



Development of historical immersive learning media to strengthening Pancasila Student Profiles in vocational high school

Alifi Nur Prasetya Nugroho 

Universitas Negeri Yogyakarta, Indonesia.

* Corresponding Author. E-mail: alifinur.pn@uny.ac.id

ARTICLE INFO

Article History

Received:

4 February 2022;

Revised:

26 March 2022;

Accepted:

1 April 2022;

Available Online:

5 September 2022

Keywords

Historical media;

Immersive learning;

Pancasila Student

Profiles;

Vocational high school

ABSTRACT

This study aims to develop historical immersive learning media to improve the Pancasila student profiles in Vocational High Schools (SMK) in Indonesia. This research and development use ADDIE's research steps method (analyze, design, develop, implement, and evaluate). The results show that immersive learning media can enhance the understanding and appreciation of Pancasila values among SMK students. The media effectively stimulates students' interest in history and encourages them to apply Pancasila values daily. The study concludes that immersive learning media can potentially strengthen the Pancasila student profiles and promote the development of responsible, tolerant, and patriotic citizens in Indonesia. The result of media tests on vocational students obtained satisfactory results, with the average overall score reaching 4.25 or in the category of "Very Decent." The findings suggest that implementing immersive learning media in SMKs should be encouraged and supported by policymakers, educators, and other stakeholders in the education sector.



This is an open access article under the **CC-BY-SA** license.



How to cite:

Nugroho, A. N. P. (2022). Development of historical immersive learning media to strengthening Pancasila Student Profiles in vocational high school. *Harmoni Sosial: Jurnal Pendidikan IPS*, 9(2), 1-

<https://journal.uny.ac.id/index.php/hsjpi/article/view/60695>

INTRODUCTION

Education has an essential urgency for the sustainability of human life. Education provides knowledge and skills to individuals and shapes character, morals, and positive values needed in social life (Dewantara et al., 2020). Moreover, education is one of the essential things for the development of individuals and society. Education provides opportunities for everyone to develop their potential and improve their quality of life (Jia et al., 2019; Mitsumoto & Bene, 2000). Through education, one can acquire the knowledge, skills, values, and attitudes needed to function effectively in society to survive.

In Indonesia, education is regulated in a national education system consisting of formal, non-formal, and informal education (Katharina, 2015; Thoif et al., 2020). Formal education in Indonesia consists of primary, secondary, and higher education levels organized by the government or private sector. Meanwhile, non-formal and informal education outside formal educational institutions, such as courses, training, and independent learning activities. Education is one of the critical factors in forming the character of responsible individuals with strong moral values (Manurung & Rahmadi, 2017; Tan et al., 2018). As a country based on Pancasila, education in Indonesia must form a young

generation who understand, appreciate, and practice the values of Pancasila deeply through historical learning.

Character education through history is critical in forming a generation with strong and noble characters (Purwanto et al., 2020; Rosidin et al., 2019). History provides insight and understanding of the noble values contained in past events to form a good personality in individuals. Through history, we can learn about the values of Pancasila as the basis of the Indonesian state, the courage and fighting spirit of heroes, and tolerance and diversity as a strength in building the nation. Character education through history can help strengthen these positive values and encourage the younger generation to internalize these values in everyday life (Pradana et al., 2021).

Character education through history can also help overcome challenges and obstacles in forming quality character in Indonesia (Iswatiningsih, 2019). One of the challenges is the need for more understanding of the noble values embodied in history, resulting in the younger generation losing a clear value orientation. The younger generation can better understand these values through character education through narrative. In addition, character education through narrative can also help strengthen the love of homeland and nationality (Widyadharna et al., 2020). By studying the history of the nation's struggle, the younger generation can understand how important it is to maintain the integrity and diversity of the Indonesian government. Therefore, character education through history has a critical urgency in forming a generation that has a solid and noble character. This can help overcome challenges and obstacles in building quality character in Indonesia and strengthen the love of homeland and nationality.

