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Islamic State Institute of Kudus

Improving Digital Competence Madrasah Teachers Through the Ministry of Religion's Digital Platform (SIPINTAR)

Fiqra Muhamad Nazib *

* Garut Of Universty

fiqra@uniga.ac.id

Hilda Ainissyifa

Garut Of Universty

hildaainis@uniga.ac.id

Ani Siti Anisah

Garut Of Universty

sitianisah@uniga.ac.id

Masripah

Garut Of Universty

masripah@uniga.id

Farah Nabilah Yuliani

Garut Of Universty

farahnabilahyuliani09@gmail.com

Abstract

The aim of the research is to measure the extent to which digital platforms such as the Ministry of Religion's SIPINTAR can support and improve the competency of digital madrasah teachers, as well as provide useful insights for the development and evaluation of better training programs in the future. The research methodology uses mixed sequential explanatory methods, starting with quantitative research and carrying out qualitative analysis. The research population was 282 MAN teacher respondents spread across Garut Regency, while the sampling technique used the Slovin technique so that the research sample was 165 MAN teachers in Garut Regency. The research results obtained an R Square correlation of 0.251, which means that digital platforms are able to influence teacher competence by 25.1%. The Ministry of Religion's

SIPINTAR platform is an effective solution for increasing the competency of madrasa teachers for the following reasons: (1) good accessibility; (2) Diversity material; (3) direct testing; (4) evaluation and feedback as well as the legality of the certificate form as a result of the training. The Ministry of Religion's Sipantar platform suggests providing online mentor support or discussion forums where teachers can interact, share experiences and get encouragement from experts in their respective fields.

Keywords: *Digital Competence, Teachers, Digital Platform*

INTRODUCTION

The Industrial Revolution 4.0 era is a time where digital technology is developing rapidly and influencing various aspects of life and industry. The hallmarks of this revolution include the integration of physical and digital systems with technologies ranging from artificial intelligence, data analytics, the Internet of Things (IoT). The increasingly rapid advances in technology have led to dependence on the internet, various knowledge can now be accessed easily via the internet, even enabling a learning process that no longer relies on physical meetings, but instead uses digital platforms. (Nazib et al., 2024).

As the main focus, the teacher's ability to use technology is very important in today's education. By understanding and mastering technology, teachers can create a learning environment that is supportive, innovative and in line with the demands of the digital era which has a big influence on the formation of students' knowledge, skills and attitudes (Prayogi, 2019). However, the fact is that there are still many teachers who are technologically illiterate, as according to the Ministry of Education and Culture (Kemendikbud) it is revealed that 60% of teachers in the country still have limited abilities in mastering Information and Communication Technology (ICT).

Likewise, the results of research conducted by (Hasibuan, 2021) 52% of teachers' ability to use and utilize ICT is still low. This is due to many factors, but the most dominant is the low level of participation in technology-based training. Research conducted by (Winarti et al., 2022) The level of digital competence of PAUD teachers in the areas of content and knowledge creation, evaluation and problem solving as well as technical operations is still low. Research conducted by (Kurnia, 2021) research of 89 teacher respondents from 14 high schools in Banyumas Regency. The level of digital literacy competency among high school teachers in Banyumas Regency is at the intermediate level

(Medium). Research (Sahelatua, 2018) At SDN 1 Pagar Air, teachers are still unable to use IT media and do not know what benefits there are in using technology

Teachers' digital competence is not yet optimal due to many factors. Some factors that influence teachers' digital competence include: (Kurnia, 2021): (1) Access and Infrastructure Availability of sufficient access to technology and infrastructure that supports encouraging the development of digital competencies; (2) Training and Professional Development involving the use of technology; (3) Motivation and awareness of the importance of developing digital skills to support innovative learning (4) Institutional support from schools, education departments, and work environments in providing resources and incentives for teachers; (5) A work culture that supports experimentation, innovation, and the use of technology in learning will help teachers to improve their digital competence: (6) The existence of facilitators or mentors who support teachers' learning and development of digital skills also has an influence: (7) internal factors of self-confidence in facing new technology and the willingness to continue learning and developing digitally play a key role in increasing competence.

According to (Fitria, 2023) One of the reasons for the limited ability of teachers to use technology is that age is the dominant factor in the occurrence of technology failure. The higher the age, the lower work productivity will be. So digital-based training is needed to improve teachers' digital competence. The availability of sufficient access is one factor in increasing teacher digital competence.

A digital platform is a technological framework that provides services, tools, or infrastructure that enable users to interact, collaborate, or access various types of information and services in an online environment (Amin et al., 2023). A digital platform can be a website, software application, online system, or a combination of various technological elements that facilitate user activities such as e-commerce transactions, communication on social media, online learning, and many others. Digital platforms enable users to connect, share information, and perform various actions efficiently and easily through digital technology (Bonina, 2021).

Digital platforms can be evaluated through several key indicators (Yamin et al., 2022): (1) Accessibility assesses how easy the platform is for users to access and use both in terms of interface navigation and availability on various devices: (2) Interactivity measures the level of user engagement and interaction with the platform through features such as dynamic content, collaboration, and feedback; (3) Design evaluates the visual layout, security, usability, and usability of the digital platform in order to facilitate a good user experience: (4) Analyzes the impact of the platform's relevance, effectiveness, and results on stated goals, such as improving performance, understanding, or other units of measurement according to the purpose of the platform.

Digital platforms integrate a variety of modules that expand the scope of a device's functionality, sometimes referred to as additional software subsystems (Decuypere et al., 2021). In general, these modules are implemented in the form of applications developed by third parties (Reuver et al., 2017). There are many types of digital platforms that function for various purposes and activities. The following are some examples of various digital platforms that are commonly used: (1) Social Media, for example Facebook, Instagram, Twitter, LinkedIn, and Snapchat; (2) Online Marketplaces For example Amazon, eBay, Etsy, and Tokopedia; (3) Streaming Media Such as Netflix, YouTube, Spotify, and Twitch; (4) Online Education including Coursera, Udemy, Khan Academy, and Google Classroom; (5) Blogging and Websites Such as WordPress, Blogger, Wix, and Medium (6) Video Conferencing Examples include Zoom, Google Meet, Microsoft Teams, and Skype; (7) E-commerce Such as Shopify, WooCommerce, Magento, and BigCommerce; (8) Cloud Storage For example Google Drive, Dropbox, OneDrive, and iCloud; (9) Content Management Systems Such as WordPress, Drupal, Joomla, and Shopify; (10) Mobile Applications Such as WhatsApp, Uber, TikTok, and Facebook Messenger Any digital platform has unique functionality and provides a variety of services according to user requirements (Spagnoletti et al., 2019)

Through the Education and Training Center of the Ministry of Religion innovation in the form of digital-based training and learning platforms was introduced as a response to the demands of the Industrial Revolution 4.0 era. The existence of this digital platform reflects the Ministry of Religion's commitment to modernizing Islamic education and adapting it to the latest technological developments. Thus, it is hoped that the introduction of this digital platform will strengthen the capacity of teachers and education staff and improve the quality of learning in order to prepare a generation that is ready to compete in the industrial era 4.0 effectively.

Research results (Amin et al., 2023) Digital platforms show potential in reshaping and enriching competency development strategies for teachers. Then (Aulia & Murni, 2023) The independent teaching platform is the right forum to increase the competence, innovation and creativity of primary school teachers in particular. Because, the independent teaching platform provides various features that can help teachers get references, inspiration and understanding of the independent curriculum.

The Ministry of Religion's SIPINTAR digital platform is an initiative of the Ministry of Religion of the Republic of Indonesia which aims to provide education and training services in terms of increasing the competency of madrasa teachers. SIPINTAR (Innovative Adaptive Responsive Learning and Management System) is a platform

designed to support the professional development of madrasa teachers through a variety of training materials, learning content and interactive quizzes. Some of the features that are possible from the Ministry of Religion's SIPINTAR digital platform include interactive learning modules, educational resources, discussion forums, as well as reporting and monitoring learning progress. The aim is to improve and expand the technological skills of madrasa teachers to support innovative and adaptive Islamic religious education.

Therefore, there is a need for a special study regarding the role of the Ministry of Religion's digital platform (SIPINTAR) in improving the digital competence of madrasa teachers. The novelty in this research can provide a new vision regarding how digital platforms such as SIPINTAR can specifically influence changes in the behavior and competence of madrasa teachers.

METHODS

Sequential explanatory method research is combination research that combines quantitative and qualitative research methods sequentially, where the first stage of research is carried out using quantitative methods and in the second stage qualitative methods are used (Snyder, 2019).

In this study the population was 282 MAN teacher respondents spread across Garut Regency. Researchers determined the population was affordable due to more focused research and limited time and funds. (Hikmawati, 2020). The following are the names of selected schools and selected teachers in the research population.

Table 1 Population

No	School name	Population
1	MAN 1 Garut	72
2	MAN 2 Garut	64
3	MAN 3 Garut	49
4	MAN 4 Garut	35
5	MAN 5 Garut	62
Score		282

The sample size used for this research uses the Slovin formula as a reference (Elfil & Negida, 2017):

$$n = \frac{N}{1 + N(e)^2}$$

$$n = \frac{282}{1 + 282(0,05)^2}$$

$$n = \frac{282}{1 + 282(0,0025)}$$

$$n = \frac{282}{1 + 0,705}$$

$$n = \frac{282}{1,705}$$

$$n = \frac{282}{1,55} = 165,39$$

$$n = 165$$

The results of calculations using the Slovin formula to determine the number of respondents used as research samples from a population of 282 MAN principals in East Garut Regency amounted to 165.

Table 2
Sample

No	School name	Population	Calculation	Sample
1	MAN 1 Garut	72	$(72/282) \times 165 = 42,12$	42
2	MAN 2 Garut	64	$(64/282) \times 165 = 37,44$	37
3	MAN 3 Garut	49	$(49/282) \times 165 = 28,67$	29
4	MAN 4 Garut	35	$(35/282) \times 165 = 20,47$	21
5	MAN 5 Garut	62	$(62/282) \times 165 = 36,37$	36
Score				165

RESULTS AND DISCUSSION

The results of descriptive statistical data on digital competency data for madrasah teachers as a whole have high criteria. This can be seen from the score range starting from the data interval 36-51.

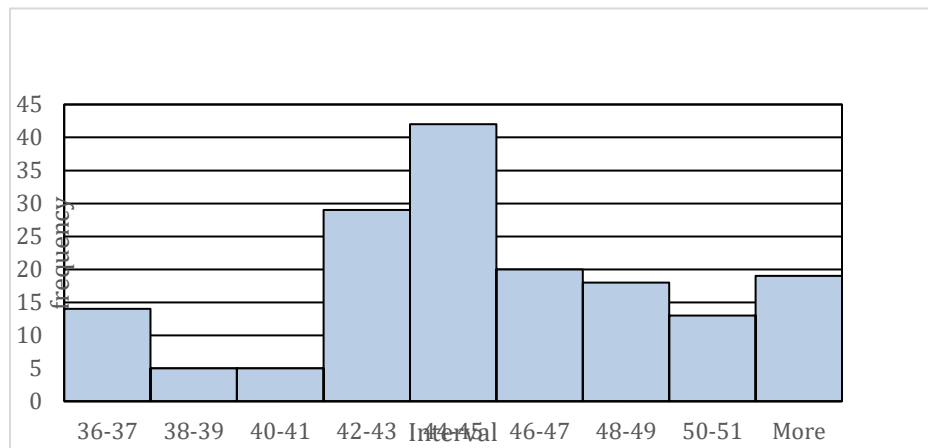
Table 3
Frequency Distribution of Digital Platforms

<i>Interval</i>	<i>Frequency</i>	<i>Relative Frequency</i>
36-37	14	8.5%
38-39	5	3.0%
40-41	5	3.0%

42-43	29	17.6%
44-45	42	25.5%
46-47	20	12.1%
48-49	18	10.9%
50-51	13	7.9%
More	19	11.5%
Score	165	100%

Furthermore, the digital competency variable data for madrasah teachers is presented in diagram form in the following figure:

Pictrure 1. Distribution Score of Digital Platforms



Likewise, the results of descriptive statistical data for the digital platform variable as a whole have high criteria. This can be seen from the score range starting from 42-57.

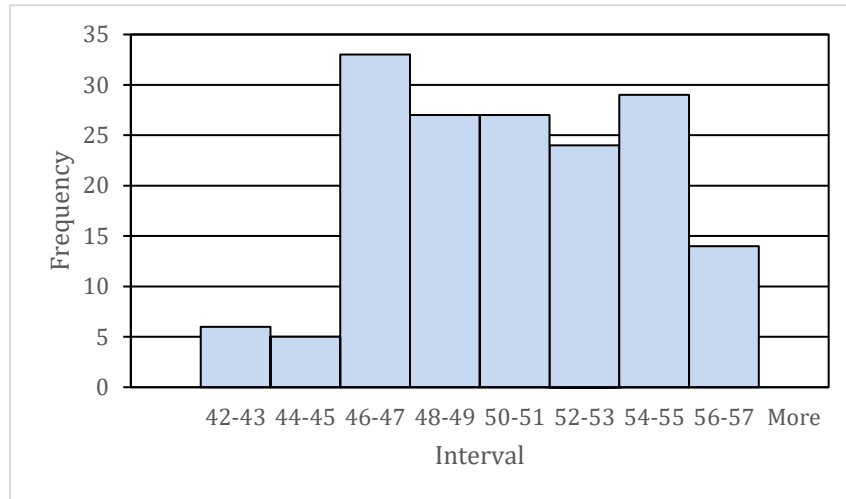
Table 4
Frequency Distribution of Digital Platforms

<i>Interval</i>	<i>Frequency</i>	<i>Relative Frequency</i>
42-43	6	3.6%
44-45	5	3.0%
46-47	33	20.0%
48-49	27	16.4%
50-51	27	16.4%

52-53	24	14.5%
54-55	29	17.6%
56-57	14	8.5%
Score	165	100%

Furthermore, the digital platform data variables are presented in diagram form in the following figure

Pictrure 2. Distribution Score of Competence Digital



In the next stage, simple and multiple correlation tests were carried out to determine the correlation coefficient between variables and their significance.

Table 5
Correlation Tests

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	95.554	1	95.554	4.147	.0000 ^b
	Residual	3755.440	163	23.040		
	Total	3850.994	164			

a. Dependent Variable: Teacher Digital Competence

b. Predictors: (Constant), Platform Digital

From the output it is known that the calculated F value = 4.147 with a significance level of $0.000 < 0.05$, so the regression model can be used to predict digital

platform variables or in other words there is an influence of digital platforms on teacher digital competence. Meanwhile, the magnitude of the correlation/relationship value can be seen in the following table:

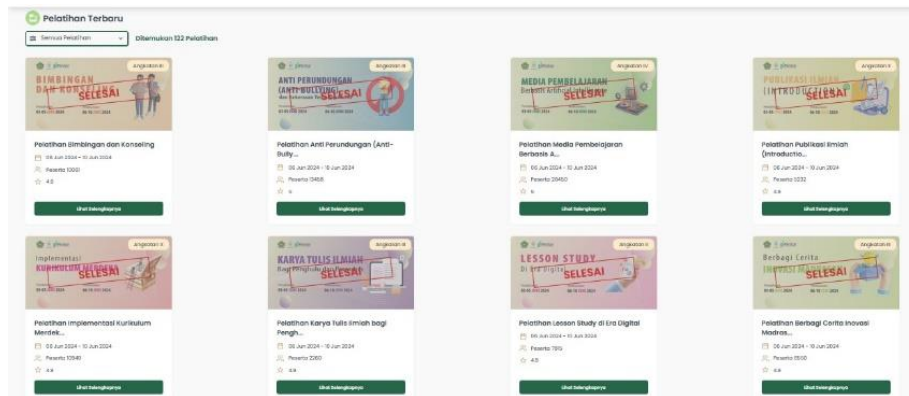
Table 6. Correlation Value Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.458 ^a	.251	.192	4.800

a. Predictors: (Constant), Platform Digital

The magnitude of the R correlation/relationship value is 0.458. From this output, an R Square correlation of 0.251 is obtained, which means that digital platforms are able to influence teacher competence by 25.1%.

The calculation results show that there is a correlation and influence of increasing teacher digital competence through digital platforms. Increasing teacher digital competence through the Ministry of Religion's SIPINTAR digital platform can occur in various ways. SIPINTAR provides online training content on the use of technology in education, supporting teachers to develop their digital skills.

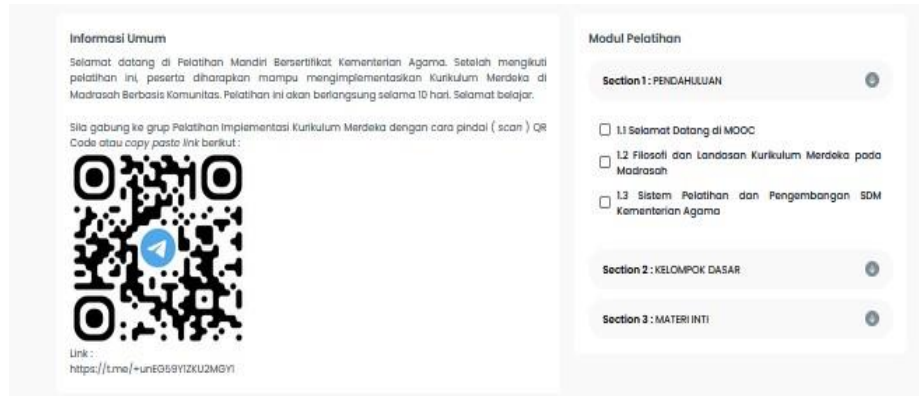


Picturure 3. Appearance Training in SIPINTAR Kemenag

Training on the Ministry of Religion's SIPINTAR platform can cover various topics that are relevant to the professional development of madrasah teachers, both academic and non-academic, which are relevant and needed to improve performance itself. Teachers can choose the training they will participate in via the platform page <https://pintar.kemenag.go.id/pelatihan>. After determining the type of training to be

followed, the teacher must complete the training stages in accordance with the stipulated provisions.

Pictrure 4. Step By Step Training



Teachers will study the training content provided, whether in the form of videos, reading materials, interactive resources, or practical exercises. Through the combination of these diverse learning resources, teachers are expected to expand their knowledge of educational technology, improve digital skills, and apply best practices in teaching to create more effective learning experiences for students. Next, there is an exam or evaluation to measure the teacher's understanding of the material that has been studied. Exams can include questions about training materials to measure the extent to which teachers understand concepts, teachers have the opportunity to gauge their understanding, evaluate learning progress, and identify areas where they need to focus to improve their digital competency.

After completing the training and meeting the requirements, teachers can obtain a certificate confirming their success in the training. receive an official certificate reflecting their success in completing the training. This certificate is proof that confirms that teachers have successfully completed training, improved their digital competencies, and met set standards. This certificate can be of added value in referring to teachers' abilities and expertise in the future, as well as increasing their credibility in the use of technology in the learning process. Thus, platforms such as the Ministry of Religion's SIPINTAR not only provide training, but also recognize and reward teachers' efforts in their personal development.



Pictrure 5. Finaly Training

Madrasah teachers can access training with the flexibility to learn in their own time, without being tied to a specific class schedule, allowing for independent skills development. Training materials can be accessed anywhere, as long as an internet connection is available, allowing wider access without geographical restrictions. Teachers can adapt learning to their own level, focusing on material that they consider important or complex. Through the ability to study independently and easy access to learning materials, madrasa teachers can expand their knowledge in various fields and deepen their skills in utilizing technology in religious education. As per (Amin et al., 2023) Good access can support teachers to take online courses and training to improve their abilities in using educational technology. Digital platforms play a crucial role as a means of training teachers to expand and improve their digital competencies. Teachers can develop their digital skills without the limits of space and time, thereby increasing their ability to utilize technology in the learning process

Teachers' digital competence can be significantly influenced by platforms because they can develop digital competence (Alf et al., 2023), perfecting teaching methods (Vásquez, 2021) and expand their understanding of technology integration in education (Haškov et al., 2021). Through digital platforms, teachers can collaborate with colleagues, share best practices, ideas and experiences, deepening their understanding of how best to use technology in learning. Sharing best practices allows teachers to improve their teaching methods, making learning more interesting, relevant, and effective (Basilotta et al., 2022).

Teachers' digital abilities can be measured through a number of criteria, as stated by (Blyznyuk, 2018) including: information management, use of technology in learning interactions (communication), teacher's ability to create digital content for education (educational content creation), teacher's efforts to protect against the impact

of digital technology (security), and teacher's mastery in analyzing the positive side and negative digital technology (educational problem solving). When a teacher has strong digital competencies, they can utilize technology more effectively to create more interactive, engaging, and relevant experiences for students (Mashuri, Chamda, 2022).

CONCLUSION

The Ministry of Religion's SIPINTAR platform is an effective solution for increasing the competency of madrasa teachers for the following reasons. Madrasah teachers can access training and learning materials easily online, anytime and anywhere, facilitating independent and customized learning. The platform provides a variety of training modules as well as digital resources to enhance technology skills and innovative integration of religious education.

The presence of multimedia content and interactive resources enriches the learning experience, helping teachers learn in a more dynamic and engaging way. Teachers can immediately apply the learning concepts obtained into their learning practices with platform support. There are tests and evaluations that help teachers understand the extent to which they are digesting the material and improving in certain areas. Providing certification or learning certificates will provide formal recognition of the training progress achieved by teachers, thereby increasing motivation and appreciation. With the combination of these features, the Ministry of Religion's SIPINTAR provides a holistic approach to digital training of madrasa teachers, strengthening the foundation of technological competence and modern learning, thereby contributing to improving the quality of religious education in Indonesia.

As suggestions for the Ministry of Religion's SIPINTAR Platform in improving its services, several suggestions could include; (1) Personalization of Training by developing features that allow teachers to create training plans tailored to their needs and interests; (2) Providing online mentor support or discussion forums where teachers can interact, share experiences, and gain encouragement from experts in their respective fields; (3) Ensure that the learning materials provided are relevant, up to date, and varied to meet the various needs and levels of expertise of teachers; (4) Include practical exercises and projects or assignments that can help teachers apply learning concepts in real contexts in the classroom; (5) Provide an informative and transparent monitoring tool so teachers can see their progress over time and be aware of areas that need improvement; (6) Collaborate with other educational organizations or the technology industry to expand the scope of learning materials and support the latest developments in the field of educational technology. By implementing these suggestions, the Ministry of Religion's SIPINTAR Platform can continue to improve the

quality of its services and have a greater impact in increasing the digital competence of madrasa teachers in Indonesia.

REFERENCES

- Alf, M., Collado-soler, R., Virginia, L., & Manzano-le, A. (2023). *education sciences Training Digital Competencies in Future Primary School Teachers : A Systematic Review*.
- Amin, R., Qadry, A., Hadi, L. F., Mustari, M., & Mataram, U. (2023). Pengembangan Platform Pendidikan Dalam Meningkatkan Kompetensi Guru Melalui Teknologi. *Journal of Education Teacher Training and Learning*, 3(1), 45–54. <https://doi.org/https://doi.org/10.47353/pj.v3i1.1488>
- Aulia, D., & Murni, I. (2023). Peningkatan Kompetensi Guru Sekolah Dasar melalui Platform Merdeka Mengajar (PMM). *Jurnal Ilmiah Profesi Pendidikan*, 8(1), 800–807. <https://doi.org/10.29303/jipp.v8i1b.1310>
- Basilotta, V., Pablos, G., Matarranz, M., Alberto, L., Aranda, C., & Otto, A. (2022). Teachers ' digital competencies in higher education: a systematic literature review. *International Journal of Educational Technology in Higher Education*. <https://doi.org/10.1186/s41239-021-00312-8>
- Blyznyuk, T. (2018). Formation Of Teacher S ' Digital Competenc E: Domestic Challenges And Foreign Experience. *Journal of Vasyl Stefanyk Precarpathian National Universty*, 5(1), 40–46. <https://doi.org/10.15330/jpnu.5.1.40-46>
- Bonina, C. (2021). Digital platforms for development: Foundations and research agenda. In *Information Systems Journal* (Vol. 31, Nomor 6, hal. 869–902). <https://doi.org/10.1111/isj.12326>
- Decuypere, M., Grimaldi, E., Landri, P., & Decuypere, M. (2021). Critical Studies in Education Introduction: Critical studies of digital education platforms Introduction: Critical studies of digital education platforms. *Critical Studies in Education*, 62(1), 1–16. <https://doi.org/10.1080/17508487.2020.1866050>
- Elfil, M., & Negida, A. (2017). *Sampling methods in Clinical Research ; an Educational Review*. 5(1), 3–5.
- Fitria, A. Z. (2023). *Maladaptasi Guru Terhadap Penggunaan Teknologi Pembelajaran Di Era Digital (Studi Pada Madrasah Tsanawiyah Negeri 7 Ciamis)*. 1349–1362. <https://seminar.uad.ac.id/index.php/PSNBK/article/view/13588>
- Hasibuan, M. F. (2021). Analisis Kompetensi Guru Madrasah Ibtidaiyah Dalam Pemanfaatan Teknologi Informasi Dan Komunikasi. *Jurnal Analisa Pemikiran Insan Cendikia*, IV(2), 44–53. <https://doi.org/https://doi.org/10.54583/apic.vol4.no2.63>
- Haškov, A., Poliakov, A., & Munk, M. (2021). *Case Study of the Integration of Digital Competencies into Teacher Preparation*.

- Hikmawati, F. (2020). *Metodologi Penelitian*. Perpustakaan Nasional: Katalog Dalam Terbitan (KDT) Hikmawati.
- Kurnia, N. (2021). *Analysis of Digital Literacy Competence for Senior High School Teachers (Survey of Senior High School Teacher in Banyumas Regency)*. 40–41.
- Mashuri, Chamda, D. (2022). *Literasi Digital* (T. Penyusun (ed.)). Perkumpulan Rumah Cemerlang Indonesia.
- Nazib, F. M., Nasrullah, Y. M., Saifullah, I., & Jamal, A. (2024). Penguatan Implementasi Literasi Digital dalam Membangun Critical Thinking Guru di Era Revolusi Industri 4.0. *Nawadeepa*, 1, 1–6. <https://doi.org/10.58835/nawadeepa.v4i1.304>
- Prayogi, R. D. (2019). Kecakapan Abad 21 : Kompetensi Digital Pendidik Masa Depan. *Jurnal Manajemen Pendidikan*, 14(2), 144–151. <https://doi.org/10.23917/jmp.v14i2.9486>
- Reuver, M. De, Sørensen, C., & Basole, R. C. (2017). The digital platform : a research agenda. *Journal of Information Technology*. <https://doi.org/10.1057/s41265-016-0033-3>
- Sahelatua, L. S. (2018). Kendala Guru Memanfaatkan Media It Dalam Pembelajaran Di Sdn 1 Pagar Air Aceh Besar. *Jurnal Ilmiah Pendidikan Guru Sekolah Dasar*, 3(2), 131–140. <https://jim.usk.ac.id/pgsd/article/view/8579>
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104, 333–339. <https://doi.org/10.1016/j.jbusres.2019.07.039>
- Spagnoletti, P., Resca, A., & Lee, G. (2019). *A design theory for digital platforms supporting online communities: a multiple case study*. 30(4), 364–380. <https://doi.org/10.1057/jit.2014.37>
- Vásquez, M. S. (2021). Teacher's Digital Competencies. A Systematic Review in the Latin-American Context. *International Journal on Advanced Science, Engineering and Information Technology*, 11(6), 2495–2502. <https://doi.org/10.18517/ijaseit.11.6.12542>
- Winarti, W., Nurhayati, S., Rukanda, N., Musa, S., Jabar, R., Rohaeti, E. E., Masyarakat, P., Keguruan, I., & Siliwangi, P. (2022). Analisis Kompetensi Digital Guru PAUD dalam Mengelola Pembelajaran Daring Anak Usia Dini. *Jurnal Pendidikan Anak Usia Dini*, 6(6), 5621–5629. <https://doi.org/10.31004/obsesi.v6i6.3111>
- Yamin, M., Supiana, S., & Zaqiah, Q. Y. (2022). Penggunaan Literasi Digital di Madrasah Aliyah Negeri. *Edukatif: Jurnal Ilmu Pendidikan*, 4(4), 6366–6377. <https://doi.org/https://doi.org/10.31004/edukatif.v4i4.3701>

Edugame Berbasis MS Power Point untuk Mengenalkan Ragam Budaya Betawi

Amanda Rizkiyani Mulqiah

UIN SIBER Syekh Nurjati

Cirebon

mandamulqiah59@gmail.com

Nadya Nazelita

UIN SIBER Syekh Nurjati Cirebon

nadyanazelita8@gmail.com

Refa Najma Tsuroya

UIN SIBER Syekh Nurjati Cirebon

refanjm16@gmail.com

Abstract

Minimnya pemanfaatan teknologi dalam mendukung proses pembelajaran yang dilakukan di PAUD, dan keterbatasan yang dimiliki untuk mengembangkan media berbasis teknologi, maka penelitian ini bertujuan untuk mengembangkan edu game dengan memanfaatkan teknologi untuk mengenalkan ragam budaya lokal Betawi dan ciri khasnya pada anak usia 5-6 tahun. Metodologi dalam penelitian ini menggunakan pendekatan pengembangan multimedia Luther, dengan melakukan 4 tahapan yaitu, concepting, material collecting, assembly, testing, distrubing. Subjek dalam penelitian ini adalah 8 guru dan 7 orang siswa dengan kelompok usia 5-6 tahun dari TPQ Baitul Hikmah. Hasil penelitian menunjukkan bahwa edu game berbasis powerpoint untuk mengenalkan ciri khas dan ragam budaya Betawi pada anak usia 5-6 tahun sesuai dengan prinsip-prinsip pemilihan media pembelajaran. Hal tersebut dibuktikan dengan hasil distrubing kepada guru menunjukkan bahwa nilai persentase 88%, hal tersebut berarti bahwa edu game berbasis powerpoint layak dan sesuai digunakan bagi anak usia 5-6 tahun. Hasil distrubing kepada anak menunjukkan persentase 92% Hal tersebut menunjukkan bahwa edu game berbasis powerpoint menarik serta bermakna bagi anak.

Kata kunci: Edu Game, Budaya, Betawi, Anak Usia Dini.

INTRODUCTION

Pendidikan di era globalisasi ditandai dengan banyaknya masyarakat yang mulai sadar akan perkembangan teknologi dan ilmu pengetahuan sejalan dengan pendapat (Amadi, 2022), bahwa di era globalisasi pendidikan mengalami perkembangan yang signifikan, salah satunya adalah perubahan dari sistem pembelajaran tradisional menjadi lebih terintegrasi dengan teknologi. Bisa dilihat dari segala aktivitas kita yang hampir semuanya menggunakan teknologi, banyak anak memanfaatkan teknologi untuk bermain. Hanya saja kurang tepatnya pemilihan pada jenis permainan masih sering terjadi, sehingga banyak anak yang bermain video game kekerasan, hal tersebut dilakukan selama beberapa tahun hingga mencatat kenaikan tajam dalam nilai agresi mereka selama jenjang pendidikan (Pane et al., 2017).

Dengan begitu, pendidikan memiliki peran penting sebagai pendamping dalam proses pembelajaran, pendidikan melalui guru dapat memanfaatkan teknologi game berbasis teknologi yang akan memiliki potensi besar untuk membangun motivasi dengan menampilkan audio serta visual secara bersamaan. Tidak hanya itu, dengan game juga dapat menimbulkan perasaan senang dan nyaman serta metode tersebut dapat diterima oleh masyarakat dengan ditunjukkan dari hasil pengujian fitur aplikasi yang ditawarkan (Deslianti & Sonita, 2022). Selain itu penggunaan game pada proses pembelajaran dapat meningkatkan konsentrasi anak, menjadikan anak lebih mandiri dan kolaboratif (Flewitt et al., 2014).

Perkembangan teknologi dan game di satuan PAUD masih sulit diterapkan dan digunakan dalam proses pembelajaran dikarenakan masih kurangnya fasilitas yang mendukung. Selaras dengan temuan (Fenty & Anderson, 2014), yang mengatakan bahwa Saat ini masih kurangnya teknologi yang tersedia di lingkungan anak usia dini.

Menurut Yatmo dalam (Rais & Riska, 2018) mendefinisikan game sebagai aktivitas yang mencakup karakteristik fun (bebas bermain adalah pilihan bukan kewajiban), separate (terpisah), uncertain (tak menentu), nonproductive (tak produktif), governed by rules (diatur oleh aturan), fictitious (samaran). Maka dari itu game sangat cocok digunakan sebagai media pembelajaran di PAUD karena di dalam game karena menggabungkan antara media lagu, teka teki dan permainan sehingga pembelajaran menjadi lebih menyenangkan (Mardhotillah & Rakimahwati, 2022).

Edu game dapat menjadi media interaktif sebagai bentuk pemanfaatan

teknologi dalam mengenalkan budaya pada anak usia dini. Terlebih secara harfiah anak masih senang untuk bermain, juga dapat menjadi daya tarik bagi anak dalam proses pembelajaran (Kurniawan & Hermawan, 2019). Untuk menciptakan generasi berkualitas, dapat dimulai sejak dini. Pada penggunaan teknologi dalam pengenalan budaya tradisional dapat memberikan kemudahan terlebih, budaya yang dimiliki oleh Indonesia sangat beragam, setiap daerah memiliki ciri khas budaya yang lahir dari bentuk ekspresi masyarakat lokal. Banyaknya warisan budaya yang diberikan sebagai pengetahuan, gagasan, kepercayaan, bahkan menjadi nilai norma dalam suatu masyarakat (Pane et al., 2017).

Salah satu budaya lokal dari Indonesia adalah Betawi. Suku Betawi adalah suku yang mendiami Jakarta. Kebudayaan Betawi merupakan hasil percampuran dari beberapa kebudayaan antara lain: Jawa, Ambon, Sunda, bahkan Tionghoa dan Arab (Febriansyah, 2022).

Hal tersebut selaras dengan pendapatnya membahas tentang masyarakat Betawi yang berasal dari hasil percampuran kebudayaan Betawi akan pengaruh dari Belanda, Cina, Arab, India, Portugis, dan Sunda. Kebudayaan Betawi, memiliki beragam adat istiadat yang masih dilakukan hingga saat ini meskipun sudah tidak lagi sama seperti dulu. Adanya kebudayaan Belanda dan Tionghoa menjadi bahan kebudayaan Betawi, mulai dari ciri khas, bahasa, pakaian adat, makanan, dan budaya lainnya (Waliyyayasi, B. M. (2021).

Betawi memiliki banyak ciri khas, Ondel-Ondel menjadi salah satu ciri khas dari Betawi. Ondel-ondel adalah boneka besar khas Betawi yang memiliki keunikan khusus dan digunakan sejak zaman penjajahan Belanda (Purbasari, 2010). Tidak hanya Ondel- Ondel yang menjadi khas di Betawi, Kerak telur menjadi legenda kuliner di masyarakat Betawi, sering disebut dengan jajanan khas Betawi yang terbuat dari telur, ketan, kelapa, merica, garam, dan udang kering dengan cara memasak kerak telur ini juga cukup khas (Adriansyah & Parantika, 2023)

Selain itu Betawi memiliki sapaan khusus untuk laki-laki dan perempuan yaitu, abang dan none. Abang sebenarnya adalah cara sapaan laki-laki dewasa yang dilakukan oleh orang yang lebih muda dalam struktur keluarga atau di antara teman-teman dalam bahasa Betawi, dan None adalah cara sapaan terhadap remaja putri yang belum menikah (Waliyyayasi, 2021). Penelitian yang terkait dengan penggunaan game dalam proses pembelajaran telah banyak dilakukan diantaranya oleh Mardhotillah & Rakimahwati, (2021) berfokus pada pengembangan aplikasi edukasi power point pada kemampuan kognitif anak. Penggunaan media power point ini sangat menarik dan mudah dipahami oleh anak.

Ditemukan penelitian yang serupa mengenai Game edukasi ragam budaya yang dilakukan oleh (Pane et al., 2017), game tersebut menggunakan metodologi Waterfall dalam pembuatan aplikasi. Aplikasi ini Untuk mengenalkan kebudayaan Indonesia tentang makanan tradisional, rumah tradisional, senjata tradisional, tarian tradisional dan lagu tradisional. Berdasarkan hal tersebut, peneliti ingin mengembangkan media edu game berbasis power point yang dapat digunakan sebagai media pembelajaran pada anak usia dini. Power point adalah program komputer yang digunakan untuk presentasi, selain itu di power point juga bisa menampilkan animasi yang nyata (Srimaya, 2017).

Penelitian ini akan berbeda dengan penelitian sebelumnya dalam hal tujuan pengembangan dan materinya. Sedikitnya materi mengenai budaya lokal pada suatu suku menjadikan tujuan fokus pada penelitian ini adalah mengembangkan edu game untuk mengenalkan ragam budaya lokal Betawi dan ciri khasnya pada anak usia 5-6 tahun. Adapun media Edu Game berbasis power point dalam penelitian pengembangan ini memuat materi tentang budaya lokal Betawi dan ciri khas pada anak usia 5-6 tahun. Pada game tersebut akan mengenalkan tempat tinggal Jakarta, suku Jakarta, ciri khasnya, makanan, panggilan sapaan, dan pakaian adat.

METHODS

Penelitian ini merupakan penelitian pengembangan dengan menggunakan pendekatan pengembangan multimedia Luther. Penelitian ini bertujuan untuk mengembangkan dan menghasilkan produk media berbasis teknologi, dengan menggunakan *powerpoint*. Tahapan dalam penelitian ini terdiri dari 5 Tahap pertama yakni *concepting* atau membuat konsep, Tahap kedua yakni *material collecting* adalah tahap mengumpulkan bahan-bahan yang dibutuhkan untuk mengembangkan *edu game*, Tahap ke tiga atau tahap *assembly*, pada tahap ini merupakan pembuatan objek edu game berbasis powerpoint, Tahap keempat yakni tahap testing dilakukan setelah tahap *assembly* (pembuatan). Tahap kelima distribusi hasil media.

Penelitian dilaksanakan di TPQ Baitul Hikmah yang terletak di Kabupaten Cirebon dengan menggunakan subjek guru dan siswa dengan kelompok usia 5-6 tahun. Tujuan penelitian ini untuk meninjau sejauh mana edu game berbasis powerpoint ini memberikan manfaat bagi anak dalam pengenalan ciri khas dan ragam budaya Betawi. Data dikumpulkan dengan menggunakan lembar validasi ahli materi dan ahli media, angket respon subjek pengguna yakni guru dengan menggunakan skala likert dan anak dengan kriteria penilaian menggunakan 1-2.

Teknik analisis data pada penelitian ini menggunakan analisis data deskriptif kuantitatif yang diperoleh dari skor angket penilaian ahli media, ahli materi, guru, dan siswa kelompok 5-6 tahun dengan menghitung persentase jawaban masing-masing ahli dan pengguna kemudian dihitung dengan menggunakan rumus untuk selanjutnya dideskripsikan.

RESULTS AND DISCUSSION

Sesuai dengan yang telah digambarkan pada gambar 1, langkah pada penelitian ini terdiri dari 5 tahap, yaitu membuat konsep edu game, mengumpulkan bahan, memproduksi/membuat edu game, melakukan pengujian dengan melibatkan ahli media, ahli materi, guru dan respon anak dan distribusi hasil media. Adapun tahapan tersebut digambarkan sebagai berikut ini.

Tahap pertama yakni *concepting* atau membuat konsep, merupakan tahap untuk menentukan tujuan pengembangan, sasaran target/pengguna serta merumuskan materi yang akan dikembangkan. Dapat dilihat melalui Tabel 1. Bahwa edu game ini diperuntukan bagi anak usia 5-6 tahun, dengan tema mengenalkan budaya Betawi. Melalui tahap konsep ini peneliti dapat merumuskan apa saja yang dibutuhkan pada tahap selanjutnya.

Tabel 1, Deskripsi Konsep Aplikasi Edu game Berbasis Powerpoint

Tema Edu game	: Mengenal Budaya Betawi
Tujuan	: Mengenalkan Budaya Betawi dan Ragamnya
Aplikasi yang digunakan	: Microsoft powerpoint
Sasaran Pengguna	: Anak usia 5-6 tahun
Pemain	: 1 kelompok
Fitur	: Pengetahuan, petunjuk penggunaan,, tujuan pembelajaran, level game, game sederhana

Tahap kedua yakni *material collecting* adalah tahap mengumpulkan bahan-bahan yang dibutuhkan untuk mengembangkan *edu game*, bahan yang dibutuhkan diantaranya gambar animasi ragam khas Betawi serta gambar pendukung seperti background, text, dan audio. Sumber gambar diperoleh dari platform dan website seperti canva dan google, adapun audio diperoleh dari platform youtube.

Tahap ke tiga atau tahap *assembly*, pada tahap ini merupakan pembuatan objek edu game berbasis powerpoint. Pembuatan produk didasarkan pada tahap design dan material collecting, kemudian diolah menjadi rangkaian game. berikut ini adalah tampilan pada masing-masing menu yang ada pada edu game dengan

judul “Bermain di Betawi”.

1. Halaman Menu Utama

Sebelum anak akan memulai memainkan aplikasi, anak akan dihadapkan dengan *menuloding/play*. Desain menu utama ini bisa dilihat pada gambar dibawah ini. Seperti yang terlihat pada gambar. 2 terdapat nama atau judul dari *edu game* “Bermain di Betawi”



Gambar 1, Menu utama

2. Halaman Menu Pilihan

Tampilan menu utama ini terdiri dari 4 pilihan menu yaitu menu pengetahuan, petunjuk main, tujuan pembelajaran dan game level. Setiap tombol pada scene menu utama memiliki fungsi masing-masing, saat kita mengklik *button* pengetahuan maka akan ditampilkan scene pengetahuan dst.



Gambar 2, Menu pilihan

3. Halaman Menu Petunjuk Main

Pada halaman petunjuk main di halaman utama game yang didapat pada tampilan ini adalah tentang tata cara bermain dilengkapi dengan simbol rumah

untuk menu utama, tanda panah kanan untuk lanjut bermain dan kiri untuk kembali, dapat dilihat pada



Gambar 3, Petunjuk main

4. Halaman Menu Pengetahuan

Pada gambar scene pengetahuan adalah scene dimana anak dapat melihat, memahami dan mempelajari isi materi yang ada, sehingga dapat memudahkan pemain dalam menyelesaikan misi yang diberikan pada scene bermain nantinya. Halaman menu pengetahuan ini berisi pilihan belajar juga dengan dua materi yaitu dengan pengenalan ciri khas Betawi, sebutan untuk laki-laki yang lebih tua dan sebutan untuk perempuan muda, juga makanan khas Betawi.



Gambar 4, Menu pengetahuan

5. Halaman Menu Tujuan Pembelajaran

Halaman menu tujuan pembelajaran ini berisi tujuan pembelajaran yang dilakukan menggunakan edu game "Bermain Di Betawi" bisa dilihat pada gambar dibawah ini.



a

Gambar 5, Menu tujuan pembelajaran

6. Halaman Game Level

Halaman menu game level berisi pilihan level dalam bermain, dengan tiga kategori level yaitu, Level mudah, level menengah dan level sulit. Bisa dilihat pada gambar dibawah ini.



Gambar 6, Menu Level

Tahap keempat yakni tahap testing dilakukan setelah tahap *assembly* (pembuatan). Pada tahap ini peneliti dilakukan pengujian kelayakan terlebih dahulu dengan melibatkan penilaian ahli materi dan ahli media. Hasil validasi uji materi digambarkan pada tabel 2, dari tabel tersebut dapat terlihat bahwa nilai keseluruhan yang diperoleh 29 dari nilai maksimal 30 dengan persentase $P = \frac{29}{30} \times 100\% = 97\%$ yang apabila dikonversikan menjadi kualitatif berada pada kategori **layak**

Tabel 2. Hasil Validasi Ahli Materi

No	Indikator	Nilai
Aspek kelayakan Isi		
1	kesesuaian tampilan gambar edu game dengan karakteristik anak usia 5-6 tahun	5
2	Kesesuaian isi materi edu game berbasis ppt dengan karakteristik anak usia 5-6 tahun	5
3	kegiatan di dalam edu game berbasis ppt menumbuhkan rasa ketertarikan	5

No	Indikator	Nilai
	anak dalam menggunakan bahan ajar	
Aspek Kognitif		
4	Pengetahuan mengenai ciri khas Budaya Betawi mudah dipahami	4
5	Pengetahuan mengenai makanan khas Betawi mudah dipahami	5
6	Pengetahuan mengenai pakaian adat Betawi mudah dipahami	5
	Jumlah	29
	Persentase	97%

Hasil validasi ahli media digambarkan pada tabel 2, secara keseluruhan hasil yang didapat yakni 66 dari nilai maksimal 70 dengan persentase $P = \frac{66}{70} \times 100\% = 94\%$ yang apabila dikonversikan menjadi kualitatif berada pada kategori layak

Tabel 3. Hasil Validasi Ahli Media

No	Indikator	Nilai
Tampilan Fisik		
1	Kesesuaian tampilan <i>edu game</i> berbasis ppt dengan anak usia 5-6 tahun	5
2	Kesesuaian media <i>edu game</i> berbasis ppt untuk digunakan oleh kelompok anak dengan jumlah maksimal 2 anak	4
Desain Grafis		
3	Ketepatan pemilihan warna pada gambar	5
4	Kemenarikan komposisi warna secara keseluruhan	5
5	Kesesuaian gambar dengan konten <i>edu game</i>	5
6	Kualitas gambar pada <i>edu game</i>	5
7	Keterbacaan judul pada <i>edu game</i>	5
8	Ketepatan pemilihan huruf	4
9	Desain tampilan isi <i>edu game</i> menarik minat anak	5
10	Ketepatan tata letak gambar dengan tulisan	4
Bahasa		
11	Kemenarikan judul bagi anak usia 5-6 tahun	5
12	Bahasa yang digunakan komunikatif	4
Kebermanfaatan		
13	Media dapat memotivasi anak	5
14	Melibatkan anak untuk aktif	5

Jumlah	66
Presentasi	94%

Tahap kelima yakni disturbing atau pendistribusian hasil produk pengembangan yang telah dinyatakan layak oleh ahli. Pada tahap ini peneliti melibatkan subjek guru dan anak untuk melihat sejauh mana respon subjek pengguna edu game berbasis powerpoint ini. Dari uraian tabel 4. Dapat diketahui bahwa respon guru terhadap edu game memiliki nilai persentase 88%, hal tersebut berarti bahwa edu game berbasis powerpoint layak dan sesuai digunakan bagi anak usia 5-6 tahun.

