs and character values that are appropriate to be integrated into the basic competencies listed in the Indonesian history syllabus for class X SMK. Character values that are in accordance with the learning of Indonesian history in the 2013 Curriculum include: nationalism values, religious values, integrity values, mutual cooperation values, and independence values. These values will be integrated into web-based learning media both in the web display and in the learning materials and assignments presented.

During the design stage, the developer looks at web media design as a web product design by making media product designs, finding interesting learning media titles, choosing texts and materials for learning sequences, and evaluating how well the media works.

At the development stage, the developer creates a product that has been designed to be a web-based learning media product that is integrated with character education and is ready to be validated by experts (materials and designs), colleagues, and groups (prospective students) to obtain input.

The last stage is an evaluation to assess the product based on suggestions from experts, colleagues, and groups of students tested to obtain input so that it becomes a ready-to-use product. Stage Before the design is tested in the form of field trials, all design products will be validated by experts, peers, individual groups, and small groups of students. In this validation, the triangulation validation technique is used, namely by involving the validation of experts, peers, and groups of students.

From the validation of the design experts, the description of the data is categorized into 3 in-depth aspects of the design, namely the web display aspect, the interactivity aspect between the display and the user, and the web presentation aspect. It is found that the total percentage is 84.1%. This concludes that the product developed is feasible and tested in individual groups. The suggestion given is that the shape of the letters and the size of the font in the display be different. At this stage, the writer makes revisions to add variations in the form of letters and font sizes in the front view of the *web*.

From the expert validation of the material description, the data is categorized into 3 aspects of deepening the material, namely the content/material aspect, the linguistic aspect, and the presentation aspect. Overall, the aspects obtained are a total percentage of 93.3%. This also concludes that the product developed is very feasible to do. Individual trials The advice given is to add pictures and videos to the description of the learning material, so that at this stage, revisions can be made to perfect the learning media.

Furthermore, from peer validation of data descriptions that were categorized into 3 in-depth aspects of design, which were categorized as content and material aspects, aspects of material and content discussion, and aspects of material presentation, it was found that the total percentage was 85.6%. developed to be suitable for individual trials.

From the individual trial, the data is categorized into 3 deep aspects: the appearance aspect, the presentation aspect of the material, and the usability aspect. Overall aspects obtained a total percentage of 79.3%. This also gives the conclusion that the product developed is feasible to be tested in small groups.

Even though it had no effect on the overall product design, which received a score of 77.5%, the researchers made minor changes to ensure that the results obtained had a more perfect design.After a small revision, it was found that in the small group trial, the percentage increased to 80%. There was a change from 68% to 80% for instrument number 3. This means that the product could be used in the next trial, which was a small group trial.

From the small group validation in the data description, which was categorized into 3 in-depth aspects of the design, which were categorized as display aspects, material presentation aspects, and usability aspects, it was found that overall aspects obtained a total percentage of 77.9%. This also gives the conclusion that the products developed are suitable for field trials. Furthermore, the feasibility of the developed learning media can be seen in table 3 below:

Character Education Values in Web-Based Learning Media in Indonesian History Subjects

Table 3. Validation results from material experts, media experts, peers, and student groups

No	Reviewer	Score (%)	Category
1	Design expert	84.1%	Very feasible
2	Material expert	93.3%	Very feasible
3	Peers	85.6%	Very feasible
4	Individual	79.3%	Feasible
5	Small group	77.9%	Feasible
6	Field	86.6%	Very feasible

After the revision was carried out, it was continued with field trials carried out on students of class X RPL 1 SMK Negeri 1 Kamal, totaling 30 people. The results of the field tests led to the final product, which is web-based Indonesian history learning media that also teaches good behavior.