To strengthen the profile of Pancasila students in vocational schools, using immersive learning media in teaching history can be an effective alternative (Yulianti et al., 2020). Immersive learning media can help students understand history in more engaging and challenging ways and provide more immersive learning experiences. In addition, immersive learning media can encourage students to think critically and build social skills that are important for future success (Menggo et al., 2019).

Through the development of historical immersive learning media to strengthen the profile of Pancasila students in SMK, it is hoped that students can better understand Pancasila's values and practice them in everyday life (Adillah, 2022). Developing a strong Pancasila student profile is an essential requirement in education in Indonesia. Vocational High Schools (SMK) have the responsibility to prepare their students to be ready to enter the workforce and have the technical skills needed by industry (Carrillo et al., 2019). However, SMK must also be able to form students with strong character, including a good Pancasila profile. Therefore, the development of historical immersive learning media to strengthen the profile of Pancasila students in SMK has a critical urgency.

Immersive learning media can help students understand the history and values of Pancasila in a more exciting and challenging way (Suryadi, 2022). In addition, using immersive learning media can also help students build social skills and critical thinking skills that are essential for future success. Using immersive learning media, students can gain a more profound learning experience and better understand Pancasila's values (Rahmi et al., 2019). Thus, the development of immersive historical learning media can help strengthen the profile of Pancasila students in vocational schools and prepare them for success in the future.

For the effectiveness of education in Indonesia, joint efforts are needed from the government, society, and the world of education. The government needs to increase the allocation of funds for education and improve the education management system, while communities need to be actively involved in educating their children. The world of education needs to continue to innovate and develop more effective learning methods and improve the teaching staff's quality.

This research aims to develop immersive technology-based learning media to increase students' understanding and appreciation of Indonesian history, especially Pancasila's values as the country's basis. In addition, this study also aims to strengthen the profile of Pancasila students in SMK by integrating Pancasila values in an exciting and interactive learning process through immersive media. That way, students can better internalize the values of Pancasila and strengthen their national identity as Indonesian citizens with Pancasila culture.

METHOD

This research design is development research that applies the model method of Branch and Kopcha (2014) ADDIE's research steps guide this research and development (analyze, design, develop, implement, and evaluate). The study was conducted from February 26 to November 2, 2021, at SMK in Yogyakarta. The ADDIE model is a broad learning design framework consisting of five iterative phases: Analysis, Design, Development, Implementation, and Evaluation. In this study, researchers will apply the ADDIE model with a branching approach to develop historical immersive learning media to strengthen the profile of Pancasila students in vocational schools in Indonesia.

The Analysis phase will involve assessing the current state of history teaching in vocational schools and identifying gaps that can be filled by immersive learning of history. Researchers will also analyze the needs of students and teachers and the constraints of the learning environment. Based on this analysis, researchers will determine learning objectives, content, and evaluation methods.

In the Design phase, researchers will create a blueprint of historical immersive learning media. This includes a user interface, storyboards, scenarios, and branching options. This design phase will be based on the learning objectives and content specified in the analysis phase. The Development phase will involve creating historical immersive learning media. Researchers will use multimedia tools to develop video, audio, images, and animation. Researchers will also apply a branching approach to enable learners to choose their learning paths and outcomes.

In the Implementation phase, historical immersive learning media will be tested at SMK. Researchers will work with teachers to implement this media in the classroom environment. Feedback and feedback from learners will be collected to improve the press for better learning outcomes. In the Evaluation phase, researchers will assess the effectiveness of historical immersive learning media. The evaluation will include learners' achievement of learning objectives, engagement level, and the branching approach's effectiveness. Researchers will also gather feedback from teachers and students to identify areas for improvement.