Tabel 4. Hasil Respon Guru

Indikator	Guru							
	1	2	3	4	5	6	7	8
Kesesuaian materi dengan karakteristik anak usia dini	2	4	4	4	4	4	4	3
Kemudahan penggunaan	2	4	4	4	4	3	4	3
Kebermanfaatan edu game untuk mengenalkan budaya Betawi	2	4	4	4	4	3	4	3
Kemenarikan edu game	2	4	4	4	4	4	4	4
Kesesuaian tampilan dengan anak usia dini	2	4	4	4	4	3	2	3
Jumlah	10	20	20	20	20	17	18	16
rata-rata	17,6							
Persentase	88%							

Peneliti juga melakukan uji coba terbatas terhadap anak usia 5-6 tahun, untuk melihatsejauh mana respon anak terhadap *edu game* yang dimainkannya. Dalam tabel 5. Nilai rata-rata pada respon anak yakni 9,2 dari nilai maksimal 10 apabila dipresentasikan nilai yang diperoleh yakni 92%. Hal tersebut menunjukkan bahwa edu game berbasis power point menarik serta bermakna bagi anak.

Item	nama anak						
	AI	FS	AM	AA	MA	MR	RP
Gambar menarik bagi anak	2	2	2	2	2	2	2
Warna menarik	2	2	2	2	2	2	2

Isi cerita dapat dipahami	2	2	2	2	1	1	1
Menambah pengetahuan mengenai Betawi	2	2	2	2	1	1	2
Menumbuhkan minat belajar	2	2	2	2	2	2	2
Jumlah	10	10	10	10	8	8	9
Rata-rata	9,2						
Persentase	92%						

Dari hasil pengembangan edu game berbasis powerpoint, diperoleh hasil bahwa produk layak digunakan, diuji cobakan dan didistribusikan. Berdasarkan hasil validasi ahli materi dan ahli media diperoleh bahwa edu game berbasis powerpoint layak digunakan, hal tersebut terlihat dari hasil persentase yang cukup tinggi. Dalam hal tersebut, dapat diketahui bahwa *edu game* berbasis *powerpoint* untuk mengenalkan ciri khas dan ragam budaya Betawi pada anak usia 5-6 tahun sesuai dengan prinsip-prinsip pemilihan media pembelajaran.

Diskusi

Kegiatan belajar dengan memanfaatkan edu game dapat meningkatkan pengetahuan budaya anak usia dini yang disampaikan melalui permainan berbasis teknologi. Proses pengenalan budaya Betawi pada edu game ditekankan pada kemenarikannya sehingga anak tidak cepat bosan. Game edukatif berbasis pada teknologi bisa menambah pengetahuan dan pengenalan anak usia dini. Terlihat dari hasil validator menemukan bahwa game edukatif mempunyai kebaruan. Hasil yang dapat dilihat pada penelitian yaitu sangat penting menambah pengetahuan serta pengenalan Ciri dan Ragam Betawi menggunakan games edukatif (Mahardika et al., 2023).

Adapun pengembangan *edu game* berbasis *powerpoint* penggunaan animasi, perpaduan warna, serta suara menjadi daya tarik tersendiri bagi anak. Hal tersebut terlihat dari hasil pengamatan pada awal datang anak cukup tertarik dengan laptop yang telah dibawa, terlebih ketika diberitahu jika akan bermain game menggunakan laptop anak semakin antusias. Dengan hal ini pembelajaran berbasis TIK dapat menarik pikiran, perhatian, perasaan, dan minat anak sedemikian rupa sehingga proses belajar terjadi.

Pada saat kegiatan sedang berlangsung peserta terdiri dari 7 anak dapat mengikuti dengan tertib pada kegiatan pengenalan materi ini. Kegiatan awal adalah memperkenalkan perangkat yang digunakan, dan terlihat anak sudah dapat menyebutkan seperti benda yang dibawa adalah laptop yang dapat

digunakan untuk bermain game.

Kegiatan selanjutnya dalam memberikan edukasi dengan menggunakan *edu game* yang memang diperuntukkan untuk anak-anak. Mengapa dengan game, karena game memiliki sifat membangun seperti emosional, intelektual dan psikomotorik. Contoh dari game tersebut adalah pengenalan ciri dan ragam Betawi. Ketika proses kegiatan anak-anak sangat antusias menyebutkan gambar-gambar yang ada di layar laptop seperti melihat gambar ondel-ondel anak-anak secara serentak menyebutkan gambar ondel-ondel. FS menyatakan melihat ondel-ondel “di TV”, AL juga menyatakan “di youtube juga banyak”. Berdasarkan hal tersebut bahwa pada dasarnya pengaruh teknologi terhadap anak memang sangatlah mudah berkembang maka perlu pendidikan berkarakter agar bisa membantu proses pembelajaran sesuai dengan umuranak (Ardiana, 2023).

Edu game berbasis *powerpoint* adalah permainan yang dirancang untuk memberikan pengetahuan atau pembelajaran kepada anak. *Edu game* dirancang untuk memberi informasi atau pengetahuan. Meliputi pengenalan materi, pertanyaan, dan jawaban pilihan yang beragam. Hal ini menunjukkan bahwa anak yang sudah mampu berpikir untuk mencari jalan keluar sendiri atas permasalahan yang mereka hadapi walaupun tidak sejalan dengan apa yang diperintahkan.

Dari hasil observasi anak-anak mengerjakan secara bersamaan dengan dipandu oleh peneliti. Ketika pada salah satu pertanyaan anak-anak tertarik melihat salah satu gambar yang unik yakni gambar wayang, tanpa membaca perintah terlebih dahulu anak langsung memilih wayang sebagai jawabannya, setelahnya anak mendapat jawaban salah. Kemudian peneliti mengarahkan anak untuk membaca pertanyaan terlebih dahulu sebelum memilih jawaban.

Dengan hal tersebut semua anak mengulang kembali sampai jawaban mereka benar. Hal ini menunjukkan media *powerpoint* flexible karena dapat digunakan secara berulang-ulang. Media Power point bersifat interaktif sehingga sangat memudahkan guru untuk dimanfaatkan sebagai media belajar anak. Media yang dapat menarik minat anak agar anak dapat berpartisipasi aktif dan dapat termotivasi dalam pembelajaran seperti dengan memanfaatkan salah satu software pada teknologi komputer yaitu *Microsoft power point* (Saudale et al., 2022). Dengan adanya *edu game* dapat melatih konsentrasi anak, mengajar lebih cepat dan efektif, menambah daya pengetahuan dan ingatan, membuat proses belajar menyenangkan, membangkitkan emosi anak, meningkatkan kemampuan komunikasi anak, dan meningkatkan rasa sosialisasi anak (Febriani

et al., 2018).

Demikian, keterbatasan dalam penelitian *edu game* yaitu penggunaanya yang perlu dampingan oleh guru. Dalam hal ini guru menjadi fasilitator untuk mendampingi atau mengawasi anak-anak ketika bermain *edu game* berbasis *powerpoint*. Kualitas pengalaman pada anak dalam menggunakan teknologi dapat berbeda-beda karena tergantung pada faktor pendukung dan pendorong yang diberikan pada anak. Penelitian Pengembangan ini memperoleh hasil interaksi anak dengan teknologi dalam hal *edu game* berbasis *powerpoint* dapat mendukung anak-anak untuk memperoleh pengetahuan serta mengembangkan sisi positif tentang penggunaan teknologi khususnya untuk pengenalan Ciri dan Ragam Betawi pada anak.

CONCLUSION

Penggunaan teknologi dalam proses pembelajaran itu sangat perlu dimanfaatkan untuk mempermudah pembelajaran dalam dunia pendidikan tidak terkecuali pada pendidikan anak usia dini. Dalam hal ini kita memanfaatkan teknologi untuk membuat *edu game* berbasis program *power point* untuk menjadi salah satu media yang digunakan untuk pembelajaran di pendidikan anak usia dini. Bisa kita lihat dari hasil penelitian bahwa *edu game* berbasis *power point* merupakan media yang sangat cocok untuk pembelajaran pada anak usia 5-6 tahun karena, *edu game* ini menarik dan menyenangkan untuk dimainkan dari segi gambar, musik, warna, dan tampilan. Manfaat dari *edu game* ini adalah untuk mengenal ragam budaya lokal Betawi.

REFERENCES

- Adriansyah, F. D., & Parantika, A. (2023). Kerak Telor Makanan Khas DKI Jakarta. *Jurnal Ilmiah Wahana Pendidikan*, 9(9), 461–467.
- Amadi, A. S. M. (2022). Pendidikan di Era Global: Persiapan Siswa untuk Menghadapi Dunia yang Semakin Kompetitif. *Educatio*, 17(2), 153–164. <https://doi.org/10.29408/edc.v17i2.9439>
- Ardiana, R. (2023). Implementasi Media Berbasis TIK untuk Pembelajaran Anak Usia Dini. *Murhum: Jurnal Pendidikan Anak Usia Dini*, 4(1), 103–111. <https://doi.org/10.37985/murhum.v4i1.117>
- Deslianti, D., & Sonita, A. (2022). Game Edukasi Ragam Budaya Indonesia Berbasis Android. *JTIS: Journal of Technopreneurship and...*, 3(2), 135–143. <http://jurnal.umb.ac.id/index.php/JTIS/article/view/3676%0Ahttp://jurn>

- al.um b.ac.id/index.php/JTIS/article/download/3676/2520
- Febriani, A. S., Mulyana, E. H., & Rahman, T. (2018). Pengembangan Educative Game Berbasis Aplikasi Android Untuk Memfasilitasi Keterampilan Membaca Anak Usia 5-6 Tahun. *Jurnal Paud Agapedia*, 2(2), 187–196. <https://doi.org/10.17509/jpa.v2i2.24544>
- Febriansyah, M. R. (2022). Strategi Dinas Kebudayaan Provinsi Daerah Khusus Ibukota Jakarta dalam Melestarikan Budaya Ondel-Ondel Penulis: Afiliasi: conditions of the Creative Commons Attribution-ShareAlike 4.0 International License-(CC-BY-SA). *Jurnal Terapan Pemerintahan Minangkabau*, 2(1), 35–43. <https://creativecommons.org/licenses/by-sa/4.0/>
- Fenty, N. S., & Anderson, E. M. K. (2014). Examining Educators' Knowledge, Beliefs, and Practices About Using Technology With Young Children. *Journal of Early Childhood Teacher Education*, 35(2), 114–134. <https://doi.org/10.1080/10901027.2014.905808>
- Flewitt, R., Messer, D., & Kucirkova, N. (2014). New directions for early literacy in a digital age: The iPad. *Journal of Early Childhood Literacy*, 15(3), 289–310. <https://doi.org/10.1177/1468798414533560>
- Kurniawan, A. J., & Hermawan, C. (2019). Rancang Bangun Aplikasi Game Edukasi Pengenalan Budaya Indonesia Berbasis Android. *Jurnal Penelitian Dosen Fikom (UNDA)*, 10(2), 1–5. <http://jurnal.unda.ac.id/index.php/Jpdf/article/view/137/132>
- Mahardika, E. K., Nurmanita, T. S., Anam, K., & Prasetyo, A. (2023). Strategi Literasi Budaya Anak Pengembangan Game Edukatif Usia Dini melalui Pengembangan Game Edukatif. *Murhum: Jurnal Pendidikan Anak Usia Dini*, 4(2), 80–93. <https://doi.org/10.37985/murhum.v4i2.287>
- Mardhotillah, H., & Rakimahwati, R. (2022). Pengembangan Game Interaktif Berbasis Android untuk Meningkatkan Kemampuan Membaca Anak Usia Dini. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 6(2), 779–792. <https://doi.org/10.31004/obsesi.v6i2.1361>
- Pane, B., Najoan, X., & Paturusi, S. (2017). Rancang Bangun Aplikasi Game Edukasi Ragam Budaya Indonesia. *Jurnal Teknik Informatika*, 12(1), 1–9. <https://ejournal.unsrat.ac.id/v3/index.php/informatika/article/view/17793/17317>
- Purbasari, M. (2010). Indahnya Betawi. *Humaniora*, 1(1), 1. <https://doi.org/10.21512/humaniora.v1i1.2142>

- Rais, M., & Riska, M. (2018). Pembelajaran Interaktif Edu-Game Pengenalan Profesi Berbasis Android Pada Siswa Paud. *Jurnal Psikologi Pendidikan Dan Konseling: Jurnal Kajian Psikologi Pendidikan Dan Bimbingan Konseling*, 4(1), 38. <https://doi.org/10.26858/jpkk.v4i1.3645>
- Saudale, M., Astawan, G., & Paramita, V. A. (2022). *Metode Game Edukasi Berbasis Power Point Interaktif Dalam Pengembangan Bahasa Pada Anak Usia Dini*. 7(3), 0–00. https://ejournal2.undiksha.ac.id/index.php/jurnal_bk
- Srimaya. (2017). Efektivitas Media Pembelajaran Power Point. *Biotek*, 5(1), 53–68.
- Waliyyayasi, B. M. (2021). Abang-None As an Attempt of the Government To Introduce the Betawi Culture To the World. *International Review of Humanities Studies*, 6(2), 917–931. <https://doi.org/10.7454/irhs.v6i2.364>

Development Of Digital Modules Integrated With Huma Betang For Islamic Religious Education And Ethics Subjects In High School

Rika Andriani*

*IAIN Palangka Raya

rikaandriani996@gmail.com

Setria Utama Rizal

IAIN Palangka Raya

setriautamarizal@iain-palangkaraya.ac.id

Nurul Hikmah

IAIN Palangka Raya

nurulhikmah@iain-palangkaraya.ac.id

Abstract

The field of education is evolving as a result of advances in science and technology. To be able to compete and not be left behind, this development encourages an increasingly modern learning process. Developing technology-based learning media and resources is one of the steps. SMA Negeri 3 Palangka Raya has facilities and infrastructure that support the digital-based learning process, but in the learning process of Islamic religious education and character, teachers and students still use printed teaching materials, such as package books in general, due to the unavailability of digital teaching materials. The material contained in the book has also not been integrated with local wisdom, especially huma betang in Central Kalimantan. So the development of digital modules based on local wisdom is very important. The objectives of this research are: 1) to produce a digital module integrated with huma betang in the subject of Islamic religious education and ethics class X at SMA Negeri 3 Palangka Raya; and 2) to describe the feasibility of an integrated digital module of huma betang in Islamic religious education and ethics class X at SMA Negeri 3 Palangka Raya. The development of this local wisdom-based digital module was developed through the Canva application to produce a soft file product with a size of 63.5 MB consisting of 61 pages/slides. The results showed that, based on the material expert validation of 92.72% with the criteria "Very Feasible," Furthermore, the results of media expert validation amounted to 89.33% with the criteria "Very Feasible." Based on the validation results of the two

validators, the average score was 91.02% with the criteria "Very Feasible." Thus, it can be concluded that the local wisdom-based digital module that has been developed meets the criteria of being very feasible to use in the learning process.

Keywords: *Digital Module; Canva; Huma Betang*

INTRODUCTION

The rapid development of science and technology (IPTEK) has changed various aspects of life in the fields of economy, politics, culture, art, and even education. With this technological advancement, teachers must be more adaptive when digitizing teaching materials (Azizah, 2022). According to Permendikbud Number 56/M/2022 concerning Guidelines for Curriculum Implementation in the Framework of Learning Recovery, it is explained that "the preparation of learning materials is carried out by the development of science, technological progress, the arts, and culture." Digital modules can be packaged into teaching materials as one type of digitization of teaching materials that we often encounter in the form of text, video, images, and audio.

Digital modules contain learning materials that are systematically created according to a certain curriculum and packaged at a certain time that can be viewed on a cellphone, computer, or other device (Febrianti et al., 2023). The transformation of the presentation of material in digital modules to be more contextual is driven by the influence of digitalization. Given that current advances in science and technology have a positive and negative impact on life, the younger generation should continue to maintain the culture and local wisdom in their area for future generations (Jamun, 2018).

The local wisdom carried out in this research is huma betang. Huma betang, or long house, is the traditional house of the Dayak people in Central Kalimantan (Apandie & Ar, 2019). Huma betang has four main philosophical pillars of life, namely: honesty, equality, togetherness, and tolerance (As Pelu & Tarantang, 2018). Inside the betang house, the residents are governed by customary laws that have been established as guidelines for life. So the special value in the meaning of huma betang is togetherness amid differences between families living under one roof in huma betang (Lukman, 2018).

Based on the results of the observations of researchers in class X-5 SMA Negeri 3 Palangka Raya, data were obtained that in the learning process, both teachers and students still use printed textbooks, but there is no availability of teaching materials in digital form, especially digital modules. In addition, local wisdom, traditions, and culture, especially huma betang, have not been integrated into the content of the books used today. The results of the curriculum analysis that the researchers conducted with the wakame curriculum obtained information that SMA Negeri 3 Palangka Raya had

implemented an independent curriculum in class X in the odd semester of the new school year 2023/2024 with the Implementation of the Independent Curriculum (IKM) independently changed. Furthermore, the results of the material analysis in this study are based on the results of the needs analysis and curriculum analysis that the researchers have done before. So that the material that is suitable for integration with the local wisdom of huma betang in Central Kalimantan is obtained, namely in the subject of Islamic religious education and character in class X, chapter VIII, avoiding madzmumah morals and accustoming mahmudah morals, so that life is more comfortable and blessed. This is by the Decree of the Head of the Standards Agency, Curriculum, Culture, Research, and Technology Number 033/H/Kr/2022 concerning learning outcomes at the end of phase E (generally for grade X SMA/MMA / Package C Program) in the element of morals.

Based on the results of interviews conducted by researchers with class X Islamic religious education teachers, it is stated that the material of avoiding madzmumah morals and accustoming mahmudah morals to make life more comfortable and blessed needs to be integrated with the local wisdom of huma betang considering that both teachers and students at SMA Negeri 3 Palangka Raya come from different religions and tribes. In addition, with the development of digital modules integrated with huma betang, it is hoped that students can understand that local wisdom has taught them to do good so that it does not conflict with the teachings of Islam. Furthermore, the results of the analysis of the characteristics of students obtained information that class X students at SMA Negeri 3 Palangka Raya are more likely to be interested in digital learning. This is supported by adequate facilities and infrastructure at school and the permissibility of using cell phones during certain lessons. So the development of digital modules will greatly assist in the learning process, which is realized through learning outcomes (CP).

Based on this background, the researcher intends to conduct research with the title "Development of Digital Modules Integrated Huma Betang Islamic Religious Education and Cultivation Subjects in High School." The formulation of the problem of this research is how the development of digital modules integrated huma betang Islamic religious education subjects and class X ethics in SMA Negeri 3 Palangka Raya and how the feasibility of digital modules integrated huma betang Islamic religious education subjects and class X ethics in SMA Negeri 3 Palangka Raya. The purpose of this research is to produce a digital module integrated with huma betang in the subject of Islamic religious education and ethics class X in SMA Negeri 3 Palangka Raya and to describe the feasibility of digital modules integrated with huma betang in the subject of Islamic religious education and ethics class X in SMA Negeri 3 Palangka Raya.

METHODS

This research was conducted from February to April 2024. This research will be conducted at SMA Negeri 3, Palangka Raya. Jl. G. Obos No. 12, Menteng, Kec. Jekan Raya, Palangka Raya City, Central Kalimantan 73112. The research method used is research and development (R & D) to produce certain products and test their effectiveness. The research design follows the ADDIE development model, which consists of five steps: analysis, design, development, implementation, and evaluation. These stages are applied in the implementation of research and development.

The analysis stage in this research includes needs analysis, curriculum analysis, material analysis, and learner analysis. The design stage goes through several stages, namely design development, drafting, and prototype production. The development stage is product validation in the form of an integrated digital module of huma betang by material expert validators and media experts. The implementation stage is the product trial stage in the field, which is used by teachers and students in the learning process. This stage was carried out in class X-5, SMA Negeri 3, Palangka Raya. After this stage was completed, the researchers distributed teacher and learner response questionnaires to find out how they responded to the products that had been developed. The evaluation stage involves the final revision of the module based on input from expert validation as well as responses from teacher and learner questionnaires. The goal is that the developed module is really suitable and can be used in Islamic religious education and ethics subjects, especially material about avoiding madzmumah morals and familiarizing mahmudah morals so that life is more comfortable and blessed.

The research instruments used in this study were validation questionnaires and teacher and learner response questionnaires. The validation questionnaire consists of two types, namely the material expert validation questionnaire and the media expert validation questionnaire. The data collection techniques used include observation, interviews, documentation, and questionnaires to identify problems that need to be researched and evaluate the integrated digital module. Data analysis in this study was carried out with qualitative and quantitative descriptive analysis. Qualitative descriptive analysis was used to process data from the reviews of material experts, media experts, teachers, and supervisors in the form of input, responses, criticisms, and suggestions for improvement of the products developed. Quantitative descriptive analysis was used to process data from the validation of material experts and media experts, as well as the results of teacher and learner response questionnaires. Each piece of data was collected and then analyzed using a Likert scale, including: 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, and 1 = strongly disagree.

RESULTS AND DISCUSSION

Researchers used the ADDIE model in the research process, which consists of five stages: analysis, design, development, implementation, and evaluation. This model was chosen because it is often used in instructional development. Mulyatiningsih (2011: 5) states that “the ADDIE model is considered more rational and more complete than other models.” Therefore, this model can be applied to various types of product development, such as learning models, learning strategies, learning methods, media, and teaching materials (Rohaeni, 2020).

The first stage is analysis. According to Mulyatiningsih (2011: 186), the analysis stage involves several activities, such as identifying products that are suitable for target learners, learning objectives, learning materials, the learning environment, and learning delivery strategies (Ningrum & Dwijayanti, 2021). The analysis stage in this study carried out several activities, including needs analysis, curriculum analysis, material analysis, and learner analysis. The results of the needs analysis showed that the teaching materials used in learning were still limited and in the form of print (non-digital), such as package books that are generally used in schools. Then the material contained in the package book has also not been integrated with local wisdom, especially huma betang, so the development of digital modules integrated with huma betang is very important. The results of the curriculum analysis obtained indicate that SMA Negeri 3 Palangka Raya has implemented an independent curriculum in the odd semester of the 2023–2024 school year in class X with the Independent Curriculum Implementation (IKM) independently changed. The independent curriculum is a curriculum that integrates literacy, knowledge skills, and attitudes toward the use of technology (Mu'minah, 2021). So that the development of this digital module can support the implementation of the independent curriculum (IKM) in class X SMA Negeri 3 Palangka Raya. The results of the material analysis, based on the results of the needs analysis and curriculum analysis that the researcher has done previously, obtained material that is suitable for integration with Huma Betang local wisdom. This material analysis resulted in the main material, namely avoiding madzmumah morals and becoming familiar with mahmudah morals to make life more comfortable and blessed. This is by the Decree of the Head of the Standards Agency, Curriculum, Culture, Research and Technology Number 033/H/Kr/2022 concerning Learning Outcomes in Early Childhood Education, Primary Education Level, and Secondary Education Level in the Merdeka Curriculum that at the end of phase E (generally for grade X SMA / MA / Package C Program), in the moral element, students analyze the benefits of avoiding madzmumah morals; create works that contain content on the benefits of avoiding madzmumah attitudes; believe that madzmumah morals are prohibitions and mahmudah morals are religious orders; and familiarize themselves with avoiding

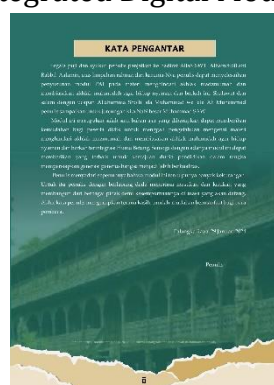
madzmumah morals and displaying mahmudah morals in everyday life. The results of the analysis of the characteristics of students at SMA Negeri 3 Palangka Raya obtained data that the facilities and infrastructure at the school have supported the digital-based learning process, such as the availability of projectors at school and the existence of two computer laboratories. Students have also been equipped with knowledge about computer operation, and they are allowed to bring cell phones to school. Therefore, the development of digital modules will be very helpful in the learning process, which is realized through learning outcomes because the characteristics of students in these schools are more interested in digital learning than non-digital.



Picture 1. Cover of Huma Betang Integrated Digital Module



Picture 2. Foreword



Picture 3. Table of Contents



Picture 4. Digital Module Instructions for Use



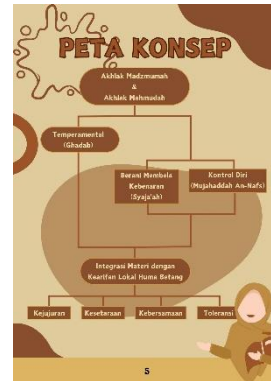
Picture 5. Learning Outcomes



Picture 6. Learning Objectives



Picture 7. Learning Objective Flow



Picture 8. Concept Map



Picture 9. Barcode Integrated Digital Module Huma Betang

The second stage is design; at this stage, the product design is still conceptual and will underlie the development process at the next stage (Maydiantoro, 2021). At this stage, several processes are carried out, namely design development, drafting, and prototype production. Design development is the determination of product design on the medium to be developed, namely in the form of an integrated digital module (huma betang) with the help of the Canva application. Canva is a simple, free design platform that allows users to create attractive, unique, and organized designs (Syabrina, 2023). Furthermore, in the preparation of the draft, stage is carried out by paying attention to

the material to be developed by quoting from several relevant sources. This material is adjusted to the material analysis that has been carried out at the previous analysis stage. The material in question is avoiding madzmumah morals and getting used to mahmudah morals so that life is more comfortable and blessed with integrated huma betang, while the sub-materials discussed are madzmumah morals, avoiding temperamental nature (ghadab), mahmudah morals, getting used to self-control behavior, getting used to brave behavior to defend the truth, integration of material with local wisdom huma betang, and behavior that is not by customs. The content of the material is taken from several relevant sources. Then the prototype production stage is the process of developing or making products in the form of integrated digital modules (huma betang) called prototype 1 to produce soft file products with a size of 18.8 MB consisting of 62 pages or slides.

The third stage is development. In this study, the development stage contains product assessment or validation by experts to determine the feasibility of the product that has been developed. The resulting product has had a positive influence and contribution to the learning process, namely providing interactive elements, providing feedback, and making students independent. This is because the Huma Betang integrated digital module developed as teaching material for students has gone through a validation test by expert validators who are competent in their fields. This validation was carried out by two validators, namely one material expert validator and one media expert validator. Material experts are people who have knowledge and competence in the field of material studied (Purba et al., 2023). Media experts are people who have knowledge and competence in the fields of technology and media design (Suwanda et al., 2023). In development research, material experts and media experts work together to assess the feasibility and validity of the products developed. The criteria for determining expert subjects include: 1) experience in their field; and 2) status as a lecturer.

A material expert is tasked with providing an assessment of the material in the reviewed medium (Alfina et al., 2023). The results of the material expert validation are used as a basis for making improvements to the developed product. The material in the developed product was only assessed by one material expert. The material expert validator consists of one expert, namely Mr. Ali Iskandar Zulkarnain, M.P.D. The material expert validation process was carried out once. Furthermore, the results of the material expert validation will be analyzed and processed using the following formula: $v = (\sum \text{scores obtained}) / (\sum \text{maximum score}) \times 100\%$. 22 questions have 5 answer criteria, so the maximum score obtained is 110 (22 items x 5 criteria). The validation results obtained a total score of 102, so the feasibility value of the integrated digital module of Huma Betang Islamic religious education and character in high school was

92.72%, in the category "very feasible." The results of the material expert validation can be seen in the following table.

Table 1. Material Expert Validation Results

Number	Indicator	Score	Description
Aspects of Self-Instruction			
1.	The material in the module is in accordance with the learning outcomes	4	Agree
2.	The material presented is in accordance with the learning objectives	4	Agree
3.	The material is presented coherently according to the flow of the learning objectives	4	Agree
4.	The material presented can be easily understood by students	5	Strongly Agree
5.	The material presented can be related to the context of the task and the environment of the learners	5	Strongly Agree
6.	Illustrations are presented in accordance with the content of the material in the module	4	Agree
7.	The language used in the module is easily understood by learners	5	Strongly Agree
8.	There is information about references, enrichment, and references that support learning materials	3	Neutral
9.	There are exercises, assignments, and the like	5	Strongly Agree
Aspects of Self Contained			
10.	The module contains the learning materials needed by students	5	Strongly Agree
11.	The module contains one chapter of learning material that is packaged as a whole	5	Strongly Agree
Aspects of Stand Alone			
12.	Module material can be learned without the help of other modules	4	Agree
13.	Module material can be learned without the help of other media	4	Agree
Aspects of Adaptive			
14.	The developed module is in accordance with the development of science and technology	5	Strongly Agree
15.	Modules developed are flexible and can be used on various hardware	5	Strongly Agree
16.	The material in the module can be used within a certain period of time	5	Strongly Agree
17.	Module material can be learned anywhere and anytime	5	Strongly Agree
18.	Module material uses simple language and is easy to	5	Strongly

	understand		Agree
Integration of Material with Huma Betang Values			
19.	The material presented is integrated with the value of honesty that exists in Huma Betang	5	Strongly Agree
20.	The material presented is integrated with the value of equality that exists in Huma Betang	5	Strongly Agree
21.	The material presented is integrated with the value of togetherness that exists in Huma Betang	5	Strongly Agree
22.	The material presented is integrated with the value of tolerance that exists in Huma Betang	5	Strongly Agree

A media expert is someone who can provide feedback on whether the media developed is effective in achieving learning objectives, whether the media is easy to use, and whether the media has an attractive and interactive appearance (Latief et al., 2022). Media expert validation aims to determine the graphic feasibility and quality of the developed product (Farida et al., 2018). The media expert validator consists of one person, namely Mr. Slamet Riyadi, M.Kom. The validation process by media experts was carried out twice. Furthermore, the results of the media expert validation will be analyzed and processed using the following formula: $v = (\sum \text{scores obtained}) / (\sum \text{maximum score}) \times 100\%$. 30 questions have 5 answer criteria, so the maximum score obtained is 150 (30 items x 5 criteria). The validation results obtained a total score of 134, so the validity value of the integrated digital module of Huma Betang Islamic religious education and ethics subjects in high school was 89.33% in the category "very feasible." After validation, the Huma Betang integrated digital module was revised according to suggestions and input from media expert validators. The results of the material expert validation can be seen in the following table.

Table 2. Media Expert Validation Results

Number	Indicator	Score	Description
Module Size			
1.	Conformity of module size to ISO standards: A4 (210 x 297 mm) or B5 (176 x 250 mm)	5	Strongly Agree
2.	Size suitability with module content material	5	Strongly Agree
Module Cover Design			
3.	The arrangement of layout elements on the front cover is appropriate and harmonious so as to give the impression of a good rhythm	5	Strongly Agree
4.	The arrangement of layout elements on the back cover is appropriate and harmonious so as to give the impression of a good rhythm	4	Agree
5.	Displays the right center of view (point center)	4	Agree

6.	The composition of layout elements (title, author, illustration, logo, etc.) is proportional to the layout of the content	5	Strongly Agree
7.	The size and writing layout elements are proportional to the size of the module	5	Strongly Agree
8.	Color elements have a harmonious layout that can clarify the function (module content material)	4	Agree
9.	Module title font size is more dominant than the author name and logo	5	Strongly Agree
10.	The color of the module title contrasts with the background color	4	Agree
11.	Does not use too many typeface combinations	4	Agree
12.	Does not use ornamental or decorative letters	4	Agree
13.	In accordance with the typeface for the content and material of the module	4	Agree
14.	Illustrations can describe the content or material of the module	4	Agree
15.	Illustrations are able to reveal the character of the object	4	Agree
Module Content Design			
16.	The placement of layout elements is consistent based on the writing pattern	5	Strongly Agree
17.	Clear separation between paragraphs	5	Strongly Agree
18.	There are no widows or orphans (sentences on different pages)	5	Strongly Agree
19.	Placement of chapter titles or equivalent (preface, table of contents, etc.) is uniform or consistent	5	Strongly Agree
20.	The margins used are proportional to the module size	5	Strongly Agree
21.	The distance between text and illustrations is appropriate	4	Agree
22.	Not using too many fonts	5	Strongly Agree
23.	The use of letter variations (bold, italic, capital, and small capital) is not excessive	4	Agree
24.	The font size is appropriate for the educational level of the learners	5	Strongly Agree
25.	The typeface is in accordance with the content of the material	4	Agree
26.	Spacing between lines of normal text arrangement	4	Agree
27.	Spacing between letters is normal	4	Agree
28.	The level or hierarchy of titles is clear	5	Strongly Agree
29.	Able to reveal the meaning of the object	4	Agree
30.	Shape in accordance with reality	4	Agree

Based on the results of the data analysis, the final percentage generated is as follows: The results of the material expert validation were interpreted at 92.72% with the category "very feasible"; the results of the media expert validation were interpreted at 89.33% with the category "very feasible." The validation results of the two validators obtained an average of 91.02% in the category "very feasible." Thus, it can be concluded that the Huma Betang integrated digital module that has been developed meets the criteria of being very feasible to use in the learning process.

The fourth stage, namely implementation, is the stage for implementing the design of teaching materials that have been developed in real classroom situations (Safitri et al., 2022). Teaching materials that have been developed are delivered in accordance with learning (Cahyadi, 2019). After the validation of material experts and media experts has been carried out and declared very feasible to use, the Huma Betang integrated digital module is ready to be tested on students in the product trial stage in the field. Researchers conducted product trials on a large scale with a total of 19 students in class X-5 SMA Negeri 3 Palangka Raya. Based on Arikunto (2010: 254), the test subjects for small groups involved 4–14 respondents, while those for large groups involved 15–50 respondents. The class that became the research subject was a recommendation from the Islamic religious education subject teacher in the class. The trial was carried out using each student's cellphone by sending a link to the Huma Betang integrated digital module via the WhatsApp application so that it could be accessed.

After the product trial is completed, the next step is the distribution of teacher and learner response questionnaires. The response given by teachers and students during the learning process is a benchmark for whether the media used is feasible or not (Hur Rahman Zh et al., 2022). As a researcher, it is very important to know the response of students and teachers to learning media in teaching and learning activities. But before that, the response questionnaire must first go through a questionnaire validation process carried out by the instrument validator, namely Mr. H. Abdul Aziz, M.P.D. The questionnaire validation that has been carried out has reached the feasibility level to be used, with a percentage of teacher response questionnaire validation of 82.22% in the category "very feasible" and a percentage of student response questionnaire validation of 81.66% in the category "very feasible." The results of the Islamic religious education teacher response questionnaire were 97% in the category "very feasible," and the results of the student response questionnaire were 76.77% in the category "feasible." Suharsimi Arikunto (2009: 35) indicates that if the percentage results are 81–100%, then the module is categorized as very feasible; the percentage results of 61–80% are categorized as feasible; the percentage results of 41–60% are categorized as quite feasible; the percentage 21–40% is categorized as not feasible; and

the percentage <21% is categorized as very unfit (Ernawati, 2017). Based on the research results obtained, it can be concluded that the integrated digital module of Huma Betang Islamic religious education and ethics subjects in high school that has been developed meets the very feasible category so that it can be said to be suitable for use.

The fifth stage, namely evaluation, is a process to see whether the product being built is successful by initial expectations or not (Kunto et al., 2021). Evaluation is carried out to analyze data on the validity of the developed Huma Betang integrated digital module. At this stage, researchers made the final revision of the developed module based on input obtained from the results of expert validation and teacher and learner response questionnaires. This aims to make the developed module suitable and can be used in Islamic religious education and ethics subjects on the material of avoiding madzmumah morals and familiarizing mahmudah morals so that life is more comfortable and blessed. This evaluation stage produces a soft file product of the Huma Betang integrated digital module with a size of 72.6 MB consisting of 61 pages/slides.

CONCLUSION

Based on the research and development of digital modules integrated with huma betang Islamic religious education and ethics subjects in high school, it can be concluded as follows:

1. The development of integrated digital modules of huma betang Islamic religious education and ethics subjects in high school uses the ADDIE research model (Analysis, Design, Development, Implementation, and Evaluation). The analysis stage includes needs analysis, curriculum analysis, material analysis, and analysis of learner characteristics. Based on this analysis, the appropriate product to be developed is an integrated digital module of Huma Betang Islamic religious education and ethics subjects in high school. The design stage goes through the stages of design development, drafting, and prototype production. This stage produces a soft file product measuring 18.8 MB with 62 pages or slides called a prototype. The development stage involves validation by material experts and media experts so that the products that have been developed are suitable for use in the learning process. The implementation stage involves the use of digital modules integrated with Huma Betang by teachers and students to find out their responses to the products that have been developed. The evaluation stage is the final stage that produces a product in the form of a digital module integrated with huma betang after passing the validation stage by material experts and media experts as well as trials by teachers and students.

2. The feasibility of digital modules based on the local wisdom of Islamic religious education and ethics subjects in high school was validated by two validators, namely material experts and media experts. The results of the validation by one material expert, namely Mr. Ali Iskandar Zulkarnain, M.Pd., were 92.72% with the criteria "Very Feasible." Furthermore, the results of validation by media experts amounted to one person, namely Mr. Slamet Riyadi, M. Kom., with 89.33% of the criteria "very feasible." Based on field trials conducted at SMA Negeri 3 Palangka Raya through the distribution of response questionnaires to Islamic religious education teachers and students, The teacher response questionnaire is 97% with the criteria "very feasible," and the student response questionnaire is 76.77% with the criteria "feasible."

REFERENCES

- Alfina, C. S., Fauziah, P. Y., Amalia, D., & Ulfah, K. U. (2023). Pengembangan Soft Book sebagai Media Pengenalan Huruf Hijaiyah pada Anak Usia Dini. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 7(6), 7589–7600. <https://doi.org/10.31004/obsesi.v7i6.4233>
- Apandie, C., & Ar, E. D. (2019). Huma Betang: Identitas Moral Kultural Suku Dayak Ngaju Kalimantan Tengah. *Journal of Moral and Civic Education*, 3(2), 76–91. <https://doi.org/10.24036/8851412322019185>
- As Pelu, I. E., & Tarantang, J. (2018). Interkoneksi Nilai-Nilai Huma Betang Kalimantan Tengah dengan Pancasila. *Jurnal Studi Agama dan Masyarakat*, 14(2), 119. <https://doi.org/10.23971/jsam.v14i2.928>
- Azizah, M. (2022). *Pengembangan Modul Digital Interaktif Berbasis Tari SigeKh Pengunten Untuk Siswa SMP Materi Sistem Gerak Pada Manusia*. <http://digilib.unila.ac.id/id/eprint/67651>
- Cahyadi, R. A. H. (2019). Pengembangan Bahan Ajar Berbasis Addie Model. *Halaqa: Islamic Education Journal*, 3(1), 35–42. <https://doi.org/10.21070/halaqa.v3i1.2124>
- Ernawati, I. (2017). Uji Kelayakan Media Pembelajaran Interaktif Pada Mata Pelajaran Administrasi Server. *Elinvo (Electronics, Informatics, and Vocational Education)*, 2(2), 204–210. <https://doi.org/10.21831/elinvo.v2i2.17315>
- Farida, F., Khoirunnisa, Y., & Putra, R. W. Y. (2018). Pengembangan Bahan Ajar Gamifikasi Pada Materi Bangun Ruang Sisi Lengkung. *Jurnal Penelitian dan Pembelajaran Matematika*, 11(2). <https://doi.org/10.30870/jppm.v11i2.3765>
- Febrianti, R., Sutisnawati, A., & Amalia, A. R. (2023). Pengembangan Modul Ajar Berbasis Digital Dalam Pembelajaran Pendidikan Pancasila. *Pendas: Jurnal*

- Ilmiah Pendidikan Dasar*, 08(01), 6199–6212.
<https://doi.org/10.23969/jp.v8i1.8914>
- Hur Rahman Zh, M., Ardiansyah, A., Sari Dewi, M., & Nikmatullah, F. (2022). Analisis Respon Siswa Dan Guru Terhadap Pengembangan Media Pembelajaran Flipbook Online Pada Pelajaran Al-Qur'an Hadist Di Madrasah Aliyah Negeri (MAN) Kota Batu. *Jurnal Literasiologi*, 8(2), 556619.
<https://doi.org/10.47783/literasiologi.v8i2.365>
- Jamun, Y. M. (2018). Dampak Teknologi Terhadap Pendidikan. *Jurnal Pendidikan dan Kebudayaan Missio*, 10(1), 48–52. <https://doi.org/10.36928/jpkm.v10i1.54>
- Kunto, I., Ariani, D., Widyaningrum, R., & Syahyani, R. (2021). Ragam Storyboard Untuk Produksi Media Pembelajaran. *Jurnal Pembelajaran Inovatif*, 4(1), 108–120.
<https://doi.org/10.21009/JPI.041.14>
- Latief, M. A. N., Bintartik, L., & Sutansi, S. (2022). Pengembangan Media Pembelajaran Berbasis Android pada Materi Hubungan Antar Makhluk Hidup dalam Ekosistem untuk Membentuk Karakter Mandiri Siswa Kelas V SDN Kendalrejo 02 Blitar. *Wahana Sekolah Dasar*, 30(2), 84.
<https://doi.org/10.17977/um035v30i22022p84-96>
- Lukman, A. A. (2018). Pewarisan Nilai sebagai Pembentuk Kepribadian Berkarakter Melalui Falsafah Huma Betang Suku Dayak Kalimantan. *SOSIETAS*, 8(1).
<https://doi.org/10.17509/sosietas.v8i1.12498>
- Maydiantoro, A. (2021). Model-Model Penelitian Pengembangan (Research and Development). *Jurnal pengembangan profesi pendidik indonesia (JPPPI)*.
<http://repository.lppm.unila.ac.id/43959/1/ARTICLE%20JPPPI.pdf>
- Mu'minah, I. H. (2021). Studi Literatur: Pembelajaran Abad-21 Melalui Pendekatan Steam (Science, Technology, Engineering, Art, and Mathematics) dalam Menyongsong Era Society 5.0. *In Prosiding Seminar Nasional Pendidikan*, 3, 584–594.
- Ningrum, D. M., & Dwijayanti, R. (2021). Pengembangan Media Pembelajaran Buku Saku Pada Kompetensi Dasar Mengidentifikasi Sop Penataan Produk Mata Pelajaran Penataan Barang Dagang Pada Peserta Didik Kelas Xi Pemasaran SMK Ketintang Surabaya. *Jurnal Pendidikan Tata Niaga (JPTN)*, 9(2), 1230–1236.
<https://doi.org/10.26740/jptn.v9n2.p1230-1236>
- Purba, B. P. W., Afrianti, B., Saragih, F. E., Nabilla, M. N., Adlini, M. N., & Rifda, R. (2023). Pengembangan Video Pembelajaran Pada Materi Sistem Pernapasan Di Madrasah Aliyah Laboratorium Universitas Islam Negeri Sumatera Utaramedan. *Jurnal Edukasi Biologi*, 9(2), 90–97.
<https://doi.org/10.21831/edubio.v9i2.19893>

- Rohaeni, S. (2020). Pengembangan Sistem Pembelajaran Dalam Implementasi Kurikulum 2013 Menggunakan Model Addie Pada Anak Usia Dini. *Instruksional*, 1(2), 122–123. <https://doi.org/10.24853/instruksional.1.2.122-130>
- Safitri, M., Aziz, M. R., & Sjakyakirti, U. (2022). Addie, Sebuah Model Untuk Pengembangan Multimedia Learning. *Jurnal Pendidikan Dasar*, 3(2), 51–59.
- Suwanda, N. A., Ulfa, S. W., & Adlini, M. N. (2023). Pengembangan Media Pembelajaran Komik Digital Biologi Berbasis Pendidikan Karakter Pada Materi Sistem Ekskresi Untuk Peserta Didik Kelas XI SMA. *JUPEIS: Jurnal Pendidikan dan Ilmu Sosial*, 2(4), 79–91.
- Syabrina, M. (2023). Pelatihan Aplikasi Canva Dalam Meningkatkan Literasi Digital Dan Kreativitas Peserta Didik Di MI Al-Muhajir Kereng Pangi. *Anfatama: Jurnal Pengabdian Masyarakat*, 2(4), 14–24. <https://doi.org/10.572349/anfatama.v2i4.1472>

Teacher Readiness to Apply Independent Curriculum Learning Tools in Private Madrasah Ibtidaiyah Palangka Raya City

Fitriani*

*IAIN Palangka Raya, Indonesia

fitrianiपालंगकराया12@gmail.com

Setria Utama Rizal

IAIN Palangka Raya

setria.utama.rizal@iain-palangkaraya.ac.id

Sulistiyowati

IAIN Palangka Raya

sulistiyowati@iain-palangkaraya.ac.id

Abstract

The implementation of the Independent Curriculum is organized based on levels, namely PAUD, SD/MI, SMP/MTs, SMA/MA, and SMK/MAK. This research aims to determine the readiness of teachers in implementing the Merdeka Curriculum learning tools in the Private Madrasah Ibtidaiyah of Palangka Raya City, Central Kalimantan Province, especially in MIS Hidayatul Muhajirin, MIS Al-Jihad, and MIS Nahdlatul Ulama (NU) in class I and class IV. The teacher's readiness is focused on (1) Learning Objectives (TP), (2) Learning Objectives Flow (ATP), (3) Teaching Module (MA), (4) Student Worksheet (LKPD), (5) Project for Strengthening Pancasila Student Profiles (P5), and Rahmatan Lil Alamin Student Profile (PPRA). The approach used in this research is qualitative with descriptive research type. The data collection technique used is observation when teachers are in the learning process implementing the Independent Curriculum. Then, interview techniques to explore teacher information regarding their understanding of the application of the Merdeka Curriculum learning tools. The research sites were at MIS Hidayatul Muhajirin, MIS Al-Jihad, and MIS Nahdlatul Ulama (NU) with a total of 18 teachers from the three Private Madrasah Ibtidaiyah. The data analysis technique used is the Miles Huberman model which consists of (1) data collection, (2) data reduction, (3) data presentation or analysis, and (4) drawing conclusions. The research results show that teachers as educators welcome and are ready for the implementation of the Independent Curriculum. Readiness to apply this to learning tools, namely Learning Objectives (TP), Learning Objective Flow (ATP), Teaching Modules (MA), Student

Worksheets (LKPD), and the Project for Strengthening the Pancasila Student Profile (P5) and the Rahmatan Lil Alamin Student Profile (PPRA). Efforts made include participating in various training activities and technical guidance related to the implementation of the Independent Curriculum, urgency and policies, as well as components of learning tools that need to be prepared or completed before implementing the Independent Curriculum.

Keywords: *Teacher Readiness, Implementation of the Independent Curriculum*

INTRODUCTION

The development of the times is one of the things that influences the educational process. As time goes by, there is an increase and equalization of the quality of education which is a challenge for the government in responding to it. Education is a process for humans to obtain their rights and obligations in a fair, decent and civilized manner. Education as a system consists of input, process and output. Input is the student who carries out learning activities, while the process is the activity that the students themselves go through. The process of implementing this education is of course expected to produce students as quality human resources. Continuously improving quality is one of the goals of education (Pristiwanti et al. 2022).