In web views, material descriptions, and assignments, character values consisting of nationalism, religion, mutual cooperation, independence, and integrity are spread throughout the web. Of the five existing character values, the independent character value is the character value that appears the most on the *web*.
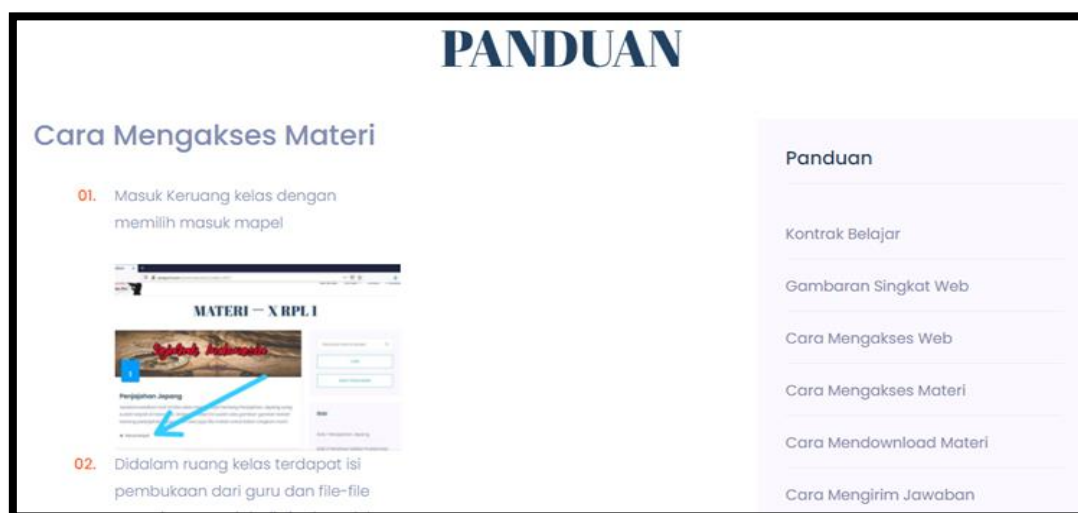

Image 4. Example of character values displayed on the site.

The value of the character of nationalism in this *web-based learning environment* is found in the image on the front of the web, learning materials, and assignments. The value of being a nationalist is that it can make people love their country and home, be proud of their country and home, be willing to sacrifice for the sake of the country and state, and put the interests of the country and state above their own and other people's.

The value of religious characters in *web-based learning media is* found in the selection of texts in learning materials. For example, religious character values are able to foster values that are in accordance with religious teachings, for example, gratitude and concern for the surroundings.

The value of the gotong royong character in web-based learning media is found in the selection of texts in learning materials. Working together can grow the character of working together in completing work or problems, fostering a sense of brotherhood and strengthening unity and integrity.

The value of independence in web-based learning media is found in the display of web usage guides that require students to learn independently how to operate the web and assignments that are carried out independently when students do distance learning. The value of independent character can train students to be responsible, have initiative, think positively, dare to make decisions, and have the ability to think critically, creatively, and innovatively.

The value of integrity in character in learning media is found in the selection of texts in learning materials and assignment activities to complete competency test exercises. The value contained in the character of integrity is that students are able to complete their responsibilities at the agreed time and are honest in their actions.

IV. CONCLUSION AND SUGGESTION

A. *Conclusion*

Development of integrated web-based learning media Character education aims to produce a learning media product that incorporates character values. The development of this learning media uses the ADDIE model, which consists of five stages, including analysis, design, development, implementation, and evaluation.

Media development is carried out through several stages of product testing, which is developed by conducting validity tests using triangulation techniques, including validation tests involving experts, colleagues, and initial responses from groups of students. The trials conducted by groups of students included individual trials, small groups, and field trials.

All validation results from individual, small group, and field trials resulted in a significant percentage, with an average percentage ranging from 70% to 90%, so the overall conclusion from the test results is that the product developed is a web-based learning medium that uses web-based learning media. Integral with character education, technology can be used as a medium in carrying out the learning process in history subjects.

B. *Suggestion*

1. The demands of the 21st century suggest that the learning process must change from a conventional face-to-face learning process to a web-based learning process.
2. The use of web-based learning media can be integrated with other characteristics such as to attract students' interest, increase students' learning motivation, and so on,
3. In history subjects, it has been proven that the use of web-based learning media associated with character education can increase pleasure and motivate students to take history subjects, so history teacher friends can use this design as a tool (learning media).
4. At other times, this research can also be developed not only web-based, but can also be packaged with learning with a blended learning model that is associated with character.
5. The hope of future research is that there will no longer be a conventional learning process, but the learning process must be packaged with a learning model that emphasizes the advancement of knowledge and information technology that is rich in online-based learning resources.
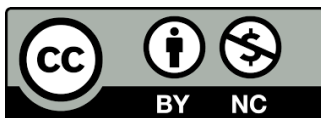
V. ACKNOWLEDGEMENTS