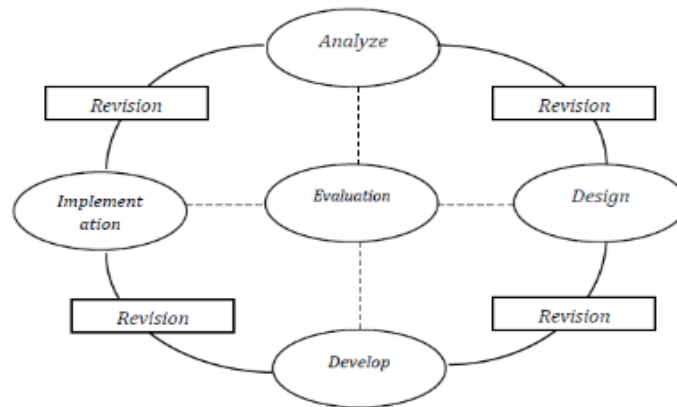


Figure 1. ADDIE Model (Branch & Kopcha, 2014)

RESULT AND DISCUSSION

The followings are the results and discussions of the development of historical immersive learning media to strengthen the profile of Pancasila students in SMK:

At this stage, a needs analysis was carried out on historical immersive learning media needed by SMK students to improve their Pancasila profile. Based on the analysis results, it was found that students need more interactive and fun learning media that provide a different learning experience from conventional learning. A needs analysis was carried out as a first step to develop historical immersive learning media to strengthen the profile of Pancasila students in SMK. The needs analysis aims to understand stakeholders' existing conditions, needs, expectations, and problems faced in history and learning in SMK related to forming Pancasila student profiles. The needs analysis results show that history teaching in SMK still uses a conventional approach that needs to be more

interactive and tends to focus on memorizing historical facts. The needs of stakeholders are the existence of more interactive and exciting learning media, as well as strengthening students' understanding of the values of Pancasila. In addition, the problems faced in learning history in SMK are the low interest of students in the account, limited access to varied learning resources, and the need for more use of technology in learning. Therefore, the development of immersive historical learning media in SMK is expected to overcome these problems and strengthen the profile of Pancasila students.

After conducting a needs analysis, the next stage is the design of historical immersive learning media. At this stage, design and immersive learning concepts are carried out, which include learning scenarios, technology selection, and learning flows. This design aims to ensure immersive learning media to the needs and desired learning objectives. The design stage in the development of historical immersive learning media seeks to design the learning concept to be developed. At this stage, it is necessary to analyze the learning material to be presented and determine the right approach and learning method to achieve learning objectives.

In addition, the design stage also includes determining the technology and media to be used, including audio, video, and graphics. In developing historical immersive learning media to strengthen the profile of Pancasila students in SMK, the design is carried out by considering student needs, the applicable curriculum, and available technology. The design is carried out with a project-based learning approach, where students will be actively involved in learning through exploration, research, and product creation activities. The immersive learning media used are 360-degree videos, interactive audio, and animated graphics to enrich the student learning experience. In addition, learning media is also designed to contain Pancasila values in every learning activity so that students can get a meaningful and immersive learning experience.

After the learning media design is complete, the next stage is development. At this stage, prototypes of historical immersive learning media planned at the previous stage were developed. This development includes producing learning materials, application programming, and technical testing. At the development stage, immersive learning media content is created based on the design prepared in the previous stage. The range covers various essential aspects of historical learning, such as the chronology of events, significant figures, and the values of Pancasila applied at that time. In addition, interactive scenarios are also created that involve students in learning to increase student involvement and interest in history learning.

Various modern technologies such as 3D animation, gamification, and augmented reality (AR) are used to develop immersive learning media content. 3D animation technology is used to create characters and objects in a learning environment, whereas gamification is used to add game elements and challenges to learning. Meanwhile, AR technology presents virtual objects in the real world so students can experience more authentic and exciting knowledge. Research and development have produced a media product with expert feasibility assessment (product validation) results. The results of the media expert assessment are 4.53 (feasible), and the expert assessment material of 4.29 (possible). After the content was created, a trial was conducted on a group of SMK students to determine the effectiveness of the immersive learning media that had been completed. The trial results will be the basis for adjusting and improving the content that has been made to increase the effectiveness and quality of the immersive learning media produced.