As for the function of education, it is stated in Law no. 20 of 2003 concerning the objectives of National Education Chapter II Article 3 reads: "National Education functions to develop abilities and shape the character and civilization of a dignified nation in order to educate the life of the nation, aiming to develop the potential of students so that they become human beings who have faith and are devoted to God Almighty. One, noble character, healthy, knowledgeable, capable, creative, independent, and a democratic and responsible citizen."

Therefore, education always coexists with developments over time. It cannot be denied that education in Indonesia is currently still at the improvement stage. Various national and international studies show that Indonesia has experienced a learning crisis (learning loss) for quite a long time. These studies say that underprivileged Indonesian children will understand simple reading and basic math concepts. Education in Indonesia also shows disparities between regions and social groups. The emergence of the Covid-19 pandemic is also one of the reasons that has further worsened the education system in Indonesia. Learning that started with face-to-face methods has shifted to distance learning (Muhafid et al. 2023).

Regarding this problem, the steps taken by the government to advance education are improvements to the curriculum. The emergence of the Independent Curriculum is the development of a new curriculum that the government is trying to overcome problems that are still occurring (Hamdi et al. 2022). The Merdeka

Curriculum still sounds strange, especially for teachers as facilitators of students who have to open their minds and learn new knowledge. So, it is not uncommon for some teachers to feel confused and curious about the Independent Curriculum system created recently by the government. The implementation of the Independent Curriculum is organized based on levels, namely PAUD, SD/MI, SMP/MTs, SMA/MA, and SMK/MAK. The basic level, namely Elementary School or Madrasah Ibtidaiyah, in readiness to implement the Independent Curriculum, must make preparations first. Because there are new terms in the Merdeka Curriculum, such as Learning Objectives (TP), Learning Objective Flow (ATP), Teaching Module (MA), Project for Strengthening the Pancasila Student Profile (P5), and Rahmatan Lil Alamin Student Profile (PPRA) for this level. base under the auspices of the Ministry of Religion(Rizal et al. 2022).

Based on data from the Ministry of Religion of Central Kalimantan Province, there are 28 Madrasah Ibtidaiyah in Palangka Raya City. Consists of 5 State Ibtidaiyah Madrasas and 23 Private Ibtidaiyah Madrasas. As for the decision of the Director General of Islamic Education Number 1443 of 2023 concerning Madrasas Implementing the Independent Curriculum for the 2023/2024 Academic Year, especially in Palangka Raya City there are 11 Private Ibtidaiyah Madrasas implementing it. These private Madrasah Ibtidaiyah include: MIS Islamiyah, MIS Miftahul Huda 1, MIS Nahdlatul Ulama, MIS Muslimat NU, MIS Al-Jihad, MIS Darussa'adah, MIS Hidayatul Muhajirin, MIS Miftahul Huda 2, MIS Mutiara Insan, MIS Darul Muallaf, and MIS Fathul Iman.

The reason the researcher chose MIS Hidayatul Muhajirin, MIS Al-Jihad, and MIS NU (Nahdlatul Ulama) as research sites, namely (1) Private Madrasah Ibtidaiyah which has just implemented the Independent Curriculum in the new academic year 2023/2024, (2) implementing the Independent Curriculum in stages, namely in class I and class IV, (3) the teachers at the Private Ibtidaiyah Madrasas have attended training, technical guidance, or workshops related to the implementation of the Independent Curriculum, (4) The three madrasas are Private Ibtidaiyah Madrasas located in the City Palangka Raya, Central Kalimantan Province which has more than 450 students.

Therefore, in this research, researchers need to know the readiness of teachers at the Private Madrasah Ibtidaiyah City of Palangka Raya, especially at MIS Hidayatul Muhajirin, MIS Al-Jihad, and MIS NU (Nahdlatul Ulama) in implementing the Independent Curriculum which can be formulated with the thesis title "Teacher Readiness Implementing Independent Curriculum Learning Tools in Private Madrasah Ibtidaiyah Palangka Raya City."

This research is limited only to the readiness of teachers in implementing the Merdeka Curriculum learning tools in the Private Madrasah Ibtidaiyah of Palangka Raya City which is simultaneously starting to implement the Merdeka Curriculum in the new

school year 2023/2024 for class I and class IV. The aim is to determine teacher readiness in implementing the Independent Curriculum learning tools which are focused on the following learning tools:

1. Learning Objectives (TP)
2. Learning Objective Flow (ATP)
3. Teaching Module (MA)
4. Student Worksheet (LKPD)
5. Project for Strengthening the Pancasila Student Profile (P5) and Rahmatan Lil Alamin Student Profile (PPRA)

Learning Objectives (TP) are achievements that must be met by students in the learning process. The formulation of learning objectives should contain two main components, namely competence and scope of material. The Learning Objectives Flow (ATP) or in the 2013 Curriculum known as the syllabus is a reference material for compiling teaching modules (Mahmudah et al. 2023). The Teaching Module (MA) or in the 2013 Curriculum known as RPP (Learning Plan Plan) is a document which contains the objectives, steps, learning media and assessments required in one topic based on the flow of learning objectives. The Teaching Module contains more complete items, divided into three, namely general information, core information and attachments. Apart from that, the characteristic or difference between the Merdeka Curriculum and the previous curriculum is the Pancasila Student Profile Strengthening Project (P5) which is designed to realize student profiles produced through the Indonesian education system. The Pancasila student profile has a competency formulation that complements the focus on achieving graduate competency standards by instilling character values related to Pancasila. Meanwhile, the Rahmatan Lil Alamin Student Profile (PPRA) is one option in developing a moderate religious concept to care for Indonesia's diversity without having to uproot existing traditions and culture (Kemendikbudristek).

METHODS

This research uses a qualitative approach with a descriptive type. A qualitative approach is an approach used in research to investigate, discover, describe and explain the qualities or features of social influence that cannot be explained, measured or depicted through a quantitative approach (in the form of numbers). (Nurdin, I. et al. 2019). The reason the researcher uses a qualitative approach is because in this research it will describe or describe a social situation that occurs in the Private Madrasah Ibtidaiyah of Palangka Raya City. Especially at MIS Hidayatul Muhajirin, MIS Al-Jihad, and MIS Nahdlatul Ulama (NU) which are related to teacher readiness to apply the Independent Curriculum learning tools in the learning process. The data in this

research is in the form of a sentence by sentence structure obtained from observations, interviews and documentation.

The research was carried out from June 2023 to June 2024. The research locations were at 3 Private Ibtidaiyah Madrasahs in Palangka Raya City, namely MIS Hidayatul Muhajirin, MIS Al-Jihad, and MIS Nahdlatul Ulama (NU). There are two data in this research, namely primary data and secondary data. The primary data that will be sought in this research is data during observations and interviews with teachers regarding their readiness to implement the Merdeka Curriculum learning tools. Meanwhile, the secondary that will be sought in this research is knowing the readiness of teachers to implement the Merdeka Curriculum learning tools related to the components prepared as well as experiences from the training that has been attended. The primary data source was obtained through 18 informants, namely the total number of informants from the 3 Private Madrasah Ibtidaiyah research sites. As for secondary sources through intermediaries such as the Head of the Madrasah, Deputy Head of the Madrasah for Curriculum or Student Affairs as well as journal articles related to the implementation of the Independent Curriculum.

Data collection techniques through observation, interviews and documentation. After the data is collected, it will go through validation or triangulation. Triangulation is a method for testing whether information is valid or not obtained from research. The triangulation techniques used in this research are source triangulation and engineering triangulation. Source triangulation is testing data from various sources of informants from which data will be taken. Meanwhile, technical triangulation is testing whether data can be trusted which is done by finding out and searching for the truth of the data from the same source using different techniques. (Alfansyur et al. 2020). Then, the data will be analyzed using the Miles Huberman model which consists of the data collection stage, data reduction stage, data presentation or data analysis stage, and conclusion drawing and verification stage. (Ahmad et al. 2021).

RESULTS AND DISCUSSION

Based on the results of observations, interviews, and documentation, researchers obtained several findings regarding teachers' readiness to implement the Independent Curriculum at MIS Hidayatul Muhajirin, MIS Al-Jihad, and MIS NU (Nahdlatul Ulama). The following are the results of interviews with researchers at MIS Hidayatul Muhajirin showing that MIS Hidayatul Muhajirin has implemented the Independent Curriculum in the new academic year 2023/2024 in stages for classes I and IV according to the rules set by the government. The readiness that teachers have followed in order to implement the Independent Curriculum, namely several times

participating in training or technical guidance related to the implementation of the Independent Curriculum.

A teacher must need a lot of preparation to implement the Independent Curriculum, one of which is preparing the learning device components. The learning device components contained in the Independent Curriculum must be created by teachers independently following environmental conditions and students' needs. Therefore, the competence of a teacher must increase and be ready for changes in the curriculum. Madrasah heads and teachers need to prepare personal, pedagogical, professional and social competencies in facing the Independent Curriculum (Muhafid 2023).

As for the readiness that has been carried out by MIS Al-Jihad, namely for teachers to take part in workshops regarding the introduction of IKM (Implementation of the Independent Curriculum), how to create KOSP (Educational Unit Operational Curriculum) or KOM (Madrasah Operational Curriculum), and learning administration. Likewise with MIS NU (Nahdlatul Ulama), similar to MIS Hidayatul Muhajirin and MIS Al-Jihad, MIS NU (Nahdlatul Ulama) before implementing the Independent Curriculum has attended training related to readiness and applicable policies in implementing the Independent Curriculum. The training activities, workshops or technical guidance that have been participated in are provisions held by the government, either directly or through the Merdeka Mengajar platform.

Based on the implementation of the Independent Curriculum which is divided into three options that can be implemented by each madrasah starting from independent learning, independent change, and independent sharing. MIS Hidayatul Muhajirin, MIS Al-Jihad, and MIS Nahdlatul Ulama (NU) implement the Independent Curriculum with independent learning where madrasahs are given the freedom to apply several parts and principles of the Independent Curriculum while still using K13. This is proven by the implementation of the Independent Curriculum which is still being implemented gradually in class I and class IV. This means that for classes II, III, V and VI, the three madrasahs still apply the 2013 Curriculum.

Then, there were several interview results from questions asked by researchers regarding teachers' readiness to implement the Independent Curriculum, the following information was obtained:

Mrs. N as the IB class teacher at MIS Hidayatul Muhajirin said:

"Actually, the Merdeka Curriculum is fun, the same as K13 which refers to and stimulates children to be active. However, the Merdeka Curriculum is quite complicated because it requires various things and there are many administrative things that must be completed. Apart from that, in the Independent Curriculum, if there are special children, the materials and

questions must be differentiated. Likewise with children who are fast and children who are slow in learning. However, as a teacher you have to follow the government and try to implement it." (Interview, February 26, 2024).

A similar thing was also conveyed by the homeroom teacher of class IV C at MIS Al-Jihad, namely Mrs. Sr., who found it difficult to fulfill the learning administration in the Independent Curriculum:

"If teachers have to be ready, whether it's difficult or not, they have to be ready. The curriculum was created as a reference, but when implemented it is very different. The Merdeka Curriculum has prepared a lot of learning tools. Like TP, ATP, MA are actually complicated to process. Even though with K13 only the name or term is different. Apart from that, the Merdeka Curriculum is divided into several phases which creates a dilemma for teachers in deciding whether material that students cannot complete can stay in class. "I, myself, still choose fun learning so that students understand the material presented." (Interview, February 12, 2024).

As for the opinion of the subject teacher, Mr Rm as the Arabic subject teacher at MIS NU (Nadhlatul Ulama), he said that:

"We have passed the curriculum from K13 to the Independent Curriculum. The convenience of the Independent Curriculum is related to the teaching method which is the same as the previous curriculum. Meanwhile, the difficulties encountered are in the administration which must be completed." (Interview, February 27, 2024).

On the other hand, Mr. HAB as a teacher of Al-Qur'an Hadith subjects at MIS Al-Jihad said:

"In my personal opinion, it means there must be learning. Because learning is not only absolute for students, but teachers are also required to learn. So that when the teacher understands the material it will automatically pass on to the students. So, if it's difficult, it's definitely there at every change in the curriculum. It's called changing whether you like it or not, you have to learn it slowly." (Interview, 07 February 2024).

What was expressed by Mr. HAB above is supported by a statement made by Mr. I as a teacher of the Aqidah Akhlak subject at MIS NU (Nadhlatul Ulama):

"When the curriculum is implemented, there is review and evaluation. So, the existence of the Independent Curriculum is a refinement of the previous curriculum. As a curriculum implementer, a teacher welcomes taking part in IKM (Independent Curriculum Implementation) training or IKM guidance (technical guidance). Then, try to implement the curriculum by creating tools such as TP, ATP, and MA. As well as trying to implement the Independent Curriculum in the classroom as best as the teacher can do." (Interview, 07 March 2024).

Then, a slightly different opinion emerged from Mrs. Nr as class IV A teacher at MIS Al-Jihad, she said that:

"When the Independent Curriculum was determined as the new curriculum that would be implemented, there was a burden to learn because they had to process new learning tools. The different curricula are certainly different as well. The Independent Curriculum is seen as more practical in its learning. Now it is easy to determine learning boundaries. The Independent Curriculum also adapts to the limits or abilities of students. "Even though in terms of making questions for tests, we still use the previous curriculum pattern, namely sharing in making questions for all class groups." (Interview, 07 February 2024).

Another opinion, which was almost the same, was conveyed by Mrs. M, class IV A teacher at MIS Hidayatul Muhajirin:

"Incidentally, I just graduated in 2022 and was only accepted to work at MIS Hidayatul Muhajirin in 2023 according to the new teachings. So, the first time you enter teaching, immediately apply or use the Independent Curriculum. However, during college, what was taught and implemented was K13. So, it was a bit surprising because the curriculum was immediately changed. However, the Merdeka Curriculum and the previous curriculum are different in terms of name only. Apart from that, if K13 the learning is in thematic form. Meanwhile, the Independent Curriculum is broken down into subjects. This actually makes it easier for teachers to convey the material. The assessment is more or less the same, only there is an additional P5." (Interview, February 26, 2024).

Based on the various opinions above, it can be described that being a teacher must be ready for all changes determined by the government. Some teachers find it difficult to process administration or learning tools to implement the Independent Curriculum because of the new terms. Apart from that, there is a feeling of confusion regarding the material that cannot be resolved in the initial learning phase. Apart from that, several other informants described that the Merdeka Curriculum could be implemented well, as seen in the teacher's knowledge regarding the components of learning tools that were different from the previous curriculum. Based on the results of the researcher's observations and interviews regarding the components that must be prepared by teachers before implementing the Independent Curriculum, the following information was obtained:

1. Learning Objectives (TP)

Mrs. M as class IV A teacher at MIS Hidayatul Muhajirin said that:

"The creation of learning device components, namely Learning Objectives (TP), is carried out jointly by fellow class teachers." (Interview, February 26, 2024).

Mrs. Nr as class IV A teacher at MIS Al-Jihad also said the same thing:

"Learning Objectives (TP) or Learning Objective Flow (ATP) are created through prior discussion between fellow class teachers regarding the boundaries of the material being taught." (Interview, 07 February 2024).

The opinion of Mr. I as a teacher of the Aqidah Akhlak subject at MIS NU (Nahdlatul Ulama) expressed:

"Competencies in the Independent Curriculum are formulated in the CP. Meanwhile in K13, namely KI and KD. Regarding competencies, in the Independent Curriculum they are integrated into CP, namely the abilities that must be achieved by students including aspects of attitudes, knowledge and skills. CP is a teacher's reference for planning learning before implementing it. The derivative of CP is TP. "The preparation of the TP is carried out independently in three ways, namely formulating it directly based on the CP, formulating the TP by analyzing competencies and material (content), and formulating the TP through cross-elements." (Interview, 07 March 2024).

Based on several of the informants' opinions above, it can be concluded that teachers, especially homeroom teachers for class I and class IV, formulate TP through discussion or collaboration. Meanwhile, subject teachers still formulate TP independently. There are three ways regulated by the government in formulating TP, namely through CP, competency and material analysis, and across elements.

TP or Learning Objectives must refer to the CP set by the government and then contextualized by the teacher based on the characteristics and circumstances of the madrasah environment. In its formulation, TP is not necessarily based on the teacher's wishes alone, but is based on the needs and characteristics of students (Rahim Ruspa et al, 2022). TP is a statement that explains what students want to achieve as a result of the learning process. The relationship between TP, namely with competencies and learning standards that focus on learning outcomes (Aulia et al. 2023). In formulating the TP, you can go through the CP directly, analyzing the competencies and scope of material contained in the CP and formulating it across elements.

Based on the documents that researchers obtained regarding Learning Objectives (TP), it was found that the Learning Objectives had been created and formulated by the teacher well. It can be seen that each Learning Objective (TP) that has been formulated contains the competencies and content or material that must be achieved by students. This is in line with the stipulated provisions, namely that the formulation of TP must include competencies, namely abilities that must be achieved

or acquired by students. Then, there is content or material which in this case is related to knowledge.

2. Learning Objective Flow (ATP)

Mrs. M as class IV A teacher at MIS Hidayatul Muhajirin revealed regarding ATP that:

"Similar to TP, ATP is made through discussions between homeroom teachers." (Interview, February 26, 2024).

The statement from Mrs. R as the IB class teacher at MIS Al-Jihad:

"The preparation or creation of ATP is of course through discussion and collaboration among homeroom teachers by discussing the boundaries of the material being taught." (Interview, 06 February 2024).

Apart from that, Mr. I as a teacher of Aqidah Akhlak subjects at MIS NU (Nahdlatul Ulama) also revealed about ATP:

"ATP, namely from TP there are several phases, so they are sorted by class and semester. Sort the material from easy to difficult or general to special and still pay attention to the textbook." (Interview, 07 March 2024).

The opinions expressed by several informants above can be concluded or illustrated that the teachers continue to carry out discussions and collaboration regarding the boundaries of the material to be taught until it is formulated jointly and expressed in the form of an ATP. Discussions carried out by teachers, namely in terms of sequencing the material to be taught. Sort the material from easy to difficult or from difficult to easy. However, usually the material taught first is basic material which then moves on to special material.

ATP is a series of learning objectives that are arranged systematically from the beginning to the end of the phase. The steps in preparing the ATP, namely analyzing the CP, identifying the competencies that students need to master, analyzing the elements or sub-elements of the Pancasila student profile, determining the TP, determining the scope of the material, and determining the number of lesson hours (Andina, ..., and 2023 2023). ATP is arranged logically according to the learning sequence from the beginning to the end of a phase. Different from K13 where KI and KD have been determined. Meanwhile, in the Independent Curriculum there is no such term, but it has changed to CP. In principle, the formulation of ATP includes essential, sustainable, contextual and simple. This is because ATP functions in the same way as a syllabus, namely as a reference for teachers in planning learning. However, it is complemented by the CP obtained by students at the end of the phase as well as P5 (Mahmudah et al. 2023).

Based on the documents that researchers obtained regarding the Learning Objectives Flow (ATP), it was found that the Learning Objectives Flow had been created and formulated by the teacher well. It can be seen in the documents recorded by researchers that the ATP was formulated by following the principles that have been regulated by the government and contains elements, CP, TP and core material.

3. Teaching Module (MA)

Mrs. N as the IB class teacher at MIS Hidayatul Muhajirin expressed her opinion regarding the Teaching Module (MA) that:

"MA is made per chapter simply based on needs, environment and capabilities." (Interview, February 26, 2024).

Meanwhile, Mrs. AYB as a teacher of the Aqidah Akhlak subject at MIS Al-Jihad said something similar:

"Designing an MA to suit existing books and the teaching environment." (Interview, 07 February 2024).

Regarding the MA, Mr. I as the teacher of the Aqidah Akhlak subject at MIS NU (Nahdlatul Ulama) made one MA for one TP and it can be used in two meetings. He said this because:

"It depends on the breadth of the material being taught, but the maximum is one MA for two meetings." (Interview, 07 March 2024).

Based on several opinions from the informants above, it illustrates that each teacher has his own way of processing the components of learning tools in the Independent Curriculum. Even so, teachers also still pay attention to the books that students use as well as students' abilities which are also related to environmental conditions. The use of one MA for two meetings.

The implementation of learning is guided by planned teaching tools, namely Teaching Modules (MA). The MA contains learning objectives, dimensions of the Pacasila student profile to be achieved, learning steps, learning assessments, and attachments. The Teaching Module is very different from the previous teaching tool, namely the RPP in K13. Learning in the Independent Curriculum refers to the principle of "Teaching at the Right Level", so the design of teaching modules, especially in terms of learning steps, must refer to students' achievements and the design must clearly differentiate the treatment of each student with different CP levels. (Ruspa et al. 2022).

MA or Teaching Module is a development of the Learning Implementation Plan (RPP) which is equipped with more detailed guidance, including LKPD (Students' Worksheets) and assessments to measure the achievement of learning objectives. It is called a module because the device components can be used modularly. The existence

of MA can help teachers to use a wider variety of learning tools, not just limited to textbooks used throughout the year. Apart from being developed by the government, teachers can also develop MA. The emergence of MA certainly has a goal for the learning process, namely that learning becomes more flexible because it does not depend on the material in the textbook alone.

Based on the documents that researchers obtained regarding the Teaching Module (MA), it was found that the Teaching Module had been created and formulated by the teacher well. It can be seen from the components contained in the Teaching Module which have been designed by the teacher, such as general components, core components and attachments.

4. Student Worksheet (LKPD)

MA or Teaching Module is one of the mandatory components that teachers must prepare before carrying out the learning process. One of the formats contained in the MA is an attachment containing LKPD or Student Worksheets. The following are the results of interviews with informants regarding LKPD:

Mrs. M as class IV A teacher at MIS Hidayatul Muhajirin said:

"Regarding LKPD, we make our own, because sometimes the questions contained in the textbook are too universal or broad." (Interview, February 26, 2024).

Meanwhile, Mrs. JA as the IC class teacher at MIS Al-Jihad revealed:

"I create the questions or assignments in the LKPD myself by adapting the material in the book and what has been taught. Apart from that, I also look for reference questions from the internet." (Interview, 07 February 2024).

Apart from that, Mrs. Rs as class IV A teacher at MIS NU (Nahdlatul Ulama) said that:

"Regarding LKPD, make your own and adapt it to the TP and simplify it." (Interview, February 22, 2024).

Regarding the preparation of LKPD or questions created by teachers independently, this was also carried out by Mr. I as a teacher of the Aqidah Akhlak subject at MIS NU (Nahdlatul Ulama). However, he has a different view regarding LKPD or assessment in the Independent Curriculum, he said that:

"The assessment in the Independent Curriculum contained in the MA, namely LKPD. LKPD is made so that students are active in learning adapted to TP. You can create questions from books or yourself. Sometimes we use LKS which contains LKPD. LKPD doesn't have to be questions, but assignments. How to use it can be individual or group. LKPD during the learning process, while the questions are for summative or at the end of the learning process." (Interview, 07 March 2024).

Regarding the assessment contained in the Independent Curriculum, he also added a related opinion:

"There are differences in the Merdeka Curriculum, namely formative assessment during learning by asking students questions to test their understanding. At the beginning of learning there is also an initial ability test to map the competencies and characteristics of students. "Apart from that, in the Independent Curriculum there is also differentiated learning. "Previously, in K13, learning was carried out homogeneously or evenly, starting from the same material and assessment." (Interview, 07 March 2024).

Some of the opinions above regarding LKPD describe that every teacher in processing questions must adapt to the TP that has been formulated. Apart from that, the teacher also pays attention to the textbook or worksheet which contains the questions that have been studied. Not only do they use questions that are already available, but teachers can also create their own based on the material that has been taught. Far from that, it is necessary to understand that LKPD is not only in the form of questions. However, it takes the form of assignments that stimulate students to think actively.

LKPD or Student Worksheet is one of the learning tools contained in the attachment section in the MA. LKPD helps and facilitates students' learning process to achieve TP. LKPD contains sheets on which there are instructions for completing the tasks given. Before making a LKPD, of course the teacher must first analyze the material that will require LKPD. Apart from that, teachers must also prepare a map of LKPD needs to see the priority order of the LKPD that will be made. The things that must at least be included in the LKPD include TP to inform students of the achievements they will obtain after working on the LKPD..

Based on the documents that researchers obtained regarding the Student Worksheets (LKPD), it was found that the Student Worksheets had been created and that the teacher had properly adjusted the Learning Objectives (TP) that were formulated. It can be seen that each LKPD has different assignments. This of course adapts to the goals to be achieved and the level of material being taught. Not only LKPD, in terms of assignments teachers also use questions that are available in student textbooks or handbooks.

5. Project for Strengthening the Pancasila Student Profile (P5) and Rahmatan Lil Alamin Student Profile (PPRA)

The presence of the Independent Curriculum which has two learning structures, namely the first is intracurricular learning which focuses on fundamental material and refers to Learning Achievements (CP) in each subject that students go through in the learning process. Second, the Merdeka Curriculum focuses on project-based learning to develop students' soft skills and character according to the Pancasila student profile.

Apart from P5, there is also PPRA or Rahmatan Lil Alamin Student Profile, which is developing a moderate religious concept to care for Indonesia's diversity. The Rahmatan Lil Alamin Student Profile (PPRA) in its development adopted values related to religious moderation.

MIS Hidayatul Muhajirin in implementing P5 and PPRA was expressed by Mrs. N as IB class teacher that:

"P5 of the project is planting. Meanwhile, PPRA is an activity related to religion. MIS Hidayatul Muhajirin every morning holds educational radio broadcasts with Tuesdays filled with short surahs. Wednesday with prayer reading, Thursday daily prayer, and Saturday with Yassin reading."

The same thing was also conveyed by Mrs. M as class IV A teacher at MIS Hidayatul Muhajirin regarding P5:

"P5 has been implemented temporarily in the odd or first semester, namely holding 17s competitions and bazaars or market days. "As for even or odd semesters, that is planting." (Interview, February 26, 2024).

The P5 and PPRA in MIS Al-Jihad are filled with BTQ. As Mrs. Nr as the homeroom teacher of class IV A said:

"P5 has not implemented according to the Independent Curriculum. Temporarily changed to BTQ." (Interview, 07 February 2024).

The above opinion was added by Mrs. Sr. as class IV C teacher at MIS Al-Jihad, she said that:

"P5 and PPRA are filled with BTQ or Reading and Writing the Qur'an for which a guide book is available." (Interview, February 12, 2024).

Meanwhile, MIS NU (Nahdlatul Ulama) has implemented P5 based on a statement from Mrs. Rs as class IV A teacher that:

"In the first or odd semester, we implemented P5 by making recycling bins from bottles which were done in groups. For the second or even semester, P5 is a visit to a museum and is assigned to write an article. The article is a work created individually. Contains stories about what was found in the museum and the impression of the message. The application of P5 is included in the IPAS subject of residential history material. Meanwhile, PPRA, which is like the habits before starting to study, is to pray and exchange greetings with the teacher and say hello. Apart from that, PPRA also carries out Dhuha prayers." (Interview, February 22, 2024).

The statement above concerns the implementation of P5 and PPRA in MIS Hidayatul Muhajirin, MIS Al-Jihad, and MIS NU (Nahdlatul Ulama). This expression describes that MIS Hidayatul Muhajirin and MIS NU (Nahdlatul Ulama) have

implemented it in the first and final semesters. Meanwhile, MIS AL-Jihad has not fully implemented P5 based on the Independent Curriculum, but is filled with BTQ activities for which there is also a guidebook.

The Project for Strengthening the Pancasila Student Profile (P5) and the Rahmatan Lil Alamin Student Profile (PPRA) is an activity designed according to a predetermined theme included in the subject. The implementation of P5 and PPRA is based on the Pancasila student profile and adapts to the environmental conditions around the Madrasah which can be used as a characteristic of the Madrasah. As has been implemented at MIS Hidayatul Muhajirin in the form of a market day or bazaar which teaches students about buying and selling, knowing money and numeracy literacy. This will create students who are passionate about entrepreneurship and as a platform for natural resources by highlighting local wisdom. Apart from that, the P5 activities reflect the characteristics of the Independent Curriculum. The PPRA is filled with activities related to religion, namely educational radio broadcasts. The educational radio broadcasts are divided into several days with different material, namely Tuesdays with short suras, Wednesdays with prayer readings, Thursdays with daily prayers, and Saturdays with the reading of Surah Yassin. Meanwhile, MIS NU (Nahdlatul Ulama), namely visiting the Museum as a historical residence which is included in the IPAS (Natural and Social Sciences) subject. The P5 activity will produce work in the form of articles, which will teach students about reading and writing literacy. Meanwhile, MIS Al-Jihad applies P5, which is filled with BTQ (Reading and Writing the Qur'an). Even though its implementation does not fully follow the Independent Curriculum.

The character education program based on Pancasila aims to produce graduates who not only have academic intelligence, but also strong moral and ethical integrity. The description of graduates in this context reflects the extent of students' abilities in understanding, internalizing and applying Pancasila values in everyday life. It also includes social interactions, personal decisions, and contributions to society. The hope is that a generation of moderate nation will emerge, able to create a harmonious national life, and adhere to values such as tolerance, democracy, national spirit, love of the homeland, love of peace, social care, justice and global diversity.(Rohmah, 2024). The strategy for implementing the project to strengthen Rahmatan Lil Alamin's student profile can be carried out through planned co-curricular, integrated and extra-curricular learning with the guidance of the school principal and the project facilitation team.(Muthrofin et al. 2023).

CONCLUSION

Based on the results of research and discussions regarding "Teachers' Readiness to Apply Independent Curriculum Learning Tools in Private Madrasah Ibtidaiyah

Palangka Raya City", especially at MIS Hidayatul Muhajirin, MIS Al-Jihad, and MIS NU (Nahdlatul Ulama), it can be concluded that teachers are a workforce educators are ready for the implementation of the Independent Curriculum. The teacher's readiness also relates to his willingness to fulfill learning tool components such as Learning Objectives (TP), Learning Objective Flow (ATP), Teaching Modules (MA), Student Worksheets (LKPD), and the Project for Strengthening the Pancasila Student Profile (P5) as well as Rahmatan Lil Alamin Student Profile. Efforts made include participating in various training activities and technical guidance related to the implementation of the Independent Curriculum, urgency and policies, as well as components of learning tools that need to be prepared or completed before implementing the Independent Curriculum.

REFERENCE

- Ahmad, Muslimah. 2021. "Understanding Qualitative Data Processing and Analysis Techniques." *Proceedings of Palangka Raya International and National Conference on Islamic Studies (PINCIS)* 1(1).
- Andarusni Alfansyur. 2020. "THE ART OF MANAGING DATA: APPLYING TRIANGULATION OF TECHNIQUES, SOURCES AND TIME TO SOCIAL EDUCATION RESEARCH." *Historical: Journal of Historical Education Studies, Research and Development* 5(2):146–50. doi: 10.31764/historis.vXiY.3432.
- Andina, FNA, NW Subayani-JS (School Journal, and undefined 2023. 2023. "Analysis of Teacher Readiness in Implementing the Independent Curriculum in Elementary Schools." *Pdfs.Semanticscholar.Org* FNA Andina, NW Subayani, I MarzukiJS (School Journal), 2023• *pdfs.Semanticscholar.Org* 7(3):392–404.
- Aulia, N., S. Sarinah, J. Juanda-Literacy Journal, and undefined 2023. nd "Analysis of the Independent Curriculum and the 2013 Curriculum." *Jurnalfkip.Samawa-University.Ac.Id* N Aulia, S Sarinah, J Juanda Indonesian Journal of Literacy and Learning, 2023• *jurnalfkip.Samawa-University.Ac.Id*.
- Hamdi, Syahrul, and Cepi Triatna. 2022. "INDEPENDENT CURRICULUM FROM A PEDAGOGICAL PERSPECTIVE." *SAP (Education Articles)* 7(1).
- Ismail Nurdin and Sri Hartati. 2023. "Social Research Methodology" - Google Books.
- Easy, Istiyati. 2023. "Analysis of MI Teacher Education Students' Difficulties in Preparing Independent Curriculum Learning Plans." *MIDA: Journal of Islamic Basic Education* 6(2):191–203. doi: 10.52166/MIDA.V6I2.4168.

- Mahmudah, Istiyati, Madrasah Ibtidaiyah Teacher Education Study Program, Faculty of Tarbiyah and Teacher Training, and Iain Palangka Raya. 2023. "Teacher Preparation Assistance in Implementing the Independent Curriculum at MI Fathul Iman Palangka Raya." *Journal of Indonesian Community Service* 3(2):727–32. doi: 10.54082/JAMSI.734.
- Muhafid, Ervian Arif, and Heri Retnawati. nd PREPARATION OF ELEMENTARY SCHOOL TEACHERS TO IMPLEMENT THE MERDEKA (INDEPENDENT) CURRICULUM IN THE YEAR 2022: A PHENOMENOLOGICAL.
- Muthrofin, Madrasah Khoirul, Hepi Ikmal, Winarto Eka Wahyudi, and Lamongan Islamic University. 2023. "The Implementation of Islamic Religious Education (PAI) in Shaping the Profile of Rahmatan Lil Alamin Students in a Madrasah." *Ejournal.Staimnglawak.Ac.IdK Muthrofin, H Ikmal, WE WahyudiEDUCATIO: Journal of Education*, 2023•*ejournal.Staimnglawak.Ac.Id* 8(2). doi: 10.33578/jpfkip.v7i1.5338.
- Nidaur Rohmah Al-Fatah Lamongan Tarbiyah Science College, Annisa. 2024. "Strategy for Developing Rahmatan Lil Alamin's Student Profile in Implementing the Independent Curriculum in Madrasah Ibtidaiyah." *IBTIDA'* 5(1):61–79. doi: 10.37850/IBTIDA.
- Pristiwanti, Desi, Bai Badariah, Sholeh Hidayat, and Ratna Sari Dewi. 2022. "Understanding Education." *Journal of Education and Counseling (JPDK)* 4(6):7911–15. doi: 10.31004/JPDK.V4I6.9498.
- Rahim Ruspa, Abd, Nirwana 2. Jusrianto, Busra Bumbungan, Haspidawati Nur, and Daniel Parubang. nd "Technical Guidance on Understanding CP, Preparing TP/ATP, and Teaching Modules at SD Negeri 7 Ponjalae Palopo." *Pusdig.Web.IdAR Ruspa, B Bumbungan, H Nur, D ParubangAbdimas Langkanae*, 2022•*pusdig.Web.Id*.
- Rizal, Setria Utama, Nurul Hikmah, Muhammad Redha Anshari, Teacher Education, Madrasah Ibtidaiyah, Iain Palangka Raya, Religious Education, and Palangka Raya. 2022. "Technical Guidance on the Implementation of the Independent Curriculum in MIN 2 Palangka Raya City." *Education Friday: Journal of Community Service* 3(3):134–38. doi: 10.32764/ABDIMASPEN.V3I3.3395.

Analysis Of The Role Of Brain Education In Developing The Spirituality Character MPAI Students UAD Yogyakarta

Yogi Sopian Haris*

*Master of Islamic Education Study Program, Ahmad Dahlan University Yogyakarta, Indonesia
2308052039@webmail.uad.ac.id

Suyadi

Master of Islamic Education Study Program, Ahmad Dahlan University Yogyakarta, Indonesia
suyadi@fai.uad.ac.id

Abstract

This study aims to analyze the role of brain education in developing the spirituality character of Master of Islamic Education students at Ahmad Dahlan University Yogyakarta. Neuroscience course material (brain education) is used to explain the neurobiological mechanisms behind spiritual behaviors and conditions, such as meditation, self-awareness, and emotional control. This research uses Library research method with qualitative approach. The research findings reveal that brain education at MPAI UAD integrates neurobiological understanding of spiritual experiences such as prayer, reading the Koran, and religious activities to develop students' spiritual character. Neuroscience research reveals the neurobiological mechanisms behind spirituality, such as the role of neurotransmitters, brain wave activity patterns, and changes in brain structure due to spiritual practices. Recent findings highlight the existence of a God spot or center of divinity and most recently the existence of complex spiritual circuits in the brain that process spiritual experiences in an integrated manner. The conclusions in this study are that this research integrates brain education and spiritual character development in the context of Islamic religious education. Neuroscientific findings reveal the neurobiological mechanisms of spiritual experiences, including the "God Spot" and spiritual circuits in the brain. This approach enables the dialogue of science and spirituality to understand the human experience holistically while maintaining an integrated approach.

Keywords: *Brain Education, Spiritualist Character, Students*

INTRODUCTION

Today, we can witness many interesting changes in the domain of spirituality and religiosity. While technology and material progress continue to advance rapidly, interest in the search for deeper existential meaning and higher purpose is increasing. This development has changed our paradigm towards spirituality. Spirituality is an important aspect in the formation of a whole human character. Spirituality is not only related to religious beliefs, but also includes inner dimensions, values, meaning of life, and connection with something transcendent. The development of spirituality from an early age can provide a strong foundation for individuals in facing the challenges of life and forming a positive character. (Wasisto, 2012). Many factors influence a person's spiritual understanding, one of which includes individual experience and learning things related to spirituality. One of the scientific disciplines that studies spirituality is neurospirituality, which is a branch of neuroscience.

But in recent decades, research in the field of neuroscience has provided new insights into how the human brain is involved in spiritual experiences and character development processes. Studies show that certain activities in the brain, particularly in the prefrontal, parietal and temporal areas, are associated with spiritual experiences, meditation and appreciation of values. Brain-based education is an approach to learning that takes into account the principles of the brain and neuroscience. By understanding how the brain learns, processes information and forms neuronal connections, learning methods can be designed to optimize the brain's potential and support the cognitive, emotional and spiritual development of individuals.

The development of neuroscience has influenced the understanding of spirituality. Spirituality includes the meaning of life, rituals, positive emotions, and spiritual experiences that direct life goals to be important (Asrori, 2020). The spiritual neuroscience approach is an important alternative to improve Islamic Religious Education learning (Fadkhulil Imad Haikal Huda, 2022). This approach has the advantage of integrating neuroscience in multidisciplinary studies. Therefore, education should capitalize on these advances in neuroscience, especially since in some countries, neuroscience has been incorporated into the education curriculum (Nurul Istiqomah & Rio, Pebrian & Susi, 2018).

Spiritual neuroscience is a sub-discipline that focuses on the study of the brain and human spirituality. This sub-discipline has a strong relevance to the characteristics of PAI as both are related to the study of God (Heni Listiana, Achmad Yusuf, Supandi, 2021). According to Ari Ginanjar, an Emotional Spiritual Quotient (ESQ) expert, within humans there is what is referred to as the "God Spot". God Spot refers to the spiritual potential that every human being is born with. It is the deepest aspect of the human personality that is connected to God or the Almighty. This God dimension is the center

of a person's inner strength, intuition and spiritual awareness. It is the source of human values such as love, truth, justice, and benevolence. By developing and activating the God Spot, one can achieve a balance between intellectual intelligence (IQ), emotional intelligence (EQ), and spiritual intelligence (SQ) that complement each other (Al Ahyadi, 2015).

Neuroscience at MPAI UAD is an interesting and important course to learn. Neuroscience itself is the study of the human nervous system, especially the brain, and its relationship with behavior and mental processes. (Hidayat, 2017). In this course, students will study the structure and function of the brain in detail, starting from neurons as the basic unit of the nervous system to the division of major areas of the brain such as the cerebral cortex, limbic system, and others. The material also covers the process of neurotransmission, brain development from the womb, and research methods in neuroscience. Neuroscience theories are combined with concepts in psychology to provide a complete understanding of mental processes (Taufik, 2010). In addition, this course also touches on current issues in neuroscience such as cognitive neuroscience, social neuroscience, as well as neuroscience applications in the fields of mental health, education, and spirituality. The discussion of neuroscience in Islamic religious education is certainly a major highlight in this MPAI study program (Yusmaliana et al., 2022). Although the material is quite challenging, this course is very important to broaden students' understanding in understanding psychological phenomena and their relationship with human spirituality as a whole (Yakin, 2018).

Some previous studies have reviewed character brain education in Islamic education, linking a sharp analysis of Islamic character education with neuroscience. In addition, there are also studies that examine character education through a neuroscience-based behavioristic approach. The results of these studies show that students need motivation and supervision from educators in internalizing religious teachings appropriately according to the goals of school education (Nashihin, 2018). In addition, there is also research that reviews the brain and mind from the perspective of the Quran and neuroscience. This research discusses human perfection that lies in the normality of reason, while the brain functions as the control center of human activity (Ahwinarto & Suyadi, 2020). According to Suyadi, character education actually helps develop the potential of the human brain, with the six brain systems playing a role in shaping individual attitudes and behavior. The importance of maintaining the balance and optimal performance of the brain allows better control of human behavior by involving the emotional and spiritual dimensions (Suyadi, 2017). Then in the research conducted by (Dahuri, 2023) By using the brain effectively and naturally in the thinking process, a person can demonstrate good morals that are reflected in spiritual values in their daily life. This will ultimately increase their faith and devotion to God, because as

humans, they become more diligent and consistent in their worship.

This research presents a new perspective in the world of Islamic religious education by integrating the brain-based education approach and holistic spiritual character development. The brain education approach considers how the brain works in the learning and teaching process, involving an understanding of neurology, cognitive psychology and learning science. The aim is to create an optimal learning environment by utilizing the brain's potential to the fullest. On the other hand, spiritual character development is at the core of Islamic religious education, which focuses on building a strong character based on spiritual principles in Islamic teachings. It emphasizes on the appreciation of religious values, such as faith, piety, noble character, and relationship with Allah SWT. The aim is to form individuals who are not only academically intelligent but also have spiritual maturity.

By integrating these two approaches, this research seeks to create a novelty in the context of Islamic religious education. It combines the brain education approach with spiritual character development efforts in the curriculum and learning methods. By utilizing an understanding of how the brain works, this research aims to facilitate effective learning in instilling Islamic spiritual values. This is done by creating a learning environment that is conducive to cognitive development as well as the formation of a strong spiritual character.

Through this integration, this research is expected to produce learning methods that are more effective and optimize the potential of students as a whole, both in terms of cognitive and spiritual. By integrating rational and spiritual aspects in the education process holistically, it is hoped that individuals can be formed who not only have high intellectual intelligence, but also have a strong spiritual character in accordance with Islamic teachings. The success of this research will provide a better understanding of the role of the brain in shaping spiritualist character, as well as provide a basis for developing more effective teaching methods in achieving the objectives of Islamic religious education, especially at advanced education levels such as Masters Programs. (Lalu Abdurrahman Wahid, 2022).

METHODS

In this study, researchers used the library research method (library research) Library research is a traditional research method that has been widely used by researchers to evaluate various scientific studies (Nashihin, 2023). By using this method, the researcher seeks to conduct an in-depth and comprehensive analysis and obtain optimal results. In the context of this research, the desk research method is used to explore and analyze the relationship between brain education and spiritual character development in the context of Islamic religious education. This research also involves

collecting data from various sources relevant to the object of research, such as books, scientific works, and journals. The approach used is qualitative, where data is obtained through literature study by carefully examining articles, books, and scientific journals related to the influence of brain education on the character of special spirituality (Pahleviannur, M. R., De Grave, A., Saputra, D. N., Mardianto, D., Hafrida, L., Bano, V. O., ... & Sinthania, 2022). To enrich the data, researchers also conducted unstructured interviews with students of the Ahmad Dahlan University Master of Islamic Education Study Program (MPAI UAD) regarding their opinions on Neuroscience courses and their influence on their spirituality character. Data was collected by tracing and collecting information from various sources that became a reference for research. After the data is collected, a discussion is carried out on all the problems studied to produce accurate and precise data and study materials. The data that has been collected is then analyzed qualitatively with an approach from the general to the specific, in accordance with the method used in this study (Hakim, 2023).

RESULTS AND DISCUSSION

1. The Role of Brain Education at MPAI UAD Yogyakarta

The brain is a very important part of humans. Not only as a physical organ, but also as a control center that regulates various bodily functions and complex mental processes. Even in religious views, the brain is also considered a tool that enables humans to carry out their duties as caliphs on earth. (Tamin, 2022). The brain's ability to adapt and develop over time is amazing. The concept of "use dependent development" that you mentioned is one of the things that makes the brain so unique. The brain's ability to renew itself and improve its performance as it experiences and learns is what sets it apart from machines or other inanimate objects (Ahwinarto & Suyadi, 2020). With its complex capabilities, the brain allows humans to do a variety of things, from thinking, feeling emotions, making decisions, to performing reflexes and survival. Without the brain, humans would not be able to do many things that make them unique and able to adapt to the surrounding environment. So, it can be said that the brain is one of the most defining aspects of human identity as an intelligent and complex being (Setyawan, 2017).

For centuries, humans have relied on brainpower and reasoning as the main foundation in various aspects of life. However, a view that puts intellectual intelligence above all else often neglects other aspects such as attitude and behavior. This can result in detrimental imbalances in the lives of individuals, which can eventually give rise to serious multidimensional crises (Dr. Jonaedi Efendi, S.H.I., M.H, Prof. Dr. Johnny Ibrahim, S.H., S.E., M.M., 2016). Thus, there are three important

things that can be drawn from the description: first, the importance of responding to the findings of neuroscience in the development of education; second, the recognition that all aspects of humans, including character and knowledge, are related to brain processes; and third, the need for harmony between intellectual intelligence and emotional and behavioral aspects to achieve balance and a better quality of life (Rusuli, 2014).

Brain Education at MPAI UAD Yogyakarta offers a different approach amidst the density of materials and theories in education. Through this approach, individuals are guided to deeply understand how their brain works and reach their full potential. For example, activity in the prefrontal cortex and limbic system are linked to meditation skills, emotional control, and self-awareness which are important in spirituality.

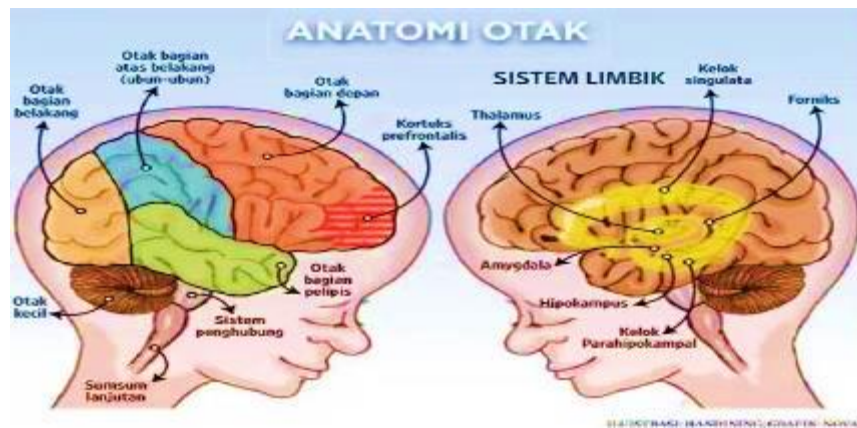


Figure 1. Anatomy of the Brain

Spiritual experiences such as meditation, prayer, and dhikr practices can be understood and analyzed in greater depth through neurospiritual education (Fitriani & Abdullah, 2021). This helps students understand spiritual aspects more scientifically and rationally, which can strengthen the foundation of their faith. This was expressed by Muhammad Ilham Baihaqqi, one of the MPAI UAD students.

