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Audiovisual Learning Media with Package C Students' Interest in Learning

Faris Afandi¹, Yatim Riyanto², Heryanto Susilo³

- ¹ PKBM Permata Bangsa, Indonesia
- ^{2,3} Pendidikan Luar Sekolah, Universitas Negeri Surabaya, Indonesia

Corresponding author, email: faris.23020@mhs.unesa.ac.id

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Abstract

This research examines the relationship between the use of audiovisual learning media and the learning interest of Package C students at CLC Permata Bangsa Surabaya. The aim of the research is to find out whether the use of audiovisual media can increase students' interest in learning. The method used was quantitative correlational involving 31 students. Data was collected through questionnaires and analyzed using statistics. The research results show that there is a positive and significant relationship between the use of audiovisual media and interest in learning, with a correlation coefficient of 0.568 and a significance value of 0.001 (p < 0.05). CLC Permata Bangsa plays an important role in implementing this technology, which has a positive impact on improving the quality of education and developing students' skills. In conclusion, audiovisual learning media is effective in increasing interest in learning in non-formal education, especially for Package C students. The results of this study can be used as a reference in the development of a multimodal learning model that combines various forms of media in the non-formal learning process, in order to create a more interesting and effective learning experience.

Keywords: Audiovisual Learning Media, Interest in Learning, Non-formal Education

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INTRODUCTION

The use of audiovisual media in modern education has a crucial role in improving the quality of learning. This media not only makes learning material more interesting, but also helps students understand complex concepts through clearer and more interactive visualizations. By using video, animation, and multimedia presentations, educators can present information in a more dynamic and easy-to-understand manner, which in turn can improve student retention and understanding. Apart from that, audiovisual media also enables more inclusive learning by supporting various learning styles, be it visual, auditory or kinesthetic, so that each student can learn according to the most effective way for them (Hasan et al., 2021).

Education plays a crucial role in the progress of the nation and religion, helping to change individual attitudes and behavior through a learning process designed to develop potential in achieving life goals. The government strives to ensure that every individual gets a proper education through various regulations and policies (Lestari et al., 2023). Effective education not only includes mastery of

material but also the development of habits, interests, talents, and adaptation to the environment, as well as high aspirations.

Teachers are educators whose job is to convey information to students. In carrying out their duties, teachers facilitate the teaching and learning process by creating a pleasant learning environment, determining the material to be taught, choosing teaching methods, using appropriate media, and evaluating students' learning interests. With this responsibility, teachers must be able to ensure that students understand all the material taught (Ilat & Loupaty, 2022).

In teacher-led learning contexts, communication tends to be one-way, where information only flows from the teacher to the students without adequate feedback. This often makes students feel bored quickly during the learning process. This boredom can reduce students' enthusiasm for learning, even causing them to frequently go in and out of class and disturb classmates who are focused on studying.

The problem of students' lack of interest in learning, especially in the context of empowerment learning (hydroponics), is something that needs serious attention. Teachers are required to create a supportive learning environment, where students feel comfortable and enjoy the learning process in the classroom. This pleasant atmosphere will help students to focus more on the material being taught. Good study concentration is the key to deepening students' understanding of the subject matter (Putri & Safrizal, 2023).

This feeling of joy and concentration is part of students' interest in learning, which greatly influences the final results achieved. In increasing students' interest in learning, teachers must utilize various teaching methods and techniques, including the use of learning media. The use of media, such as audiovisual media projected with an infocus or LCD projector, is often not maximized. This media has the potential to activate students, facilitate the delivery of material more effectively, and increase students' overall interest in learning. Thus, the use of technology in learning media can have a positive impact on students' abilities and motivation in participating in the learning process (Deviyanti, 2021).

The use of learning media in class can arouse students' motivation and interest in learning, even though online media is not the main factor that influences students' learning psychology. In the current era of technological development, all information or learning materials can be accessed by anyone via the internet, so that the use of technology can make it easier for teachers to create meaningful and quality learning media, teaching materials and teaching methods (Wicaksono et al., 2023). Audiovisual learning media is one of the many ways to convey material or knowledge by utilizing technological developments in presenting audiovisual messages. Audiovisual learning media has been proven to be more effective in increasing interest in learning science compared to conventional methods (Hastuti & Budianti, 2014).