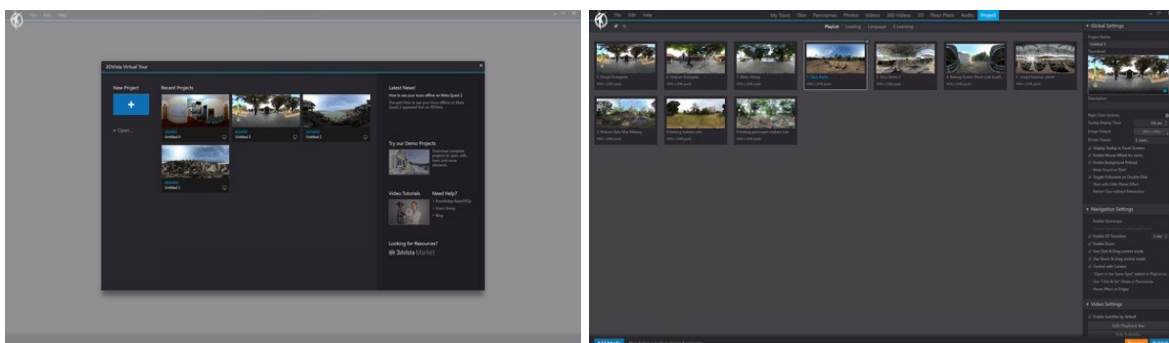


Figure 2. Developing VR using 3D Vista

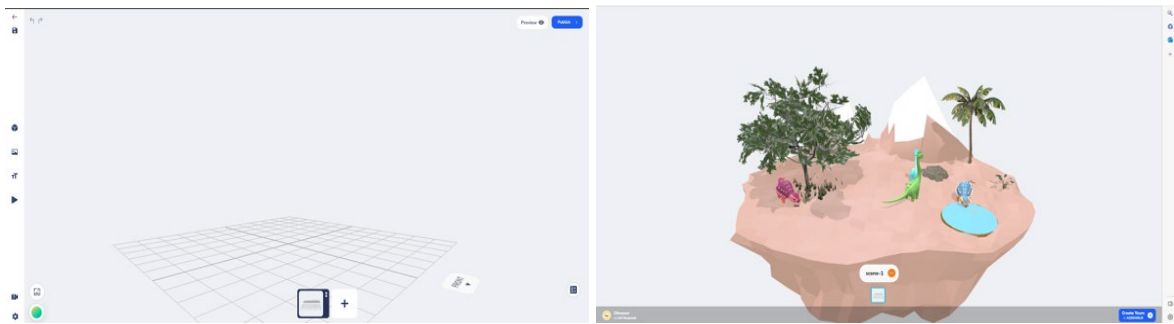


Figure 3. Developing AR using Assemblr EDU

After the prototype of immersive learning media has been developed, the next stage is implementation. At this stage, immersive learning media are introduced into the classroom and used in history learning. During this stage, teachers and students will provide feedback and evaluation of the immersive learning media used. The implementation stage is the implementation stage of the development of historical immersive learning media. At this stage, learning media designed and developed will be tested by SMK students to get feedback on their effectiveness and usefulness in increasing students' understanding of Pancasila values.

The implementation of learning media is carried out through several steps, namely holding coordination meetings with teachers and students related to the performance of learning media testing, explaining the purpose of testing, and providing guidance to students on using learning media. After that, learning media will be given to students, and students are asked to use the learning media. Furthermore, an evaluation and assessment of the effectiveness of teaching media in increasing students' understanding of Pancasila values was carried out. Evaluation is carried out by comparing student learning outcomes before and after using learning media and collecting feedback from students and teachers regarding the advantages and disadvantages of the learning media that have been used. This implementation stage is expected to provide an overview of the effectiveness and usefulness of historical immersive learning media in improving the profile of Pancasila students in SMK. The evaluation results will be considered to make further improvements and developments in the learning media that have been developed.