"In the context of Islamic religious education, brain education can be a very valuable addition because it helps students understand religious teachings more deeply, and develop a strong spiritual character" (Baihaqqi, 2024).

Then in an interview with Reyhan, one of the MPAI UAD students, he also said

"In my opinion, brain education is an effort to optimize the potential of our brain through scientific approaches such as cognitive learning and strategies to improve brain performance. The role of brain education in spirituality character development is to help us understand and control cognitive and emotional

processes related to spiritual values, such as self-awareness, empathy, and inner calm" (Reyhan, 2024).

From the interview, the researcher concluded that understanding the relationship between brain activity and spiritual experiences is important. Brain education helps us know how the brain functions while we are engaged in spiritual practices such as meditation, prayer or reading scriptures. By understanding these brain activation patterns, we can design strategies and exercises that can enhance brain performance in a spiritual context. For example, mindfulness or meditation practices can stimulate the brain regions responsible for emotion regulation, empathy and self-awareness.

Then further researchers explore how the role of brain education on the relationship between students' spiritual characteristics. Muhammad Ilham Baihaqqi as one of the students at MPAI UAD revealed the importance of brain education as a means of developing students' spiritualist characteristics. The following are the results of his interview:

"I think brain education is very important because the brain is the control center for all the functions of our body and mind. When we understand how the brain works, we can understand how our mindset and behavior are formed. This is particularly relevant in the development of spiritualist characteristics as spirituality involves a deeper understanding of the self and the purpose of life" (Baihaqqi, 2024).

This is also in line with Reyhan's expression who said.

"The brain also has parts associated with the subconscious, the place where our deepest beliefs, values and motivations are formed. Through brain education, we can open access to this subconscious and unearth spiritual potential that may not have been revealed" (Reyhan, 2024).

Based on the results of the interview above, the researcher concluded that the brain is the control center for all functions of the human body and mind. By understanding how the brain works, we can understand how our thought patterns and behaviors are formed. An understanding of the brain is particularly relevant in the development of spiritualist characteristics as spirituality involves a deeper understanding of self and life purpose. The brain has parts associated with the subconscious, the place where our deepest beliefs, values and motivations are formed. Through brain education, we can open access to the subconscious and unearth spiritual potential that may not have been revealed yet. Overall, brain education helps us understand ourselves deeply, including the spiritual aspect, so that we can better develop spiritualist characteristics (Akbar,et.al, 2023).

Furthermore, Professor Suyadi as Head of MPAl UAD Yogyakarta as well as a lecturer in Neuroscience and learning theory explained the influence of character education on brain education. It is explained in his journal article that character education actually helps develop the potential of the human brain, with the six brain systems playing a role in shaping individual attitudes and behavior. The importance of maintaining the balance and optimal performance of the brain allows better control of human behavior by involving the emotional and spiritual dimensions. (Suyadi, 2017).

In addition, several activities are often carried out at MPAl Ahmad Dahlan University in supporting the development of students' spiritual character. Such as always starting learning by saying a prayer together, and ending also with prayer. Then conduct research whose approach always leads to Islamic studies with collaboration with other disciplines. Facilities for places of worship such as mosques in the campus environment also support activities to develop students' spirituality characteristics at MPAl UAD Yogyakarta. The following is a more detailed explanation.

1. Starting and ending learning with prayer together Before starting teaching and learning activities, lecturers and students pray together. This is a form of respect to Allah SWT and realizing that knowledge is a gift from Him. By praying, they ask for blessings and ease in the learning process. After finishing, they also close with a prayer as an expression of gratitude and ask that the knowledge gained can be useful.
2. Research with an Islamic studies approach and collaboration with other disciplines MPAl Ahmad Dahlan University encourages students to conduct research that integrates Islamic studies with other disciplines. For example, in the field of education, students can conduct research on learning methods that are in accordance with Islamic values. Or in the field of psychology, they can study spiritual aspects in the development of the human soul. This approach helps students understand the interrelationship between religious and general sciences and enriches their spirituality.
3. Facilities for Places of Worship (Mosques) in the Campus Environment The existence of a mosque in the campus environment provides a means for students to carry out worship regularly, such as congregational prayers and Islamic studies. This helps students to practice their spiritual values and grow closer to Allah SWT. In addition, the mosque can also be used as a place to gather and discuss spiritual issues, thus adding insight and fostering a spirit of spirituality among students.

4. Spiritual extracurricular activities MPAI Ahmad Dahlan University also organizes spiritual extracurricular activities, such as Quranic studies, religious lectures, and commemoration of Islamic holidays. These provide opportunities for students to deepen their religious knowledge and apply it in their daily lives. Such activities also facilitate interaction between students and spiritual sources, so that they can learn directly from people who have experience in the field of spirituality (Observation of Religious Activities of MPAI UAD, 2024).

With these various activities, MPAI Ahmad Dahlan University seeks to create an environment conducive to the development of the spiritual character of its students. This is in line with the university's vision and mission to produce graduates who not only have intellectual intelligence, but also spiritual intelligence.

2. Spiritual Development and Modern Neuroscience

Developments in the field of cognitive neuroscience have revealed more in-depth information about the connection between the brain and spiritual experiences (Rohmadi, 2018). Neuroimaging technologies such as fMRI have enabled the identification of brain areas that are active while individuals engage in spiritual practices such as meditation, prayer, reading the Qur'an, prayer and other acts of worship. Some studies have also highlighted specialized brain networks involved in spiritual experiences, such as the default mode network and the saliency network. These networks have an important role in the processes of self-awareness, attention and emotion regulation that influence a person's spiritual experience. The neurobiology of spirituality is becoming a major focus in modern neuroscience research. This research includes understanding the neurobiological mechanisms behind spiritual experiences, such as the role of neurotransmitters, alpha and theta brainwave activity, and the impact of long-term spiritual practices on brain structure and function (Suyadi, 2020).

Neurospiritual research has uncovered complex neurobiological mechanisms behind spiritual experiences and religious practices performed by humans.

1. At the neurochemical level, there is an important role of several neurotransmitters such as dopamine, serotonin and endorphins associated with spiritual experiences (Irfan, 2017).
 - a. *Dopamine*, which plays a role in positive experiences, motivation, and rewards, increases in levels when individuals engage in spiritual practices such as prayer, scripture reading, prayer, meditation or other worship.
 - b. *Serotonin*, which is associated with mood regulation, emotions, and a sense of peace, also increases in levels during intense spiritual experiences.

- c. *Endorphins*, known as natural happiness hormones, are also released during deep spiritual practices, providing a sense of calmness to the individual.

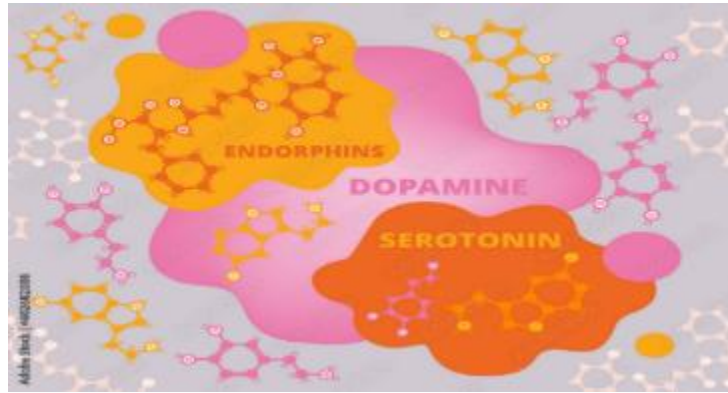


Figure 2. Structure of Neurotransmitters

2. At the level of brain activity, neurospirituals observed an increase in alpha (8-12 Hz) and theta (4-8 Hz) brainwave activity during spiritual practices (Ubudiyah, 2020). Alpha waves are associated with states of relaxation, meditation and increased awareness, while theta waves are associated with states of deep relaxation, intuition and emotional processing. During prayer, meditation or scripture reading, there is an increase in alpha wave activity in the prefrontal cortex and other brain regions, and an increase in theta waves as the spiritual experience reaches its peak.

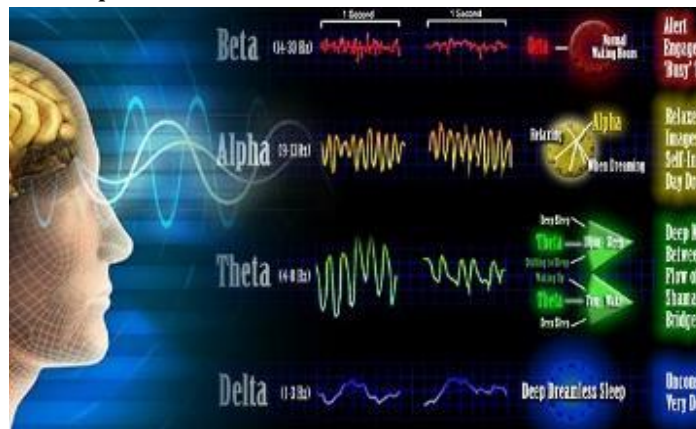


Figure 3. Brain Wave Activity

A more surprising finding was the impact of long-term spiritual practices on the structure and function of the brain itself. Individuals who meditate regularly show increased gray matter volume in brain regions associated with attention, emotion regulation, and empathy, such as the prefrontal cortex and insula. The more surprising finding is the impact long-term spiritual practices have on the structure and function of the brain itself. Individuals who meditated regularly showed

increased gray matter volume in brain regions associated with attention, emotion regulation, and empathy, such as the prefrontal cortex and insula (Novia, 2010). Connectivity between brain regions involved in spiritual experiences also increases after long-term meditation practice. In fact, long-term spiritual practice can improve cognitive capacities such as attention, working memory and emotion regulation. In addition, spiritual neuro-science also reveals differences in brain activation patterns in various spiritual practices. When praying, there is increased activity in brain regions associated with focused attention, emotions, and moral decision-making. Meanwhile, when reading the Quran, there is stronger activation in brain regions associated with language processing, memory, emotions, and spiritual experiences compared to reading a regular book.

Neuroscience studies have also revealed a strong connection between spirituality and mental health (Hanafi, 2016). Spiritual practices such as meditation can activate areas of the brain associated with emotion regulation, mindfulness and stress resilience, which in turn contribute positively to an individual's mental health. With this development, there is a greater effort to integrate scientific discoveries with spiritual traditions from different cultures and religions. This opens the door for dialogue between science and spirituality in deepening the understanding of the whole human experience. An interdisciplinary approach is also increasingly emphasized in the study of spiritual neuroscience, involving collaboration between various disciplines such as neuroscience, psychology, anthropology, philosophy and religious studies (Maunah, 2023).

According to Ari Ginanjar, an Emotional Spiritual Quotient (ESQ) expert, every human being has a spiritual potential called God Spot. God Spot refers to the deepest aspect of the human personality that is connected to God or the Almighty. It is the center of one's inner strength, intuition, and spiritual awareness. God Spot can be likened to a point or area within a human being that is the bridge between ourselves and the Creator. (Al Ahyadi, 2015). This God Spot has been present in every human being since birth, but is often neglected or covered by the busyness of daily life and the influence of the surrounding environment. Therefore, it is necessary to develop and revive this God Spot so that we can achieve a balance between intellectual intelligence (IQ), emotional intelligence (EQ), and spiritual intelligence (SQ) that complement each other.

This God dimension or God Spot is the source of human values such as love, truth, justice and virtue. When we are able to access and activate our God Spot, we will become more sensitive to these values and be able to apply them in our daily lives (Chaer, 2017). This will make us a more complete, thoughtful human being with strong integrity.

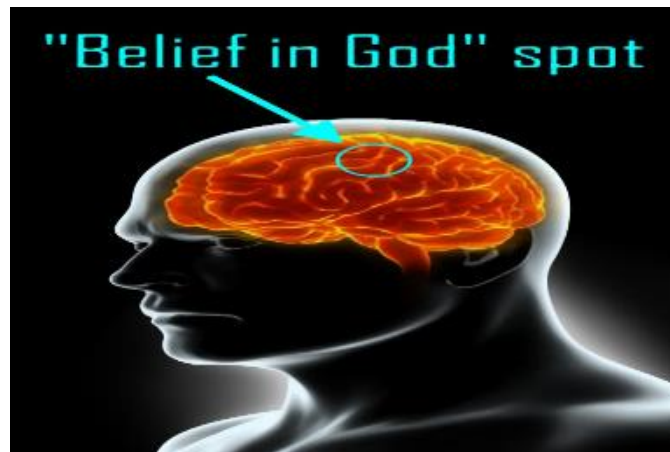


Figure 4. God Spot in the human brain

In addition, the God Spot is also the source of deep intuition and inner strength. This intuition can help us make the right and wise decisions, even in difficult or uncertain situations (Supriaji, 2019). This inner strength can also be a source of motivation and resilience in facing the challenges and trials of life. Developing and activating the God Spot requires a conscious and consistent effort in practicing spiritual activities such as meditation, prayer or contemplation. Through these practices, we can calm our minds and hearts, and open ourselves to the presence of the Almighty in our lives.

Then recent findings in neurospirituality have changed the paradigm on the neurobiological basis of spiritual experiences. Previously, many believed that spirituality originates from one specific brain region called the God Spot. However, recent research reveals that spiritual experiences instead involve the activation of a complex and integrated set of brain networks or circuits (Husnaini et al., 2021). This spiritual circuit is a network consisting of several brain regions that are interconnected and work in synergy. These brain regions include the prefrontal cortex, anterior cingulate cortex, insula, and several other regions associated with cognitive, emotional, and spiritual functions. During spiritual experiences, there is increased functional connectivity between these brain regions, which means that the communication and synchronization of neural activity becomes stronger. This connectivity allows for better integration of information and coordination in processing spiritual experiences holistically (Handojoseno, 2016). Interestingly, the activation of spiritual circuits is dynamic and fluctuates according to the stage and intensity of the spiritual experience.



Figure 5. Spiritual Circuit

This concept of spiritual circuits provides a more comprehensive understanding of the Neurospiritual basis. By understanding these circuits, we can better understand how the brain processes and integrates cognitive, emotional and spiritual aspects holistically, and how spiritual practices can shape and optimize these circuits in the long run. These findings open new avenues in exploring the potential of spirituality in improving mental health and overall human well-being.

CONCLUSION

The brain has a central role in enabling humans to perform various activities, including spiritual experiences. Brain education helps to understand how the brain works and optimize its potential, including in the context of spirituality. At MPAI Ahmad Dahlan University, brain education is integrated into learning to develop students' spiritual character through neurobiological understanding of spiritual experiences such as reading prayers at the beginning and end of learning, conducting research on Islamic studies, mosque facilities that become the center of student rituals and spirituality, reading the holy book Alqur'an, and PHBI activities that are always held. Modern neuroscience research reveals the neurobiological mechanisms behind spiritual experiences, such as the role of neurotransmitters, patterns of brain wave activity, and changes in brain structure due to long-term spiritual practices. God Spot findings refer to the deepest aspect of the human personality that is connected to God or the Almighty. It is the center of a person's inner strength, intuition and spiritual awareness. Recent research has also found that there are complex spiritual circuits in the brain, which involve a network of several brain areas in processing spiritual experiences in an integrated manner. Brain education and understanding spiritual neuroscience helps to develop spiritual character in a more in-depth and scientific manner, while respecting religious and cultural values. This opens up opportunities for

dialogue between science and spirituality in understanding the human experience in a holistically selected manner

REFERENCES

- Ahwinarto & Suyadi. (2020). Character Brain in Islamic Education: A Critical Analysis of Neuroscience-Based Character Education. <https://doi.org/10.21831/Jpk.V10i1.29693>.
- Akbar, et.al, J. S. (2023). Foundations of Education (Theories and Basic Concepts of the Foundations of Education in the Era of Industry 4.0 and Society 5.0 in Indonesia). In *Correspondencias & Análisis* (Issue 15018). Sonpedia Publishing Indonesia.
- Al Ahyadi, A. (2015). Emotional Spiritual Quotient (Esq) According to Ary Ginanjar Agustian and its Relevance to the Development of Spiritual Competence and Social Competence Curriculum 2013 Thesis. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 53(9), 1689-1699. <http://publications.lib.chalmers.se/records/fulltext/245180/245180.pdf>
<https://hdl.handle.net/20.500.12380/245180>
<http://dx.doi.org/10.1016/j.james.2011.03.003>
<https://doi.org/10.1016/j.gr.2017.08.001>
<http://dx.doi.org/10.1016/j.precamres.2014.12>
- Chaer, M. T. (2017). Islam and pacifist education" Istawa: Journal of Islamic Education. *Journal of Islamic Education*, 2(1), 73-94.
- Dahuri, D. (2023). Character Education as Brain Education from the perspective of Spiritual Neuroscience Study. *Journal of Interdisciplinary Islamic Education and Science*, 2(2), 76-85. <https://doi.org/10.59944/jipsi.v2i2.106>
- Dr. Jonaedi Efendi, S.H.I., M.H, Prof. Dr. Johnny Ibrahim, S.H., S.E., M.M., M. H. (2016). *Legal Research Methods: Normative and Empirical* No Title. Prenada Media.
- Fadkhulil Imad Haikal Huda. (2022). Neuroscience-Based Religious Character Building: Construction of Teacher Efforts in Islamic Religious Education Learning. *Journal of Islamic Religious Education Al-Thariqah*, 7(2), 491-502. [https://doi.org/10.25299/al-thariqah.2022.vol7\(2\).11138](https://doi.org/10.25299/al-thariqah.2022.vol7(2).11138)
- Fitriani, H., & Abdullah, Z. (2021). The Relevance of Taufiq Pasiak's Spiritual Neuroscience Concept to Sufistic Psychotherapy. *JOUSIP: Journal of Sufism and Psychotherapy*, 1(2), 141-160. <https://doi.org/10.28918/jousip.v1i2.4458>
- Hakim, L. (2023). Gender Equality in Islamic Education Perspective of M. Quraish Shihab. *Civilization Journal of Interdisciplinary Educational Research*, 1(1), 1-20.

<https://doi.org/10.59001/pjier.v1i1.101>

- Hanafi, I. (2016). Neuroscience-Spirituality and Creative Potential Development. *An-Nuha*, 3(1), 23-38.
[http://sindikker.dikti.go.id/dok/permendikbud/permendikbud 154 years old](http://sindikker.dikti.go.id/dok/permendikbud/permendikbud%20154%20years%20old)
- Handojoseno, A. (2016). *I'm Connected So I Exist: Perspectives on Connection-Based Pedagogy in the Digital Age*. Digital Era. Sanata Dharma University Press.
- Heni Listiana, Achmad Yusuf, Supandi, M. W. (2021). Development of an Islamic Religious Education Curriculum Based on Spiritual Neuroscience. *AL MURABBI Journal*, 6(2), 99-111.
- Hidayat, B. (2017). Learning the Quran in Early Childhood According to Religious Psychology and Neuroscience. *Proceedings of The 2nd Annual Conference on Islamic Early Childhood Education*, 2, 60.
- Husnaini, R., Adnan, & Ahmad, C. F. (2021). The Urgency of Spiritual Maturity on Brain Health. *Syifa Al-Qulub*, 6(1), 35-41.
- Irfan, M. (2017). Effect of lavender aromatherapy (*Lavandula Angustifolia*) on anxiety of white rats (*Rattus Norvegicus*) after exposure to unpredictable chronic mild stress.
- Lalu Abdurrahman Wahid. (2022). DEVELOPMENT OF ISLAMIC RELIGIOUS EDUCATION LEARNING BASED ON BRAIN POTENTIAL DEVELOPMENT USING NEUROSCIENCES THEORY. *Tarbiyatuna: Journal of Islamic Education*, 15(1), 164.
<https://doi.org/10.36835/tarbiyatuna.v14i2.1111>
- Maunah, B. (2023). *DIGITAL NAVIGATION, TECHNOLOGICAL INNOVATION, AND RELIGIOUS SCIENCE SUPPORT SYSTEM*. Akademia Pustaka.
- Nashihin, H. (2018). Praxis of Internalizing the Character of Independence in the Pesantren Yatim Piatu Zuhriyah Yogyakarta. *J-PAI: Journal of Islamic Education*, 5(1). <https://doi.org/https://doi.org/10.18860/jpai.v5i1.6234>
- Nashihin, H. (2023). Research Methods (Qualitative, Quantitative, Experimental, and R&D). *PT GLOBAL EXECUTIVE TECHNOLOGY*.
- Novia, A. (2010). Training the razor-sharp brain. Media Pressindo.
https://books.google.com/books?hl=en%5C&lr=%5C&id=pzO5RKYR5bwC%5C&oi=fnd%5C&pg=PA1%5C&dq=kulit+kiwi+preservatives%5C&ots=zfRrFxA5h_%5C&sig=fi907IjIFclKYvmlkoD6PLXzBBw
- Nurul, Istiqomah & Rio, Pebrian & Susi, M. (2018). Spirituality, Prayer and Learning Achievement. *Belajea Journal of Islamic Education*, 3(2).

- Pahleviannur, M. R., De Grave, A., Saputra, D. N., Mardianto, D., Hafrida, L., Bano, V. O., ... & Sinthania, D. (2022). *Qualitative Research Methodology*. Pradina Library.
- Rohmadi, K. (2018). Development and Implementation of Islamic Education Curriculum from Neuroscience Perspective. *Ruhama Journal*, 1(1), 39-50.
- Rusuli, I. (2014). Reflection of Behavioristic Learning Theory in Islamic Perspective. 8(1), 38-54. <https://doi.org/10.13170/jp.8.1.2041>
- Setyawan, F. E. B. (2017). *INTRODUCTION TO RESEARCH METHODOLOGY: (Practical Statistics)*. Zifatama Jawara.
- Supriaji, U. (2019). The concept of spiritual education. *Cakrawala, Journal of Islamic Education Management and Social Studies*, 3(1), 16-46.
- Suyadi. (2017). Early childhood learning theory in neuroscience studies. PT Rosadakarya.
- Suyadi. (2020). *Islamic Education and Neuroscience: Tracing the Traces of Intellect and Brain in the Qur'an to the Development of Neuroscience in Islamic Education*. Prenada Media.
- Tamin, A. K. (2022). An Examination of the Concept of the Brain in the Qur'an. *Tanzil: Journal of Quranic Studies*, 5(1), 15-28. <https://doi.org/10.20871/tjsq.v5i1.190>
- Taufik, P. (2010). *Unlimited Potency of the Brain: Recognize and Fully Utilize the Unlimited Potential of the Brain*. Mizan Library.
- Ubudiyah, F. (2020). Counseling Through Interfaith Meditation at Karangdjati Monastery Yogyakarta. *AL-IRSYAD: Journal of Islamic Counseling Guidance*, 2(1), 231-250.
- Wasisto, R. J. (2012). Urban Sufism in Urban Areas: Construction of New Muslim Middle Class Faith. *Journal of Da'wah Management Studies & Development*, 5(2), 175-199.
- Yakin, A. (2018). Islamic Education and Neuroscience in the Modern Era. *MAHAROT: Journal of Islamic Education*, 2(2), 2.
- Yusmaliana, D., Suyadi, S., Widodo, H., & Zakaria, G. A. N. (2022). Planning Framework and Outline of Neuroscience-Based Creative Imagination (IKBN) Model in Islamic Religious Learning at Elementary School Level. *EDUKASI: Journal of Religious Education Research*, 20(2), 233-251. <https://doi.org/10.32729/edukasi.v20i2.764>

Digitalization of PAI Learning Based on ICT Technology Integration with Multiple Intelligences Approach

Nur Ahmad*

*IAIN Kudus, Indonesia

ahmadnur@iainkudus.ac.id

Farandika Nanda Pratama

IAIN Kudus

farandika36@student.iainkudus.ac.id

Miftakhul Jannah

IAIN Kudus

mifjanah9@gmail.com

Abstract

The labeling of smart and dumb students has long been a part of education in Indonesia. Generally, students who are considered intelligent are synonymous with high test scores on their report cards, but this view is very wrong. It is important to emphasize early on that the intelligence characteristics of each learner are different and cannot be forced to be uniform. Moreover, with the presence of the technological era around us, PAI learning must be integrated with the available digital technology, whether we like it or not. Therefore, this study aims to analyze, describe, and explain how the digitalization of PAI learning is based on the integration of ICT technology with a multiple intelligences approach. This research uses a qualitative approach and library research method with data analysis techniques, namely descriptive analysis. The results show that the digitalization of PAI learning based on ICT technology integration is effectively applied to 9 types of multiple intelligences approaches by utilizing RPG interactive games, Quizzes, digital comics, etc. as model of digitalization of PAI learning. So that it can maximize the growth of students to become human beings who are responsive to technology in the future and can optimize their potential and talents.

Keywords: *Islamic Education Learning, ICT Technology Integration, Multiple Intelligences*

INTRODUCTION

Education is the main element in building an era. As the center of an era, of course there are many obstacles and challenges in the world of education. (Taqiyuddin dkk., 2019). Therefore, digitalization is an answer to overcome problems along with the times. Many efforts have been made by the government, but this is considered not optimal because there are still many teachers who apply traditional methods in the learning process at school. (Dewi dkk., 2021)

Not only one subject in school tends to use traditional methods. Of the many subjects available, almost all of them apply traditional methods, including PAI subjects. In addition, there are problems that can arise if the problems in the use of traditional methods are not addressed wisely, such as students who are considered smart and stupid and learning that is too centered on teachers so that the learning atmosphere becomes monotonous and boring. (Wijaya, 2023b) So that an academic from the Western world named John Holt argues that if this traditional method continues to be applied in this advanced era, then schools can be considered to kill the potential of their students because they have different interests and talents. (Bagir, 2019) This is what allows the emergence of a negative stigma that PAI learning emphasizes the memorization aspect only. (Wijaya, 2023b) Therefore, according to Thomas Armstrong, traditional methods applied in the modern era can lead to various assumptions. First, teachers tend to categorize students into smart and stupid. Second, teaching and learning activities feel monotonous and boring. Third, teachers can find it difficult to increase the enthusiasm of learners because teaching and learning activities in the classroom are less creative and not fun. (Amstrong, 2004)

If you realize it, humans are creatures that are equipped with advantages and disadvantages. Not only that, but humans are also equipped with intellectual, emotional and spiritual intelligence that makes humans perfect beings. If these three intelligences are optimally developed, it will encourage them to carry out positive activities in everyday life. Thus, the school must also consider the strengths and weaknesses of students. Learners should not be underestimated because of low grades and considered stupid. It should also be emphasized that the indicator of students' intelligence is not only measured by intellectual aspects, but also other aspects that stand out in them. (Setyawan, 2014) Therefore, an expert named Howard Gardner created a theory named multiple intelligences or multiple intelligences. Multiple Intelligences is a theory that views that humans have various intelligence potentials. (Hernowo & Nurdin, 2004)

This concept was first discovered in 1980 when Gardner was the leader of Project Zero at Harvard. There are nine kinds of human intelligence, including mathematical logic, linguistic, musical, interpersonal, intrapersonal, kinesthetic, visual, naturalist, and existential intelligence. (Gardner, 2013) This concept ultimately

has a significant impact on education. This is evidenced by the number of schools that began to integrate the concept of multiple intelligences learning system. The purpose of applying this concept is to optimally explore the potential of students and not assess students based on the scores they get alone. (Suyadi, 2020) The existence of the concept of multiple intelligences also provides ideas for academics to develop methods in accordance with the nine intelligences proposed by Gardner. (Fikriyah & Aziz, 2018)

The concept of multiple intelligences also needs to be applied in Islamic education learning at school. This is because Islamic education aims to create perfect humans and have broad insights as leaders on earth. (Dinata, 2020) To form a perfect human being, the potential and talents in humans need to be developed according to their characteristics. Therefore, the solution to this problem is to integrate technology in classroom learning. (Anwar dkk., 2022) This is due to the rapid progress of the times and the world of education continues to develop. Based on this, the author tries to examine more deeply about PAI learning with technology integration to increase the effectiveness of teaching and learning activities.

Therefore, in this study the author discusses "Digitalization of PAI Learning Based on ICT Technology Integration with Multiple Intelligences Approach." Thus, this study aims to 1) describe the digitalization of PAI learning media based on ICT technology integration, 2) describe the implementation of PAI learning based on ICT technology integration with multiple intelligences approach, and 3) describe the effectiveness of PAI learning based on ICT technology integration.

The author chose the elementary school level because at that age students experience a golden period of growth. Therefore, learning PAI with a multiple intelligences approach is important to teach because it can maximize the growth of students to become human beings in the future and encourage their potential and talents. (Hidayat, 2021)

METHODS

According to Muhammad Ramdhan, the research method is a method used in obtaining data based on the purpose of certain interests. (Ramdhan, 2021) There are five characteristics of the method, including open, objective, experience-based, structured, and potentially predictable results. (Morissan, 2017) This research has the aim of getting answers to the problems found so that later it can contribute to science.

The type of research that forms the basis for this study is qualitative research with a focus on descriptive analysis. The main objective is to investigate how the integration of ICT technology affects the digitalization of PAI learning. The qualitative approach is an attempt to understand the phenomena or events experienced by the research subjects, such as their actions, interests, and motivations using observations

or interviews. The result is descriptive analysis expressed in verbal form. The purpose

of qualitative research is to present a picture of the research subject interpreted through stories, illustrations, and other methods so as to help reveal the meaning of existing events and be able to describe the meaning arising from the phenomenon. (Wijaya, 2023b)

The type of research in this writing is qualitative which focuses on descriptive analysis with the aim of analyzing, describing, and describing the digitalization of PAI learning based on ICT technology integration. The author also uses a library research model because the main data used as a reference to solve the problems in this study come from literature such as books, articles, and journals. (Evanirosa, 2022) In addition, literature studies can also answer the problems being researched by the author and contribute various findings that can be used as solutions to the problems being studied. (Zed, 2008)

RESULTS AND DISCUSSION

1. Digitalization of Islamic Education Learning Media Based on ICT Technology Integration

Media is a set of tools that can facilitate a job or activity. Media is also defined to disseminate information widely. When associated with the world of education, especially in teaching and learning activities in the classroom, media is a tool that supports learning and can connect teachers and students. Learning media can also be interpreted as a tool to disseminate information in the form of learning materials that can attract the attention of students to cause a thinking process that affects their learning process. Based on this explanation, learning media can be interpreted as a means to convey information between teachers and students that encourages the learning process to be more effective and achieve learning objectives. (Wijaya, 2023b)

The development of technology in various sectors also affects education in Indonesia, especially in the use of learning media. The term e-learning media is familiar in this era. E-learning is a media designed through computer networks that can be accessed through students' mobile phones. Through technology as learning media, the learning process in the classroom can be fun so that the interest, motivation, and willingness of students to learn can increase and the learning atmosphere becomes more interactive. This e-learning system is one of the teaching innovations that can be done by an teachers based on ICT technology integration. (Yuliana, 2020)

E-learning, which is part of the learning media based on the integration of digital ICT technology, can now be applied by utilizing social media. The following are media that can be used in the digitalization of PAI learning based on ICT technology integration:

a. WhatshApp Group

WhatsApp application is a multifunctional application that can be used practically

by utilizing a mobile phone. There are various chat functions in this application, one of which is group chat. A suitable learning model to be applied through WhatsApp group media is problem-based learning. Through this model, students can learn independently and improve their thinking skills.. (Utomo, 2018)

b. Google Form

Google form is part of the Google Docs service. This application is suitable for teachers and students in supporting the learning process such as filling out forms, surveys, and creating or teaching quizzes. (Wijaya, 2023b)

c. Youtube

Snelson argues that YouTube is the most popular video sharing app in the world today. Through YouTube, users can watch, upload, discuss and explore videos for free. YouTube can be effectively used as a learning media because it has a download feature. Through this feature, videos related to learning can be saved on each cellphone and can be accessed without the internet so that students can play them repeatedly to learn according to their needs. (Wijaya, 2023b)

d. Google Classroom

Google classroom is an application that is connected to Gmail, Drive, Hangout, YouTube, and Calendar. This application facilitates learning activities because it provides various services that support that learning activities do not have to be in class and can learn anywhere and anytime. This application can also improve the performance of teachers, save time, and become a communication tool for teachers and students. (Wijaya, 2023b)

e. Quizizz

The utilization of Quizizz as a learning media can improve students' learning competence and motivation. Through Quizizz, learning can be fun and can be used as a learning evaluation material. This application supports the implementation of learning at various levels and subjects, especially in PAI learning. (Aini, 2019)

f. Game Edukatif di Play Store

Educational games are applications that integrate learning materials in the form of games. This educational game application can stimulate thinking and increase students' concentration and motivation to learn. In some studies, educational games can encourage users to learn material that they did not want to learn before despite spending a lot of time. Therefore, the use of educational games as learning media needs to be applied in PAI subjects because the application can be downloaded through the Play Store and played anytime and anywhere while using a cellphone. (Zahir dkk., 2022)

2. Implementation of Digitalization of Islamic Education Learning Based on ICT Technology Integration with Multiple Intellegences Approach

Howard Gardner is an expert who views that humans have many abilities that cannot be measured based on standardized scores alone. For him, there are no smart or stupid children, but rather children who have dominant abilities in one or several intelligences. Therefore, he developed a theory of multiple intelligences. (Suarca dkk., 2005). The theory developed by Gardner is trying to be applied by

various educational institutions today. The application of this concept aims to enable schools to support the potential of students and not underestimate students.

Recently, an opinion has emerged that PAI subjects are considered boring. To break this opinion, the concept of multiple intelligences developed by Gardner needs to be applied in PAI learning. This can turn previously boring learning into interesting and fun learning. Not only that, to form a pleasant learning atmosphere, teachers also need to integrate technology in PAI learning. (Wijaya, 2023a) Below are the kinds of implementation of digitalization of PAI learning based on ICT technology integration with multiple intelligences approach:

a. Math Logic Intelligence

Aisyah argues that mathematical logic intelligence is the ability to recognize shapes and colors to improve the ability to process numbers and use logic. Meanwhile, Gardner argues that mathematical logic intelligence is the ability to understand the surrounding situation with mathematical calculations and cognition or logical reasoning. (Tirta & Buyung, 2022) This intelligence is closely related to learning by combining numbers, using logic, and making hypotheses or estimates.

In classroom learning, teachers can improve students' mathematical logic intelligence by using the technology-based Problem Based Learning (PBL) method. If it is associated with PAI learning, then an teachers can integrate technology in zakat material through videos or android-based games. By integrating technology in the learning process, students can understand zakat material in a fun way so that the logical intelligence of students on zakat material can increase.



Picture 1 (Animated Learning Video on Zakat)

b. Linguistic Intelligence

Arif Rochman argues that linguistic intelligence is the ability to process words in both oral and written form. Meanwhile, Armstrong argues that linguistic intelligence is the ability to combine words well. Based on the opinions of these two experts, linguistic intelligence can be interpreted as a person's ability to process ideas that are communicated through various sentences. This intelligence has an important role because it has a close relationship with communication skills in everyday life. (Rahmawati, 2016)

When associated with PAI learning, teachers can utilize Artificial Intelligence (AI). In addition, teachers can also integrate RPG (Role Play Game)

based interactive games and VR (Virtual Reality) based learning applications. Such learning is effective for elementary school children because of their tendency to enjoy learning while playing. Teachers can also improve the linguistic

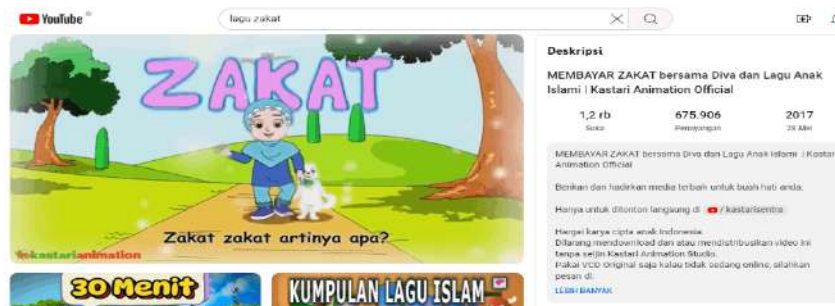
intelligence of students through applications in the PlayStore such as Zakat Belajar: Solite Kids.



Picture 2 (Zakat Belajar: Solite Kids)

c. Musical Intelligence

Musical intelligence is the ability to think, listen, recognize and compose music. In general, children who are dominant in musical intelligence have a high sense of sensitivity to the world of music. A suitable strategy for children with musical intelligence is to use songs, tones, or rhythms in learning activities. (Suarca dkk., 2005) Therefore, PAI teachers, can use music game applications or music learning videos related to PAI material. This can develop and improve students' musical intelligence. For example, by playing and showing various zakat songs to students related to zakat learning materials at school.



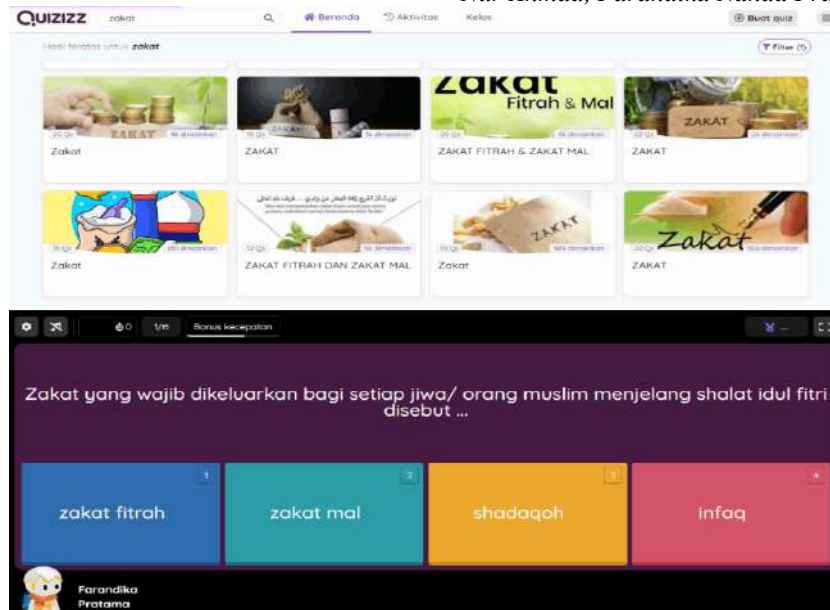
Picture 3 (Zakat Song)

d. Interpersonal Intelligence

Interpersonal intelligence can be defined as the ability in humans to empathize and communicate with others. Interpersonal intelligence can also be defined as the ability to build good relationships and maintain social relationships. This intelligence has an important role for students, as it impacts their ability to understand and interact with the surrounding environment. (Kusuma & Dafit, 2023)

Its application in PAI learning is by using the methods of group work, learning together, and collaboration. In addition, to improve learners' interpersonal intelligence, teachers can use game-based learning methods and utilize technology such as utilizing Kahoot or Quizizz applications. Through

these methods, students can help each other and work together so that their interpersonal intelligence can develop well.



Picture 4 (Quizizz)

e. Intrapersonal Intelligence

Intrapersonal intelligence belongs to the intelligence of the inner world. The main component in interpersonal intelligence is the ability to understand oneself, which includes strengths, weaknesses, moods, motivation, and self-introspection. (Maitrianti, 2021) Its application in PAI learning is to provide motivation, affection, and reflection so that students can understand themselves. This can be supported by utilizing the computer lab as a space for learning. Here, teachers can give students the freedom to search for learning resources on the internet according to what they like, for example with comics, eBooks, videos, or other learning resources according to their respective learning styles. This can encourage learners' independence and improve their interpersonal intelligence.



Picture 5 (Learning with Computer Lab Facilities)

f. Kinesthetic Intelligence

According to Gardner, kinesthetic intelligence is an ability related to the coordination of body and mind movements. Meanwhile, Lewin argues that kinesthetic intelligence is a person's ability to build relationships between physicality and thought. Based on these two opinions, kinesthetic intelligence

can be interpreted as a person's ability to process information through thoughts and gestures. (Mahardika dkk., 2017) To improve kinesthetic intelligence,

teachers can utilize YouTube as a learning medium. For example, in the zakat material, the utilization of YouTube can display interesting, animated videos. In addition, teachers can also utilize PPT and LCD Projectors to maximize learning in the classroom.



Picture 6 (Interactive PPT on Zakat)

g. Visual Intelligence

Visual intelligence is the tendency a person must combine ideas and abstract thinking. In this case, someone who has a tendency to visual intelligence can remember shapes, lines, colors, and apply them in two or three-dimensional form. (Zahro' dkk., 2022) When associated with PAI learning, technology can be integrated using video, mindmap, and ppt media to encourage students' motivation in learning because the PAI materials taught can be visualized well through designs and photos and students' visual intelligence can increase.



Picture 7 (Mindmap of Zakat Fitrah)

h. Naturalistic Intelligence

Gardner argues that naturalistic intelligence is the ability to determine and categorize elements in the environment. A person who is dominant in naturalist intelligence has a calm feeling when learning in nature. (Djumat dkk., 2023) Its application in PAI learning is to change the concept of learning which is usually in the classroom to the environment around the school. In addition to learning in nature, teachers can also utilize projectors to present objects that cannot be presented directly. Therefore, teachers can also use global zakat games. This game is designed by teaching the subject matter through a fun maze game. In addition, students can also be trained naturally about the direct practice of zakat procedures to the surrounding environment.



Picture 8 (Global Zakat Game)

i. Existential Intelligence

Existential intelligence is the ability to place oneself in various aspects such as the meaning of life, fate, and the experience of loving and being loved. Its relationship with PAI learning is essentially inseparable from the concept of tawhid. Therefore, teachers must optimize students' awareness in understanding and recognizing the existence of Allah SWT. above all. (Syarifah, 2019) In its application, teachers can teach material using digital comic media and audiovisual media. This can make students interested so that they become focused and learn the material in depth.



Picture 9 (Digital Comic about Zakat)

3. The Effectiveness of Digitalization of Islamic Education Learning Based on Digital ICT Technology Integration with Multiple Intellegences Approach

Digitalization of PAI learning based on ICT technology integration is one of the efforts to improve Indonesia's education system. Learners are invited to utilize various applications available through mobile phones, computers, and the internet. By utilizing these media, learners can learn comfortably and flexibly without any limitations in terms of space and time. In this situation, learners can listen to the material more efficiently through their respective cellphones or laptops so that they can learn comfortably and express their questions and opinions without feeling awkward. Based on research conducted by Hamidah Sadikin, learning that integrates digital technology is learner-oriented with the aim of developing a sense

of responsibility and encouraging independence in the learning process. This ICT technology integration-based learning encourages learners to manage learning, evaluate assessments, organize materials, maintain motivation, and increase interest in learning independently. (Sadikin, 2020)

Many things affect the success of learning with integrated ICT technology, but the most crucial is its effectiveness. More clearly, there are three things that affect the effectiveness of PAI learning based on ICT technology integration with multiple intelligences approach, including: First, the network setting should be easily accessible to enable the communication process between teachers and learners. Second, the personality of the teachers and the implementation of educational guidelines affect digital learning. When teachers provide materials with enthusiasm, the learning process becomes active and fun. Third, learners' characteristics related to learners' ability and discipline level.

Furthermore, research conducted by Ramli shows that the integration of digital technology in PAI learning has been implemented effectively. This technology has presented a creative and innovative way of learning to obtain quality educational outcomes. Teachers can introduce ICT technology in the form of applications to their learning because the technology has various benefits such as in the design of technological teaching materials. The combination of technology with this teaching material can provide high motivation to students. This technological design aims at convenience and efficiency and is able to innovate and even transform learning, even in the context of PAI which usually leads to descriptive rather than textual. (Ramli, 2020)

The use of technology and applications in PAI is in line with the general view of technology, which is that technology leads to innovative and transformative directions in education with the aim of improving the quality of PAI learning in the future. This is certainly appropriate in the context of PAI, which argues that Islam must respond to the good things that arise in the academic context.

Islamic science needs changes and developments that recognize the existence of technology-based learning designs and methods because it needs the right steps and is in line with the goals of Islamic education. Experiencing the process of designing Islamic Education learning programs that integrate digital technology provides various benefits, including real examples of how digital applications can facilitate the academic community when designing learning based on digital literacy in the realm of information dissemination and application empowerment. This technology has provided various benefits, including the advantages of PAI learning from new learning resources and effective methods in obtaining and disseminating learning content. From the development of learning literacy literacy and the combination of cooperation between academics as an opportunity to get multiple benefits far greater than conventional PAI learning. (Wijaya, 2023b)

CONCLUSION

Learning media is a set of tools that can be used by teachers in delivering learning materials with the aim that there is an increase in students related to their interest and motivation to learn. The application of digitalization of PAI learning media based on ICT technology integration with multiple intelligences approach is one way to appreciate and accommodate the differences in intelligence that exist in each learner such as e-learning media that affects the interest, motivation, and willingness of students in learning. Currently, there are many media that can be used to support the digitalization of PAI learning including WhatsApp Group, Google Form, YouTube, Google Classroom, Quizizz, and Educational Games in Play Store.

The implementation of digitalization of PAI learning based on ICT technology integration can be applied with a multiple intelligences approach that is expected to make learning not monotonous and able to maximize the potential of students. The goal is that learning does not limit the freedom of learners in developing according to their innate potential so that there is no assumption that learners are stupid or smart but have a dominance of excellence in one or more than one type of intelligence. There are nine types of multiple intelligences including mathematical logic, linguistic, musical, interpersonal, intrapersonal, kinesthetic, visual, naturalist, and existential that can be utilized through animated videos, educational games, mind maps, nature tours, digital comics, etc.

In fact, PAI learning based on digital ICT technology integration can be said to be effective because there is satisfaction and comfort for students from flexible learning that is not limited by space or time. Learners can also express questions and opinions without feeling awkward and increase independence in learning.

REFERENCES

- Aini, Y. I. (2019). Pemanfaatan Media Pembelajaran quizizz untuk pembelajaran jenjang pendidikan dasar dan menengah di Bengkulu. *Kependidikan*, 2(25), Article 25.
- Amstrong, T. (2004). *Sekolah Para Juara: Menerapkan Multiple Intelligence di Dunia Pendidikan*. Kaifa.
- Anwar, F., Taqiyuddin, M. F., Wijaya, K., Azmi, M. C. Y., & Izharman, I. (2022). Implementation of Talaqqi, Sima'i, Wahdah, Talqin and Kitabah Methods in Memorizing the Quran: How Do Teachers Guide Students. *Khalifa: Journal of Islamic Education*, 6(2), Article 2. <https://doi.org/10.24036/kjie.v6i2.151>
- Bagir, H. (2019). *Memulihkan Sekolah Memulihkan Manusia, Meluruskan Kembali Falsafah Pendidikan Kita*. Mizan.