Setiyawan, (2021) stated that with the rapid development of today's era, the world of technology is increasingly modern. Along with this, various learning media have emerged that support the teaching and learning process. One type of media that has experienced significant progress is audio-visual media. By using this media, students can understand complex concepts more easily and quickly. Apart from that, audio-visual media can also increase students' learning motivation because they can see and listen to the information provided. Meanwhile, research conducted by (Bahri et al., 2022) shows that the use of audiovisual media has a significant impact on students' motivation and interest in learning. The results of their research show that the use of audiovisual media consistently increases students' intrinsic motivation and strengthens their interest in the learning material. This research provides a solid theoretical foundation and important practical implications for the use of audiovisual media in educational contexts, which can support the development of innovative and effective learning strategies in schools.

Researchers proposed a solution to the non-formal educational institution CLC Permata Bangsa Surabaya to maximize the use of audiovisual media to determine its relationship with students' learning interests through an article entitled "The Relationship Between Audiovisual Learning Media and Learning Interests of Package C Students at CLC Permata Bangsa Surabaya". With audiovisual media, it

is hoped that it will be easier for teachers to convey material and students will more easily receive material through real visualization. Students can learn by seeing the form, structure and process of learning material and hearing clear explanations.

METHOD

This research uses quantitative and correlational methods. Quantitative and correlational methods were chosen because they are in accordance with the research objective which is to determine the relationship between the independent variable (audiovisual learning media) and the dependent variable (interest in learning). The quantitative approach allows objective data collection and statistical analysis that can clearly describe the pattern of relationships between variables and collect data using research instruments in the form of questionnaires containing statements related to the variables studied (Sugiyono, 2021a). The data is then analyzed using various statistical techniques, including hypothesis testing. The relevant correlational method is used to measure the level and direction of the relationship between the two variables studied. This research was carried out at CLC Permata Bangsa in Surabaya City, with the consideration that the researcher was a tutor at CLC Permata Bangsa which is a center for community learning activities located at JL. Sukosemolo 12/C-27, Perum Semolowaru Indah 1 Surabaya, Semolowaru, Kec. Sukolilo, Surabaya City.

A population is a group consisting of humans, animals, plants, and objects that have similar characteristics or certain characteristics which are the material for study and drawing conclusions by researchers. The sample is part of the population taken in accordance with the reflection of the population. Sampling is an important step in research, because the conclusions obtained are the generalization of the sample to the population. In this research, researchers chose to use a saturated sample, namely the entire population of package C students at CLC Permata Bangsa Surabaya. The saturated sample was chosen because the population was relatively small, namely 31 students, making it possible to involve the entire population in the research. This provides an advantage because the data obtained reflects the entire population, so the research results are expected to be more accurate and representative.

The independent variable in this research is audio-visual learning media and the dependent variable is interest in learning. Validity is a tool used to measure the extent to which a tool or measuring tool can accurately measure what is intended or measured (Sugiyono, 2021b). There were 30 package C class 12 students at CLC Permata Bangsa Surabaya City who took the validity test for this research. Furthermore, to measure reliability in this research, researchers used SPSS (Statistical Products and Service Solution) software version 25 for Windows by calculating the Cronbach's Alpha value. According to (Sugiyono, 2021b) Reliability is an indicator to assess the consistency of an instrument in measuring the same thing in different situations and repeated testing.

In this research, a questionnaire was used as a primary data source while supporting data was collected through documentation. This research uses a product moment correlation data analysis method from Karl Pearson which aims to determine whether there is a correlation between variables (X) and variables (Y). Before testing the correlation, a normality test and a linearity test were first carried out, after it was known that the data distributed had a normal and linear distribution, then a Product Moment correlation test was carried out using SPSS (Statistical Product and Service Solution) software version 25 for Windows.

RESULTS AND DISCUSSION

Non-formal education has an important role in providing access to learning for individuals who cannot follow the conventional formal education system. One form of non-formal education that is in great demand is the Package C Program, which is equivalent to high school education. This program aims to provide opportunities for people who have not previously completed formal education to acquire skills and knowledge equivalent to formal school graduates. In the learning process, the use of appropriate learning media is one of the crucial factors in increasing the effectiveness and interest of students in the material taught.