The final stage is evaluation. At this stage, an assessment of historical immersive learning media used in history learning in the classroom is carried out. This evaluation includes a review of the effectiveness of learning media, student and teacher satisfaction, and improvements that can be made to improve learning media in the future. The evaluation stage is essential in developing historical immersive learning media to strengthen the profile of Pancasila students in SMK. Evaluation is carried out to determine the extent to which the learning media has been developed by the objectives set. At this stage, a trial of learning media was carried out on students in SMK who were the research samples.

The trial results are used to evaluate the quality of learning media that have been developed. In this stage, data collection is also carried out through interviews, observations, and questionnaires to determine student responses to the learning media that have been developed. After that, data analysis and assessment of learning media were carried out. Evaluation will provide input and recommendations for creating better learning media. With a good evaluation stage, historical immersive learning media to strengthen the profile of Pancasila students in SMK can provide optimal benefits for students and education in Indonesia.

Based on the results of user assessments, it is known that the level of the Media can be run efficiently indicator is 4.21 which shows the criteria of "very Decent". This condition is caused because the media is made based on a flow chart design whose hyperlinks have been designed efficiently. Then in the use of media, namely the media operations take up a little quota indicator, users rate 4.33 which has the criteria "Very Decent" this is supported because in the preparation of media, assets are selected based on specifications that are adjusted to the level of internet network speed so that in addition to fast media in opening, it also requires a small quota.

Table 1. Scoring Result

No.	Indicators	Score	Criteria
1	Media can be run efficiently.	4,21	Very Decent
3	Media operations take up a little quota.	4,33	Very Decent
4	Media comes with clear operating guidelines.	3,78	Worth
5	Media is engaging and interactive.	4,09	Worth
6	Balance and proportion in displaying images and videos accordingly.	4,41	Very Decent
7	Neat and appropriate design and layout.	4,44	Very Decent
8	Media navigation icons/buttons may work fine.	4,19	Worth
9	Font and background color selection according to guidelines.	4,35	Very Decent
10	The scheme/flow of the learning process is conveyed clearly.	4,47	Very Decent
	Average Total	4,25	Very Decent

The use of kouota is one of the important aspects of criteria that need to be considered so that users feel comfortable and happy using online-based media. The level of comfort and convenience is rated "worth" with a score of 3.78 on the media comes with clear operating guidelines. This condition arises because what is available in the media is a guide to the use of features and navigation buttons on the media. The developer does not provide comprehensive usage information so that users can have the experience to explore every corner of this immersive-based media. This experience is important to increase the dimensions of the pancasila student profile. This condition is reinforced by the indicator that the media engaging and interavtive score is 4.09.

The score has a criterion of "Worth" which means that the user has had the first experience of interaction with immersive media. Of course after the use of immersive media on the second occasion and beyond, the level of engaging and interactive will increase. The indicator that the media is engaging and interactive shows a score of 4.09 with the "Worth" criterion showing the potential to increase to the "Very Decent" criterion. The increasing condition is certainly supported by the level of media portion and balance towards the selection and use of visual media in the form of images and videos with the Balance and proportion indicator in displaying images and videos accordingly.

This conformity score is 4.41 with the "Very Decent" criteria. This criterion is also supported by Neat and appropriate design and layout with a score of 4.44 with the criterion "Vert Decent". Layout and design are designed by considering the design of the user interface (UI) and also the user experience (UX). UI/UX is important because it is a factor that directly intersects with users. If the UI / UX is not designed properly, then media functions will not be optimal, especially immersive media that offer a real experience. UI / UX will not be optimal if it is not supported by the ability of media to provide navigation access, so it is necessary to display the Media navigation icons / buttons may work fine indicator with an assessment score of 4.19 with the criteria "Worth".