- Dewi, C. A., Pahriah, P., & Purmadi, A. (2021). The Urgency of Digital Literacy for Generation Z Students in Chemistry Learning. *International Journal of Emerging Technologies in Learning (ijET)*, 16(11), Article 11. <https://doi.org/10.3991/ijet.v16i11.19871>
- Dinata, F. R. (2020). *Pengembangan Materi PAI*. Penerbit Nusa Media.
- Djumat, N., Purwanto, A., & Akbar, Z. (2023). Peran Guru Dalam Pengembangan Kecerdasan Kecerdasan Naturalis Siswa. *Prosiding Seminar Nasional PSSH (Pendidikan, Saintek, Sosial dan Hukum)*, 2, 52.
- Evanirosa. (2022). *Metode Penelitian Kepustakaan (Library Research)*. Media Sains Indonesia.
- Fikriyah, F. Z., & Aziz, J. A. (2018). Penerapan Konsep Multiple Intelligences pada Pembelajaran PAI. *IQ (Ilmu Al-qur'an): Jurnal Pendidikan Islam*, 1(02), 220–244. <https://doi.org/10.37542/iq.v1i02.17>
- Gardner, H. (2013). *Multiple Intelligence*. Daras Books.
- Hernowo, & Nurdin, C. (2004). *Bu Slim dan Pak Bil: Kisah tentang Kiprah Guru "Multiple Intelligence" di Sekolah*. MLC.
- Hidayat, A. S. (2021). *Hidayat, A. S. (2021). Pengembangan Model Pembelajaran Atletik Nomor Lari Berbasis Permainan Pada Siswa Sekolah Dasar*. CV. Sarnu Untung. Sarnu Untung.
- Kusuma, T., & Dafit, F. (2023). Strategi Guru dalam Mengembangkan Kecerdasan Interpersonal pada Siswa Kelas V Sekolah Dasar. *Innovative: Journal Of Social Science Research*, 3(6), Article 6. <https://doi.org/10.31004/innovative.v3i6.6211>
- Mahardika, L., Hermawan, R., & Riyadi, A. R. (2017). Penerapan Model Project Based Learning Untuk Meningkatkan Kecerdasan Kinestetik Siswa Sekolah Dasar. *Jurnal Pendidikan Guru Sekolah Dasar*, 2(1), Article 1. <https://doi.org/10.17509/jpgsd.v2i1.13238>
- Maitrianti, C. (2021). Hubungan Antara Kecerdasan Intrapersonal Dengan Kecerdasan Emosional. *Jurnal Mudarrisuna: Media Kajian Pendidikan Agama Islam*, 11(2), Article 2. <https://doi.org/10.22373/jm.v11i2.8709>
- Morissan. (2017). *Metode Penelitian Survei*. Kencana.
- Rahmawati, K. (2016). Faktor-Faktor Yang Mempengaruhi Kecerdasan Linguistik. *BASIC EDUCATION*, 5(3), Article 3.
- Ramdhan, M. (2021). *Metode Penelitian*. Cipta Media Nusantara.

- Ramli, M. (2020). Designing Islamic Religious Education Teaching Based on Digital Innovation Creativity at Universitas Islam Negeri Antasari Banjarmasin. *Jurnal Iqra': Kajian Ilmu Pendidikan*, 7(1), 344–354.
- Sadikin, H. (2020). Pembelajaran Daring di Tengah Wabah Covid-19 (Online Learning in the Middle of the Covid-19 Pandemic). *BIODIK: Jurnal Ilmiah Pendidikan Biologi*, 6(2).
- Setyawan, A. (2014). *Benarkah Ada Anak yang Tidak Punya Semangat Belajar*. Mizan Publika.
- Suarca, K., Soetjningsih, & Ardjana, IGA. E. (2005). Kecerdasan Majemuk pada Anak. *Sari Pediatri*, 7(2), 85–87.
- Suyadi. (2020). *Pendidikan Islam dan Neurosains: Menelusuri Jejak Akal dan Otak dalam al-Qur'an Hingga Pengembangan Neurosains dalam Pendidikan Islam*. Kencana.
- Syarifah, S. (2019). Konsep Kecerdasan Majemuk Howard Gardner. *Sustainable Jurnal Kajian Mutu Pendidikan*, 2(2), Article 2. <https://doi.org/10.32923/kjmp.v2i2.987>
- Taqiyuddin, M., Arroisi, J., Taqiyuddin, M., & Salim, M. S. (2019). *Reading al-Attas' Ta'dīb as Purpose of Islamic University* (SSRN Scholarly Paper 3487353). <https://doi.org/10.2139/ssrn.3487353>
- Tirta, & Buyung. (2022). Penerapan Metode Demonstrasi Untuk Meningkatkan Konsentrasi dan Kecerdasan Logis Matematis. *Diadik: Jurnal Ilmiah Teknologi Pendidikan*, 12(2), Article 2. <https://doi.org/10.33369/diadik.v12i2.24749>
- Utomo, S. (2018). Utilization of Whatsapp Application on Problem-Based Learning for International Accounting Courses at PGRI Madiun University. *Journal of Educational Technology*, 6(2), 203–204.
- Wijaya, K. (2023a). Integrasi Teknologi Informasi (ICT) Dalam Pembelajaran PAI Berbasis Paradigma Multiple Intelligence di Sekolah Dasar. *Seminar Nasional LPPM UMMAT Universitas Muhammadiyah Mataram*, 2(434–435), 29–30.
- Wijaya, K. (2023b). Pengembangan Pembelajaran PAI Materi Menjaga Kebersihan Lingkungan Berbasis Prinsip Digitalisasi Kecerdasan Majemuk di Sekolah Dasar. *Seminar Nasional Keindonesiaan (FPIPSKR)*, 8, 2251–2254.
- Yuliana, Y. (2020). Analysis of the Effectiveness of E-Learning Utilization as a Learning Medium for Islamic Religious Education During the Corona Pandemic (Covid-19). *Journal SALAM: Syar-I Social & Cultural*, 7(10), 878–881.
- Zahir, A., Nirwana, N., Tanriolo, J. F., & Jusrianto, J. (2022). Game Edukasi Mata Pelajaran Biologi Jenjang SMA Berbasis Android. *Jurnal Sinestesia*, 12(2), Article 2.

Zahro', A., Sutomo, M., & Sahlan, M. (2022). Inovasi Media Pembelajaran Berbasis ICT terhadap Kecerdasan Visual Peserta Didik dalam Pendidikan Agama Islam. *SALIHA: Jurnal Pendidikan & Agama Islam*, 5(1), Article 1. <https://doi.org/10.54396/saliha.v5i1.255>

Zed, M. (2008). *Metode Penelitian Kepustakaan*. Yayasan Obor Indonesia.

Buliding Character Trough Multikultural Education Base on Local Wisdom in Elementary School Student

Ani Siti Anisah *

* Garut of University, Indonesia

E-mail sitianisah@uniga.ac.id

Erlisnawati **

** Riau of University, Indonesia

E-mail erlisnawati83@gmail.com

Fiqra Muhamad Nazib ***

*** Garut of University, Indonesia

E-mail fiqra@uniga.ac.id

Abstract

This research aims to explore how character can be developed through multicultural education based on local wisdom among elementary school students. The research method used is a Systematic Literature Review (SLR), conducted through six stages: defining the theme, literature search, literature selection, analysis and interpretation of literature, drafting the article, and disseminating the writing results. The literature used in this research is categorized into themes of character education strengthening in elementary schools and multicultural education based on local wisdom. After selection, a total of 23 eligible articles were identified as suitable references. The research findings conclude that there are three traditions of character development in elementary schools: direct learning, habituation, modeling, and constructivism. The process of integrating character education with multicultural education based on local wisdom not only enhances academic aspects but also fosters holistic character development in students, aligning with Piaget's and Vygotsky's constructivist theories emphasizing the importance of cultural context in learning to create meaningful learning experiences.

Keywords: *Character Education, Multicultural Education, Local Wisdom, Elementary School Students*

INTRODUCTION

Effective character education is crucial in shaping individuals who are not only knowledgeable but also moral and ethical (Handayani Tyas & Naibaho, 2020; Sukatin & Al-Faruq, 2021; Muslich, 2022). Multicultural education based on local wisdom offers a rich and contextual approach to character-building in students. Implementing this approach is essential for developing the character of the nation's youth (Nurwahid, 2023). It helps students understand, appreciate, and respect the diverse cultures and traditions around them and fosters tolerance and respect for differences (Sipuan et al., 2022), which are integral to good character and conflict avoidance (Wulandari, 2020; Loke et al., 2023). Local wisdom encompasses values, norms, and practices that have stood the test of time (Febrianty et al., 2023) and remain relevant to contemporary society. Integrating local wisdom into education makes learning more relevant and meaningful for students (Suryadi & Jasiah, 2023; Annisha, 2024). Culturally based education helps students recognize and appreciate their identities (Zahrika & Andaryani, 2023; Saputra et al., 2023), thus fostering pride in their heritage and building a strong sense of self.

Recent studies on implementing multicultural education based on local wisdom highlight its importance and varied applications in educational contexts. Research by Suri (2021) emphasizes the necessity of introducing multicultural education grounded in local cultural values to shape character, enabling children to recognize the diversity around them, including ethnicity, religion, race, and culture. Teachers must prepare learning strategies that provide knowledge and help develop attitudes and behaviors for all students and school community members, fostering education based on multiethnic and multicultural values in the school environment (Suri & Chandra, 2021).

Mubin (2022) stresses the importance of early multicultural education to familiarize students with cultural and social diversity from a young age, as this diversity influences behaviors, attitudes, and thought patterns, leading to different usages, customs, mores, and traditions (Mubin & Aryanto, 2022). Muqarramah (2023) underscores the need to embrace diversity and create inclusive learning environments in faith-based education. Overall, these studies highlight the potential benefits of multicultural education at the elementary level, emphasizing its role in cultivating culturally competent individuals aware of globalization (Muqarramah Sulaiman Kurdi, 2023). These studies underline the effectiveness of integrating local wisdom into the educational curriculum. Such integration enriches the learning experience by connecting students with their cultural heritage and plays a crucial role in character formation and promoting multicultural understanding.

Building character through multicultural education is a crucial approach in the educational field (Sipuan et al., 2022; Hakim & Darojat, 2023).

There are notable gaps in education, as many schools have not comprehensively integrated multicultural education into their curricula (Sudargini & Purwanto, 2020; Handayani et al., 2024). Curricula often focus on academic aspects (Isma et al., 2023; Febria et al., 2024) without incorporating multicultural values. There is also a lack of teacher training for multicultural teaching approaches (Wahid, 2023; Maksum et al., 2023), which hampers the acceptance and effectiveness of multicultural education programs. Additionally, there are insufficient effective assessment methods to measure character development through multicultural education, as assessments often emphasize cognitive aspects. Furthermore, there is limited in-depth empirical research on the effectiveness of multicultural education based on local wisdom in building student character. Therefore, this study aims to strengthen previous research emphasizing the importance of character education based on local wisdom, particularly for elementary school students, and to draw the attention of policymakers to develop student character through multicultural education grounded in local wisdom.

Multicultural education holds significant potential for character-building in students. However, several gaps need addressing. One major gap is the need for empirical research on the impact of multicultural education based on local wisdom. Recent studies show positive and ongoing developments in this area. These initiatives are expected to contribute significantly to creating inclusive learning environments that support character development. Enhancing the quantity and quality of research in this field can provide strong empirical evidence to support the implementation of multicultural education.

This literature review focuses on the impact of multicultural education based on local wisdom implemented in elementary school curricula, contributing to character-building in students. This research examines how such educational approaches align with the cultural and geographical contexts of students, thereby enhancing their character development in a manner that respects and integrates their local cultural heritage. The research aims to provide a robust framework for integrating local wisdom into multicultural education, thereby fostering the holistic development of students. To Promote Cultural Identity and Social Cohesion: Explore the effects of multicultural education on students' cultural identity, empathy, social skills, and ability to appreciate and respect cultural diversity.

METHODS

The method used by the author in the preparation of this scientific paper is the Systematic Literature Review. The benefit of this method is to identify, examine, review, and interpret various studies that have been reviewed. In the process, the author reviews various studies that share a common theme with the author's topic, following the established procedures and steps. The stages of the Systematic Literature Review according to Isnaeni (2012) in (Nazib et al., 2023) can be outlined as follows: 1) formulation of research questions, 2) literature search, 3) literature

selection, 4) data analysis and interpretation, 5) article drafting, and 6) dissemination of results.

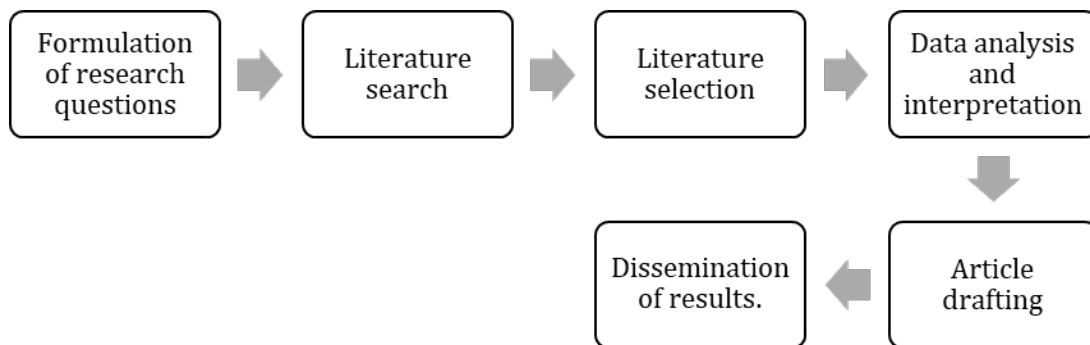


Figure 1. Systematic Literature Review Design (Isnaeni, 2012) in (Nazib et al., 2023)

In the initial stage, the researcher formulates clear and specific research questions that will become the focus of the Systematic Literature Review (SLR). This formulation of research questions will generate a focused study on the theme of Building Character Through Multicultural Education Based on Local Wisdom in Elementary School Students, encompassing three aspects: Character Education Strengthening Program in Elementary Schools, and Multicultural Education Based on Local Wisdom. The literature search employs a comprehensive strategy by identifying relevant literature sources. After the literature selection is conducted based on various aspects, including the type of research, publication year range, language, and relevance to the research questions, the author selects 23 eligible articles for review. The selected articles are then further analyzed and interpreted to derive a comprehensive conclusion addressing the study's theme in this literature review.

The research question in this study is: How can students' character be developed through multicultural education based on local culture in elementary schools? Three problem formulations have been composed, including:

RQ1: How is Character Strengthening Implemented in Elementary Schools?

RQ2: What is the form of implementation of Multicultural Education Based on Local Wisdom?

RQ3: What are the implications of character strengthening through Multicultural Education based on Local Wisdom?

RESULTS AND DISCUSSION

1. Character Education Strengthening Program in Elementary Schools

Character education aims to develop moral and ethical values in students, with the goal of shaping them into responsible, respectful, and empathetic individuals. Schools design programs related to how character education is

implemented. Below is a representation of research related to the implementation of character education in elementary schools:

Table 1. Representation of articles related to character-strengthening programs in Elementary School

Article Title and Author	Character Education Strengthening Program in Elementary Schools
Literature Study: The Importance of Character Education for Elementary Students in the Digital Era in Forming (Mansur & Sholeh, 2024)	Instilling the value of diversity can be started from an early age. This can aim to provide stronger reinforcement and cultivation of student character. These efforts can be made through cultural introduction activities both in learning activities and outside of learning.
Character Education Management of Elementary School Students (Suardin et al., 2023)	Character education based on learning is implemented by integrating character values into the themes of learning, extracurricular programs that develop students' talents, and enforcing school rules by habituating students to school discipline.
Character Education Learning Model for Elementary School Children (Fajarianto et al., 2023)	Using the character education learning model for elementary school children was able to facilitate and improve student learning outcomes and could create appropriate and effective learning and motivate students in character learning
Teachers' views on values-education: The case of secondary schools in East Gojjam, Ethiopia (Tadege et al., 2022)	Character education is an integral part of all academic subjects, which is integrated with teaching and learning tasks. Teachers must be involved in the process of developing moral values, through teaching methods and pedagogical strategies, teachers are responsible for developing ethical values and moral behavior.
How is the education character implemented? The case study in Indonesian elementary school (Aningsih et al., 2022)	Strategy character education applied in elementary schools, namely role modeling; habituation; school climate conditioning; learning integration in all subjects; and integration through extracurricular activities

Implementation of character education in state elementary schools (Yusnan, 2022)	The teacher's character education strategies include always reminding students of good things, issuing warnings, setting examples or being role models, engaging in routine or habituation activities, and increasing student awareness
Reinforcement of Character Education Based on School Culture to Enhancing Elementary School Students' Citizenship Character (Retnasari et al., 2021)	The school culture-based character education program is a civic reinforcement for students by familiarizing the main character values in religion, nationalism, independence, and cooperation in various school cultural activities
Implementation of Character Education for Elementary Students (Gunawan et al., 2020)	Character education for students is reinforced through the school culture, which encompasses values such as discipline, love of country, tolerance, religion, independence, cooperation, and a passion for reading.

2. Multicultural Education Based on Local Wisdom

Multicultural education complements character education by fostering appreciation for diversity, encouraging inclusivity, and promoting respect for different cultures and perspectives. Integrating multicultural education into character education provides a comprehensive approach to developing well-rounded individuals. Multicultural education based on local wisdom is an approach that combines an appreciation for cultural diversity with a deep understanding and respect for the local traditions and values that shape a community. Below is a representation of the form of multicultural education based on local wisdom:

Table 2. Representation of articles related to Multicultural Education Based on Local Wisdom

Article Title	Multicultural Education Based on Local Wisdom
Implementing Character Education	The school effectively integrates local wisdom
Based on Local Wisdom in a Public Islamic Elementary School (Mansur & Sholeh, 2024)	into Character Education through activities such as adopting the 5S culture (smile, greeting, greeting, politeness, and politeness), religious practices, sports, and scouting, all contributing to student character development.

Revitalizing local wisdom within character education through Ethno pedagogy approach: A case study on a preschool in Yogyakarta (Sakti et al., 2024)	Through Ethno pedagogy can improve awareness of local culture and foster character development by integrating local wisdom values into the learning process.
Chinese Traditional Culture Education: Implementing the Child's Position and Perspective in the Elementary School Textbook Morality and Law (Zhang, 2022)	Strengthening students' character through local culture in the Elementary School Textbook in China
A meta-analysis of Multicultural Education Paradigm in Indonesia (Jayadi et al., 2022)	The results of this research recommend that a comprehensive study be conducted regarding the implementation of multicultural education to achieve a harmonious and peaceful social life through strategies implemented by the government as policymakers, teachers as education implementers, and society as the object of multicultural study.
Indonesian Local Wisdom: State of the Art (Indah & Rohmah, 2022)	Local wisdom acts as a powerful force for moral education, particularly in its indispensable role in shaping character for the upcoming generations.
Teacher's Strategy for Implementing Multiculturalism Education Based on Local Cultural Values and Character Building for Early Childhood Education (Suri & Chandra, 2021)	Teachers can develop multicultural education from an early age through appropriate learning strategies to increase knowledge and develop the attitudes and behaviors of students and school residents. This approach fosters and implements educational interactions based on multiethnic and multicultural values in the school environment.
Local wisdom: Pillar development of multicultural nations and national education values (Eko et al., 2020)	The practical implementation of cultivating national character and multicultural education rooted in indigenous knowledge requires meticulous planning, organization, execution, and supervision. Understanding the factors influencing character development involves scrutinizing the content, orientation, goals, roles, and principles of multicultural education, alongside the roles and advantages of local wisdom, using an input-process-output system framework.

The Importance of Local Wisdom in Building National Character in the Industrial Age 4.0 (Sumartias et al., 2020)	Local wisdom needs to serve as a life compass for the community. Many young people today are unfamiliar with local culture due to its perception as conservative. Therefore, policymakers and community leaders must
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prioritize strengthening character through education rooted in local wisdom. They should actively oversee and sustainably manage local wisdom on a large scale to uphold the integrity of the nation's character.

3. Implications of Strengthening Character through Multicultural Education Based on Local Wisdom

By integrating multicultural education into character education, schools can develop well-rounded individuals who are not only academically competent but also culturally sensitive, ethically grounded, and socially responsible. The following implications of integrating multicultural education based on local wisdom are represented in the findings of the following research study:

Table 3. Implications of Strengthening Character Through Multicultural Education Based on Local Wisdom for Elementary School Students

Author	Implications of Strengthening Character Through Multicultural Education Based on Local Wisdom for Elementary School Students
(Lalita et al., 2024)	Multicultural education has a positive impact on the development of attitudes toward tolerance
(Faturohim et al., 2024)	The management of character education at the Surakarta Palace, based on Javanese culture, involves the development and implementation of programs aligned with the school's vision, mission, and objectives. The school aims to provide an education rooted in Javanese culture to produce students who are knowledgeable, faithful, devoted to God Almighty, and possess noble character, while also preserving regional culture. Character education is integrated into both intracurricular and extracurricular programs.
(Tohri et al., 2022)	The richness and diversity of Sasak culture, with its local wisdom values, hold significant potential for holistic integration into the curriculum, encompassing co-curricular, intra-curricular, and extra-curricular activities. These cultural elements can also serve as a foundation for character education. Therefore, it is essential to implement character education in East Lombok elementary schools

based on the local wisdom of the Sasak ethnic group.

(Elan & Solihati, 2022)	Baduy local wisdom contains character values crucial for shaping the development of elementary school-aged children. Baduy teachings are universal and religious, thus they can shape the morality of children, especially boys. The revitalization of Baduy traditional cultural values needs to be integrated into the social life of today's young generation. These values can be incorporated into the learning process..
(Choi & Lee, 2020)	Teachers need to have skills in teaching in multicultural classrooms, not only to develop these classrooms but also to improve the school climate. This ensures that multicultural classes can serve as a vehicle for comprehensive school reform and for providing better and more relevant learning experiences. These efforts contribute to building a constructive learning environment and enhancing social interaction at school.
(Siti Anisah & Holis, 2020)	The process of studying local cultural values can be carried out through thematic learning, facilitating the enculturation of character values. The enculturation process naturally occurs in formal, informal, and non-formal educational environments. In formal education, educators must pay attention to the characteristics of elementary school-age students, necessitating creativity in developing learning activities that include elements of play, creating a peer environment that teaches physical skills, socialization, collaboration, and contextual learning, thereby fostering character values throughout the learning process.
(Erlisnawati et al., 2019)	Character values based on local wisdom contained in the Pacu Jalur tradition in Teluk Kuantan Riau can be explored and transformed in learning in elementary schools. One of the character values contained in it is responsibility.

The implementation of character education in Indonesia, according to Hakam (2018), involves various critical aspects in shaping moral and ethical values among the younger generation. Integration of local cultural values, religion, and universal ethics is carried out within formal education curriculum programs (Hakam, 2018). Character education is further reinforced through both intra-curricular and extra-curricular learning activities (Faturohim et al., 2024). The pedagogical approach includes experiential learning (Choi & Lee, 2020; Siti Anisah & Holis, 2020),

habituation, modeling, constructivist methods, and active learning both inside and outside the classroom (Hakam, 2018). The role of teachers as exemplary figures is crucial in guiding students to internalize and apply character values in their daily lives (Siti Anisah et al., 2022). Overall, character education in Indonesia aims to develop students who are responsible (Erlisnawati et al., 2019), ethical, and capable of making positive contributions to society.

Beyond character development, the integration of multicultural education based on local wisdom enhances critical and reflective thinking about values and norms across cultures, including their own, a concept referred to as the internalization of values within constructivist traditions (Hakam, 2018). In the context of local wisdom, the development of universal values such as honesty, justice, responsibility, and cooperation can be taught through stories, legends, and local practices that are familiar and accepted by students (Tohri et al., 2022). This approach helps students understand and appreciate cultural diversity, fostering adaptability in facing global challenges and cultivating pride and responsibility in preserving and developing local cultural heritage. Moreover, it enhances a deep understanding of others' cultures and values and promotes empathy and social concern, thus sensitizing students to the needs and feelings of others, all of which are crucial aspects of good character development.

CONCLUSION

The literature review aims to contribute valuable insights into how character development through multicultural education based on local wisdom can be effectively applied in schools, particularly at the elementary level, as it is crucial for the holistic development of young children. This approach not only strengthens their moral and ethical foundation but also connects them with their cultural roots, fostering a sense of identity and community. Understanding the importance of integrating local wisdom into education from theoretical and psychological perspectives highlights its significant impacts, as emphasized by John Dewey, who stressed the importance of experiential learning. By incorporating local wisdom, education becomes more holistic, addressing not only intellectual but also emotional and social development. Based on Lev Vygotsky's social constructivism theory, the emphasis on cultural context in learning underscores that students' knowledge is constructed through social interaction and cultural tools, making the inclusion of local wisdom essential for meaningful learning experiences.

REFERENCES

- Aningsih, Zulela, M. S., Neolaka, A., Iasha, V., & Setiawan, B. (2022). How is the Education Character Implemented? The Case Study in Indonesian Elementary School. *Journal of Educational and Social Research*, 12(1), 371–380. <https://doi.org/10.36941/jesr-2022-0029>
- Annisha, D. (2024). Integrasi Penggunaan Kearifan Lokal Dalam Proses Pembelajaran Pada Konsep Kurikulum Merdeka Belajar. *Jurnal Basicedu*, 8(3), 2109–2115. <https://doi.org/https://doi.org/10.31004/basicedu.v8i3.7706>
- Choi, S., & Lee, S. W. (2020). Enhancing Teacher Self-Efficacy in Multicultural

- Classrooms and School Climate: The Role of Professional Development in Multicultural Education in the United States and South Korea. *AERA Open*, 6(4), 1–17. <https://doi.org/10.1177/2332858420973574>
- Eko, P. S., Eko, H., Munandar, M. A., & Rachmand, M. (2020). Local wisdom: Pillar development of multicultural nations and national education values. *Cypriot Journal of Educational Sciences*, 15(6), 1587–1598. <https://doi.org/10.18844/CJES.V15I6.5319>
- Elan, E., & Solihati, E. (2022). Potential transformation of baduy local wisdom values in civics education learning in elementary school. *Premiere Educandum : Jurnal Pendidikan Dasar Dan Pembelajaran*, 12(1), 88. <https://doi.org/10.25273/pe.v12i1.12492>
- Erlisnawati, S., Budimansyah, D., & Marhadi, H. (2019). Analysis of the Character of Responsibility in Pacu Jalur Traditions. *Proceeding of the SS9 & 3rd URICES, 2019, 2012*, 140–143.
- Fajarianto, O., Harimurti, E. R., & ... (2023). Character Education Learning Model for Elementary School. ... : *Journal of Education*, 7(4), 203–213. <http://www.staimnglawak.ac.id/ejournal/index.php/educatio/article/view/1028%0Ahttp://www.staimnglawak.ac.id/ejournal/index.php/educatio/article/download/1028/318>
- Faturohim, I., Triyanto, T., & Daryanto, J. (2024). Character Education Base on Javanese Culture in Surakarta Palace at Kasatriyan Elementary School, Surakarta. *Mini International Conference of Educational Research and Innovation (MICERI 2023)*, 7(1), 140–150. <https://doi.org/https://doi.org/10.20961/shes.v7i1.84302>
- Febria, S. N., Suryaningsi, S., Kurniawan, K., & Aziz, R. (2024). Pendidikan Karakter di Sekolah Dasar. *Jurnal Pendidikan Dan Keguruan*, 2(01), 26–35.
- Febrianty, Y., Pitoyo, D., Masri, F. A., Anggreni, M. A., & Abidin, Z. (2023). Peran Kearifan Lokal Dalam Membangun Identitas Budaya Dan Kebangsaan. *El-Hekam*, 7(1), 168–181. <https://doi.org/http://dx.doi.org/10.31958/jeh.v7i1.10591>
- Gunawan, I., Ahmadi, F., & Dukuwaluh, R. (2020). Implementation of Character Education for Elementary Students Article Info. *Journal of Primary Education*, 9(2), 168–175. <https://journal.unnes.ac.id/sju/index.php/jpe/article/view/36646>
- Hakam, K. A. (2018). Tradition of value education implementation in indonesian primary schools. *Journal of Social Studies Education Research*, 9(4), 295–318. <https://doi.org/10.17499/jsser.98315>
- Hakim, A. R., & Darajat, J. (2023). Pendidikan Multikultural dalam Membentuk Karakter dan Identitas Nasional. *Jurnal Ilmiah Profesi Pendidikan*, 8(3), 1337–1346. <https://doi.org/10.29303/jipp.v8i3.1470>
- Handayani, P. T., Zakiah, L., Pasha, N. M., Zahra, A. S., & Jaya, I. (2024). Pentingnya

- Pendidikan Multikultural dan Pendidikan Inklusi di Sekolah Dasar Dalam Menghargai Keberagaman: Studi Literatur. *Jurnal Ilmiah Pendidikan Dasar*, 09(02), 2890–2905. <https://doi.org/https://doi.org/10.23969/jp.v9i2.13566>
- Handayani Tyas, E., & Naibaho, L. (2020). *Building Superior Human Resources through Character Education*. 11864, 11864–11873. <http://repository.uki.ac.id/id/eprint/2871%0A>
- Indah, R. N., & Rohmah, G. N. (2022). Indonesian Local Wisdom: State of the Art. *Proceedings of the International Symposium on Religious Literature and Heritage (ISLAGE 2021)*, 644(Islage 2021), 254–259. <https://doi.org/10.2991/assehr.k.220206.032>
- Isma, A., Isma, A., Isma, A., & Isma, A. (2023). Peta Permasalahan Pendidikan Abad 21 di Indonesia. *Jurnal Pendidikan Terapan*, 01(September), 11–28. <https://doi.org/10.61255/jupiter.v1i3.153>
- Jayadi, K., Abduh, A., & Basri, M. (2022). A meta-analysis of multicultural education paradigm in Indonesia. *Heliyon*, 8(1), e08828. <https://doi.org/10.1016/j.heliyon.2022.e08828>
- Lalita, A. C., Zakiah, L., & Haikal, D. R. (2024). *The Effect of Multicultural Education on the Tolerant Attitudes of Elementary School Students : A Literature Study*. 8(1), 16–21.
- Loke, L. K., Marung, M. D., & Rato, E. P. (2023). Teori dan Pendekatan Pendidikan Multikultural. *Jurnal Pendidikan Sang Surya*, 9(2), 138–149. <https://doi.org/https://doi.org/10.56959/jpss.v9i2.119>
- Maksum, A., Outra, A., Zulela, Z., Marini, A., Safitri, D., Sujarwo, S., & Nurzengky, N. (2023). Pelatihan Bagi Guru Untuk Penilaian Multikultural Dalam Pembelajaran. *Jurnal Pengabdian Kepada Masyarakat*, 3(4), 702–706. <https://doi.org/https://doi.org/10.53625/jabdi.v3i4.6471>
- Mansur, & Sholeh, M. (2024). Implementing Character Education Based on Local Wisdom in a Public Islamic Elementary School. *Jurnal of Integrated Elementary Education*, 4(2), 54–70. <https://doi.org/https://doi.org/10.21580/jieed.v4i1.20238>
- Mubin, M., & Aryanto, S. J. (2022). Pelaksanaan Pendidikan Islam Multikultural di Madrasah Ibtidaiyah. *Edu Cendikia: Jurnal Ilmiah Kependidikan*, 2(01), 72–82. <https://doi.org/10.47709/educendikia.v2i01.1433>
- Muqarramah Sulaiman Kurdi. (2023). Dampak Pendidikan Multikultural Pada Madrasah Ibtidaiyah Di Indonesia. *Morfologi: Jurnal Ilmu Pendidikan, Bahasa, Sastra Dan Budaya*, 1(6), 215–244. <https://doi.org/10.61132/morfologi.v2i1.322>
- Muslich, M. (2022). *Pendidikan karakter: menjawab tantangan krisis multidimensional*. Bumi Aksara.

- Nazib, F. M., Saifullah, I., Nasrullah, Y. M., & Hanifah, F. (2023). Stratgei Kepala Madrasah Dalam meningkatkan Mutu Pendidikan Madrasah. *Indo MathEdu Intellectuals Journal*, 4(3), 2764–2773. <https://doi.org/10.54373/imeij.v4i3.505>
- Nurwahid, N. (2023). Urgensi Pendidikan Multikultural Berbasis Kearifan Lokal Bagi Siswa Sekolah Menengah Pertama. *JISIP (Jurnal Ilmu Sosial Dan Pendidikan)*, 7(1), 6–14. <https://doi.org/10.58258/jisip.v7i1.3952>
- Retnasari, L., Hidayah, Y., & Prasetyo, D. (2021). Reinforcement of Character Education Based on School Culture to Enhancing Elementary School Students' Citizenship Character. *Jurnal Ilmiah Sekolah Dasar*, 5(2), 351. <https://doi.org/10.23887/jisd.v5i2.38072>
- Sakti, S. A., Endraswara, S., & Rohman, A. (2024). Revitalizing local wisdom within character education through ethnopedagogy apporach: A case study on a preschool in Yogyakarta. *Heliyon*, 10(10), e31370. <https://doi.org/10.1016/j.heliyon.2024.e31370>
- Saputra, A. M. A., Huriati, N., Lahiya, A., Bahansubu, A., Rofi'i, A., & Taupiq, T. (2023). Pendidikan Karakter Melalui Pembelajaran Hybrid Berbasis Kearifan Lokal Untuk Mengembangkan Potensi Siswa. *Journal on Education*, 6(1), 1102–1110. <https://doi.org/10.31004/joe.v6i1.3050>
- Sipuan, S., Warsah, I., Amin, A., & Adisel, A. (2022). Pendekatan Pendidikan Multikultural. *Aksara: Jurnal Ilmu Pendidikan Nonformal*, 8(2), 815. <https://doi.org/10.37905/aksara.8.2.815-830.2022>
- Siti Anisah, A., & Holis, A. (2020). Enkulturası Nilai Karakter Melalui Permainan Tradisional Pada Pembelajaran Tematik Di Sekolah Dasar. *Jurnal Pendidikan UNIGA*, 14(2), 318. <https://doi.org/10.52434/jp.v14i2.1005>
- Siti Anisah, A., Sapriya, S., Hakam, K. A., & Syaodih, E. (2022). Strategi Pengembangan Sikap Sosial Peserta Didik Dalam Pembelajaran Tematik Di Sekolah Dasar. *Jurnal Cakrawala Pendas*, 8(2), 490–502. <https://doi.org/10.31949/jcp.v8i2.2193>
- Suardin, S., Mulianti, W. O., & Sulisworo, D. (2023). Character Education Management of Elementary School Students. *International Journal of Learning Reformation in Elementary Education*, 2(01), 1–13. <https://doi.org/10.56741/ijlree.v2i01.140>
- Sudargini, Y., & Purwanto, A. (2020). Pendidikan Pendekatan Multikultural Untuk Membentuk Karakter dan Identitas Nasional di Era Revolusi Industri 4.0 : A Literature Review. *Journal Industrial Engineering & Management Research (Jiemar)*, 1(3), 2722–8878. <https://doi.org/10.7777/jiemar>
- Sukatin, S. P. I., & Al-Faruq, M. S. S. (2021). *Pendidikan Karakter*. Deepublish.
- Sumartias, S., Unde, A. A., Wibisana, I. P., & Nugraha, A. R. (2020). *The Importance of Local Wisdom in Building National Character in the Industrial Age 4.0*. 397(Iclique 2019), 1305–1312. <https://doi.org/10.2991/assehr.k.200129.159>

- Suri, D., & Chandra, D. (2021). Teacher's strategy for implementing multiculturalism education based on local cultural values and character building for early childhood education. *Journal of Ethnic and Cultural Studies*, 8(4), 271–285. <https://doi.org/10.29333/ejecs/937>
- Suryadi, S., & Jasiah, J. (2023). Transformasi pendidikan dasar melalui kearifan lokal: Pendekatan kualitatif terhadap pengembangan kurikulum. *Wiyata Dharma: Jurnal Penelitian Dan Evaluasi Pendidikan*, 11(2), 163–170. <https://doi.org/10.30738/wd.v11i2.17109>
- Tadege, A., Seifu, A., & Melese, S. (2022). Teachers' views on values-education: The case of secondary schools in East Gojjam, Ethiopia. In *Social Sciences and Humanities Open* (Vol. 6, Issue 1). <https://doi.org/10.1016/j.ssaho.2022.100284>
- Tohri, A., Rasyad, A., Sururuddin, M., & Istiqlal, L. M. (2022). The urgency of Sasak local wisdom-based character education for elementary school in East Lombok, Indonesia. *International Journal of Evaluation and Research in Education*, 11(1), 333–344. <https://doi.org/10.11591/ijere.v11i1.21869>
- Wahid, A. (2023). Pendidikan Inklusif (Mewujudkan Keadilan, Kesetaraan Dalam Lingkungan Multikultural). *Jurnal Sains Dan Seni ITS*, 01(3), 696–712. <https://doi.org/https://doi.org/10.54437/iljjislamiclearningjournal.v1i3.1041>
- Wulandari, T. (2020). *Konsep dan Praksis Pendidikan Multikultural*. UNY Press.
- Yusnan, M. (2022). Implementation Of Character Education In State Elementary School. *ELS Journal on Interdisciplinary Studies in Humanities*, 5(2), 218–223. <https://doi.org/10.34050/elsjish.v5i2.21019>
- Zahrika, N. A., & Andaryani, E. T. (2023). Kurikulum Berbasis Budaya untuk Sekolah Dasar : Menyelaraskan Pendidikan dengan Identitas Lokal. *Pedagogika: Jurnal Ilmu-Ilmu Kependidikan*, 3(2), 163–169. <https://doi.org/https://doi.org/10.57251/ped.v3i2.1124>
- Zhang, L. (2022). Chinese Traditional Culture Education: Implementing the Child's Position and Perspective in the Elementary School Textbook Morality and Law. *ECNU Review of Education*, 5(4), 702–719. <https://doi.org/10.1177/20965311219905>

Development of Hopscotch Learning Media to Improve the Mufrodat Mastery of Student in Elementary School

Nunik Zuhriyah *

* Badrus Sholeh Islamic Institute

nunikzuhriyah@gmail.com

M Zunaidul Muhaimin **

** Faqih Asy'Ari Islamic Institute

Muhaimin.po@gmail.com

Abstract

The purpose of this research is aims 1) to describe the development of hopscotch learning media to improve the mastery of mufrodat 2) to find out whether the development of hopscotch is efektif to improve mufrodat learning in terms of validity, practicality and effectiveness. This type of research and development (R&D) uses the ADDIE development model of 5 steps including analysis, design, development, implementation and evaluation. The data collection technique is through observation, interviews, documentation, questionnaires and tests. The results of the research from the validity of the product, namely the validation of content experts on hopscotch learning media, the validity level is 86% with valid qualifications, while the validation of design experts is 92% and the validation of learning experts by 5th grade teachers with validity of 86%. The results of the T Test analysis showed an increase in Arabic language mastery through the development of hopscotch media through small group and large group trials with very good qualifications. The findings obtained are first, the development of hopscotch learning media to improve the mastery of mufrodat. Second, there is a positive influence in mastering vocabulary of Arabic.

Keywords: *Hopscotch; Development; Mufrodat*

INTRODUCTION

The development of science and technology in education continues with the renewal of curriculum and learning tools. Development is one of the fields of educational technology that is carried out as an effort to solve problems in the learning process related to the results of the needs analysis.(Isnaini and Huda 2020) The use of technology is mainly intended to facilitate human work in everyday life. Development is needed in education, one of which is the development of learning media. Research and development is a process used to develop and validate educational products(Agustini and Ngarti 2020). Arabic is a lesson that is included in education under the auspices of religious schools. In fact, it is quite difficult to learn for the Indonesian people, especially for elementary school students. One way to increase the desire to learn is to incorporate educational elements into the game itself(Alvisar and Malik 2016).

The media is one of the supporting tools in the learning process. The success or failure of the learning process is largely determined by the means used (Hafidzoh Rahman et al. 2021). Instructional media are anything that can convey messages through different channels, and can stimulate students' thoughts, feelings, and readiness so that they can encourage the creation of a learning process to add new information to students so that the learning objectives can be properly achieved(Aulia 2023). The presence of learning media has a very important in the teaching and learning process (Hafitria and Asyrofi 2024), because in these activities the ambiguity and complexity of the educational material presented can be helped through the use of media as a medium.

Mufrodat is one of the important elements that must be owned by students in learning foreign languages, especially Arabic(Sulfikar and Nurul Fawzani 2023), Mastery of a lot of mufrodat can support and determine the ability of students to communicate well(Durtam 2022). Speaking is an important language skill that is supported by a rich and productive mastery of mufrodat. The addition of vocabulary is very important for the process of learning a foreign language(Islam 2022), therefore it is necessary to develop the right media to learn mufrodat being fun. So the development of hopscotch media is one way to learn mufrodat with fun through games and materials that become a series. To get maximum results, mufrodat material is arranged with a fun concept so that it is easily memorized by students.

Problems that often arise in Arabic language learning among elementary schools are one of them caused by teaching materials that are very classical(Arjuna and Marzuki 2022). In terms of books, the difference between Arabic and English books, in Arabic books the book cover design is very monotonous and colorless so that elementary school students feel lazy to read it, while we know the design of the English book cover uses a fun design for children and uses various color images. The next problem is that for elementary school students the media is very important in the spirit of learning the material. Therefore, the development of hopscotch media can improve students' ability to learn mufrodat.

Hopscotch is a game usually played by two or five children (Sarafiah and Khatimah 2023), played by boys and girls, how to play it by using one foot on a flat field such as the ground which is drawn with a line in the form of a box with a sign (+), the box is seven in number (Dewi 2014). In playing this each child must have a tool from broken roof tiles or small flat stones (Sada, Ita, and Rewo 2021). This game is very suitable with the psychology of elementary school children, combined with the development of mufrodat teaching materials can result in the development of hopscotch media that can be interesting for elementary school students.

There are several related studies taken from different sources in this research. First is a research from (Alvisar and Malik 2016), entitled "Making Hopscotch game to learn vocabulary for elementary school students", the purpose is to know the significant improvement of vocabulary, this research is a kind of kualitatif method and the result is a game which was developed from traditional games namely hopscotch game. Application of English element in this game is the manufacturing of cards which contains some vocabulary and picture that represents the vocabulary and this research helping children to improve English vocabulary. Second is research from (Zhao and Anas 2023), entitled "Development Of A Learning Medium based On Efastraditional Game (Engklek Fun And Smart) To Improve students' Communication Ability In Thematic Learning" the purpose is to know This attempts to create an EFAS (Engklek Fun and Smart) medium version of a typical game product. The results of the two questionnaires indicate that the teachers and students' replies are categorized as being very practical. Third, the EFAS medium is deemed operational. This was demonstrated by the fact that the students were able to respond to the ask and do question instruments both in writing and orally with a score of 92%. The similarity of this research is that both examine engklek, while the difference is that this research is to improve Arabic mufrodat.

METHODS

This research is research with a research and development (R&D) design, which is research used to produce certain products and test the effectiveness of these products. The combined method is a method that combines quantitative and qualitative methods to be used together in a research activity, to obtain more comprehensive, valid, reliable, and objective data. Comprehensive data is a combination of quantitative and qualitative data. Valid data is data that has a high degree of accuracy between the data that occurs, and the data reported by researchers.

The research development procedure basically consists of two objectives, namely developing a product and testing the effectiveness of the product in achieving the objectives (Andi Rustandi and Rismayanti 2021). The first objective is called the developer function while the second objective is called validity. Thus, the concept of agile development research can be interpreted as a development effort that is also accompanied by validation efforts. The model used in this research refers to the analysis, design, development, implementation, and evaluation (ADDIE)

model developed by Robert Maribe. In the ADDIE model, there are five stages of development, namely analysis, design, development, implementation and evaluation (Rohma, Subandowo, and Atiqoh 2022). Data collection techniques were carried out through observation, interviews, documentation, questionnaires and tests. Analysis of expert validation data obtained from the assessment of subject matter content experts, media experts and learning design based on the questionnaire given.

RESULTS AND DISCUSSION

The development in this research is the ADDIE model. The results of the development steps of Arabic learning media in the form of hopscotch in the subject at the school are as follows:

1. Analysis: The analysis stage is the first step in developing this learning tool. At this stage, several activities were carried out, namely needs analysis and curriculum analysis.
 - a. Media Analysis, needs analysis was conducted to identify the main problems in the use of teaching media. At this stage, researchers noted the problems that arose in Arabic language learning in class V of Bustanul Ulum Kediri elementary school. In this step, there are at least a few things that need to be answered about what teaching aids the teacher uses in the learning process and how the teacher uses teaching media in the learning process as well as the Arabic language learning process at school. Based on the results of interviews conducted with 5th grade at Bustanul Ulum elementary school, information obtained that there is not Arabic language teaching media to support the teaching process that takes place at Bustanul Ulum elementary school in Kediri. Due to the lack of use of teaching media, teachers can only rely on books, methods and props used in the learning process.
 - b. Curriculum Analysis carried out to find out what curriculum is used in schools, what are the core competencies, basic competencies, and what materials are in Arabic lessons that will be used as material in making hopscotch. After conducting curriculum analysis, it was found that the curriculum used in schools is curriculum 13. Based on this curriculum, the core competencies and basic competencies of the materials in schools are obtained.
2. Design: After the analysis stage, the next step is to design the learning tool. The first step in designing learning media is to identify Arabic language topics, especially vocabulary in elementary school. The next step is to determine the objectives, select the materials, and create the tools. These stages are as follows:
 - a. Lesson plan design, The objectives referred to in this case are the learning objectives for each indicator. These objectives describe what students are expected to learn and master after learning with hopscotch.

- b. Learning Media Design. Learning media for this two-dimensional building game. This hopscotch game is a poster with a size of 2 x 1 meter. It reads the title of the two-dimensional building hopscotch game poster for class V Bustanul Ulum elementary school Kediri. With a top margin size of 4 cm, left side 4 cm, right side 4, and bottom 4 cm, and Cambria and Sakkal Majalla fonts designed using the Canva application.

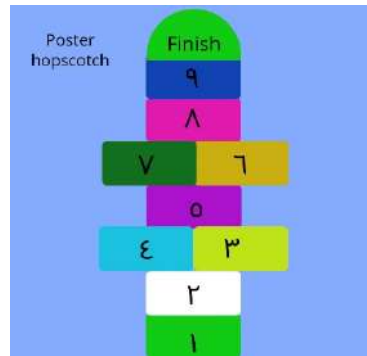


Figure 1: Poster Hopscotch game

- c. Book Design, The material taught in this book includes the material taught as well as the procedures for playing using hopscotch media which consists of 20 pages. At The title of the pocket book cover is made two-dimensional with the typeface, Cambria and calibri. The material consists of 3 sub-materials, namely The material consists of 3 sub-materials, namely *fil fasli*, *mihnah* and *hadiqotul hayawan*, also equipped with evaluation questions of five items each from each material and final evaluation and author profile at the end of the book with Cambria type.