REFERENCES

1) Arikunto, S. (2013). Manajemen Penelitian. PT Rineka Cipta.
2) Arsyad, A. (2019). Media Pembelajaran. PT Raja Grafindo Persada.
3) Astini, N. K. S. (2020). Tantangan Dan Peluang Pemanfaatan Teknologi Informasi Dalam Pembelajaran Online Masa Covid-19. Cetta: Jurnal Ilmu Pendidikan, 3(2), 241–255. https://doi.org/10.37329/cetta.v3i2.452
4) Branch, R. M. (2009). Instructional design: The ADDIE approach (Vol. 722). Springer Science & Business Media.
5) Damiati, M., Rufi'i, R., & Danu, R. (2018). The Elaboration of Tangram Media with a Scientific Approach to Social Studies Learning in Elementary School. International Journal for Innovation Education and Research, 6(12), 269–273. https://doi.org/10.31686/ijier.vol6.iss12.1276
6) Degeng, N. S., & Degeng, P. D. D. (2018). Ilmu Pembelajaran. Yayasan Taman Pustaka Kristen Indonesia.
7) Divayana, D. G. H., Suyasa, P. W. A., & Sugihartini, N. (2016). Pengembangan media pembelajaran berbasis web untuk matakuliah kurikulum dan pengajaran di jurusan pendidikan teknik informatika universitas pendidikan ganesha. Jurnal Nasional Pendidikan Teknik Informatika: JANAPATI, 5(3), 149–157.
8) Fatirul, A. N., & Walujo, D. A. (2020). Belajar dan Pembelajaran. Scopindo Media Pustaka.
9) Hartono, Y. (2017). Model pembelajaran nilai-nilai karakter bangsa di Indonesia dari masa ke masa. AGASTYA: JURNAL SEJARAH DAN PEMBELAJARANNYA, 7(01), 34–48.
10) Ichsan, I. Z., Rahmayanti, H., Purwanto, A., Sigit, D. V., Kurniawan, E., Dewi, A. K., Wirdianti, N., Hermawati, F. M., & Marhento, G. (2020). Covid-19 dan E-Learning: Perubahan strategi pembelajaran sains dan lingkungan di SMP. JINoP (Jurnal Inovasi Pembelajaran), 6(1), 50–61.
11) Inayah, F., Sitompul, N. C., & Sugito, S. (2020). Integrasi Pendidikan Karakter pada Bahan Ajar Bahasa Indonesia SMA Kelas X Semester 1. EDUTECH, 19(2), 139–149.
12) Januarisman, E., & Ghufron, A. (2016). Pengembangan media pembelajaran berbasis web mata pelajaran ilmu pengetahuan alam untuk siswa kelas VII. Jurnal Inovasi Teknologi Pendidikan, 3(2), 166–182.

13) Kristianawati, K., Degeng, I. N. S., & Sugito, S. (2020). Pengembangan media pembelajaran berbasis multimedia interaktif pada mata pelajaran Pendidikan Agama Kristen dan Budi Pekerti kelas 1 SD. Jurnal Pendidikan Edutama, 7(2), 143–152.

14) Kuntowijoyo, K. (2013). Pengantar Ilmu Sejarah. Tiara Wacana.

15) Ma'ruf, A. R. K., Uno, H., & Husain, R. I. (2017). PENGEMBANGAN PEMBELAJARAN IPS BERBASIS WEBSITE UNTUK SISWA KELAS VII MADRASAH TSANAWIYAH NEGERI GORONTALO. Jurnal Pascasarjana, 2(1).

16) Rahman, K. (2016). Pengembangan Media Pembelajaran Berbasis Website Untuk Mata Pelajaran Programmable Logic Controller (PLC) PadaSMK Darussalam Makassar. Inspiration: Jurnal Teknologi Informasi Dan Komunikasi, 6(2), 105–117.

17) Ramadhanti, M., Sumantri, M. S., & Edwita. (2019). PEMBENTUKAN KARAKTER DALAM PEMBELAJARAN BCCT (BEYOND CENTER AND CIRCLE TIME). Educate: Jurnal Teknologi Pendidikan, 4(1), 9–17.

18) Reigeluth, C. M., & An, Y. (2020). Merging the Instructional Design Process with Learner-centered Theory: The Holistic 4D Model. Routledge.