In today's digital era, audiovisual media is one of the innovations that can be used to increase students' interest in learning, including in non-formal education. Audiovisual media offers a combination of visual and audio elements that can present learning materials in a more interesting and easy-to-understand manner. Various studies have shown that the use of audiovisual media in the learning process can increase attention, comprehension, and retention of material by students. As such, it is important to explore how this media can be effectively applied in the context of non-formal education such as in Community Learning Centers (CLC).

The application of audiovisual media in non-formal education, especially in the Package C Program at CLC Permata Bangsa Surabaya, is an interesting object of study because of the various challenges faced by students and teaching staff. Students in equality education often have diverse backgrounds, both in terms of age, experience, and level of readiness to learn. This requires learning strategies that are not only innovative but also able to stimulate their interest in learning in a sustainable manner. Audiovisual as a learning medium is believed to be an effective solution in increasing student engagement and helping them understand the material better.

Table 1. Normalization Test (One-Sample Kolmogorov-Smirnov Test)

			Unstandardized Residuals	
N	N			
Normal Mean Parameters, b Std. Deviation			9.16829E-16 0.91376768	
Most Extreme	Absolute Positive		0.164 0.164	
Differences	Negative		-0.082	
Statistical Tests Asymp. Sig. (2-tailed)			0.164 .033c	
Monte Carlo	Monte Carlo Sig.			
Sig. (2-tailed)	99%	Lower	0.331	
	Confidence	Bound		
	Interval	Upper Bound	0.356	
a. Test distribu				

(Data source: SPSS 25 data processing results)

Based on the SPSS output in the table above, it can be seen that the normality test results show that the data is normally distributed. This is indicated by the significance value in the Monte Carlo.Sig column of 0.344, which is greater than 0.05 (>0.05). Therefore, data from both variable scales are considered to be normally distributed.

 Table 2. Linearity Test

ANOVA Table								
				Sum of		Mean		
				Squares	df	Square	F	Sig.
Interest	to	Between	(Combined)	19,894	9	2,210	2,719	0.028
learn*		Groups	Linearity	11,919	1	11,919	14,659	0.001
AV Media			Deviation	7,975	8	0.997	1,226	0.332
			from					
			Linearity					
Within Groups		17,074	21	0.813				
Total			36,968	30				

(Data source: SPSS 25 data processing results)

Based on the calculation results in the ANOVA table above, it can be seen that the significance value of Deviation from Linearity is 0.332, which is greater than 0.05 (>0.05). Therefore, it can be concluded that there is a linear relationship between the two variables, namely audio-visual learning media and interest in learning.

Table 3. Product Moment Correlation Test

	Correlations					
		X	Y			
X	Pearson Correlation	1	,568**			
	Sig. (2-tailed)		0.001			
	N	31	31			
Y	Pearson Correlation	,568**	1			
	Sig. (2-tailed)	0.001				
	N	31	31			
**.	**. Correlation is significant at the 0.01 level (2-tailed).					

(Data source: Results of data processing using SPSS 25)

Based on the results of the Pearson correlation test in the table above, the number 0.001 indicates a significant value and less than 0.05 (<0.05), which means the alternative hypothesis (Ha) of this research is accepted. Thus, it can be concluded that the hypothesis which states that there is a significant relationship between audio-visual learning media and the learning interest of package C students at CLC Permata Bangsa Surabaya is accepted. Apart from that, in the table it can be seen that the Pearson Correlation column shows a correlation coefficient (rxy) value of 0.568. In this study the number of samples (n) = 31 and degree of freedom (df) = 31 - 2 = 29, so the value of r table: (DF = 29) = 0.355, so the results in the table above are 0.568 > 0.355 (rcount > rtable). A positive r calculated correlation coefficient indicates that the correlation between the two variables is positive or in the same direction. In other words, the higher the use of audio-visual learning media, the higher the student's interest in

learning. Conversely, the lower the use of audio-visual learning media, the lower the student's interest in learning. To see how strongly the two variables are related, you can see the following table:

Table 4. Guidelines for the Interpretation of Correlation Coefficients

Correlation coefficient	Relationship Level
0.20 - 0.399	Very low
0.00 - 0.199	Low
0.40 - 0.599	Currently
0.80 - 1.00	Strong
0.60 - 0.799	Very strong

(Reference source: (Sugiyono, 2021b))

Based on the assessment guidelines, the correlation in the table above shows that there is a moderate relationship between audio-visual learning media and the learning interest of package C students at CLC Permata Bangsa Surabaya, with a value of 0.568. Basically, the use of media in the teaching and learning process will increase student interest. This is characterized by high enthusiasm or enthusiasm in children when learning with the help of media or learning tools. On the other hand, when learning takes place without media, students tend to be less enthusiastic because the learning atmosphere becomes more monotonous compared to using media, especially audiovisual media. Therefore, it is very important for teachers or teaching staff to use media in the learning process, especially audiovisual media, including for package C students at CLC Permata Bangsa Surabaya.