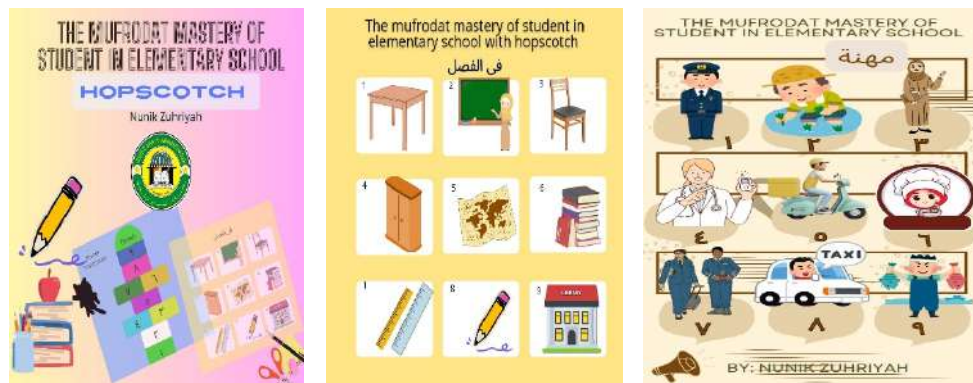


Figure 2: book desain of hopscotch

3. Develop, the next stage, the development stage, is the realization of the product from the design stage that has been carried out. Validation is then carried out to experts who are competent in their fields and can provide suggestions for better learning media. Based on the evaluation, suggestions and input from experts, researchers made revisions to learning media so that learning media were ready

to be tested on research subjects, fifth grade students of Bustanul Ulum kediri elementary school.

- a. **Validity Design:** Products that have been manufactured are then subjected to validation tests. This product validation test is performed using a questionnaire sheet that contains evaluation aspects, as well as comments, suggestions, and inputs as evaluations for improvement. The product that has been made is then subjected to validation testing. This product validation test was carried out using a questionnaire sheet containing aspects of the assessment, as well as containing comments, suggestions, and input as evaluation material for improvement. The product design was validated by Mrs. GF, who is a lecturer at Badrus Saleh Islamic Institute Kediri, because she has a deeper ability in the field of product evaluation, so this research and development requires constructive suggestions and comments from the lecturer. Validation was carried out on May 7, 2023. The criteria for this aspect were obtained by researchers from several sources and modified to suit the aspects of the product to be produced and the needs analysis in this area. The results obtained in the form of quantitative data in the form of scores used to determine the feasibility of the tool, while qualitative data in the form of suggestions to improve the product developed. The data will be described in descriptive analysis. Based on design validation from material experts, aspects of the developed teaching media still need to be improved. Media experts gave some suggestions: Adding the course name and student identification number listed on the cover of the hopscotch.

No	Criteria	$\sum x$	$\sum x_{tt}$	Description
1.	Media reveals the nature of things in everyday life	5	5	Very Good
2.	The appearance of the media cover attracts students' attention	5	5	Very Good
3.	The relevance of the media to students' needs	4	5	Very Good
4.	The images presented are clear and appealing	5	5	Very Good
5.	Attractive placement of pictures and illustrations	5	5	Very Good
6.	The media describes the contents/educational materials according to illustrations of everyday life	5	5	Very Good
7.	Appropriateness of font/type size	4	5	Very Good
8.	The color of the media title contrasts with the background color	4	5	Very Good

9.	The media is easy to use	5	5	Very Good
10.	The media presentation is able to develop students' interest in learning	5	5	Very Good
	Total	47	50	
	Average	92%		
	Category	Very Good		

Figure 3: Design validation with material experts

- b. **Validity Material:** Content validation is an evaluation of the content of learning materials contained in media products. The content expert who became an expert in this study Mrs. MLS is a lecturer at IKHAC. Validation was carried out on May 26, 2023. Material validation is carried out in the form of a questionnaire related to the assessment criteria for the content of the discussion or material as well as suggestions and comments as evaluation material for improvement. The results obtained in the form of quantitative data in the form of scores used to determine the feasibility of the tool, while qualitative data in the form of suggestions for improving the developed product.


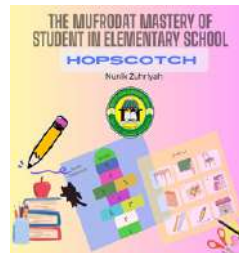
No	Suggestions	Media before Review	Media After Review
1.	Add the name of the course program and the student ID number that appeared on the cover means		
2.	topic title is written more specifically		



Figure 4:Correction Instructional aids

4. **Implementation :** The implementation stage is the stage of testing the product to students on a limited basis on the product developed in the form of a book. This trial is limited to the response of the class teacher as an observer in the implementation of the trial use of media teaching , and the evaluation conducted by the class teacher includes three aspects, namely the physical aspect or appearance, the use aspect, and the utilization aspect of the media teaching. The product development experiment was conducted at Bustanul Ulum Kediri Elementary School. This research is a study that utilizes a pretest-posttest type single group data model, in this model the same sample is processed in two different periods. Through this treatment, two different types of samples will be obtained, namely pre-test and post-test data. The pre-test is a test conducted to determine the ability of students, and this test is conducted at the beginning before learning practices and the use of media learning, while the post-test is a test conducted at the end of the semester. This test was conducted after the use of media learning in the learning process. The pre-test and post-test consisted of 10 multiple choice questions. In this study, researchers took a sample of fifth grade students of Bustanul Ulum Kediri elementary school, with a total of 20 students to serve as an experimental group.
5. **Evaluation,** The last stage of R&D is the evaluation stage, which is the process of assessing the implementation and testing of the previous stages to see how well the product is developed. The evaluation stage is analyzed below: Based on the material expert evaluation and content expert evaluation at the previous stage, it is known that there are several advantages of hopscotch, It is very interesting for students, easy to understand, and effective. At the same time, the disadvantage of hopscotch is spend a lot of time in learning. Based on the evaluation of the scores from the class teacher, it is known that the developed product has a percentage of 86% and is included in the very good category. In this case, the tools are appropriate and considered to be able to help students improve their vocabulary mastery, and this can be seen in the indicators assessed by the class teacher through a questionnaire. This research and development uses the data type model for pre-testing and post-testing, and in this model only the experimental group is used. The pre-test was conducted at the beginning before the learning practice and did not use the media. While the post-test is conducted at the end of the meeting after using the media teaching in the learning process. The samples

were taken from the 5 grade of Bustanul Ulum and the total number of students was 20 students, all of whom will be used as the experimental group.

Depending on the hypothesis test used, Paired Sample t test is used, which is a different test for two paired samples, which are the same subject but have different treatment. Below is the output of the hypothesis test.

30

Paired Samples Test

	Paired Differences					T	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 pretest - posttest	-11.25000	8.86670	1.98266	-15.39974	-7.10026	-5.674	19	.000

Based on the output table for the Paired Sample t test, it was obtained to find t_{hitung} the researcher used the t distribution table with $S_{staraf} \alpha = 0,05$ and $dk = 1 n - 1 = 1 - 20 = 19$, and then it was obtained to be $= 2.093$. After obtaining $= 5.674$ and $= 2.093$, it can be concluded that $= 5.674 < = 2.093$ is rejected and accepted. Based on hypothesis testing for the number of pre test and post test. There for the development of hopscotch is efektif to improve the *mufrodat* mastery of student in elementary school.

CONCLUSION

The development of this media product refers to the ADDIE model developed by Robbert Maribe, where in the ADDIE model there are five stages of development, namely analysis, design, development, implementation and evaluation. Based on the material expert evaluation and content expert evaluation at the previous stage, it is known that there are several advantages of hopscotch, namely very interesting for students, easy to understand, and also effective. Based on the evaluation conducted by the class teacher, it is known that the product developed received a percentage of 86% and was included in the very good category. In this case, the media developed is appropriate and able to help students in improving their mastery of Arabic vocabulary, this can be seen in the indicators assessed by the class teacher through a questionnaire. Based on the output table for the Paired Sample t test, it was obtained to find t_{hitung} the researcher used the t distribution table with $S_{staraf} \alpha = 0,05$ and $dk = 1 n - 1 = 1 - 20 = 19$, and then it was obtained to be $= 2.093$. After obtaining $= 5.674$ and $= 2.093$, it can be concluded that $= 5.674 < = 2.093$ is rejected and accepted. Based on hypothesis testing for the number of pre test and post test. There for the development of hopscotch is efektif to improve the *mufrodat* mastery of student in elementary school.

REFERENCES

- Agustini, Ketut, and Jero Gede Ngarti. 2020. "Pengembangan Video Pembelajaran Untuk Meningkatkan Motivasi Belajar Siswa Menggunakan Model R&D." 4.
- Alvisar, Dyo, and A. Malik Malik. 2016. "Making Hopscotch Game To Learn Vocabulary For Elementary School Students." *Inovish Journal* 1(2): 61–76. doi:10.35314/inovish.v1i2.84.
- Andi Rustandi and Rismayanti. 2021. "Penerapan Model ADDIE dalam Pengembangan Media Pembelajaran di SMPN 22 Kota Samarinda." *JURNAL FASILKOM* 11(2): 57–60. doi:10.37859/jf.v11i2.2546.
- Arjuna, Aisyah, and Asgar Marzuki. 2022. "Improving Mufrodath Mastery Through Audiovisual Media- Based Teaching Materials In Arabic Language Learning In Junior High School."
- Aulia, Winda. 2023. "Pengembangan Media Pembelajaran Berbasis Multimedia Interaktif Materi Tata Surya Kelas Vi Sekolah Dasar."
- Dewi, Lucyana Ma'Rufah. 2014. "The Implementation Of The Modified Traditional Hop-Scotch Game In Group Counseling To Improve Students' Social Interaction Ability In Class Vii-A Mts Negeri Tulungagung." 04.
- Durtam, Durtam. 2022. "Implementasi Model Pembelajaran Bahasa Arab Dalam Upaya Meningkatkan Penguasaan Mufrodath Berbasis Tema Pada Anak Usia Dini." *AWLADY: Jurnal Pendidikan Anak* 8(1): 98. doi:10.24235/awlad.v8i1.9773.
- Hafidzoh Rahman, Nafsiah, Annisa Mayasari, Opan Arifudin, and Indah Wahyu Ningsih. 2021. "Pengaruh Media Flashcard Dalam Meningkatkan Daya Ingat Siswa Pada Materi Mufrodath Bahasa Arab." *Jurnal Tahsinia* 2(2): 99–106. doi:10.57171/jt.v2i2.296.
- Hafitria, Annisa, and Imam Asyrofi. 2024. "Pengembangan Media Augmented Reality Dalam Pembelajaran Mufradat." *Tsaqofiya: Jurnal Pendidikan Bahasa dan Sastra Arab* 6(1): 34–51. doi:10.21154/tsaqofiya.v6i1.253.
- Islam, Fahrul. 2022. "Pengaruh Penggunaan Media Gambar Terhadap Hafalan Mufradat Siswa Kelas V Sdi Integral Luqman Al Hakim 02 Batam Tahun Ajaran 2021-2022." 2(2).
- Isnaini, Nurul, and Nurul Huda. 2020. "Pengembangan Media Pembelajaran Kosakata Bahasa Arab Berbasis Permainan My Happy Route Pada Siswa Kelas Viii Mtsn 10 Sleman." *Al Mi'yar: Jurnal Ilmiah Pembelajaran Bahasa Arab dan Kebahasaaraban* 3(1): 1. doi:10.35931/am.v3i1.156.
- Rohma, Siti, Marianus Subandowo, and Atiqoh Atiqoh. 2022. "Pengembangan Media Pembelajaran Berbasis Web Model Addie Untuk Mata Pelajaran Desain Grafis

Percetakan.” *Muaddib : Studi Kependidikan dan Keislaman* 12(1): 100–110. doi:10.24269/muaddib.v1i1.4526.

Sada, Maria Eufrasia, Efrida Ita, and Josep Marsianus Rewo. 2021. “Pengembangan Video Permainan Tradisional Engklek Untuk Aspek Fisik Motorik Kasar Anak Usia 5-6 Tahun Di Tkk St Theresia Wolomeli.” : 530–42.

Sarafiah, Siti, and Husnul Khatimah. 2023. “Development of Traditional Hopscotch Game Learning Media Based on Ethnomathematics in Class IV 9 Sila State Elementary School.” *Noumerico: Journal of Technology in Mathematics Education* 1(1): 10–21. doi:10.33367/jtme.v1i1.3538.

Sulfikar, Sulfikar and Nurul Fawzani. 2023. “Pemanfaatan Instagram Dalam Meningkatkan Penguasaan Mufradat Mahasiswa.” *Jurnal Tahsinia* 4(1): 19–27. doi:10.57171/jt.v4i1.337.

Zhao, Bin, and Nirwana Anas. 2023. “Development Of A Learning Medium Based On Efas Traditional Game (Engklek Fun And Smart) To Improve Students’ Communication Ability In Thematic Learning.” *Al-Bidayah : Jurnal Pendidikan Dasar Islam* 15(1): 165–82. doi:10.14421/albidayah.v15i1.818.

KIAI'S VIEWS ON CHILD-FRIENDLY CARE IN PESANTREN (PHENOMENOLOGICAL STUDY IN MALANG DISTRICT)

Abdurrahman*

* Al-Qolam University Malang (UQM)
gusdur@alqolam.ac.id

Demas Jaya Pratama **

** Al-Qolam University Malang (UQM)
demaspratama1@gmail.com

Muhammad Ishom Fuad ***

*** Al-Qolam University Malang (UQM)
muhammadishomfuad@pasca.alqolam.ac.id

Muhammad Siddiq ****

**** Al-Qolam University Malang (UQM)
muhammadsiddiq23@pasca.alqolam.ac.id

Abstract

This research aims to find out the views of the kiai or leaders of three Pesantrens in Malang Regency, namely Pesantren Wisata An-Nur 2 Al-Murtadlo Bululawang, Pondok Modern PP. Al-Rifa'ie Ketawang, and PP. Pesantren Rakyat Al-Amin Sumber Pucung, about child-friendly parenting. Kiai have a high influence on Pesantren's life, so exploring their views is important. The research method used is qualitative-descriptive with a phenomenological-hermeneutic approach. Data collection was carried out through deep interviews conducted several times with Kiai and Nyai. Data analysis uses a retrospective-evaluative model that describes the real implementation of child-friendly parenting policies using textural and structural description techniques and is developed in the form of a composite description that presents essential invariants regarding the views of the kiai. The research results show that the Kiai have a positive view of child-friendly parenting. They believe that child-friendly care is important to implement in Pesantrens because it can help children develop optimally, both physically, mentally, and socially. The findings of this research indicate that child-friendly parenting can be implemented in Pesantrens well. Kiai have an important role in realizing child-friendly care in Pesantrens through their views and actions.

Keywords: *Child Friendly Care, Pesantren, Kiai.*

INTRODUCTION

Pesantren has a long history in Indonesia (since the 10th century) and plays an important role in Islamic education (Abdurrahman, 2020). Apart from religious education, Pesantrens also play a role in raising children, where the kiai play a very strong role. Because kiai is one of the important components in Pesantrens - of the five components - which are recognized by law (UU Tentang Pesantren, 2019). Because kiai have a high level of cultural, social, political, and economic legitimacy, and are a reference for their students (santri). Kiai acts as a traditional authority who leads religious rituals and Pesantrens (Faisal et al., 2022), although democratic - transformative, even absolute and charismatic (Muttaqin, 2020).

The creative and dynamic views of Kiai encourage the growth of Pesantrens in various dimensions because they always try to adapt to government regulations. Kiai tend to be outside the control of the government bureaucracy. Kiai usually preserves old traditions and negotiates modernity. First, they build a network of intellectual and spiritual relationships. Second, they modernized education in Pesantrens and got involved in politics. They carry out this mechanism with different emphases (Asror Yusuf & Taufiq, 2020) and it can even be said that the success of kiai in realizing religious moderation is very dependent on their ability to maintain traditional authority in the long term (Faisal et al., 2022).

Regarding child-friendly care, in recent years there has been an awareness of this in Pesantrens. Especially after a series of cases involving individuals in the Pesantren environment in recent years. Muafiah et al. (2022) reported several cases that were revealed to the public in 2021-2022. These include sexual violence by Pesantren teachers in Bandung against 12 female students, harassment by Pesantren leaders in Ploso Jombang, and abuse of senior students which killed a student in Ponorogo. Cases of violence and harassment in Pesantrens and Islamic educational institutions were reported in the second highest number after universities in 2022.

The author's research relates to several cases reported on online news channels in 2023 and early 2024. These include: the rape of the Pesantren leader in Semarang against six female students (Kompas, 2023), sexual harassment of female students in Karanganyar (Indah Septiyaning Wardani et al., 2023), harassment of five female students while bathing in Mamuju (Hafis Hamdan, 2024), violence and harassment against dozens of Pesantren students in Serpong, South Tangerang (Hambali, 2023), the Pesantren owner's harassment of female students in Sukabumi (Syahdan Alamsyah, 2024), sexual harassment in Banjarbaru (Polres Banjarbaru, 2024), abuse of fellow students which killed one student in Mojo, Kediri (Raja Eben Lumbanrau, 2024), and finally harassment of female students towards juniors in Cilegon (Liputan6, 2024).

Globally, the International Center for Research on Women (ICRW) reports that around 30 % of adolescent girls aged 15 to 19 years experience emotional, sexual, or physical

violence. (Christina Juan, 2017). In Indonesia, the National Commission on Violence Against Women reported that in 2022, violence in educational institutions increased compared to 2021, namely 12 cases to 37 cases. The victim is usually younger and has a lower level of education than the perpetrator. Most victims were aged 18-24 years (42% of 3442 cases) (Komnas Perempuan, 2023a). Meanwhile, 8.6% of the perpetrators are actually people who should be protectors and role models, namely law enforcement officers, police, TNI, health workers, teachers, lecturers and even religious figures (Komnas Perempuan, 2023b). The cases that have been revealed do not reflect the actual number, because many other cases may have not been revealed or have been deliberately hidden (Muafiah et al., 2022).

In the context of child protection, the Indonesian nation has established a legal and regulatory framework since its inception. This can be seen from the anatomy of legislation starting from the 1945 Constitution in p 28B paragraph (2) which states that " Every child has the right to survival, growth and development and the right to protection from violence and discrimination" (Undang-Undang Dasar, 1945). Specifically, Law 23 of 2002 concerning child protection was passed, which was later amended in Law 35 of 2014, and Law 18 of 2019 concerning Pesantrens.

At the level of government regulations and ministries; ratified PPPA Ministerial Regulation 8 of 2014 concerning Child-Friendly School Policy, PP 44 of 2017 concerning implementation of child care, PMA 73 of 2022 concerning the prevention and handling of sexual violence in educational units. Decree of the Director General of Education 4836 of 2022 regarding guidelines for child-friendly Pesantren education, and finally Decree of the Director General of Education 1262 of 2024 concerning technical instructions for child-friendly parenting in Pesantrens, which was ratified on March 4, 2024. The Ministry of Religion has also carried out socialization regarding these technical guidelines on March 25-27 2024 (Kemenag, 2024).

However, not only the Pesantren community and the government, violence in Pesantrens needs to be prevented and handled jointly and in a structured manner. Starting from parents, family, Pesantrens, society, and government (Rohani Budi Prihatin, 2024). Even the public and international organizations, such as UNICEF, have participated in promoting this collective awareness movement (UNICEF Indonesia, 2023).

Referring to the studies and research that have been carried out regarding child-friendly parenting in Pesantrens, it seems that there are still observational-descriptive findings. For example, research Muafiah et al. (2022) describes the business of four Pesantrens in Ponorogo and Magetan with different typologies. The findings reveal that the efforts of the four Pesantrens are driven by Kiai, teachers (ustadz), and Santri by maximizing management functions, learning, and facilities. Almost similar to the findings Albert & Sesmiarni (2022) describing strategies for child-friendly Pesantrens, including team formation, program socialization, human resource development (teachers and staff),

building collaboration, meeting child-friendly Pesantren component indicators, monitoring, and evaluation.

In line with previous findings, the research Nurlaela et al. (2023) also describes strategies for dealing with violence in child-friendly Pesantrens. Likewise, descriptive findings Natsir & Zulmuqim (2023) from the CIPP model evaluation of the socialization and implementation of child-friendly Pesantren policies in 23 Pesantrens spread across 12 districts and cities in West Sumatra Province. Simpler than before, the writing Eviningrum (2023) is a report on community service in the form of counseling and socialization of child-friendly Pesantrens in Madiun Regency. Likewise, the reported service Anam et al. (2023) took the form of training and socialization at Mamba 'ul Ma'arif Denanyar, Jombang.

This article fills the gaps in previous research, by examining two important discussions that have not been researched at all. First, the author explores the kiai's views on child-friendly parenting in three Pesantrens with different typologies, Salaf (traditional) Pesantrens, modern Pesantrens, tourist Pesantrens and folk Pesantrens. This discussion is very urgent, considering that kiai are the main factor in Pesantren life. Second, the author confirms the kiai's views on legal regulations related to child-friendly care. These two discussions aim to formulate the Kiai's views with different Pesantren typologies regarding child-friendly care and their comparison with statutory regulations.

METHODS

This research uses a qualitative-descriptive type, a hermeneutic phenomenological approach with a focus on Kiai's views on child-friendly parenting (Creswell, 2016). The informants are three kiai who are leaders in three Pesantrens with different typologies, namely (as in table 1): (1) Mrs. Hj. Nurul Qomariyah at Al-Rifaie 1 Malang, East Java (modern Pesantren), (3) KH. Helmi at An-Nur 2 Al-Murtadlo Malang, East Java (Tourism Pesantren), and (4) KH. Abdullah Sam in Al-Amin Malang, East Java (people's Pesantren).

Table 1. Kiai informants in three Pesantrens

Informant's Name	Boarding school	Typology
Nyai Hj. Nurul Qomariyah	Al-Rifaie 1 Malang	Pondok Modern
KH. Helmi	An-Nur 2 Al-Murtadlo Malang	Pesantren Wisata
KH. Abdullah Sam	Al-Amin Malang	Pesantren Rakyat

Data mining was not extensive, but only used in-depth interviews (single interviews) or several interviews (multiple interviews) with the three kiai as informants. However – if necessary – it can involve observation and documentation. The discussion of findings is a retrospective-evaluative model policy analysis that describes the real implementation of child-friendly parenting policies (Aziz et al., 2020). For this purpose, researchers use textural and structural description techniques to examine important themes from Kiai's

views, and then build them in the context of appropriate legal regulations. In this stage, researchers can provide reflections on the views expressed. The results were then developed in the form of a composite description that presented the invariant essence of Kiai's views (Creswell, 2016).

RESULTS

KH. Helmi View

KH. Helmi, principal of PP. An-Nur 2 Al-Murtadlo, emphasized the importance of the government's role in preparing teaching staff and Pesantren administrators who are competent in classroom management, child psychology, guidance, and counseling. He believes that the government's child-friendly Pesantren program needs to be expanded throughout Indonesia to minimize the potential for bullying or violence in Pesantrens.

According to KH. Helmi, there are several important conditions for Pesantrens to be child-friendly. First, he believes that ideally elementary school-age children should still be with their parents and should only study at a Pesantren after graduating from elementary school. Second, he emphasized the importance of regular control and monitoring by caregivers to administrators, at least every day. Third, he emphasized that administrators must focus on nurturing the students and avoid discrimination by not accepting "gifts" from the students' guardians. Fourth, he views the importance of training and knowledge about good care for administrators, with at least mastery of management and other relevant knowledge. Fifth, he emphasized the need for Pesantrens to have guidance and counseling institutions.

KH. Helmi also emphasized that the government's technical guidelines are not enough to ensure that Pesantrens are child-friendly. Facilities and legality as a child-friendly Pesantren, according to him, are secondary factors. He emphasizes commitment and concrete action in implementing child-friendly parenting principles. He also encouraged Pesantrens to cooperate with the authorities and report crime incidents as an indicator of good faith in protecting children.

KH's view. Helmi provided an overview of the importance of collaboration between Pesantrens and the government in creating a safe, comfortable, and educative Pesantren environment for students. The government's active involvement in preparing qualified teaching staff and administrators, as well as support through child-friendly Pesantren programs, is expected to help Pesantrens in realizing child-friendly care that is conducive to children's growth and development.

KH. Abdulloh Sam View

KH. Abdulloh Sam, principal of PP. Pesantren Rakyat Al-Amin, has a comprehensive view of child-friendly care in Pesantrens. He emphasized the important role of Kiai and administrators in ensuring the safety and welfare of students. According to him, Kiai has

legal ties and moral responsibility for the care of students, as stated in the notarial deed of the Ministry of Law and Human Rights. Caregivers who care for children directly must also have certain boundaries to maintain privacy and protect children.

He believes that Pesantrens must provide adequate and quality facilities, even exceeding the "4 healthy 5 perfect" standards, but must be 8 healthy 10 perfect, because they are not only physically healthy but also spiritually healthy. KH. Abdulloh Sam also applies the principle of "*think globally, act locally*" in creating a child-friendly environment. He wants students to feel comfortable and at home in the Pesantren by providing various activities and complete facilities, without having to limit them with walls. He also encouraged interaction between Santri and the surrounding community to foster a sense of belonging and build synergy in caring for and educating Santri. Santri are involved in various community activities, such as agriculture, animal husbandry, and cooperatives, and are allowed to mingle with local residents.

Conflicts in Pesantrens cannot be avoided, but KH. Abdulloh Sam emphasized the importance of teaching students about conflict management. He believes that emotional intelligence (EQ) and spiritual intelligence (SQ) are as important as intellectual intelligence (IQ) in building students' mental resilience. KH. Abdulloh Sam emphasized that the rules in Pesantrens must be clear and firm, with fair consequences without physical or psychological harm. He wants to create a "happy Pesantren" where students feel at home with a loving touch from the Kiai and administrators, not only in terms of facilities but also in mental and spiritual development.

Nyai Hj. Nurul Qomariyah View

Based on an interview with Nyai Hj. Nurul Qomariyah, principal of PP. Pondok Modern Al-Rifa'ie 1, revealed three important elements in child-friendly care in the Pesantren environment. *First*, clear and consistent Pesantren rules. Clear and consistent rules are the main foundation for creating child-friendly care in Pesantrens. This rule must be understood and obeyed by all parties, including students, teachers, and administrators. *Second*, the role of administrators and Ustadz as substitute parents. Teachers and boarding school administrators play an important role as substitute parents for the students. Ideally, the ratio of administrators and ustadz to students is 1:7. This allows them to provide more personal attention and guidance to each student. And *third*, family culture and a comfortable environment. Building a family culture in Pesantrens, such as with smiles, greetings, and greetings, can create a warm and friendly atmosphere. Apart from that, a comfortable and conducive Pesantren environment is also an important factor in supporting child-friendly care.

Nyai Hj. Nurul Qomariyah emphasized that a comfortable environment does not mean pampering students. Rather, to build a conducive learning atmosphere and encourage them to develop optimally. It is hoped that the continuous application of these three elements can create a Pesantren environment that is child-friendly and conducive to the growth and development of the students.

DISCUSSION

Based on research findings, it was revealed that Kiai and Nyai in Pesantrens have a comprehensive view regarding child-friendly care in the Pesantren environment. This view focuses on three important aspects, as seen in Table 2. *First*, the elements that must be fulfilled in child-friendly care in Pesantrens. The Kiai and Nyai emphasized the importance of creating a safe, comfortable, and inclusive environment for the students. This includes providing adequate facilities and infrastructure, implementing clear and fair regulations, and building a culture of mutual respect and respect. *Second*, the mechanism for implementing child-friendly care in Pesantrens. Kiai and Nyai view child-friendly parenting as a continuous process and involving various parties. The central role is held by caregivers and educators, who need to be equipped with relevant knowledge and skills. Apart from that, active participation from students, parents, and the surrounding community is also essential to realize effective child-friendly care. *Third*, government programs and roles in supporting the implementation of child-friendly care in Pesantrens. The kiai and nyai hope for concrete support from the government, both in the form of regulations, training, and funding. It is also hoped that there will be a strong synergy between the government, Pesantrens, and civil society organizations in realizing child-friendly Pesantrens.

Table 2. discussion of Kiai's views

Elements of Child-Friendly Parenting	Child-Friendly Parenting Mechanisms
<ol style="list-style-type: none"> 1. Kyai, Educators, and Administrators 2. Availability of Facilities and Supporting Services 3. Rules and Character Cultivation 	<ol style="list-style-type: none"> 1. Building a Strong Sense of Belonging 2. Developing the Potential of Santri with a Complex and Complete Approach 3. Compliance with Rules and Regulations

Elements of Child-Friendly Parenting

Kyai, Educators, and Administrators

Based on the views of the Kiai and Nyai, several important elements were identified to realize child-friendly care in the Pesantren environment. The first element is the Kiai, educators, and administrators at the Pesantren. Several important things that must be considered are related to the responsibilities of kiai and nyai as the main caregivers in Pesantrens, including legal responsibilities. Apart from that, the managerial and educational skills of educators and administrators must continue to be improved. They must have strong managerial skills, including classroom management, understanding child psychology, and so on. Kiai or main caregivers, as Pesantren leaders, need to

facilitate training and capacity development for educators and administrators to improve their skills.

More than that, Kiai must carry out comprehensive periodic monitoring of the performance of educators and administrators in carrying out the care of students. This is to ensure effectiveness and conformity with child-friendly parenting principles. In this case, clear and firm rules and codes of ethics are needed for educators and Pesantren administrators. This aims to ensure the focus and effectiveness of parenting, as well as build a safe and conducive environment for the students. Kiai and educators must provide a good and loving parenting touch to the students. This will foster a sense of comfort at home for the students so that they feel they receive love like from their parents at the Pesantren. Especially if there are students in the elementary school age range.

Availability of Facilities and Supporting Services

The availability of adequate facilities and services is the second element in realizing child-friendly care in Pesantrens. Even though this element is relatively secondary compared to preparing human resources for caregiving, its role cannot be ignored. These facilities and services are not intended to pamper students, but rather to create a sense of comfort and security for them in living their lives in the Pesantren environment.

Adequate facilities will contribute to increasing the enthusiasm and motivation to learn among students, as well as building a conducive learning atmosphere. Some examples of facilities that need to be provided include (1) Decent dormitories. Dormitories must be clean, comfortable, and safe, with adequate sanitation and good ventilation. (2) A conducive learning space. The study room must be quiet, free from distractions, and equipped with adequate study equipment. (3) Complete worship infrastructure. Worship infrastructure such as mosques or prayer rooms must be well maintained and easily accessible to students. (4) Playing field. A representative playing field is important to support physical activity and recreation for students. (5) Health facilities. Health facilities such as clinics or Santri health centers must be easily accessible and provide adequate health services.

Apart from facilities, Pesantrens also needs to provide various child-friendly parenting support services, such as (1) Guidance and counseling services. Counseling services can help students overcome the various problems they face, both in academic and personal aspects. (2) Access to education and training. Pesantrens need to provide access to quality education and training, both formal and non-formal, curricular and extracurricular, to support the overall development of students. By providing adequate facilities and services, Pesantrens can create an environment that is child-friendly and conducive to the growth and development of the students. This will ultimately contribute to improving the quality of education and achievement of students in Pesantrens.

Rules and Character Cultivation

Building child-friendly care in Pesantrens requires a solid foundation of rules and culture. This is the third element which is no less important. *First*, clear and firm rules are needed regarding child-friendly care in Pesantrens. These rules must include the rights and obligations of students, as well as a fair and consistent rule enforcement mechanism. Implementing appropriate *rewards and punishments* is also important to ensure compliance with rules and encourage positive behavior among students. *Second*, the positive cultivation of Pesantren characters and traditions needs to continue to be maintained and developed. Family culture within the Pesantren community must be the main basis for child-friendly care. This can be realized through various activities and programs that foster mutual respect, tolerance, and mutual cooperation between students.

Some examples of efforts to cultivate the character and traditions of Pesantrens in the context of child-friendly care, for example (1) Instilling religious values: Pesantrens need to instill noble religious values in their students, such as compassion, honesty, and responsibility. (2) Teaching manners and manners: It is important to teach manners and manners to students, both in interactions with fellow students and with other people. (3) Deliberation and consensus activities: Getting students used to solving problems through deliberation and consensus can foster a sense of democracy and justice. (4) Organizing Pesantren activities: Activities such as expressing Pesantrens, commemorating Islamic holidays, and joint community service can strengthen the sense of brotherhood and togetherness among students.

Child-Friendly Parenting Mechanisms

Building a Strong Sense of Belonging

Building a strong sense of belonging is a crucial first step in creating child-friendly care in the Pesantren environment. This feeling must be instilled in the entire Pesantren community, including educators, administrators, students, and all stakeholders. This aims to ensure that all facilities and efforts provided by Pesantrens can be utilized optimally by all parties. More than that, a strong sense of belonging can foster a sense of comfort at home for the students in living life at the Pesantren. When they feel accepted and appreciated as part of the community, they will be more motivated to learn, participate, and contribute to the progress of the Pesantren.

Several important points in building *a sense of belonging* in Pesantrens include several efforts. (1) Building open and effective communication. creating open and easily accessible communication channels for the entire Pesantren community. encourage dialogue and exchange of ideas to build a strong sense of mutual understanding and belonging. (2) Organizing joint activities involving the entire Pesantren community, such as religious, sports, arts and cultural activities. This activity can help students to make friends, build cooperation, and strengthen a sense of togetherness. (3) Creating a sense

of mutual respect and appreciation, by instilling the values of tolerance and mutual respect between individuals and groups in the Pesantren community. creating a safe and inclusive environment where every student feels valued and accepted for who they are. (4) Providing appreciation and recognition by providing appreciation and recognition for the contributions and achievements of the students. This can increase their self-confidence and motivation to continue to develop and contribute positively to the Pesantren. (5) Involving students in decision-making related to their life at the Pesantren. This can help them to feel ownership and responsibility for the progress of the Pesantren.

Developing the Potential of Santri with a Complex and Complete Approach

The second mechanism in child-friendly care in Pesantrens is providing complex and complete learning. This means that Pesantrens does not only focus on the intellectual development (IQ) of the students but also other aspects that are important for creating complete and balanced individuals. Therefore, Pesantrens need to integrate the development of *Emotional Intelligence* (EQ), *Spiritual Intelligence* (SQ), *Physical Intelligence* (PQ), and *Adversity Intelligence* (AQ) in their curriculum and learning methods.

Several important points in implementing complex and complete learning in Pesantrens according to these intelligences: (1) EQ development, by helping students to understand and manage their emotions well. Teaches them how to communicate effectively, build positive relationships, and peacefully resolve conflicts. (2) SQ development, by instilling strong spiritual and moral values in the students. Helping them to understand the meaning of life, practice religious values, and build a positive relationship with God. (3) Developing PQ by encouraging students to maintain their physical and mental health. Teach them about the importance of a healthy diet, regular exercise, and adequate rest. (4) Developing AQ by helping students build resilience and persistence in facing challenges. Teaching them how to overcome adversity, learn from failure, and bounce back stronger.

By implementing complex and complete learning, Pesantrens can help students develop their potential to the maximum and become individuals who are ready to face various challenges in life. This approach is in line with the concept of holistic education which emphasizes the development of all aspects of the individual, including intellectual, emotional, spiritual, physical, and social. Holistic education can help students become individuals with knowledge, faith, and noble character.

Compliance with Rules and Regulations

The third mechanism in child-friendly care in Pesantrens is compliance with all applicable rules and regulations. This includes regulations relating to Pesantrens in general, as well as regulations relating to child protection and child-friendly care. Compliance with rules and regulations is a crucial aspect in creating a Pesantren

environment that is safe, comfortable, and conducive to children's growth and development. By ensuring that all Pesantren activities run following applicable regulations, Pesantrens can provide optimal protection for students and ensure that their rights are properly fulfilled.

By ensuring compliance with rules and regulations, Pesantrens can demonstrate their commitment to child protection and child-friendly care. This will increase trust and support from various parties, including parents, society and the government. Compliance with rules and regulations is also an important part of building order and discipline in Pesantrens. This order and discipline will help students to develop good character and become responsible individuals.

CONCLUSION

This research succeeded in exploring the views of several Kiai or caregivers and leaders from three Pesantrens in Malang Regency regarding child-friendly care in Pesantrens. This research not only describes the implementation of child-friendly care but also explores the views of Pesantren leaders regarding this matter. This research produced two main findings: (1) Elements of child-friendly parenting in Pesantrens: This research identified several important elements that must be fulfilled in child-friendly parenting in Pesantrens. (2) Mechanisms for implementing child-friendly care in Pesantrens. Even though this research has succeeded in achieving its objectives, several weaknesses need to be acknowledged, including those related to data collection which has not been carried out holistically, so it cannot be confirmed with certainty how child-friendly care is implemented in each Pesantren. So it is still very open for further research to reveal a more comprehensive view.

REFERENCES

- Abdurrahman, A. (2020). History of Pesantrens in Indonesia: A Genealogical Tracing. *INTAJ Scientific Research Journal* , 4 (1). <https://doi.org/DOI:https://doi.org/10.35897/intaj.v4i1.388>
- Albert, A., & Sesmiarni, Z. (2022). Strategy for Improving the Quality of Pesantren Education through the Development of Child Friendly Pesantren Programs. *Indonesian Education Journal* , 3 (11). <https://doi.org/10.36418/japendi.v3i11.1223>
- Anam, S., Hafidz, A., & Rasyid, A. (2023). Training on implementing child-friendly schools at the Mamba'ul Ma'arif Pesantren Denanyar Jombang. *ABISATYA: Journal of Community Engagement* , 1 (1). <https://journal.unesa.ac.id/index.php/abisatya/article/view/20073>

- Asror Yusuf, M., & Taufiq, A. (2020). The dynamic views of kiais in response to the government regulations for the development of Pesantrens. *Qudus International Journal of Islamic Studies* , 8 (1). <https://doi.org/10.21043/qijis.v8i1.6716>
- Aziz, A. A., Nurfarida, R., Budiyantri, N., & Zakiah, Q. Y. (2020). Model Analisis Kebijakan Pendidikan. *Tapis : Jurnal Penelitian Ilmiah*, 4(2), 192. <https://doi.org/10.32332/tapis.v4i2.2575>
- Christina Juan. (2017). *Violence Against Children Survey Analysis*. International Center for Research on Women (ICRW). <https://www.icrw.org/projects/violence-children-surveys/>
- Creswell, J. W. (2016). Qualitative Inquiry and Research Design: Choosing Among Five Approaches. In *Design: Choosing Among Five Approaches* (Vol. 3, Issue June). SAGE Publications, Inc.
- Eviningrum, S. (2023). Socialization of Child-Friendly Pesantrens in Efforts to Prevent Violence Against Women and Children in Pesantren Units throughout Madiun Regency. *Abdimas Indonesian Journal* , 3 (2), 13–18. <https://doi.org/10.59525/aij.v3i2.316>
- Faisal, A., Pabbajah, M., Abdullah, I., Muhammad, NE, & Rusli, M. (2022). Strengthening religious moderation through the traditional authority of kiai in Indonesia. *Cogent Social Sciences* , 8 (1). <https://doi.org/10.1080/23311886.2022.2150450>
- Hafis Hamdan. (2024, February 12). *Depraved Pesantren Teacher in Mamuju Harassed 5 Female Students While Bathing* . South Sulawesi seconds. <https://www.detik.com/sulsel/Hukum-dan-kriminal/d-7188196/bejat-guru-pondok-pesantren-di-mamuju-lecehkan-5-santriwati-saat-mandi>
- Hambali. (2023, December 13). *Dozens of Pesantren students in South Tangerang are suspected of experiencing violence and sexual harassment* . SindoNews.Com. <https://metro.sindonews.com/read/1275441/170/belasan-santri-ponpes-di-tangsel-diduga-alami-kekerasan-dan-pelecehan-sexual-1702422748>
- Indah Septiyaning Wardani, Adhik Kurniawan, & Anik Sulistyawati. (2023, September 7). *Case of Sexual Harassment at Pesantren Shocks Karanganyar, Here's the Review* . Solopos Soloraya. <https://soloraya.solopos.com/kas-pelecehan-sexual-di-ponpes-hebohkan-karanganyar-ini-ulasannya-1734154>
- Ministry of Religion. (2024, March 30). *Ministry of Religion Collaborates with Various Parties to Create Child-Friendly Pesantrens* . Indonesian Ministry of Religion. <https://kemenag.go.id/nasional/kemenag-gandeng-berbagai-party-wujudkan-pesantren-ramah-anak-SOU0z>
- National Commission on Women. (2023a). *CATAHU 2023: ANNUAL RECORDS OF VIOLENCE AGAINST WOMEN IN 2022* .

- National Commission on Women. (2023b). *National Commission on Violence Against Women Annual Notes Fact Sheet 2023 Violence against Women in the Public and State Domains: Lack of Protection and Remedies* .
- Compass. (2023, September 10). *Rape case of six female students in Semarang* . Kompas.Com. <https://regional.kompas.com/read/2023/09/10/131900178/case-pemeriksaan-6-santriwati-di-semarang-mengapa-kekerasan-sexual-di?page=all>
- Coverage6. (2024, March 5). *Santri in Cilegon Allegedly Harassing Juniors in Pesantren Rooms* . Liputan6.Com. <https://www.liputan6.com/regional/read/5542388/santri-di-cilegon-diduga-melecehkan-juniornya-dalam-kamar-ponpes>
- Muafiah, E., Sofiana, NE, & Khasanah, U. (2022). Pesantren Education in Indonesia: Efforts to create child-friendly Pesantrens. *Ulumuna* , 26 (2). <https://doi.org/10.20414/ujs.v26i2.558>
- Muttaqin, I. (2020). Types and Characteristics of Kyai Leadership Within Pesantrens. *Dynamics of Science* . <https://doi.org/10.21093/di.v20i1.2446>
- Natsir, A., & Zulmuqim, Z. (2023). Evaluation of the CIPP Model Child-Friendly Pesantren Program in West Sumatra Province. *SURAU : Journal of Islamic Education* , 1 (1), 66. <https://doi.org/10.30983/surau.v1i1.6375>
- Nurlaela, N., A., Muh. M., & Arifin, S. (2023). STRATEGY TO OVERCOME VIOLENCE AGAINST CHILDREN THROUGH CHILD-FRIENDLY BOARDING BOARDINGS. *NUSRA: Journal of Educational Research and Science* , 4 (4), 1257–1264. <https://doi.org/10.55681/nusra.v4i4.1835>
- Banjarbaru Police. (2024, February 19). *Police Investigate Case of Sexual Harassment of Pesantren Students in Banjarbaru* . Polresbanjarbaru.Org. <https://polresbanjarbaru.org/polisi-usut-kas-pelecehan-sexual-santri-ponpes-di-banjarbaru/>
- King Eben Lumbanrau. (2024, February 29). *"I'm scared, mom, please pick me up quickly," student in Kediri dies, suspected of being abused - Why is violence happening again at Pesantrens?* BBC News Indonesia. <https://www.bbc.com/indonesia/articles/c0vjeq20d8po>
- Rohani Budi Prihatin. (2024). *THE URGENCY OF CHILD-Friendly Pesantrens* . https://berkas.dpr.go.id/pusaka/files/isu_sepekan/Isu%20Sepekan---V-PUSLIT-Februari-2024-198.pdf
- Syahdan Alamsyah. (2024, February 9). *The owner of the Pesantren in Sukabumi was policed for harassing female students* . West Java Seconds. <https://www.detik.com/jabar/ Hukum-dan-kriminal/d-7184694/peklik-ponpes-di-sukabumi-dipolisikan-gegara-lecehkan-santriwati>

Constitution, State Gazette of the Republic of Indonesia (1945).

UNICEF Indonesia. (2023, November 3). *Child-friendly Pesantrens: creating a safe learning place in educational institutions* . UNICEF Indonesia. <https://www.unicef.org/indonesia/id/pendidikan-dan-Teen/cerita/pesantren-ramah-anak-mewujudkan-plac-belajar-yang-aman-di-anggaran-pendidikan>

UU Tentang Pesantren, Pub. L. No. 18 tahun 2019 (2019).

DEVELOPMENT OF DIGITAL STORYBOOKS TO INSTILL EMPATHETIC CHARACTERS IN EARLY CHILDHOOD IN RA AL-KARIIM, CIREBON DISTRICT

Sri Heti*

* IAIN Syekh Nurjati Cirebon
sriheti18@gmail.com

Jazariyah **

** IAIN Syekh Nurjati Cirebon
jazariyah@syeknurjati.ac.id

Ayu Vinlandari Wahyudi***

***IAIN Syekh Nurjati Cirebon
ayuvw.vw@gmail.com

Abstract

This research is motivated by the lack of media that supports the learning process, especially to instill empathetic character. The lack of understanding of empathy in children gives rise to bullying. This research aims to instill the character of empathy in young children using digital storybook media in the OB RA Al-Kariim group, Cirebon Regency. The type of research used is development or R&D type research with the Borg and Gall model which has 10 stages of development. However, researchers limit the product development stages to only 8 stages. The subjects of this research consisted of 9 children from group OB. Data was obtained through observations, interviews, filling out questionnaires, and documentation. Next, the data that has been obtained is then analyzed using qualitative analysis and quantitative analysis. Media expert validation results obtained an average score of 94% and material expert validation results obtained an average score of 88% in the "Very Eligible" category. The results of the feasibility response from class OB teachers obtained a score of 86% and the response results from the accompanying teachers obtained a score of 84% in the "Very Eligible" category.

Keywords: *empathy; social emotional; media; caring.*

INTRODUCTION

Humans grow and live in a social environment; this social involvement can have an influence on everyone. This is in line with Busyaeri & Muharom's opinion that there is a relationship of mutual influence in social interactions and reciprocal relationships that influence the behavior of each community. However, as time goes by, it is very unfortunate that there is a fact that children are starting to experience a decrease in curiosity and concern for the social environment, this can be seen from the many cases of bullying that occur among young children (Busyaeri & Muharom, 2016).

Based on data from KPAI (Indonesian Child Protection Commission), in 2021 there were 53 cases of child victims of bullying in the school environment and 168 cases of bullying in cyberspace. Meanwhile, in 2022, bullying cases in schools will increase by 81 cases. Perren said that bullying has been around since kindergarten. In his research, of the total kindergarten children, 37% of children were actively involved in bullying cases, either as victims or perpetrators, or even both. Of the 16 to 18 kindergarten groups, there is at least one child who is the victim or perpetrator of bullying several times a week (Ufairah, 2018).