There are challenges in designing navigation in immersive media due to limited user access to interaction. Users are given the choice of using a remote stick or by pointing a point that defaults to the screen by moving their head to the tomb or the intended direction to navigate. Moreover, the level of user experience in media utilization is also influenced by the criteria of Font and background color selection according to guidelines. The use of fonts and backgrounds if not carefully will cause an unpleasant experience because it takes energy and thought to read information. On this indicator obtained a score of 4.35 with the criterion "Very Decent", This means that the development of immersive media is very good and able to provide a good experience as well. Moreover, indicator that the scheme/flow of the learning process is conveyed criteria " Very Decent." These criteria show that the immersive media developed is in accordance with the user's ability to understand the flow of material delivered in the media.

Based on the results and discussion, The media that tested on vocational students obtained satisfactory results, with the average overall score reaching 4.25 or in the category of "Very Decent." it can be concluded that developing historical immersive learning media to strengthen the profile of Pancasila students in SMK is an effective solution to improve the quality of history learning and enhance student character in Pancasila values. Using immersive learning media, students can actively engage in learning and get a more engaging and interactive learning experience. This is expected to

increase students' interest in education and help them better understand and internalize Pancasila's values.

CONCLUSION

Based on the results of this study, it can be concluded that the development of historical immersive learning media is effective in raising the profile of Pancasila students in SMK. Through needs analysis, design, development, implementation, and evaluation using the ADDIE branch method, immersive learning media has been successfully developed to increase students' understanding of Pancasila values. The evaluation results showed that students responded positively to using immersive learning media and showed improvement in understanding Pancasila's values and Indonesian history. In addition, immersive learning media can provide a more exciting and interactive learning experience for students, thus strengthening students' learning motivation and interest in learning history. However, more than the development of historical immersive learning media is needed to raise the profile of Pancasila students in vocational schools. Effective character education and history learning also require support from various factors, such as teacher commitment, support from schools and families, and cooperation between related institutions. Therefore, continuous efforts are needed to improve the quality of education in Indonesia, especially in strengthening the character of students and the understanding of Pancasila's history and values. The development of historical immersive learning media is one solution that can be implemented. Still, it needs to be further developed and adapted to the needs and characteristics of students and different school contexts.

REFERENCES

- Adillah, F. C. (2022). Implementation of living values education Pancasila values in the generation of Indonesians. *QISTINA: Jurnal Multidisiplin Indonesia*, 1(1), 1–6. <https://doi.org/10.57235/qistina.v1i1.15>
- Branch, R. M., & Kopcha, T. J. (2014). Instructional design models. In *Handbook of Research on Educational Communications and Technology* (pp. 77–87). Springer New York. https://doi.org/10.1007/978-1-4614-3185-5_7
- Carrillo, J., Climent, N., Contreras, L. C., & Montes, M. (2019). Using professional development contexts to structure prospective teacher education. In *International Handbook of Mathematics Teacher Education: Volume 2* (pp. 393–419). BRILL. https://doi.org/10.1163/9789004418967_015
- Dewantara, J. A., Efriani, E., Sulistyarni, S., & Prasetyo, W. H. (2020). Optimization of character education through community participation around The school environment (case study in lab school junior high school Bandung). *JED (Jurnal Etika Demokrasi)*, 5(1), 53–66. <https://doi.org/10.26618/jed.v5i1.3017>
- Iswatiningsih, D. (2019). Penguatan pendidikan karakter berbasis nilai-nilai kearifan lokal di sekolah. *Satwika: Kajian Ilmu Budaya Dan Perubahan Sosial*, 3(2), 155–164. <https://doi.org/10.22219/satwika.v3i2.10244>
- Jia, F., Krettenauer, T., & Li, L. (2019). Moral identity in cultural context: Differences between Canadian and Chinese university students. *Journal of Moral Education*, 48(2), 247–262. <https://doi.org/10.1080/03057240.2018.1499504>
- Katharina, R. (2015). Implementasi kebijakan pembentukan unit Percepatan Pembangunan Provinsi Papua dan Provinsi Papua Barat (UP4B) dalam konteks otonomi khusus. *Jurnal Politika Dinamika Masalah Politik Dalam Negeri Dan Hubungan Internasional*, 6(2), 123–144. <https://doi.org/10.22212/jp.v6i2.314>
- Manurung, M. M., & Rahmadi, R. (2017). Identifikasi faktor-faktor pembentukan karakter mahasiswa. *JAS-PT Jurnal Analisis Sistem Pendidikan Tinggi*, 1(1), 41–46.