This research shows that there is a positive and significant relationship between the use of audiovisual learning media and the learning interest of Package C students at CLC Permata Bangsa Surabaya. This is in line with research (Hasan et al., 2021), which states that audiovisual media can improve student retention and understanding. In line with research (Syaiful, 2022)that audiovisual media helps in the development of practical skills, especially in learning hydroponic topics, which shows that the use of audiovisual media consistently increases students' intrinsic motivation and interest in learning.

The positive relationship between audiovisual media and interest in learning can be understood through the lens of learning style theory, which identifies three main learning styles, namely visual, auditory and kinesthetic. Each individual tends to have different learning preferences based on their learning style (Aini et al., 2020). The use of audiovisual media provides advantages in meeting the needs of these various learning styles effectively. For students with a visual learning style, the images and diagrams presented in videos can help them understand concepts better. On the other hand, auditory students will benefit from narratives and verbal information conveyed through this media. Meanwhile, for kinesthetic students, audiovisual media can stimulate active thinking and reflection, for example through interactive demonstrations or simulations.

By taking into account these differences in learning preferences, the use of audiovisual media can not only make learning more inclusive but also more effective. Students feel more involved and motivated when learning material is presented according to their learning style. This creates a learning environment that enriches the learning experience, allowing students to explore and understand the material in depth according to their individual needs. Thus, the integration of audiovisual media in education not only follows the principle of inclusivity, but also strengthens the effectiveness of learner-centered learning.

In empowering learning about hydroponics at CLC Permata Bangsa Surabaya, the use of audiovisual media plays a crucial role in facilitating in-depth understanding for package C students. This is supported by constructivism theory, which emphasizes that effective learning occurs through active, collaborative, and interactive experiences (Lukman et al, 2024). Audiovisual media plays a significant role in facilitating this process by providing students with both visual and auditory stimuli. This multimedia approach enables students to engage more deeply with the learning material, allowing them to observe hydroponic planting techniques in detail, visually track the growth process, and listen to comprehensive explanations about the benefits and applications of this technology. By actively participating in the learning process, students are encouraged to construct their own understanding, making the learning experience more meaningful and effective.

Apart from facilitating conceptual understanding, audiovisual media also expands the space for collaboration and collective experimentation. Learners can interact actively, share ideas, and design hydroponic projects together. Discussions sparked by visualizations and audio presentations open opportunities for deep reflection and improved social and collaborative skills. Thus, the integration of audiovisual media is not just a learning aid, but also a means for developing practical skills and in-depth mastery of concepts in the context of modern agriculture. Participation in hydroponic activities not only develops an understanding of modern soilless farming, but also improves skills in managing hydroponic systems. This provides an opportunity for students to apply practical knowledge in everyday life or on a community empowerment project scale.

CLC Permata Bangsa Surabaya acts as an important facilitator in supporting students' ability to contribute to the application of modern agricultural technology such as hydroponics, thereby having a positive impact on increasing the independence and welfare of the surrounding community. Utilizing interactive audio-visual learning media, CLC can create inspiring learning experiences and build students' self-confidence in applying their knowledge in real situations. This not only helps them in the development of practical skills, but also prepares them to become agents of positive change in their communities.

According to (Sukmawinata, 2022) states that the use of audio visual media as a whole makes the delivery of material to students more interesting and varied, thus arousing students' interest in being active in the learning process. This shows that the more appropriate the use of audio-visual media with lesson material, the more students' interest in learning will increase. In line with the research results (Agustin & Riyanti, 2024) which show that based on the data, facts and theories that have been collected, the results show that the alternative hypothesis (Ha) can be approved because audio-visual media has a significant impact on interest in learning.