Many things have been done to combat bullying, both written and real, such as creating anti-bullying posters, anti-bullying movements, and anti-bullying seminars. An example of this effort is implementing character education through habituation by instilling good values. Nastiti also believes that the formation of character takes quite a long time, so that with this character education, apart from maximizing children's skills and capacities, it is also hoped that in the future it can produce a generation with good character or personality (Nastiti, 2022).

Character education is an effort to foster beauty, and schools must explicitly show beauty such as respect and responsibility (Purwanto & Maimunah, 2022). Character education is more important than moral education because it not only teaches children what is right and what is wrong, but also helps them understand the values of good character and makes them act according to these values to become much better individuals (Priska, 2020). Agreeing with this, Djohar stated that an important part of moral or character education is touching the area of the heart so that a sense of empathy can emerge. Without touching this area, any form of moral education of children will fail (Muhtadi, 2014).

Rogers stated that empathy is the ability to interpret another person's condition or state of mind correctly, and without losing sight of the real situation (Sutanti, 2017). In fact, high empathy can help individuals become happier people in their lives by building good, friendly and comfortable relationships with other people. Jannati stated that it is very important to apply empathy in the era of society 5.0, because by doing so, a person can foster a sense of mutual help, make the interlocutor feel appreciated, lighten the burden on the interlocutor, build positive social relationships with other people, provide appropriate responses in accordance with other people's states, and understanding and controlling their emotions (Jannati & Hamandia, 2021). The existence of empathy in children as part of emotional knowledge allows children to direct and control their emotional experiences, so they are able to interpret and respond to other people's emotional expressions (Arik, 2024).

Based on observation findings at RA Al-Kariim on Friday, November 26, 2022. In one incident, a female student in class 0B had darker skin than the other children and was then made fun of by her friends. The response from other children who witnessed this incident was indifferent, and some of them even mocked him. Apart from that, an incident that is often encountered is when in a group of children there is one child who

is not dominant, then that child will become the object of ridicule from his friends and the response from other individuals or groups of children is that if they don't stay silent then they will also make the child the wrong one. not dominant as an object of ridicule too, both at the same time and at other times. As with findings in the field, the author realizes that children experience a crisis of empathy for themselves and their friends. This is in line with the opinion of Daniel Goleman who says that empathy will begin to disappear when children are approximately two and a half years old, when children begin to realize that other people's pain is not the same as personal pain, and they begin to be good at looking for diversions (Muhtadi, 2014). Reflecting on cases which are also supported by expert opinions, of course instilling empathy from an early age is a must. This helps them grow into good, moral, polite, reliable and trustworthy people in society (Muhtadi, 2014).

Efforts to instill empathy made by teachers at RA Al-Kariim themselves only use the method of lectures or advice, storytelling and example conveyed orally without supporting media. However, in fact researchers found that this method was less effective because not all children could understand what the teacher was saying. This is also supported by Mrs. Warnisi's statement in an interview that previously she had not used supporting media other than LKA in the form of pictures about good and bad behavior, because schools were not adequate so that supporting media such as printed picture story books did not yet exist, let alone digital-based ones. As Hasan said, learning media is media that can be used in the learning process and contains instructional messages or information (Hasan, 2021). Learning media is very important to help students acquire new knowledge, abilities and skills.

Based on the description of the problem above, the researcher wants to conduct research related to how to foster a sense of empathy in early childhood which is based on the increasing number of bullying among children through digital-based storybooks. In connection with this, the author is motivated to conduct research and development with the title "Development of a Digital Storybook to Instill Empathetic Characters in AUD in Ra Al-Kariim".

METHODS

The research method used is Research and Development (R&D) is a research method that creates new products or improves existing products. The products made consist of hardware and software. Educational products can be in the form of modules, books and other learning programs (Syavira, 2021). This research focuses on research design and development of the Borg & Gall model which consists of: (1) Potential and problems, (2) Data collection, (3) Product design, (4) Design validation, (5) Design revision, (6) Product trials, (7) Product revisions, (8) Usage trials, (9) Product revisions, (10) Mass production. Researchers limited the development stages to 8 out of 10 stages. This is because the target of the product is limited, namely, only to be tested at 1 institution and also due to time constraints. As explained by Borg and Gall, when carrying out a small scale project with a limited number of test subjects with a design created by

the researcher, and if the manufacturing process does not have sufficient resources then one effort that can be made is to limit the research to only a few steps and R&D cycle (Ridwan, 2023). The population of this study were group 0B students at RA Al-Kariim, Cirebon Regency. The number of trial samples was 9 students. Data collection techniques use interviews, questionnaires, observation and documentation. This research uses quantitative data analysis techniques and qualitative data analysis. The data obtained from the questionnaire validity and feasibility tests were then analyzed using a Likert scale based on questionnaire response score rules.

RESULTS AND DISCUSSION

1. Initial information collection

The initial information collection process is carried out to find information and problems faced by both institutions, teachers and students in the learning process. In collecting this initial information, researchers carried out observations and interviews with students and teachers. The results of observations obtained by researchers in class 0B, researchers found several behaviors or attitudes of the children there which showed that they were unable to understand what empathy was for their friends, those around them, and for themselves. Of the many attitudes or behaviors of children that show their lack of knowledge about empathy, one of them is that in one incident, a girl had darker skin than other children, and was then made fun of by her friends.

The response from other children who witnessed this incident was indifferent, and some of them even mocked him. Based on the findings that the researcher obtained from this observation, the researcher realized that there were still many class 0B children at RA Al-Kariim who still did not understand what empathy was or showed concern for their surroundings. Apart from that, researchers also found a lack of learning media in the school. Most of the media available there is only media to stimulate motor or cognitive skills in children, while the media to stimulate religious, moral and social emotional aspects such as empathy in children is very limited, only through storytelling, advice or example methods.

2. Digital Storybook Design

The next stage or step is the design of the product that will be developed. The steps taken by researchers are as follows:

a. Creating a Story Narrative

The first step the researcher took was to create a narrative story. After going through the initial information gathering process, the researcher carried out an analysis regarding the content of the story of the product that will later be developed. The narrative of this digital storybook media was developed by referring to incidents or occurrences that researchers discovered during observations. The content of the digital storybook is based on a fable type story where the characters are a group of guinea pigs against the background of a garden entitled Snowy, Shadow, & Choco. The narrative of this story tells of 3 main characters, namely, a white mermut named Snowy who has a weakness in his legs

so he cannot walk well. Apart from that, there is Shadow the black marmot and his friends who really like to make fun of or mock Snowy. Finally, there is Choco, a kind brown marmot, who will later become a mediator between Snowy and Shadow.

b. Creating a Digital Storybook Outline

This process was carried out to determine the flow of development of digital storybook media created by researchers. This creation also aims to make it easier for researchers to develop digital storybook media.

c. Designing Images and Supporting Attributes

In the design process, researchers used the Ibispaint X application to create garden illustrations as a setting in the story and use AI features to create characters or actors in the story.



d. Assembling and Creating Digital Storybook Media

In assembling or combining illustration results with other attributes, researchers used the Canva application. The following series of story books were created:



e. Inserting Audio

Inserting audio or background sound is the last step that researchers take in creating a digital storybook. After the process of uniting or assembling all parts of the storybook, continue by changing the display from PDF format to Flipbook using the Heyzine application. Through the Heyzine application, researchers added supporting features such as including background sound with the song

"Best Friend" created by Kak Dodi, whose reference the researchers took from the Educa Studio YouTube Channel.

3. Validation of digital storybook products

After developing it in fleepbook form, a broad test was carried out by media experts and material experts with the following results:

Table 1. Percentage results of media experts and material experts for stage 1

Validator	Total score	Percentage	Information
Media expert	33	66%	Worthy
Material expert	36	72%	Worthy

Based on the validator test results by media experts 66% and material experts 72%, these results indicate that the media developed is feasible. However, each validator still provides notes for the product design being developed so that improvements need to be made.

Table 2. Notes on improvements by material experts and media experts

Media expert notes	Material expert notes
1. Match the story with the illustrations 2. Book identity/copyright 3. Add a short synopsis at the end of the page 4. Color contrast and harmonization in the illustrations are made even smoother	1. Grammar or editorial on page 2 changed 2. The images and the story content are more adjusted 3. The expressions of each character are clarified 4. Dialogue layout tidied up 5. Place the moral at the end

After validation results from material experts and media experts have been obtained, improvements are then made based on suggestions given by media experts and material experts. The repaired product results are then validated again by the validator with the following results:

Table 3. Results of the percentage of media experts and material experts for stage 2

Validator	Total score	Percentage	Information
Media expert	47	94%	Very Worth It
Material expert	44	88%	Very Worth It

The validator test results by media experts were 94% and material experts were 88%. The results showed that the product category was in the Very Feasible category and was allowed by the validator to be tested.

6. Product improvements

Improvements to the product are carried out after validation in the first stage and improvements according to the validator's suggestions.



On the cover page, the revised design is a color contrast in the grass and leaves and then the characters have clearer expressions so that children can distinguish the characters through expressions.



On the opening page there is the addition of a black guinea pig character, a change in the contrast of the color of the grass, and a change in font type as well as shorter sentences. This change is in accordance with the direction and advice of media experts who suggested changing the color contrast of the grass so that the focus of children or readers can be focused on the guinea pig character. Other suggestions from material experts include changing fonts and shortening sentences with the aim of making the page not look full of writing.



On the contents page there are changes to the characters or figures, namely by adding expressions that are adapted to the narrative, then also the layout or placement of the narrative or dialogue is shortened, and the placement is made clearer so that readers are not confused. Lastly, change the color contrast of the background on all pages.

Before Revision	After Revision
<p>Akhirnya setelah mendengar nasihat dari Choco, Shadow bersama teman-temannya merasa bersalah dan berjanji untuk tidak lagi mengejek Snowy atau teman-teman yang lain.</p> <p>"Maaf ya..." "Maaf ya..." "Maaf Snowy" "Maaf ya Snowy"</p> <p>"Maaf kan aku ya Snowy, Aku sudah membuat kamu sedih". Ucap Shadow</p> 	<p>Shadow dan teman-temannya yang mendengar nasihat dari Choco akhirnya menyadari kesalahannya. Mereka pun berjanji akan menjadi binatang yang lebih baik lagi. Akhirnya mereka meminta maaf pada Snowy, mendengar Choco tersenyum senang.</p> <p>"Maafkan kan ya Snowy..." Sewa mereka berantusias.</p> 

7. Digital Storybook Product Trial

After going through several stages, the finished product is revised and declared suitable for field testing in learning process activities. In the trial stage, it was carried out directly by the researcher on 2 teachers, which was then applied by the teacher to 9 class 0B students at RA Al-Kariim, Cirebon Regency on January 29 to February 5 2024. During the research, the researcher applied the media 3 times in one week. The first application of the product involves first introducing the media that has been developed by researchers to group 0B teachers, regarding how to access the media via links, how to use the icons on the storybook screen so that teachers can easily use the media. Then the researcher distributed questionnaires with a 5 point scale, each containing 10 statements for teachers to assess the feasibility of the product being developed with the following results:

Table 4. Class Teacher Percentage Results

Validator	Total score	Percentage	Information
Teacher 1	44	86%	Very Worth It
Teacher 2	42	84%	Very Worth It

The second and third application of the product is carried out by the teacher to the students. The application of the digital story book with the title Snowy, Shadow, & Choco is carried out after the core learning activities before break time. Access digital storybooks via a projector screen so that children can view and read together, assisted by a teacher who narrates the contents of the storybook. In this activity, the researcher's role is as an observer, that is, the researcher analyzes how the children respond when the teacher tells the contents of the storybook. During storytelling and reading activities using digital storybooks, the children were very enthusiastic about listening and answering when the teacher occasionally asked questions regarding the contents of the digital storybook Snowy, Shadow, & Choco.

During the product application process, researchers act as observers to analyze and observe children's behavior and habits. There are changes or not between before using media and after using media, whether changes towards increasing or decreasing children's empathic abilities. To find out if there is a change or not

regarding the child's empathy abilities, researchers used a validated grid containing 5 indicators with 10 criteria as the assessment standard.



Image of an Enthusiastic Child Reading the Story Book Snowy, Shadow, & Choco

According to Mukhtar Latif, media selection should meet quality requirements such as function, purpose, benefits, appropriate to the child's world, attractive, colorful, and related to children's play activities.(Khadijah, 2015). In line with this, digital storybook media is created by paying attention to several things, including adapting the themes in the curriculum, story content based on children's daily lives, and characterizations taken from animal forms so that they can attract children's interest.

Gonen believes that the reason picture story books are used as a learning medium is because stories delivered in words and pictures can enrich concepts in providing various information (Rizkiyah & Ningrum, 2022). Likewise, the digital storybooks developed by researchers are made using words and sentences appropriate to the child's age, meaning that the words and sentences are arranged in such a way that they are easily understood by children, both in terms of meaning and pronunciation. Next, the words and sentences that have been arranged are then illustrated through pictures so that the meaning of the story content can be illustrated.

Digital storybooks created by researchers can increase the cultivation of empathy in children, including children being able to comfort friends who are sad, children being interested in offering help to their friends, and children being interested in appreciating their friends with an average score before using the media of 27.25% and after using the media. increased to 53.61%. In line with this research, Iis stated that through storytelling, children can increase their empathetic abilities, including children wanting to play with friends, children wanting to help friends, and children wanting to share with friends. After previously in cycle 1 it was 42.8%, it increased in cycle 2 to 85.71% (Iis, 2012). The difference between this research and the previous one is that the digital storybook created by the researcher has not been able to increase children's willingness to play with their friends, this is because children at RA Al-Kariim tend to be friends with friends who are already familiar.

In addition, the digital storybook media created by researchers obtained an average score of 94% from media experts and an average score of 88% from material

experts without notes after several revisions. However, during the trial, the researcher received notes from the teachers in group 0B RA Al-Kariim regarding variations in the characters in the story, because having diverse characters can attract more children's interest. Meanwhile, previous research conducted by Lucia Dewi Kartika Sari and Krisma Widi Wardani regarding the development of digital picture storybooks to increase students' responsible character obtained a score of 93.7% from media experts and 91% from material experts with a note of paying attention to the use of capital letters (Sari & Wardani, 2021).

The overall results of the feasibility assessment of digital storybook media developed by researchers can be seen in the following table:

Based on the results of expert assessments, it is known that the digital storybooks that have been developed by researchers are suitable and suitable for use in learning, especially to stimulate empathy in children with an average score of 88% in the "very suitable" category. In line with researchers, Ni Ketut Sumiati and Luh Ayu Tirtayani previously researched the use of Audio-Visual Based Digital Picture Storybooks to Stimulate Early Childhood Empathy Abilities, stating that digital storybook media can influence children's empathy abilities, this can be seen through the validity of the media with 85% from media experts and material experts and in the trial received a score of 97%.

CONCLUSION

Development of digital storybook media which was developed with the aim of being used as supporting media to instill empathetic character in early childhood group 0B RA Al-Kariim Cirebon Regency. This media development was developed using the Borg & Gall model. Digital Storybook Media is considered feasible and can be used as seen from the development process, the product validity results from the expert team, both media experts and material experts, show the criteria "Very Feasible". Apart from that, revisions have been carried out in accordance with the revision notes obtained from the validation and trial stages with the aim of product improvement. Digital storybook media is also considered effective and can be used as an alternative media to instill empathetic character in young children, this is because the digital storybook media created by researchers has quite interesting visualizations and also has background sound so that it can attract children's interest. The effectiveness of this digital storybook media can be seen from the increased empathy in children.

REFERENCES

- Arik, G. K. (2024). Predictors of Media Emotion Regulation and Its Consequences for Children's Socioemotional Development. *Psikiyatride Guncel Yaklasimlar - Current Approaches in Psychiatry*, 16(3), 569–584. <https://doi.org/10.18863/pgy.1368538>
- Busyaeri, A., & Muharom, M. (2016). Pengaruh Sikap Guru Terhadap Pengembangan Karakter (Peduli Sosial) Siswa Di Mi Madinatunnajah Kota Cirebon. *Al Ibtida: Jurnal Pendidikan Guru MI*, 2(1), 1–17. <https://doi.org/10.24235/al.ibtida.snj.v2i1.177>

- Hasan, M. M. D. H. K. T. (2021). *Media Pembelajaran. Tahta Media Group*.
- Iis, N. (2012). Pengembangan Empati Anak Usia Dini Melalui Mendongeng Di Taman Kanak-Kanak Asyiyah Pariaman. *Jurnal Ilmiah Pesona Paud*, 1(4), 1–11. Diambil dari <http://ejournal.unp.ac.id/index.php/paud/article/view/1667>
- Jannati, Z., & Hamandia, M. R. (2021). Persepsi Mahasiswa Tentang Urgensi Empati Dalam Berkomunikasi Di Era 5.0. *Jurnal Komunikasi Islam dan Kehumasan (JKPI)*, 5(2), 59–72. <https://doi.org/10.19109/jkpi.v5i2.10981>
- Khadijah. (2015). *Media Pembelajaran Anak Usia Dini. Perdana Publishing*.
- Muhtadi, A. (2014). Pengembangan Empati Anak Sebagai Dasar Pendidikan Moral, 1–15.
- Nastiti, D. (2022). Implementasi Karakter Disiplin Pada Anak Usia Dini Guna Mengurangi Perundungan Pada Anak. *Jurnal Pajar (Pendidikan dan Pengajaran)*, 6(4), 1083. <https://doi.org/10.33578/pjr.v6i4.8629>
- Priska, V. H. (2020). Pentingnya Menanamkan Karakter Sejak Dini. *EduPsyCouns: Journal of Education, Psychology*, 2(1), 193–201. Diambil dari <https://ummaspul.e-journal.id/Edupsycouns/article/view/433>.
- Purwanto, A., & Maimunah, R. (2022). AWLADY: Jurnal Pendidikan Anak Evaluasi Implementasi Pendidikan Karakter Pada Anak Usia Dini di Masa Pandemi Covid-19 ANIM PURWANTO. *AWLADY: Jurnal Pendidikan Anak*, 8(2), 2528–7427. Diambil dari www.syekhnurjati.ac.id/jurnal/index.php/awлады
- Ridwan, M. (2023). *Pengembangan Materi Pembelajaran Biografi Tokoh Pendidikan Berbasis Articulate Strolyline Untuk Pemelajaran Bahasa Lampung Siswa Kelas 7 SMP Kabupaten Pringsewu*.
- Rizkiyah, P., & Ningrum, M. A. (2022). Pengembangan Buku Cerita Bergambar Berbasis Digital Untuk Meningkatkan Kecakapan Literasi Digital Anak Usia Dini. *Indonesian Journal of Early Childhood: Jurnal Dunia Anak Usia Dini*, 4(1), 115. <https://doi.org/10.35473/ijec.v4i1.1230>
- Sari, L. D. K., & Wardani, K. W. (2021). Pengembangan Buku Cerita Bergambar Digital untuk Meningkatkan Karakter Tanggung Jawab Siswa di Sekolah Dasar. *Jurnal Basicedu*, 5(4), 1968–1977. <https://doi.org/10.31004/basicedu.v5i4.1138>
- Sutanti, T. (2017). Bimbingan Klasikal Dengan Teknik Simbolik Model Sebagai Alternatif Solusi Untutkt Meningkatkan Empati Pada Anak Usia Dini. *Prosiding Seminar Bimbingan dan Konseling*, 1(1), 369–380.
- Syavira, N. (2021). Pengembangan Media Pembelajaran Berbasis Powerpoint Interaktif Materi Sistem Pencernaan Manusia Untuk Siswa Kelas V Sd. *OPTIKA: Jurnal Pendidikan Fisika*, 5(1), 84–93. <https://doi.org/10.37478/optika.v5i1.1039>

Ufairah, N. (2018). Bullying Pada Anak Usia Dini. *Motoric*, 1(1), 8. Diambil dari <https://jurnal.narotama.ac.id/index.php/paudmotoric/article/view/550>

Character Development through Akidah and Tauhid for Grade 5 Tunagrahita Students at SLB B-C Bagaskara Sragen

Syarifah*

* Universitas Darussalam Gontor

syarifah@unida.gontor.ac.id

Dinni Triana Dewi**

** Universitas Darussalam Gontor

dinnitri@unida.gontor.ac.id

Abstract

This research aims to find out the process of instilling faith and tawhid in the character education of grade 5 students with disabilities at SLB B-C Bagaskara Sragen and identify the inhibiting and supporting factors in the process. This research uses descriptive qualitative methods, with data collection through observation, interviews, and documentation, and data analysis with data reduction, data presentation, and verification techniques. The results showed that the process of instilling faith and monotheism went well, with cooperation between schools and parents in providing an understanding of the pillars of faith and the pillars of Islam, as well as the habituation of qouliyah and amaliyah worship on thoharoh material (especially ablution) and prayer. The formal and informal education environment also supports the cultivation of faith and tawhid, thus developing the potential of each student. Supporting factors include motivation, role models, mentor teachers, and the environment, while inhibiting factors include forgetfulness, not mastering the material, boredom, and lack of concentration. Based on these findings, it is recommended that schools prepare more teachers who are specific in the field of religion, provide adequate classrooms, and parents and teachers are more patient and continue to motivate children with disabilities to keep their enthusiasm in learning.

Keywords: Cultivation of Akidah and Tauhid, Character Education, Tunagrahita

INTRODUCTION

Education, as defined in the Law of the Republic of Indonesia No. 20 Year 2003 on the National Education System, article 1, is a conscious and planned effort to create a learning environment and learning process that enables learners to actively develop their potential. The goal is for them to have religious spiritual strength, self-recognition, personality, intelligence, noble character, and skills needed for themselves, the community, nation, and state. However, there are currently challenges in instilling spiritual values, particularly akidah and tawhid, especially for students with special needs such as the mentally disabled.

Indonesian Muslim society is currently showing a worrying trend, namely the inability to accept the reality of aging, modesty, and morality in the face of death. In this millennium era, modernisation and contemporary culture dominate, so young people are faced with various challenges. The term "today's children" has become popular, reflecting concerns about moral degradation. Factors that influence students' moral development come not only from the home environment, but also from the community, school, and social interaction (Bafadhol, 2017). Islam comes as a solution by offering a concept of life based on the principles of Akidah and Tauhid. Akidah and Tauhid instil solid character, attitude, and identity for Muslims. Muslim individuals apply their understanding and commitment through self-control, morality, vision, and behaviour in everyday life (Takdir dkk., 2021).

Allah SWT teaches a view of life centred on monotheism, as the main foundation in living life. The values of monotheism must be instilled early in children through education at home, school and society. Education is a fundamental right for every human being, because humans are born with physical and mental limitations, but have the potential to learn and develop. (Marimba, 1992)

In this regard, every nation has a shared responsibility to uphold compassionate education in Islam for all children, including children with special needs, given the increasing standard of living in Indonesia today. Equality of rights in obtaining quality education is also reflected in Allah's words in the Qur'an Surah Al-Hujurat: 13.

This shows that Allah never changes His will. Although Allah may want someone to be the most pious in His sight-that is, the one who honours Him the most-that individual may still experience suffering and hardship, both physical and mental. This is also a reminder for us to behave well towards our "fellow man". (Suparno, 2008)

In general, children with special needs are those who have unique characteristics and traits that distinguish them from other children. This means that the focus of this learning is more on children, especially those who fall into the category of children with disabilities or disorders. In fostering students, SLB Bagaskara has

implemented a life skills development programme. As explained earlier, this can be a model for student character. Therefore, students do not have any traits or potentials, but have interesting traits or morals. Students in this school consist of 94 children with special needs who are divided into two groups, namely deaf and tunagrahita. However, in this study the researcher used deaf children, which is a group of adolescents who have a low IQ (IQ below a certain level). The reason researchers chose this type of special needs child is because they have special needs that are internal and external in nature.(Delphie, 2012)

Sebagaimana hasil pra lapangan yang peneliti temukan pada tanggal 5 Agustus 2022, disekolah ini tidak ada guru PAI khusus namun pembelajaran agama diajarkan dari setiap guru pembimbing kelas, karena diperlukannya strategi yang tepat dalam penanaman akidah dan tauhid pada anak tunagrahita, yaitu dengan pembiasaan, pembelajaran, pemberian nasehat, serta memberikan contoh keteladanan. Sehingga Keteladanan yang baik dapat membangkitkan keinginan seseorang untuk meniru dan mengikuti, baik dalam ucapan maupun perbuatan yang positif. Dalam hal ini merupakan suatu amaliyah yang penting dan berkesan bagi penanaman akidah dan tauhid dalam kehidupan sehari-hari.(Ar-Rahmad, 2006)

As the pre-field results that researchers found on 5 August 2022, in this school there is no special PAI teacher but religious learning is taught from each class supervising teacher, because the right strategy is needed in instilling faith and tawhid in children with disabilities, namely by habituation, learning, giving advice, and providing exemplary examples. So that a good example can arouse a person's desire to imitate and follow, both in speech and positive actions. In this case it is an important and memorable amaliyah for the cultivation of faith and tawhid in everyday life.(Syarifah dkk., 2023)

METODE

In this study, the descriptive qualitative method was applied. (Sugiyon, 2021) the central activity throughout the research cycle was the writing of "field notes". In the data collection process, researchers used three stages, namely observation, interviews, and documentation. So as to get clear data in the development of character education based on faith and tawhid which is centred on grade 5 students with disabilities at SLB B-C Bagaskara Sragen. While data analysis by applying data reduction, presentation and verification.(Moleong, 2015) With this comprehensive methodology, this research is expected to provide a clear and in-depth picture of the cultivation of faith and tawhid in the character development of tunagrahita students at SLB B-C Bagaskara Sragen.

RESULT AND DISCUSSION

1. The values of faith and tawhid in character education for Grade 5 Tunagrahita children at SLB B-C Bagaskara Sragen

According to the Vice Principal, the values of faith and tawhid are the main components in developing students' character education, especially for those with special needs. The importance of building character for these students cannot be ignored. The opportunities given to students and teachers to increase their faith and devotion to God Almighty enable them to understand and live their lessons, act effectively, live in harmony with society, and find their identity through active, creative, effective and responsive participation.

In conclusion, the values of faith and monotheism have been applied to students both inside and outside the classroom. Although this school does not have a special Islamic Religious Education (PAI) teacher, every teacher always integrates elements of Islamic religious education in the teaching and learning process, so that these values can be embedded in students. However, there are some students who do not fully understand, for example when asked about prayer or its laws, (Meria, 2015)

The learning process for grade 5 tunagrahita students at SLB B-C Bagaskara Sragen must be tailored to the needs of each individual. One of the indicators of success in education is the importance of the teacher designing a mature learning plan beforehand. In terms of instilling the values of faith and monotheism to students with special needs at SLB B-C Bagaskara Sragen, religious learning in the classroom includes methods of instilling Islamic religious education values that are suitable for their special needs, especially for grade 5 students, such as:

a. Introducing the pillars of Islam and the pillars of faith

Grade 5 students in SLB B-C Bagaskara Sragen little by little they memorise and while remembering the various pillars of Islam and the pillars of faith using the singing method. Adjusting the lyrics with the correct intonation, then the teacher practices the song by mentioning one by one the various pillars of Islam and the pillars of faith so that students feel comfortable and enjoy so that students can remember simply by learning in class like that. They sympathise with the activities carried out by the teachers. Provide them with appropriate learning materials to improve their skills. To confirm their understanding, they use their teachers' nods or short words. The teacher also invites students to relate it to their daily lives. Students are actively invited to express their experiences in daily life related to the material being taught. One by one to express their experiences, such as the 2nd pillar of Islam (prayer), how often students pray.

When given questions about how many pillars of Islam there are, what are the

most important parts of the pillars of Islam that we must carry out every day. Some students answer correctly, but some still need guidance given the limitations of students.

b. Prayer 5 times

Prayer is one of the topics in Islamic religious education that forms students to strengthen faith and piety to Allah SWT, especially in Fiqh subjects. Fiqh material is an important part of Islamic education that emphasises teaching about the laws of worship that are well structured, especially in terms of understanding and practicing Islamic principles in everyday life.

Based on the interview with the principal, the researcher observed that teachers adopt various approaches in teaching Grade 5 students with disabilities. One of the methods observed was the teaching of the hijaiyyah letters, the pillars of faith, the pillars of Islam, as well as prayer and ablution procedures. The researcher observed that not all grade 5 students with disabilities were able to receive learning directly. Some students showed difficulty in grasping learning materials due to their mental condition. Therefore, they need direct guidance and examples from the teacher.

Basically, students with disabilities need special guidance in understanding prayer materials and ablution procedures, which are often delivered through practical methods. Teachers provide understanding to students first, with the hope that they can develop their potential optimally and can adapt to the environment dynamically and constructively.

Firstly, the teacher asked the students whether prayer is obligatory and how many times a day it should be done. Then, one by one, students enthusiastically answered the questions according to their own understanding and experience. Some Grade 5 students already have knowledge about prayer and an understanding that prayer is an obligation that must be done in daily life.

Each student has a unique character, which is influenced by the surrounding environment, including the school and home environment. The interview results show that when returning home, parents always accustom children to pray and read Iqro'. Collaboration between parents and schools in educating children enables the growth and development of children with great potential in character education.

c. The procedure for wudhu

Ablution is an essential requirement for the acceptance of mahdhah worship such as prayer. Therefore, it is important to teach ablution to children from an early age. In the learning process, teachers need to explain and show examples of ablution procedures so that students can understand and follow well what has been taught.

In applying learning to children with disabilities, patience, sincerity, and

dedication are required given their characteristics and impairments. (Martiningrum, 2015). The observation results in this study show this. Before starting the lesson on ablution, the teacher reviews the previous learning material by asking some related questions. After the students are able to answer the questions well and understand the material, the teacher then starts the core discussion about ablution.(Martiningrum, 2015)

The teacher starts the lesson by asking the students if ablution is obligatory, to explore their knowledge about ablution. After that, the teacher explains the material gradually so that students can understand it well. The teacher explains the pillars and sunnah of wudhu, then continues with an explanation of things that can invalidate wudhu. Some students may be quick in understanding the material, while others may need more time, so the teacher needs to repeat the explanation several times to ensure all students understand the material well.

In determining the method here, the teacher lists the type of practical method, which is in the form of a description of how the steps of the method will be carried out. the teacher determines several learning methods, namely:

- Students practice mentioning the order of ablution
- The teacher conducts a question and answer session with students.
- Students practice ablutionSiswa berlatih menyebutkan urutan berwudhu

This is done for habituation and planting by means of material that is always repeated in everyday life so that students remember and can be applied when they are at home. (Mangunsong, 2009) With the obstacles that students have, some of them are able to perform ablution when they want to pray at home, it's just that it's not in accordance with the pillars, some of them wash the members of ablution imperfectly such as washing the face only partially washed, then when washing the hands do not reach the elbow. For this reason, they need supervision by parents.

Religious knowledge for human beings is one of the two forces capable of transforming one's life. The Qur'an and Sunnah both emphasise the importance of faith and monotheism for a select group of Muslims. It contributes to the improvement of human quality in all its aspects, including worship, morals, spirituality and social life. Thought and physical endeavours can be used to realise the will of Allah in a way that is mutually beneficial to the individual and society.

Compared to that, the verbalistic introduction to the students is only limited to the introduction of the creed and tawhid that has been applied, not touching the values that are instilled substantially. This is due to several factors:

- 1) Aqidah is a simple, abstract, and difficult concept to explain to the public, especially the younger generation of Tunagrahita.

- 2) Children with special needs are not able to think abstractly, so the use of tawhid reasoning such as divinity must be in accordance with their ability to make decisions arbitrarily.
- 3) Students' attention span and memory need to be trained and sharpened because it is difficult for students to understand the lessons.
- 4) Teachers still need innovation in teaching and learning activities for students.

The results of interviews conducted by researchers show the importance of the social role in instilling aqidah and tawhid in children with special needs. Thus, students and teachers in schools can better understand themselves and provide effective advice to them on how to provide appropriate guidance. The importance of aqidah and tauhid for children with special needs, as well as other typical children, should be highlighted as the basis of a happy life. Therefore, teachers and others have a very important role in the development of character education in students.

Based on the results of observations related to students' beliefs in themselves in habits such as praying 5 times in everyday life which provides a good result for parents and schools. With the implementation of character education based on faith and tawhid carried out by the teacher, namely inviting students, modelling students, and guiding students in instilling the values of faith so that students become individuals who have good character.

According to Zakaria Stapa, creed or faith is something that is bound tightly and firmly in the soul, so it is impossible to unravel or separate. Akidah plays a very important role in human life. The strength or weakness of a person's faith depends on his belief in Allah SWT. The term properly refers to a process or experience that occurs at a spiritual level within a person, which is so profound that it is able to fully control the individual's consciousness, desires, and feelings (Stapa, 1999).

From the explanation above, it includes the teaching of faith, belief and confidence in the soul of each individual. Given the different conditions and characters of students. Teaching and providing material to students the teacher cannot impose, the teacher always sees the condition of the students in the classroom, gives the theory and then students apply it when they go home, such as the 5 daily prayers.

2. Teaching and Learning Process of Grade 5 Tunagrahita Students at SLB B-C Bagaskara Sragen

Islamic religious education for students with disabilities is only educative. They cannot be compared with students in general. One of the negative impacts of learning Islamic religion at school is that students are aware of the existence of religion, the laws that must be applied in daily life, and the obligations in the religion such as five daily

prayers and good behaviour towards fellow students, teachers, and the community. They lack motivation to carry out these duties. Therefore, students with disabilities tend to be less interested in learning more about Islamic education.

Based on the researcher's interview with Mrs IM before the teaching process, Mrs IM always accustoms children to pray before and after learning so that they can receive learning with their own beliefs.

Here, teachers use a variety of methods in the learning process, including demonstration and lecture methods. As stated by Arief in his book on the introduction to the science and methodology of Islamic education, the demonstration method involves role-playing to explain a concept or show students how a learning process functions (Efendi, 2006). On the other hand, the lecture method is used when teachers give explanations to students. Based on the learning experience, students with disabilities tend to be calm and relaxed throughout the class. (Djamarah, 2010). Therefore, the learning process is accompanied by the use of teaching aids to facilitate students' understanding and attract their attention.

It can be noted that the methods used by teachers in delivering Islamic religious education materials involve the use of several methods in the learning process:

a. Lecture method

The lecture method can be referred to as a form of teaching to tell, which is a way of delivering or presenting learning materials by means of an intermediary in the form of sound, or oral. This method focuses on the teacher explaining to students to listen to what the teacher says when explaining the material. (Suparno, 2008).

b. Demonstration method

One such teaching technique is to encourage students to pay attention by having them scrutinise the work they are doing. Therefore, the demonstration method is very important as a means of teaching both in terms of form and content. This method is useful for presenting material such as the two creeds, highlighting prophetic attributes.

c. Practical Method

Practical method is a learning approach where students engage in hands-on practice activities to improve their assertiveness or skills according to what has been learnt. Some learning materials use practical methods to help students understand the methods and movements involved in the learning process.

d. Question and answer method

This method is very important in the learning process, so that students are active not passive, so that students always ask questions if they don't understand

what the teacher has explained.

e. Assignment method

Giving assignments is one of the methods in the teaching and learning process where students are given questions to do. The purpose of giving this assignment is so that the teacher can evaluate the extent of students' understanding of the learning material taught every day. (Smart, 2016).

f. Drill Method

The drill method is used to improve students' dexterity and skills on the material studied. This method provides opportunities for students to practice certain skills based on explanations from the teacher. Drill involves repeated repetition of the same concept or activity. This repetition aims for students to be able to respond to the subject matter that has been delivered by the teacher and remember it well (Efendi, 2006).

g. Method of thickening letters

This method of thickening letters is usually used by teachers in training student focus, because of the mental limitations of students in capturing a lesson, usually this method of thickening letters is needed in training students, such as thickening hijaiyyah letters, thickening animal pictures, and so on.

h. Habituation method

Habituation in education is a method that involves "cultivating habits" in which individuals perform the same actions repeatedly and diligently so that they are formed and difficult to forget (Wafi & Saifulloh, 2019).

Based on the analysis of the findings above, the methods used in the implementation of teaching and learning here vary greatly. To convey Islamic teachings, a special approach is needed so that the desired goals can be achieved.

In learning here, teachers do their best to make teaching successful. One of the key success factors is the way the material is delivered or the teacher's teaching strategy. As done by teachers at SLB B-C Bagaskara Sragen, they use the strategy of love. This means that teachers cannot teach students with disabilities in a harsh way if students do not understand. Teachers must be more patient and painstaking in explaining the material presented.

The researcher observed that the mentor teacher or homeroom teacher always starts the lesson with an explanation and writes the material on the blackboard. After the students record the material in their books, the teacher then re-explains the material using the lecture method and sometimes involves questions and answers with the students. This learning process also occurs in other classes. In some specific materials, practical methods such as ablution and prayer are also used. However, in

learning Islamic Religious Education (PAI) here, the practical method is only applied to a limited extent because students are difficult to condition in the classroom.

From the explanation above, learning and materials taught to children with special needs are not much different from the materials taught by ordinary teachers. However, the difference is that Mrs IM provides Islamic Religious Education (PAI) material by focusing on the basics. Mrs IM wants to familiarise children with the pillars of faith and the pillars of Islam, as well as singing hijaiyyah letters.

Researchers also conducted interviews with parents about how parents provide understanding and support their children's learning process at home. Based on these interviews, parents always accompany their children while studying and provide full support to them.

The conclusion from the interviews with parents of students with disabilities is that parents use an approach that includes providing motivation, assistance needed, and creating a supportive environment to foster self-confidence in their children.

Muslim teachers' limited ability to explain to their students that religion exists in this world is considered illogical. This is because the purpose of Islamic education for Muslim students is not only to teach them to recognise that there are religions in the world. They realise that there is a higher power in this world, namely Allah, the One True God. (Purwanta, 2015). They also realise that in order to succeed in society, they must behave well towards every individual who has noble morals.

When students return home, they are guided by their parents. Children's character will develop slowly from their surroundings and environment, including at home. Students learn at school and apply it at home. Although they need special guidance, it is important to never give up in supporting the child's development. Motivation from both children and parents is very important to be given to students with disabilities in daily life, to increase students' enthusiasm in the learning process and their mental development.

The cultivation of faith and tawhid in overall character building, based on the results of the study, it can be concluded that grade 5 students in SLB B-C Bagaskara Sragen have religious beliefs, which provide motivation in their lives. Through the self-development program and the practice of worship and behaviour in daily life, students are accustomed to developing character based on faith and tawhid.

In this context, parents, teachers and students contribute to realising the balance of human relationships with God, self, fellow humans and the environment. Through education provided at school and at home, students can develop into individuals who have characters based on faith and tawhid, so that they have confidence in religion.

3. Inhibiting and Supporting Factors in Character Development through Akidah and Tauhid for Grade 5 Tunagrahita Students at SLB B-C Bagaskara Sragen

a. Inhibiting factors

1) Based on the results of interviews that have been conducted at SLB B-C Bagaskara Sragen, the researcher can conclude that the inhibiting factors in the cultivation of faith and tawhid in Grade 5 Tunagrahita Children at SLB B-C Bagaskara Sragen are as follows:

2) Forgetfulness

Learners who have problems in learning but in general, students with disabilities have abilities below the average. One of the prominent problems in the education of SLB B-C Bagaskara Sragen is the problem of mental capacity. Often they feel worried about the lessons that have just been taught, so often the teacher criticises the lessons that have been taught.

Grade 5 tunagrahita students at SLB B-C Bagaskara Sragen also experience difficulties in the material as seen from the results of observations that have been completed with the decline in students' writing abilities which are directly related to their writing skills. Students are very difficult in understanding and applying the material that has been taught

3) Feeling bored

Easily changeable taste As students feel bored and bored, it causes friends around them to feel that way too. Concentration is very clear when the teaching and learning process is taking place.

4) Lack of student concentration

Communication is the most important aspect of learning. It is important to note the poor communication skills of students at SLB B-C Bagaskara Sragen, who often do not understand what the teacher wants to explain. Therefore, in order for students to understand, teachers must always review the material.

From the explanation above, it is clear that the educational problems of students with disabilities are caused by several factors that are cognitive in nature.

Note the relative size between an ordinary child and a child with a disability below. This causes students to be irritable, clumsy, erratic concentration, and reluctant to absorb material. But in this case, caregivers of the mentally challenged are not just helpless children; they also have academic skills that the mentally challenged have, including: dressing appropriately, maintaining hygiene, eating, and swimming. Faktor pendukung

Based on the results of interviews that have been conducted at SLB B-C

Bagaskara Sragen, all the efforts given have been tried as well as possible, the researcher can conclude that the supporting factors in the pattern of instilling faith and tawhid in Grade 5 Tunagrahita Children at SLB B-C Bagaskara Sragen are as follows:

1) Motivation

A motivation given to students is very good influence on 5th grade tunagrahita students in SLB B-C Bagaskara Sragen, especially the motivation of students themselves, parents, families, and school teachers. Therefore, with the existence of motivation, especially to be able to help in developing potential, talent, so that the spirit of life. So that they can receive education and teaching in accordance with the vision and mission of the educational institution they occupy.

2) Exemplary

Apart from motivation, the example instilled by the school to students is also the most important thing for students in the process of fostering and instilling the values of faith and tawhid in 5th grade students at SLB B-C Bagaskara Sragen so as to achieve a set of beliefs or feelings that are believed to be an identity that gives a special pattern to patterns of thinking, feeling and behaviour.

3) Mentor Teacher

In the supporting factors here, the supervising teacher is also very influential, which functions as an educator, teacher, mentor, motivator, and a good role model for his students. The mentor teacher makes a full effort in understanding the characteristics of his students, especially 5th grade students with tunagrahita in SLB B-C Bagaskara Sragen. Different characteristics both in attitude and in capturing material, some of them are fast and some are slow in receiving material.

4) Environment

The environmental side is also included in the supporting factors, as the environment here is the initial formation in education that provides motivation for students to develop. Socially tunagrahita children can adapt to the surrounding environment. This is due to social, emotional factors which include feelings of fear. Therefore, the environment is very influential in developing talents, abilities, and life for people with disabilities in the family and community environment.

CONCLUSION

Based on research on character development through faith and tawhid for grade 5 students at SLB B-C Bagaskara Sragen, it can be concluded that the process of instilling faith and tawhid is going well. The school collaborates with parents to provide students with an understanding of the pillars of faith and the pillars of Islam, as well as familiarising worship practices such as ablution and prayer. The formal

and informal education environment supports the cultivation of the values of faith and tawhid, so that students can develop their potential according to their respective abilities.

This research found that there are several obstacles in fostering the character of students with disabilities, such as limitations in learning, forgetfulness, often not mastering the material, feeling bored, and lack of concentration which makes it difficult for them to achieve optimal development. Nevertheless, the support from teachers, parents, and the surrounding environment that provides encouragement and motivation constantly helps foster the talents, abilities, and faith of students with disabilities in their character building process.

REFERENCES

- Ar-Rahmad, A. (2006). *Cinta Untuk Anak*. Aqwwam.
- Bafadhol, I. (2017). Pendidikan Akhlak dalam Perspektif Islam. *Jurnal Edukasi Islami*.
- Delphie, B. (2012). *Pembelajaran Anak Tunagrahita: Suatu Pengantar Dalam Pendidikan Inklusi*". Refika Aditama.
- Djamarah, S. B. (2010). *Strategi Belajar Mengajar*. PT. Rineka Cipta.
- Efendi, M. (2006). *Pengantar Psikopedagogik Anak Berkelainan*. Bumi Aksara.
- Mangunsong. (2009). *Psikologi dan pendidikan anak berkebutuhan khusus*. Jogjakarta:BPFE UIL.
- Marimba, A. D. (1992). *Pengantar Filsafat Pendidikan Islam*. Maarif.
- Martiningrum. (2015). *Penanaman nilai-nilai agama islam pada anak penyandang tunagrahita di SLB BC Santi Mulia Surabay*. Skripsi.
- Meria, A. (2015). *Model Pembelajaran Agama Islam Bagi Anak Berkebutuhan Khusus di SDLBYPPLB*. *Jurnal Tsaqofah*.
- Moleong, L. J. (2015). *Metodelogi Penelitian Kualitatif*. PT REMAJA ROSDAKARYA.
- Purwanta, E. (2015). *Modifikasi Perilaku: Alternatif Penanganan Anak Berkebutuhan Khusus*. Pustaka Pelajar.
- Smart, A. (2016). *Metode Pembelajaran dan Terapi Untuk Anak Berkebutuhan Khusus*. Ar Ruzz Media.
- Stapa, Z. (1999). *Akidah dan Akhlak Dalam Kehidupan Muslim*. Utusan Publication.
- Sugiyon, S. (2021). *Metode penelitian kuantitatif, kualitatif, dan R&D (3 ed.)*. Alfabeta.
- Suparno. (2008). *Bahan Ajar Cetak: Pendidikan Anak Berkebutuhan Khusus*. Dirjen Pendidikan Tinggi, Departemen Pendidikan Nasional.
- Syarifah, S., Utomo, B., Haris, A., & Mansur, R. (2023). *Masyarakat Madani dalam Filsafat*

- Pendidikan Barat dan Islam. *Jurnal Sustainable*, 6(2), 797–802.
<https://doi.org/10.32923/kjmp.v6i2.4216>
- Takdir, M., Mushthafa, M., & As, R. (2021). The Dynamics of Religious Conflict in Indonesia: Contestation and Resolution of Religious Conflicts in The New Order Age. *Al-Adyan: Journal of Religious Studies*, 2(2), 103–121.
<https://doi.org/10.15548/al-adyan.v2i2.3184>
- Wafi, H., & Saifulloh, A. (2019). Habitual Method in Moral Education of Grade 5 Students of KMI Darussalam Gontor Modern Islamic Institution. *At-Ta'dib*, 14(1), Article 1.
<https://doi.org/10.21111/at-tadib.v14i1.2843>

THE ROLE OF ECOSUFISM ON THE PROCESS OF TAHFIDZ AL-QUR'AN STUDENTS IN GRIYA DDPE QUR'AN (GDQ): THE PERSPECTIVE OF BRONFENBRENNER'S ECOLOGICAL THEORY

Arini Saila Haq*

*Institut Ilmu Al-Qur'an (IIQ) Jakarta

arini.saila.haq@mhs.iiq.ac.id

Sri Widyastri**

** Institut Ilmu Al-Qur'an (IIQ) Jakarta

widi@iiq.ac.id

Abstract

The crisis due to environmental pollution seems timeless. This term environmental crisis has become a major problem in various countries. One of the solutions offered is to reflect back on human existence and its relationship with nature, better known as ecosufism. This study analyzes the role of ecosufism in influencing the Qur'an memorization process in students at Griya DDPe Qur'an (GDQ), using Bronfenbrenner's Ecological Theory perspective as the analytical framework. The method used is descriptive qualitative, with interviews, and observations made directly during the research process. GDQ as an Islamic educational institution that integrates Sufism practices with environmental awareness, provides a supportive environment for students to deepen their spiritual connection with the Qur'an. The microsystem analysis shows that the learning space supported by the practice of dhikr and tafakkur nature strengthens concentration and appreciation of the Qur'an. At the mesosystem level, the interconnectedness of the learning environment with support from family and community strengthens religious and moral values in the memorization process. The GDQ ecosystem emphasizes nature conservation through bird rearing and other environmental activities, which creates conditions for the development of ecological awareness and social responsibility. GDQ Ecosystem shows a response to the changing times with evolution in curriculum and educational technology. Thus, the implementation of ecosufism at GDQ contributes significantly to strengthening students' Qur'anic memorization process, enriching their educational experience with spiritual, ecological and social values.