<https://doi.org/10.36339/jaspt.v1i1.63>

- Menggo, S., Suastra, I. M., Budiarsa, M., & Padmadewi, N. N. (2019). Needs analysis of academic-English speaking material in promoting 21st century skills. *International Journal of Instruction*, 12(2), 739–754. <https://doi.org/10.29333/iji.2019.12247a>
- Mitsumoto, H., & Bene, M. Del. (2000). Improving the quality of life for people with ALS: The challenge ahead. *Amyotrophic Lateral Sclerosis and Other Motor Neuron Disorders*, 1(5), 329–336. <https://doi.org/10.1080/146608200300079464>
- Pradana, D. A., Mahfud, M., Hermawan, C., & Susanti, H. D. (2021). Nasionalism: Character education orientation in learning development. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 3(4), 4026–4034. <https://doi.org/10.33258/birci.v3i4.1501>
- Purwanto, A., Pramono, R., Asbari, M., Hyun, C. C., Wijayanti, L. M., Putri, R. S., & Santoso, P. B. (2020). Studi eksploratif dampak pandemi COVID-19 terhadap proses pembelajaran online di sekolah dasar. *EduPsyCouns: Journal of Education, Psychology and Counseling*, 2(1), 1–12. <https://ummaspul.e-journal.id/EdupsyCouns/article/view/397>
- Rahmi, M. S. M., Budiman, M. A., & Widyaningrum, A. (2019). Pengembangan media pembelajaran interaktif Macromedia Flash 8 pada pembelajaran tematik tema pengalamanku. *International Journal of Elementary Education*, 3(2), 178–185. <https://doi.org/10.23887/ijee.v3i2.18524>
- Rosidin, U., Kadaritna, N., & Hasnunidah, N. (2019). Can argument-driven inquiry models have impact on critical thinking skills for students with different personality types? *Cakrawala Pendidikan*, 38(3), 511–526. <https://doi.org/10.21831/cp.v38i3.24725>
- Suryadi, S. (2022). Implementasi pendidikan karakter dan nilai religius siswa melalui seni budaya Debus Banten. *Jurnal Ilmiah Wahana Pendidikan*, 8(5), 188–195. <https://doi.org/10.5281/zenodo.6410560>
- Tan, B. P., Mahadir Naidu, N. B., & Jamil Osman, Z. (2018). Moral values and good citizens in a multi-ethnic society: A content analysis of moral education textbooks in Malaysia. *The Journal of Social Studies Research*, 42(2), 119–134. <https://doi.org/10.1016/j.jssr.2017.05.004>
- Thoif, M., Sadjijono, S., & Suhartono, S. (2020). The nature and legal position of non-formal educators according to Indonesian Positive Law. *International Journal of Multicultural and Multireligious Understanding*, 7(11), 218–222. <https://doi.org/10.18415/ijmmu.v7i11.2241>
- Widyadharma, A. P., Ulfatin, N., Utaya, S., & Supriyanto, A. (2020). Situational leadership with the STIFIn genetic intelligence approach. *Systematic Reviews in Pharmacy*, 11(6), 1409–1419. <https://doi.org/10.31838/srp.2020.6.202>
- Yulianti, D., Wiyanto, W., Rusilowati, A., & Nugroho, S. E. (2020). Student worksheets based on Science, Technology, Engineering and Mathematics (STEM) to facilitate the development of critical and creative thinking skills. *Journal of Physics: Conference Series*, 1567, 022068. <https://doi.org/10.1088/1742-6596/1567/2/022068>