This shows that the more appropriate the use of audio-visual media to the lesson material, the more interest in learning will increase significantly. In line with a study conducted by Setiyawan (2021), audio visual media was chosen as a way to present learning material because it has better features than just using ordinary images. This research also shows that classes that use audio-visual media tend to be more effective than classes that only rely on image media in the learning process. This confirms that the use of audio-visual media can make a significant positive contribution in improving student learning outcomes. The conclusion that can be drawn is that the level of use of learning media has a significant relationship with the learning interest of package C students at CLC Permata Bangsa Surabaya.

The integration of audiovisual media in the learning process has been shown to significantly enhance students' engagement and learning outcomes. Research by Castro-Alonso et al., (2021) supports the idea that properly designed multimedia instruction can reduce cognitive load, making learning more efficient and engaging for students. Their study highlights the importance of using both auditory and visual channels to present information, which helps learners process and retain information more effectively. (Yuvaraj et al., 2025) emphasize that multimedia learning environments promote deeper

cognitive engagement by providing students with various modes of input, such as text, images, and audio. This variety of stimuli not only sustains interest but also aids in better comprehension of complex topics. Furthermore, (Shaheen, 2022) demonstrate that multimedia learning environments are particularly effective in motivating students, as they allow for interactive and dynamic learning experiences. These environments support active participation, where learners are encouraged to engage with the material and discuss their understanding, leading to improved learning outcomes.

In addition to its positive impact on student engagement, well-structured multimedia learning experiences are key to enhancing educational effectiveness. (Clark & Mayer, 2023) provide guidelines for creating multimedia instruction that considers learners' cognitive load and interactivity, suggesting that such approaches are particularly beneficial in non-formal education contexts. This approach not only supports a deeper understanding of content but also encourages learners to take an active role in their educational journey. Similarly, research by (Revano & Juanatas, 2024) explores the efficacy of multimedia technology in fostering technology-enabled learning and teaching. Their study emphasizes that multimedia tools are instrumental in bridging educational gaps, particularly in environments where access to traditional resources is limited. By integrating multimedia technology, students are provided with dynamic learning opportunities that enhance their engagement and facilitate a deeper understanding of the material. This use of multimedia not only supports academic achievement but also promotes technological literacy, preparing students for future learning in increasingly digital spaces.

CONCLUSION

Based on data analysis using SPSS 25 in this research, the processing results show that the correlation coefficient is 0.568, which is greater than the critical value of the table (DF = 29) = 0.355. This means that there is a significant positive correlation between the use of audio-visual learning media and the learning interest of package C students at CLC Permata Bangsa Surabaya. In addition, the significance value obtained was 0.001 (p < 0.05) indicating that the alternative hypothesis (Ha) was accepted, while the null hypothesis (H0) was rejected. These results confirm that there is a significant relationship between the variables studied. Based on the degree of correlation criteria, this value also indicates that there is a fairly strong correlation between the two variables. These findings provide strong empirical support for the importance of using audio-visual learning media in increasing students' interest in learning in non-formal education contexts such as CLC Permata Bangsa Surabaya.

REFERENCES

- Agustin, D., & Riyanti, H. (2024). The Influence of Audio Visual Media on Students'learning Interest to Improve Their Learning Outcomes. *Esteem Journal of English Education Study Programme*, 7(2), 348–362. https://jurnal.univpgri-palembang.ac.id/index.php/esteem/article/view/14166
- Aini, P. N., Hariyani, S., & Suwanti, V. (2020). Analisis Pemahaman Konsep Matematika Ditinjau Dari Gaya Belajar Siswa Menurut Teori Honey Mumfor. *JP2M (Jurnal Pendidikan Dan Pembelajaran Matematika*), 6(2), 44. https://doi.org/10.29100/jp2m.v6i2.1746
- Bahri, Syaiful, D. (2022). *The impact of the use media audio visual on learning outcome in elemantary school.*
- Bahri, S., Saputra, R., & Rahmi, R. (2022). The Impact of the Use Media Audio Visual on Learning Outcomes in Elemantary School. *Tarbiyah Al-Awlad: Jurnal Kependidikan Islam Tingkat Dasar*, 12(2), 119–125.
 - https://ejournal.uinib.ac.id/jurnal/index.php/alawlad/article/download/4517/pdf
- Castro-Alonso, J. C., de Koning, B. B., Fiorella, L., & Paas, F. (2021). Five strategies for optimizing instructional materials: Instructor- and learner-managed cognitive load. *Educational Psychology Review*, *33*(4), 1379–1407. https://doi.org/10.1007/s10648-021-09606-9
- Clark, R. C., & Mayer, R. E. (2023). E-learning and the science of instruction: Proven guidelines for