19) Rinaldy, F. A., & Mustaji, M. (2020). PENGEMBANGAN MEDIA VIDEO PADA MATERI PERMAINAN BOLA VOLI MATA PELAJARAN PENDIDIKAN JASMANI OLAHRAGA DAN KESEHATAN PADA SISWA KELAS X SMKN 1 JOMBANG. Jurnal Mahasiswa Teknologi Pendidikan, 10(29).

20) Rohdiani, F., & Rakhmawati, L. (2017). Pengembangan Pembelajaran Berbasis Web Pada Mata Pelajaran Dasar Elektronika di SMK Negeri 3 Jombang. Jurnal Pendidikan Teknik Elektro, 6(1), 105–110.

21) Rusman. (2012). Belajar dan Pembelajaran Berbasis Komputer. Alfabeta.

22) Sari, H. V., & Suswanto, H. (2017). Pengembangan media pembelajaran Berbasis Web Untuk mengukur hasil Belajar siswa pada mata pelajaran Komputer Jaringan Dasar program Keahlian teknik komputer dan jaringan. Jurnal Pendidikan: Teori, Penelitian, Dan Pengembangan, 2(7), 1008–1016.

23) Setyadi, D., & Qohar, A. B. D. (2017). Pengembangan Media pembelajaran matematika berbasis web pada materi barisan dan deret. Kreano, Jurnal Matematika Kreatif-Inovatif, 8(1), 1–7.

24) Sirnayatin, T. A. (2017). Membangun Karakter Bangsa Melalui Pembelajaran Sejarah. SAP (Susunan Artikel Pendidikan), 1(3), 312–321.

25) Sitompul, N. C. (2020). PENGEMBANGAN BAHAN AJAR BERBASIS KARAKTER DI ABAD-21 PELAJARAN BAHASA INDONESIA KELAS XI. JURNAL EDUCATION AND DEVELOPMENT, 8(2), 417.

26) Suhadi, O. (2018). Penguatan Pendidikan Karakter (PPK). Penerbit Erlangga.

27) Supeni, A., Degeng, I. N. S., & Sugito, S. (2020). Pengaruh pembelajaran berbasis web dan pembelajaran langsung dan gaya belajar siswa terhadap prestasi belajar siswa mata pelajaran kearsipan kelas X SMK. Jurnal Pendidikan Edutama, 7(2), 127–136.

28) Suryani, N., Setiawan, A., & Putria, A. (2018). Media Pembelajaran Inovatif dan Pengembangannya. PT Remaja Rosdakarya.

29) Suyanto. (2010). Pendidikan Karakter Teori dan Aplikasi. Kementerian Pendidikan Nasional.

30) Syarifah, U. K., Fatirul, A. N., & Harwanto, H. (2020). DEVELOPMENT OF HYPERLINK-BASED AUDIO VISUAL MEDIA FOR SIX-GRADE SCIENCE LEARNING. EduHumaniora| Jurnal Pendidikan Dasar Kampus Cibiru, 12(2), 107–114.

31) Transinata, T. (2017). Integrasi Pendidikan Cinta Tanah Air dalam Kurikulum Tersembunyi Berbasis Karakter Kebangsaan. PHILANTHROPY: Journal of Psychology, 14(1), 55–64.

32) Uno, H. B., & Ma'ruf, A. R. K. (2016). Pengembangan media pembelajaran IPS berbasis website untuk siswa kelas VII Madrasah Tsanawiyah Negeri. JTP-Jurnal Teknologi Pendidikan, 18(3), 169–185.

33) Utama, F. H., Rufii, R., & Cholid, A. (2021). Pengembangan Media Sport Card Untuk Pengetahuan Cabang-Cabang Olahraga. Jurnal Pendidikan Kesehatan Rekreasi, 7(1), 38–45.

34) Wardani, M. A. P., Rufi'i, R., & Harwanto, H. (2020). Pengaruh Penerapan Strategi Pembelajaran Berbasis ICT Terhadap Pencapaian Hasil Belajar Sistem Komputer Siswa Kelas X SMK. Faktor: Jurnal Ilmiah Kependidikan, 7(2), 99–106.

35) Wisada, P. D., Sudarma, I. K., & Yuda S, A. (2019). Pengembangan media video pembelajaran berorientasi pendidikan karakter. Journal of Education Technology, 3(3), 140–146.