- *consumers and designers of multimedia learning.* john Wiley & sons. http://dx.doi.org/10.1002/pfi.4930420510
- Deviyanti, I. (2021). Konsep dan Pengembangan Pembelajaran Yang Inovatif. *Universitas Muhammadiyah Sidoarjo*. http://eprints.umsida.ac.id/8442/
- Hasan, M., Milawati, M., Darodjat, D., Harahap, T. K., Tahrim, T., Anwari, A. M., Rahmat, A., Masdiana, M., & Indra, I. (2021). *Media pembelajaran*. Tahta media group. https://eprints.unm.ac.id/20720/
- Ilat, I. P., & Loupaty, E. (2022). Pengembangan Sumber Daya Guru Dalam Rangka Mencapai Guru Profesional. *JMPK: Jurnal Manajemen Pendidikan ...*, 2(2), 91–98. http://ejournal-iakn-manado.ac.id/index.php/jmpk/article/view/1079
- Lestari, G., Widodo, Yusuf, A., & Widyaswari, M. (2023). *Implementasi Komunikasi Positif dalam Meningkatkan Motivasi Belajar Anak Usia Dini.* 7(4), 4791–4802. https://doi.org/10.31004/obsesi.v7i4.4896
- Lukman, L., Furkan, F., & Syfril, S. (2024). Implementasi Pendekatan Konstruktivisme Dalam Pembelajaran Bahasa Inggris. *eL-Muhbib jurnal pemikiran dan penelitian pendidikan dasar*, 8(1), 114-125. https://doi.org/https://doi.org/10.52266/
- Putri, F. M., & Safrizal. (2023). Faktor Penyebab Rendahnya Minat Belajar Siswa dalam Pembelajaran Matematika Kelas VI Sekolah Dasar Nageri 12 Baruh-Bukit. *Jurnal Riset Madrasah Ibtidaiyah (JURMIA)*, 3(1), 66–77. https://doi.org/10.32665/jurmia.v3i1.1346
- Revano, T. F., & Juanatas, R. A. (2024). Exploring the Efficacy of Multimedia Technology in Fostering Technology-Enabled Learning and Teaching: Bridging Educational Gaps. *Proceedings of the 2024 8th International Conference on Education and Multimedia Technology*, 134–141. http://dx.doi.org/10.1145/3678726.3678728
- Setiyawan, H. (2021). Pemanfaatan Media Audio Visual dan Media Gambar Pada Siswa Kelas V. *Jurnal Prakarsa Paedagogia*, 3(2). https://doi.org/10.24176/jpp.v3i2.5874
- Shaheen, N. L. (2022). Technology accessibility: How U.S. K-12 schools are enacting policy and addressing the equity imperative. *Computers & Education*, 179, 104414. https://doi.org/10.1016/j.compedu.2021.104414
- Sugiyono. (2021a). Sugiyono-Metode Penelitian Kuantitatif dan Kualitatif dan R&D. *Nuevos Sistemas de Comunicación e Información*.
- Sugiyono, S. (2021b). *Metode penelitian kuantitatif dan kualitatif dan R&D (Catatan Ke)*. Yogyakarta. https://inlislite.uin-suska.ac.id/opac/detail-opac?id=26594
- Tanjudan Sukmawinata, S. Q. A. (2022). Pengaruh Media Audio Visual Terhadap Minat Belajar Siswa Mata Pelajaran Pendidikan Agama Islam Di SDN Mojotrisno Mojoagung Jombang. *Sumbula: Jurnal Studi Keagamaan, Sosial Dan Budaya, 7*(1), 119–143. https://doi.org/10.32492/sumbula.v7i1.4871
- Wicaksono, V. D., Yusuf, A., Paksi, H. P., Windasari, W., & Pramana, A. (2023). Pelatihan Pengembangan Modul Digital Berbasis Kurikulum Merdeka Bagi Guru Sekolah Dasar. *Prosiding Seminar Nasional Pengabdian Masyarakat LPPM UMJ*, 1(1).
- Yuvaraj, R., Mittal, R., Prince, A. A., & Huang, J. S. (2025). Affective Computing for Learning in Education: A Systematic Review and Bibliometric Analysis. *Education Sciences*, 15(1), 65. https://doi.org/10.3390/educsci15010065