Keywords: Ecosufism, Tahfidz Al-Qur'an, Ecology, Bronfenbrenner, Environmental Interaction

INTRODUCTION

The environment is the natural or social conditions that can influence human development. The presence of natural and social environments in educational institutions certainly affects the development of learners. Humans themselves are part of nature, as they live within the sphere of nature. Humans cannot be separated from nature. This nature can be used as an educational tool to obtain a noble degree in the educational process. (Moh. Roqib, 2016)

The environment can be used as a means of education that is closely related to the cultivation of character values for anyone who lives in an educational institution. Where these values are certainly related to human behavior related to God Almighty, self, fellow humans, and the environment. As we all know, environmental problems have long been a shared responsibility, not just the government or policy makers. All citizens of the community on individual awareness assume an important role in environmental sustainability. (Arif, 2016)

The current environmental crisis is influenced by misunderstandings about our existence as humans, nature and our position in the ecosystem as a whole. This error leads to mistakes in human behavior patterns, especially when dealing with nature. Nature is the most important place for human life and survival. The existence of a sustainable nature brings many benefits to human survival without us realizing it.

Recently, the government and various other organizations have begun to actively echo the attitude of protecting nature and the residential environment and maintaining the environment and its preservation. People's attention to the science of ecology, which was initially reduced, has suddenly changed. The change in the attitude of scholars and politicians to the science of ecology occurred after the world was hit by the "human environmental crisis".

This situation also attracted the attention of Sufism experts, according to them deepening Sufism can create self-devotion to the environment as a form of God's creation. The understanding of ecosufism began to be developed as an offer to resacralize nature based on religious values and spirituality. Ecosufism itself is an approach that combines the practice of Sufism with environmental awareness in the hope of achieving harmony between spirituality and nature. (Misbah, 2020)

Griya DDPe Qur'an (GDQ) is a special student dormitory for Qur'an memorizers who are studying at PTIQ University Jakarta. In GDQ, the process of memorizing the Qur'an is not only focused on the memorization aspect, but also on character building that reflects one's concern for the environment in which he/she lives. The students are

encouraged to understand and apply ecosufistic values in their daily lives, with the hope that later they will be able to become agents of change who inspire their communities to care more about nature.

The concept of ecosufism in the form of a hierarchy of takhalli, tahalli, and tajalli is a method used to preserve nature. Takhalli is a state where individuals view environmental destruction as a form of material and non-material crime, then tahalli is a state where individual mindsets change from environmental destruction to environmental preservation, while tajalli is the application of ecosufistic values to the environment.

Understanding ecosufism can at least be an offer for humans to protect and preserve nature, as well as a vehicle for Muslims to get closer to Allah SWT. (Suwito, 2011) The discussion of ecosufism helps the process of one's awareness and responsibility towards the environment. The values of love for the environment or care for the environment is one of the values contained in the nation's culture and character education.

What is important to know is that the teaching and learning of the Qur'an does not only emphasize cognitive aspects, but also affective and psychomotor aspects. This includes spiritual practices such as dhikr and tafakkur in nature, memorization in a beautiful and supportive environment, as well as environmental conservation activities such as sustainable waste management, caring for animals that are God's creatures, and caring for plant growth. This approach is believed to be able to strengthen the spiritual relationship between humans and Allah SWT as the Creator of Nature, and foster high ecological awareness among students.

With this culture and character education, it is expected that a person has moral and ethical values that function to develop individuals who have noble character in their daily thoughts, attitudes and behaviors. (Muhibbin, 2005) Environmental care behavior is described as behavior that always seeks to prevent damage to the natural environment and its surroundings. Also look for efforts to repair natural damage that has occurred.

Bronfenbrenner's Ecological Theory is considered comprehensive enough to examine how various environmental layers affect the individual development of students who memorize the Qur'an with the practice of ecosufism. Bronfenbrenner's theory identifies five main interacting systems: microsystem (immediate environment such as family and school/ boarding school), mesosystem (interaction between microsystems), exosystem (indirect influence from the wider environment), macrosystem (culture and policy), and chronosystem (environmental changes over time). Using this theory, the researcher will analyze how the different layers of the

environment at GDQ contribute to the implementation of ecosufism and how the interactions between these layers affect the Qur'an memorization process of the students. (Unik, 2018)

This study aims to explore the role of ecosufism in the students' Qur'an memorization process at Griya DDPe Qur'an (GDQ) and analyze it through the perspective of Bronfenbrenner's Ecological Theory. This research is expected to make a significant contribution to the religious education literature by offering new insights into the integration of environmental values in Islamic education.

METHODS

Research methods in general can be interpreted as a scientific way to obtain data with specific purposes and uses. (Sugiyono, 2016) This research uses a qualitative description method with observation data collection techniques. interviews and documentation studies.

Observation is the initial data collection by making direct observations on the object to be studied. Interview is a meeting of two people to exchange information and ideas through questions and answers so that meaning can be constructed in a certain topic. Meanwhile, documentation is a record of events that have passed and are presented in the form of writing. pictures or monumental works of a person.

RESULTS AND DISCUSSION

This research explores the role of ecosufism in the process of memorizing the Qur'an for college students through the perspective of Bronfenbrenner's ecological theory conducted at Griya DDPe Qur'an (GDQ). GDQ dormitory is located at Jalan Darussa'adah No. 57, RT / RW 03/04, Kel. Cinangka, Kec. Sawangan, Depok City, West Java 16516. GDQ has a vision of "Clear with the Qur'an". GDQ stands for Griya DDPe Qur'an, an extension of Griya which is a house, DDPe (pronounced: dedepe) in Javanese which means sticking, being close, getting closer, taqarrub, Qur'an is the holy book of the Qur'an. GDQ is basically a moral movement to invite oneself, family, and anyone to interact with the Qur'an in everyday life based on family and home (in griya / home) respectively.

The GDQ minimalist dormitory is inhabited exclusively by four male students studying at PTIQ University Jakarta. Two students who live in GDQ come from areas outside Java, namely Riau and Jambi, while the other two come from Bekasi and Cirebon, West Java.

A number of routine activities carried out with students and the surrounding community are tadarrus, khataman Al-Qur'an, Al-Qur'an content studies, hadith

studies, taklim assemblies, TPQ for children, compensation, shalawat nights, and a number of other social-educational activities.

Furthermore, routine activities carried out by students in this GDQ Dormitory every morning are morning prayers in congregation, depositing and murojaah memorizing the Qur'an, then carrying out ecosufism implementation activities, sports, independent dhuha prayers, then leaving for college. In the afternoon, students carry out activities that support the implementation of ecosufistic values in a hidden curriculum, maghrib prayer in congregation, tadarus surah Yasin Al-Waqi'ah and Al-Mulk, isya' prayer in congregation, night study hours, then rest. Incidental activities such as taking turns being the imam of congregational prayers, preaching Friday prayers in the surrounding mosque, procuring Eid al-Fitr and Eid al-Adha prayers, slaughtering sacrificial animals, joint gymnastics, and so on are also carried out by students in collaboration with the GDQ caregiver family.

The activities that support the implementation of ecosufistic values in the hidden curriculum at GDQ such as; dhikr and memorizing the Qur'an by pondering the surrounding nature; minimizing the use of disposable plastic materials; using energy efficiently, such as turning off lights and electrical equipment when not in use; using water wisely and avoiding waste; caring for and loving animals as fellow living beings; to care for plants.

GDQ has a hut that is used as a place to memorize the Qur'an as well as to contemplate nature, an optional place to learn iqra' in TPQ activities, as well as a place to discuss and exchange ideas between students. GDQ also raises and cares for 16 birds, 9 of which are puter pigeons (Eurasian collared pigeon), 4 are yellow-vented bulbul, 2 are canaries, and 1 is a lovebird (*Agapornis*).

The simple huts used for various activities at GDQ reflect the principle of ecosufism which integrates spiritual practices with environmental awareness. This greatly helps students in improving their concentration and peace of mind, two very important factors in the process of memorizing the Qur'an. Physically, this hut is not only a place to memorize the Qur'an, but also a facility for students to contemplate nature, namely reflection and meditation carried out in an open environment. This is certainly in line with the value of ecosufism which emphasizes the importance of the realization of interaction between humans and nature as a means to get closer to Allah SWT.

The use of the hut as a place to learn iqra' and discussion (*ngopi*) shows that the natural environment is an inspiring and calming learning space. This helps students or anyone who comes to the hut in the process of developing a more effective understanding of Islam in a conducive atmosphere, in harmony with nature. Positive

social interactions create a supportive learning environment, where students can help and motivate each other in memorizing the Qur'an.

The maintenance and care of the birds at GDQ is also a concrete example of ecosufistic behavior. Caring for living creatures is a manifestation of love and respect for Allah's creation. In ecosufism, this action reflects the responsibility of humans as caliphs on earth who must always strive to protect and care for the environment and living things in it. The presence of birds, including their chirping sounds, not only adds beauty and tranquility to the GDQ environment, but also serves as a means to teach the values of love and care for nature.

Students are invited to learn to appreciate and protect nature while deepening their religiosity, creating a harmonious balance between worship and ecological responsibility. This shows that an environment designed with ecosufistic values can support meaningful learning, especially in the process of memorizing the Qur'an, as well as forming individual characters who care more about nature and living things. This is in accordance with the research findings which show that a spiritual and natural environment can improve the quality of learning and religious understanding. (Z. Ibrahim, 2018)

With hidden curriculum-based activities that focus on environmental conservation, students not only learn to memorize the Qur'an but also internalize ecological values as part of their religious practice. So that religious education integrated with environmental awareness can produce more meaningful and in-depth learning.

This research also conducted an in-depth analysis based on Bronfenbrenner's systems ecology theory to understand how the various environmental layers in GDQ affect the Qur'an memorization process and the development of student character through the application of ecosufism.

In the mesosystem or inter-microsystem relationship, this concept is manifested through a number of interactions between microsystems that support the practice of ecosufism and the Qur'an memorization process for students. One of the main examples of this mesosystem is the interaction that exists between the various facilities and activities at GDQ with the host family and the surrounding community. Students are also constantly encouraged to strengthen their relationships with their families of origin through online. The emotional and financial support from their families certainly provides additional motivation for students to be consistent in their Qur'an memorization activities and other ecosufistic activities.

The ecosystem at GDQ not only creates a supportive environment for the Qur'anic memorization process, but also has a role in shaping students' character and

attitude towards the environment and society. Students' interactions with biological diversity and external communities enrich their spiritual and educational experiences.

The macrosystem at GDQ positions Islamic values as the main foundation in every aspect of activity. The institution adheres to deep Islamic principles, which are reflected in daily practices such as tahfidz Al-Qur'an, dhikr and tafakkur alam. In addition, of course, GDQ also pays attention to local and global cultural influences. Students are not only rooted in a distinctive religious tradition, but are also quite open to influences and cultural dynamics coming from outside, which shape their diversity and inclusiveness as 'mahasantri' (students as well as santri).

In the chronosystem, GDQ reflects the changes and adaptation of the institution to the challenges and changes of the times. Dormitory policies change to adapt to technological developments, changing educational needs, and social dynamics. For example, GDQ tries various learning methods to increase the effectiveness of its students' Qur'an memorization, or responds to the demands of society in order to develop students who are able to have a role and be useful.

In addition, an important feature of the chronosystem at GDQ is that the institution not only supports students' Qur'anic and academic development, but also promotes environmental awareness and social care.

Using Bronfenbrenner's Ecological Theory as an analytical tool, this study shows that the interaction between the different layers of the environment at GDQ contributes significantly to the successful implementation of ecosufism and the Qur'an memorization process. Ecosufism at GDQ successfully creates a supportive environment for the Qur'an memorization process through the application of spiritual values and environmental awareness. The interaction between different layers of the environment influences the spiritual and ecological development of the students. Thus, this not only strengthens the ability to memorize the Qur'an but also forms individuals who are responsible and care for the environment, in line with Islamic values and Sufism.

CONCLUSION

Analysis using Bronfenbrenner's Ecological Theory reveals that the implementation of ecosufism at GDQ has a crucial role in strengthening and enhancing students' Qur'an memorization process. In the microsystem, GDQ provides a directly supportive environment for the practice of Qur'anic memorization, including learning spaces that are supported by the practice of dhikr and tafakkur of nature.

At the mesosystem level, the interconnectedness of the learning environment at GDQ with support from family and community reinforces religious and moral values in

the tahfidz process. Positive interactions between students, educators and the community are also important factors in character building and commitment to tahfidz.

The ecosystem at GDQ emphasizes the integration of Sufism practices with environmental awareness, which is reflected in nature conservation activities such as bird and plant rearing. This environment not only creates favorable conditions for Qur'anic learning, but also strengthens students' ecological awareness and social responsibility.

The GDQ chronosystem shows a response to changing times, such as the evolution in curriculum and educational technology. This allows GDQ to remain relevant and responsive to the demands of the times in preparing students to face global challenges.

Overall, the conclusion of this journal is that the implementation of ecosufism at GDQ, viewed from the perspective of Bronfenbrenner's Ecological Theory, positively affects its students' Qur'an memorization process. The activities implemented not only strengthen the spiritual connection with the Qur'ān, but also promote ecological awareness, social responsibility, and character development based on Islamic religious values in the education of its students.

REFERENCES

- Berk. (2000). *Child Development*. Boston: Allyn and Bacon.
- Bronfenbrenner. (1986). *Ecology of the Family as a Context for Human Development Research Perspectives*. *Developmental Psychology*.
- Hasanah, Mita Uswatun and Mulia Ardi. (2022). *Eco-Sufism in Environmental Conservation Efforts at Alam Kandung Rejotangan Tulungagung*. *Syifa al-Qulub: Journal of Sufistic Psychotherapy Studies*.
<http://repo.uinsatu.ac.id/33816/1/Eko%20sufisme.pdf>
- Hidayah, Noor, Sindy Febrianti and Nanda Enita Virgianti. (2024). *Analysis of the Influence of School Environment on Students' Social Patterns at State Elementary School 09 Kayu Agung*. *Scientific Journal of Student Research*.
<https://ejurnal.kampusakademik.my.id/index.php/jipm/article/view/48>
- Ibrahim, Z. (2018). *The Role of Spiritual Environment in Religious Learning: Case Study at an Islamic Education Institution*. *Journal of Islamic Education*.
- Latifah, Itsna and Idris. (2024). *Tafsir Ayat-Ayat Ekologi Yusuf Al-Qaradawi dan Seyyed Hossein Nasr. Al-Thiqah: Journal of Islamic Sciences*.
<https://ejurnal.stiuda.ac.id/index.php/althiqah/article/view/186>
- Mahendra, Muhammad Luthfi. (2023). *Ethological Theory and Developmental Ecology in the Perspective of Amorti Islamic Psychology*. *Journal of Interdisciplinary Islamic Studies*. <https://journal.amorfati.id/index.php/AMORTI/article/view/85>
- Misbah, Muhammad. (2020). *Ecosufism: Integration of Sufism and Environmental Awareness in Islamic Religious Education*. Jakarta: Harmony Publisher.
- NS, Suwito. (2011). *Eko Sufism, Strategy Concept and Impact*. Purwokerto: STAIN Press.
- Roqib, Moh. (2016). *Prophetic Education Philosophy*. Purwokerto: Pasma An-Najah Press.
- Salsabila, Unik Hanifah. (2018). *Bronfenbrenner's Ecological Theory as an Approach in Islamic Religious Education Curriculum Development*. *Al-Manar Journal*.
<https://journal.staimsyk.ac.id/index.php/almanar/article/view/72>
- Sugiyono. (2016). *Educational Research Methods, Quantitative, Qualitative, and R&D Approaches*. Bandung: Alfabeta.
- Sumantri, Arif. (2010). *Environmental Health*. Jakarta: Kencana Prenada Media Group.

Syah, Muhibbin. (2005). Educational Psychology. Bandung: Remaja Rosda Karya.

Zuzana, Mira and Ican Mandala. (2023). The Role of Madrasah Ecology in Building Students' Hard Work Character at MAN 1 Kerinci. Journal of Islamic Education Policy. <https://journal.iain-manado.ac.id/index.php/jiep/article/view/2643>

Technology-Enhanced Digital Literacy in the Independent Curriculum for Teaching English in Islamic Early Childhood Education

Aprilian Ria Adisti *

* UIN Salatiga

aprilian@uinsalatiga.ac.id

Muhamad Rozikan **

** UIN Salatiga

rozikanmuhamad@gmail.com

Abstract

The Independent curriculum represents a revitalized approach to education aimed at post-pandemic learning recovery. At the early childhood education level, this curriculum prioritizes fundamental skills such as literacy and numeracy over rote memorization techniques. The integration of digital literacy in English learning aligns with the Independent curriculum's emphasis on optimizing child development in accordance with the Child Development Achievement Level Standard (STPPA). This research adopts a research and development approach using the ADDIE model, comprising Analyze, Design, Develop, Implement, and Evaluate phases. Findings indicate that the developed product is valid and suitable for implementing English teaching in early childhood education, as validated by experts including native speakers, ICT specialists, early childhood educators, Independent curriculum specialists, and preschool teachers. Following testing in five early childhood education schools in Central Java, it was concluded that enhancing digital literacy in English learning for young children reflects the aspirations of the Independent curriculum. This initiative successfully encourages active learning, critical thinking, and the development of character aligned with the Pancasila values among students.

Keywords: *Technology; Digital Literacy; Independent Curriculum; Teaching English; Islamic Early Childhood Education*

INTRODUCTION

With English established as the global Lingua Franca, it serves as a crucial communication tool worldwide. Numerous countries have integrated English language education starting at the earliest levels of schooling (Tang, 2020; Gursay et al., 2017). In recent times, due to rapid developmental progress, children are now being exposed to and learning English from preschool age in Early Childhood Education. Several fundamental reasons highlight why learning English is easier at a young age, particularly that children from 0 to 5 years old are in a "golden age" period before puberty. This critical stage significantly supports optimal child development, impacting their intelligence in later years (Çimen & Bal Gezegin, 2021; Nuraeni, 2019). This period is also recognized as the child's linguistic phase, spanning ages 1 to 5 years, which in linguistic terms is called the language acquisition phase, where children naturally acquire language skills as native speakers (Tabassam, 2024). Moreover, Akbari noted that consistent early exposure to a foreign language results in higher language learning achievement. Their research supports the notion that early childhood is the ideal time for children to naturally acquire foreign language proficiency. During this phase, children can learn a foreign language quickly, naturally, and effectively (Akbari, 2015) (Behlol & Anwar, 2011).

In Indonesia's educational context, English is regarded as a foreign language, while Indonesian is used as the lingua franca in schools. Since 2004, Indonesia has implemented Teaching English to Young Learners (TEYL) as a local curriculum subject in primary schools (Daif-Allah & Aljumah, 2020; Intarapanich, 2013). The inclusion of English in the local curriculum suggests that it is taught with varying objectives in different schools. However, the rapid pace of globalization has necessitated significant changes in Indonesia's curriculum and education system to align with global market demands (Gursay & Eken, 2018). One notable change is the increasing focus on English as an international foreign language in education. Many schools are now actively designing English language programs as extracurricular activities or additional classes. Parents increasingly believe that English proficiency will enhance their children's educational and career prospects (Drigas & Charami, 2014). These perceptions have led to a rise in the number of TEYL programs in schools, with English becoming a priority subject and a hallmark of some internationally-branded schools. This trend is evident from the growing number of schools across Indonesia that are introducing English classes from early childhood education levels.

Post the COVID-19 pandemic, Indonesia's education system underwent significant transformation. Among these changes was the introduction of the

"Independent Curriculum," aimed at revitalizing learning and focusing on nurturing children's interests and talents from an early age. This curriculum emphasizes essential skills, character building, and student competencies, providing teachers with the flexibility to select, develop, and design diverse teaching materials tailored to student needs (Gilakjani & Sabouri, 2017; Taghizadeh & Hasani Yourdshahi, 2020; Chalikandy, 2013).

Rahayu et al. (2022) highlighted that the Independent Curriculum for early childhood education prioritizes essential skills such as literacy and numeracy over traditional memorization methods. This curriculum adopts a constructivist approach, merging Piaget's and Vygotsky's theories, which focus on children's active engagement with their environment (Uztosun, 2018). In this educational framework, children should be stimulated in all developmental aspects, including religious and moral values, cognitive, physical-motor, social-emotional, language, and arts, to fully achieve the Child Development Achievement Level Standards (STPPA).

Learning English is a crucial part of holistic child development, particularly in the language aspect. The English language curriculum should not only develop linguistic abilities but also cover all six developmental aspects as outlined by the STPPA. Hence, enhancing English literacy is a critical reflection of the PAUD Independent Curriculum (Gilakjani & Sabouri, 2017). In the modern era, literacy encompasses more than reading and writing; it has expanded to include digital literacy. Digital literacy involves the ability to access, evaluate, use, and create information using digital technologies in a responsible, creative, innovative, and critical (Tekin & Baykara, 2023; Intarapanich, 2013).

The PAUD Independent Curriculum is deeply connected to digital literacy, emphasizing the STEAM (Science, Technology, Engineering, Arts, and Mathematics) approach, which prepares students to compete in the digital age. Integrating digital literacy into English language learning represents an innovative strategy to achieve the goals of the PAUD Independent Curriculum. Previous studies, such as those by Adisti (Hyett et al., 2014) have developed effective media for teaching English to young learners. Moreover, research on digital literacy by Bekker et al. (2015), Saud (2021), and Alfia et al. (2021) shows a preference among students for using digital technology in learning English.

Furthermore, studies on the PAUD Independent Curriculum, such as those by Prameswari (2020), Pratikno et al. (2022), and Nursarofah (2022), indicate that this curriculum enhances children's developmental potential, independence, and creativity in critical thinking and problem-solving. Despite the existing research, there is a gap in

studies combining the development of digital literacy for teaching English to early childhood learners within the framework of the PAUD Independent Curriculum. Therefore, this study fills that gap by exploring the integration of digital literacy in PAUD English teaching aligned with the Independent Curriculum to achieve STPPA goals.

Additionally, this study aligns with the National PAUD Standards outlined in the Minister of Education and Culture Regulation No. 137 of 2014, covering the scope of early childhood development. This research aims to develop digital literacy in English language learning for early childhood by adopting the Independent Curriculum. It addresses three main questions: (1) What kind of English learning materials are needed in PAUD based on the Independent Curriculum? (2) How can digital literacy for early childhood English learning be designed and developed according to the Independent Curriculum? (3) What are the outcomes of implementing digital literacy in English learning in PAUD?

This research introduces a novelty aspect by integrating digital literacy into early childhood English education within Indonesia's Independent Curriculum. This approach aims to fill educational gaps and meet the demands of the digital age, where both English proficiency and digital skills are increasingly important. By focusing on STEAM principles, the study helps children develop language skills alongside critical thinking, problem-solving abilities, and creativity. The findings are valuable for educators, policymakers, and stakeholders, offering insights into effective teaching methods that support overall child development according to national standards and global competencies. This prepares young learners to excel in a connected and technology-driven world.

METHODS

This study is a Research and Development project utilizing the ADDIE model, which includes the phases of Analyze, Design, Develop, Implement, and Evaluate. The five phases of the ADDIE design model used in this research are: (1) Conducting a needs analysis for children and teachers in early childhood education through surveys, interviews, and curriculum reviews; (2) Designing the digital literacy framework based on the needs analysis; (3) Creating digital literacy resources in the form of a digital book for early childhood English instruction; (4) Implementing the developed product in early childhood education settings; and (5) Evaluating the effectiveness of the digital literacy product in early childhood English learning (Faculty of Arts and Social Science, University of Malaya, Malaysia & Choy, 2014) (Tobi & Kampen, 2018).

This research involves various stakeholders. During the preliminary research phase, data was collected from the management of the Ikatan Guru RA (IGRA) and Ikatan Guru TK (IGTK) in Central Java, as well as from 75 early childhood education teachers in the region. Respondents were purposively selected and represented various kindergartens throughout Central Java. The primary research sites included five early childhood education institutions: two in Salatiga, one in Semarang Regency, one in Surakarta, and one in Kudus.

Four different instruments were employed in this study. The first instrument was an observation guide in the form of a checklist used for non-participant observation (Khasawneh, 2021). The second instrument was an interview guide containing open-ended questions for the respondents. The third instrument was a questionnaire with both open-ended and closed-ended questions for the respondents and experts. The fourth instrument was a documentation guide used to collect relevant documentation and curriculum materials, such as English teaching syllabi, Daily Learning Implementation Plans (RPPH), and other related curriculum documents.

To ensure the validity of the instruments, the quantitative data from the statement items were tested using the Product Moment Validity Test with Microsoft Excel. The reliability of the quantitative data items was tested using the Alpha Cronbach Reliability Test, also with Microsoft Excel. Additionally, experts provided qualitative validation of the instruments. For validating the digital literacy product for early childhood English learning, experts such as native speakers, ICT specialists, early childhood education professionals, Independent Curriculum experts, and early childhood education teachers were involved (Hyett et al., 2014; Uztosun, 2018).

The data validity in this study was ensured through technique triangulation and source triangulation (Almalki, 2016; Tobi & Kampen, 2018). Data from observations and questionnaires were cross-verified with interviews and documentation using technique triangulation, while information obtained from informants was cross-verified using source triangulation from other informants.

This research project utilized the ADDIE model to develop and implement a digital literacy framework for early childhood English instruction (Tobi & Kampen, 2018). Through rigorous analysis, design, development, implementation, and evaluation phases, the study addressed the needs identified among children and teachers in early childhood education settings across Central Java. Stakeholder engagement was integral, involving Ikatan Guru RA (IGRA) and Ikatan Guru TK (IGTK) management, along with 50 early childhood education teachers. The implementation spanned five educational institutions in Salatiga, Semarang Regency, Surakarta, and

Kudus. The research employed a variety of instruments, including observation guides, interview protocols, questionnaires, and documentation reviews, ensuring comprehensive data collection and validation through technique and source triangulation. This study contributes to enhancing digital literacy in early childhood education, aligning with the Independent Curriculum and addressing the evolving needs of English language instruction in Indonesian educational contexts.

RESULTS AND DISCUSSION

An online questionnaire survey was conducted with 50 respondents to determine the requirements for English learning materials in early childhood education that are in line with the Independent Curriculum. The findings are summarized in Table 1 below.

Table 1. Survey Results Analysis

No	Item	Response
1	Necessary English materials according to the Independent Curriculum	- 45% of respondents indicated a need for materials that adhere to the Child Development Achievement Level Standard (STPPA), covering six areas of child development. - 25% of respondents suggested materials that integrate religious and character education. - 15% of respondents preferred materials that involve practical activities or projects. - 15% of respondents proposed other themes, such as introducing basic vocabulary and suggesting learning activities.
2	Essential English skills	- 75% of respondents emphasized speaking skills. - 20% of respondents highlighted listening skills. - 5% of respondents focused on reading skills.
3	Preferred forms of digital literacy	- 40% of respondents favored digital books. - 35% of respondents chose videos. - 15% of respondents recommended digital posters. - 10% of respondents suggested other forms, such as apps and games.

The survey results highlight the most critical needs and recommendations for English learning materials that align with the Independent Curriculum for early childhood education. Key points include the necessity for literacy materials based on STPPA PAUD indicators, which integrate six developmental aspects: religious and moral values, cognitive, physical motor, social-emotional, language, and arts. This is consistent with the National Standard for Early Childhood Education (Permendikbud No. 137 of 2014).

Teachers prioritize teaching speaking skills to children. The respondents' preferred form of digital literacy is a digital book that includes audio and video elements, providing a diverse and engaging approach to English language learning for young children.

Designing and Developing Digital Literacy

During the design and development phase, several essential steps were undertaken:

(a) **Designing sub-themes for English learning materials:** This involved structuring sub-themes based on an analysis of both the TEYL (Teaching English to Young Learners) curriculum and the early childhood education curriculum, with careful consideration of the STPPA benchmarks. Ten sub-themes were identified, including themes such as: "Let's make friends," "Hello my body," "I love my family," "My meal," "Clean my room," "Let's pray," "My feelings," "Can I help you?," "I love school," and "Indonesia is my country."

(b) **Development of the digital book:** Following the thematic design, the digital book began its development phase, incorporating feedback and insights gathered from the needs analysis stage.

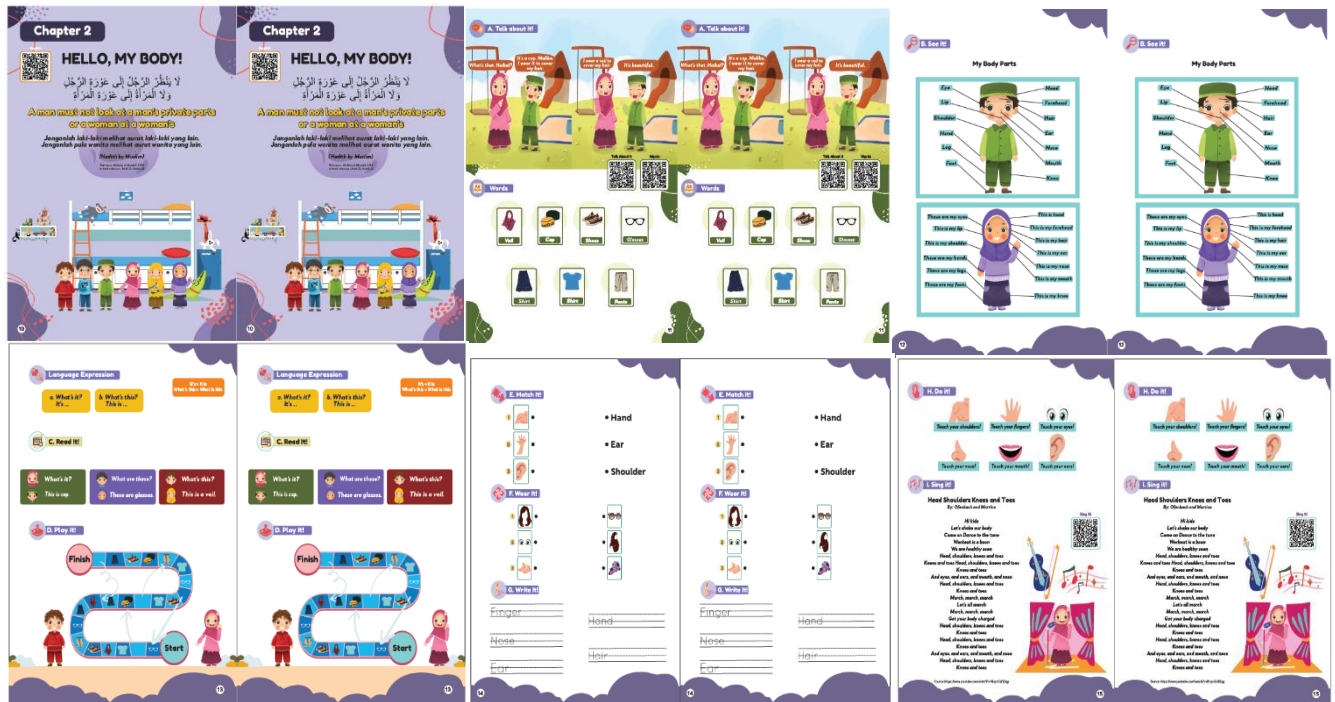
(c) **Validation testing of the product:** Validation involved testing the initial product with a panel of five experts, including a native speaker, ICT specialist, early childhood education expert, Independent Curriculum expert for early childhood education, and PAUD teachers.

(d) **Revision of the second phase of product development:** Based on expert feedback, the second phase underwent revisions to enhance the research product.

(e) **Implementation of the validated digital literacy product:** Once endorsed by all experts, the digital literacy product was prepared for implementation in English language learning across five PAUD schools in Central Java.

Highlighted below are excerpts from the validated digital book as reviewed and approved by the experts.

Figure 1. Documentation of the Product



Implementation of Digital Literacy in Early Childhood English Learning

The entire content of the digital book encompasses the Early Childhood Education National Standards (STPPA) that must be achieved in PAUD, considering the indicators of the Independent Curriculum. Additionally, the learning materials are aligned with TEYL (Teaching English to Young Learners) and the PAUD curriculum. The implementation of Digital Literacy in Early Childhood English Learning The final stage involved implementing the development of digital literacy in English language learning. In this stage, five schools served as testing grounds for implementing the research product: two schools in the Salatiga region, one school in the Semarang Regency, one school in the Surakarta region, and one school in the Kudus region. Throughout the use of this product, continuous observations were made to understand the ongoing conditions and student responses when taught English using this product. Observations showed positive attitudes and enthusiasm among students in learning English.

To strengthen these observations, interviews were conducted with PAUD teachers using the research product in classrooms. The interview results also indicated positive reactions from teachers regarding the research product, such as in the interview with Ms. TS. "The digital book greatly aids us in teaching English because it includes clear audio for reading instructions and serves as our guide when pronouncing specific sentences or vocabulary. Moreover, this book synchronizes with various

aspects of child development, including the introduction to religious moderation that supports moral and religious values, simple readings that are easily understandable by children, artistic elements supplemented with video links, and instructions for children to move like the TPR method, along with interesting dialogues about character education, introducing the Republic of Indonesia (NKRI), and Pancasila, all fitting with the Independent Curriculum, accompanied by visually appealing and colorful images for children." However, observations also noted some challenges in implementing this product, as highlighted by Ms. SM. "The book is excellent, but it would be better if each child had their own copy so they wouldn't have to share. Perhaps a suggestion regarding the art aspect, such as singing, as there are a few songs that are somewhat unfamiliar to us, so we need to learn them first before teaching them to the children."

Based on the observations and interviews with respondents, it can be concluded that the development of digital literacy products aligns with the spirit of the Independent Curriculum in PAUD promoted by the government. The book has been developed in accordance with needs analysis and indicators of the Independent Curriculum, focusing on nurturing children's interests and talents and their enthusiasm for learning English through enjoyable materials. This has been validated by experts who affirmed that the product is valid and suitable for broader use in teaching English to young children. The results of testing the product in five schools also showed positive reactions when used in teaching. However, there are some limitations in this study, such as the lack of in-depth effectiveness testing and technical challenges for teachers in using this digital book, which has not yet been widely distributed to students. Certainly, these aspects provide opportunities for further research to continue evaluating the scientific effectiveness of the research product on student achievement performance.

The results of this developmental research support the constructivist theory using a child-centered approach developed by Vygotsky (Cozma, 2015). Learning English using a digital book makes children creative and independent learners through experiential contexts and critical thinking, which aligns with the goals of the Independent Curriculum. Children not only memorize vocabulary but also engage in enjoyable activities within this digital book, such as role-playing, singing, playing games, listening to short stories, and participating in artistic activities that introduce them to culture, religious moderation, character education, etc., aligning with the Pancasila learner profile in the Independent Curriculum.

Based on the comprehensive process outlined, this study undertook a systematic approach to develop and implement digital literacy for early childhood

English learning, following the ADDIE model (Analyzing, Designing, Developing, Implementing, and Evaluating). Beginning with a needs analysis through an online questionnaire survey involving 50 respondents, the research identified crucial requirements for English learning materials aligned with the Independent Curriculum in early childhood education. The findings emphasized the integration of STPPA PAUD indicators across six developmental aspects, reinforcing the National Standards for Early Childhood Education (Permendikbud No. 137 of 2014). Teachers prioritized speaking skills and endorsed a digital book format with audio and video elements, facilitating engaging English language instruction for young learners.

During the design and development phase, the study structured ten sub-themes for English learning materials, aligning with both TEYL and PAUD curricula while meeting STPPA benchmarks. The subsequent development of the digital book incorporated feedback from experts in native English proficiency, ICT, early childhood education, Independent Curriculum for PAUD, and PAUD teaching. Validation testing ensured the product's alignment with educational goals, leading to revisions that enhanced its efficacy and relevance.

Implementation took place across five PAUD schools in Central Java, validating the product's effectiveness through continuous observation and teacher feedback. Positive student attitudes and teacher reactions underscored the book's alignment with the Independent Curriculum's spirit, fostering enthusiasm and effective learning experiences. However, challenges such as resource distribution and technical proficiency among teachers highlighted areas for improvement and future research.

Overall, this developmental research supports a constructivist approach to early childhood education, echoing Vygotsky's child-centered theory. By integrating digital literacy into English learning, the study enhances critical thinking, creativity, and cultural understanding, integral to the Pancasila learner profile underpinning the Independent Curriculum. The study's findings contribute to ongoing educational discourse and provide a framework for future research into optimizing digital tools for holistic child development and effective English language learning in early childhood education contexts.

CONCLUSION

Based on the investigation findings, the English language learning materials recommended by respondents during the needs analysis stage are literacy materials derived from the STPPA PAUD indicators, which can integrate with six aspects of child development, taking into account character education and a child-centered approach

characteristic of the Independent Curriculum. During the design and development phase of the product, the process began with designing ten sub-themes based on curriculum analysis and respondent needs analysis recommendations. These were subsequently developed and validated by five experts, including a native speaker, ICT expert, early childhood education specialist, Independent Curriculum expert, and PAUD teacher. The validated product was then tested in five PAUD schools in Central Java, demonstrating positive outcomes in early childhood English language learning. Therefore, it is concluded that developing digital literacy for early childhood English learning reflects the objectives of the Independent Curriculum by encouraging students to become active learners, capable of critical thinking, and embodying character traits aligned with the Pancasila learner profile in the Independent Curriculum.

Furthermore, according to the investigation findings, the recommended English language learning materials for early childhood education align with STPPA PAUD indicators and integrate with six aspects of child development, emphasizing character education and a child-centered approach typical of the Independent Curriculum. The design and development phase involved creating ten sub-themes based on curriculum and respondent analyses, subsequently validated by a panel of five experts. Implementation in five PAUD schools in Central Java yielded positive outcomes, supporting early childhood English language learning. However, limitations include the lack of in-depth effectiveness testing and technical challenges faced by teachers using digital books. Future research should consider longitudinal studies, broader geographical sampling, enhanced teacher training, and comparisons with traditional pedagogical methods to further explore the integration of digital literacy in early childhood education.

REFERENCES

- Akbari, Z. (2015). Current Challenges in Teaching/Learning English for EFL Learners: The Case of Junior High School and High School. *Procedia - Social and Behavioral Sciences*, 199, 394–401. <https://doi.org/10.1016/j.sbspro.2015.07.524>
- Almalki, S. (2016). Integrating Quantitative and Qualitative Data in Mixed Methods Research—Challenges and Benefits. *Journal of Education and Learning*, 5(3), 288. <https://doi.org/10.5539/jel.v5n3p288>
- Behlol, M. G., & Anwar, M. (2011). Comparative Analyses of the Teaching Methods and Evaluation Practices in English Subject at Secondary School Certificate (SSC) and General Certificate of Education (GCE O-Level) in Pakistan. *International Education Studies*, 4(1), p202. <https://doi.org/10.5539/ies.v4n1p202>
- Chalikandy, M. A. (2013). A Comprehensive Method for Teaching English for Specific Purpose. *Arab World English Journal*, 4(4).
- Çimen, Ş. S., & Bal Gezegin, B. (2021). An Analysis of Theses Written on Teaching English to Young Learners in Turkey. *Dil Eğitimi ve Araştırmaları Dergisi*, 7(2), 356–370. <https://doi.org/10.31464/jlere.958734>
- Cozma, M. (2015). The Challenge of Teaching English to Adult Learners in Today's World. *Procedia - Social and Behavioral Sciences*, 197, 1209–1214. <https://doi.org/10.1016/j.sbspro.2015.07.380>
- Daif-Allah, A. S., & Aljumah, F. H. (2020). Developing the English Language Teaching Skills of Saudi Teachers of Young Learners. *English Language Teaching*, 13(3), 20. <https://doi.org/10.5539/elt.v13n3p20>
- Drigas, A., & Charami, F. (2014). ICTs in English Learning and Teaching. *International Journal of Recent Contributions from Engineering, Science & IT (iJES)*, 2(4), 4. <https://doi.org/10.3991/ijes.v2i4.4016>
- Faculty of Arts and Social Science, University of Malaya, Malaysia, & Choy, L. T. (2014). The Strengths and Weaknesses of Research Methodology: Comparison and Complimentary between Qualitative and Quantitative Approaches. *IOSR Journal of Humanities and Social Science*, 19(4), 99–104. <https://doi.org/10.9790/0837-194399104>
- Gilakjani, A. P., & Sabouri, N. B. (2017). Teachers' Beliefs in English Language Teaching and Learning: A Review of the Literature. *English Language Teaching*, 10(4), 78. <https://doi.org/10.5539/elt.v10n4p78>
- Gürsoy, E., & Eken, E. (2018). English teachers' understanding of the new English language teaching program and their classroom implementations.
- Hyett, N., Kenny, A., & Dickson-Swift, V. (2014). Methodology or method? A critical review of qualitative case study reports. *International Journal of Qualitative Studies on Health and Well-Being*, 9(1), 23606.

<https://doi.org/10.3402/qhw.v9.23606>

- Intarapanich, C. (2013). Teaching Methods, Approaches and Strategies Found in EFL Classrooms: A Case Study in Lao PDR. *Procedia - Social and Behavioral Sciences*, 88, 306–311. <https://doi.org/10.1016/j.sbspro.2013.08.510>
- Khasawneh, M. A. S. (2021). The Relationship of Curriculum, Teaching Methods, Assessment Methods, and School and Home Environment with Learning Difficulties in English Language from the Students' Perspectives. *Technium Social Sciences Journal*, 23, 285–295. <https://doi.org/10.47577/tssj.v23i1.4117>
- Nuraeni, C. (2019). Using Total Physical Response (TPR) Method on Young Learners English Language Teaching. *Metathesis: Journal of English Language, Literature, and Teaching*, 3(1), 26. <https://doi.org/10.31002/metathesis.v3i1.1223>
- Tabassam, M. (2024). An Exploration of Young Learners' Motivation Level inLight of TEYL Principles: Private vs. Public Schools in Sialkot.
- Taghizadeh, M., & Hasani Yourdshahi, Z. (2020). Integrating technology into young learners' classes: Language teachers' perceptions. *Computer Assisted Language Learning*, 33(8), 982–1006. <https://doi.org/10.1080/09588221.2019.1618876>
- Tekin, S., & Baykara, T. (2023). Teaching English to Young Learners: Combining Theory and Practice through Practicum in Pre-service Teacher Education. 5(1).
- Tobi, H., & Kampen, J. K. (2018). Research design: The methodology for interdisciplinary research framework. *Quality & Quantity*, 52(3), 1209–1225. <https://doi.org/10.1007/s11135-017-0513-8>
- Uztosun, M. S. (2018). Professional competences to teach English at primary schools in Turkey: A Delphi study. *European Journal of Teacher Education*, 41(4), 549–565. <https://doi.org/10.1080/02619768.2018.1472569>

Reinterpreting Ethical Values in "Ta'lim Al Muta'allim" for Contemporary Learning Contexts: A Humanistic Approach

Muhammad Nurul Mubin *

1 Universitas Islam Negeri Sunan Kalijaga Yogyakarta, Indonesia
mnmubin96@gmail.com

Iffah Khoiriyatul Muyassaroh **

2 * Universitas Islam Negeri Sunan Kalijaga Yogyakarta, Indonesia
iffahkms@gmail.com

Abstract

This study aims to reinterpret the ethical values presented in the classical Islamic text "*Ta'lim Al Muta'allim*" by Shaykh Az Zarnuji, adapting them for humanistic application within contemporary learning environments. Employing a qualitative literature review methodology, this research examines the compatibility of these traditional values with modern educational contexts. Through systematic selection and thematic analysis of academic sources, the study identifies critical critiques of Az Zarnuji's ethical prescriptions, including their perceived rigidity and hierarchical nature. The findings reveal that values such as the physical orientation of study, the avoidance of doubtful matters, and the hierarchical teacher-student relationship require adaptation to align with the dynamic, flexible, and inclusive nature of modern learning. The reinterpretation ensures these values remain relevant and beneficial by integrating academic integrity, collaboration, and digital literacy principles. The study's implications are significant for Islamic educational institutions seeking to modernize curricula, promoting a holistic educational model that combines religious and secular knowledge, fostering intellectual growth, moral development, and social responsibility. However, this research acknowledges its limitations in theoretical focus and context dependence, recommending future empirical validation in diverse educational settings.

Keywords: Ethical values, Contemporary learning, *Ta'lim Al Muta'allim*.

INTRODUCTION

The significance of rethinking humanized ethical values in education has never been more crucial in today's rapidly changing global context. With the increasing interconnectedness and complexities of contemporary learning environments, traditional ethical frameworks are often challenged and deemed insufficient to address modern educational needs (Auda, 2008; Rahman, 2006). "*Ta'lim Al Muta'allim*," a seminal work by Sheikh Az-Zarnuji, has long been a foundational text for students in Islamic boarding schools (pesantren) worldwide. This text provides comprehensive guidance on the ethics of learning, emphasizing behaviors and attitudes essential for students' intellectual and moral development. However, the evolving educational landscape necessitates critically examining and potentially re-interpretation of these traditional values to ensure their relevance and applicability in contemporary settings (Al-Jabri, 1990).

Previous studies have extensively explored the ethical dimensions of "*Ta'lim Al Muta'allim*," highlighting its enduring relevance in various educational contexts. For instance, research outlines the ethical imperatives prescribed by Az-Zarnuji, such as sincerity in learning, prayer, facing the *Qibla*, maintaining warm (caution), trust, patience, compassion, consultation, and respect for knowledge and teachers (Ramadhan et al., 2023). Similarly, other studies discuss aligning these ethical principles with the character education goals in Indonesia, affirming their continued significance (Irfan Faruq, 2024). Additionally, studies demonstrate the universal applicability of the teacher-student ethics delineated by Al-Āmili, underscoring their potential for contemporary actualization (Muntakhib et al., 2020).

Paragraph 3 Other scholars have examined the practical applications of Az-Zarnuji's ethics in modern educational settings. Some research emphasizes the foundational role of divine revelation and experiential learning in Az-Zarnuji's educational philosophy (Abdurrahman, 2022). Others identify Islamic values inherent in these ethical practices, such as emulating the Prophet Muhammad, adhering to Islamic personality traits, and engaging in *ijtihad* (independent reasoning) (Putra, 2021). Further studies elucidate the character values embedded in "*Ta'lim Al Muta'allim*," which include active learning, honesty, intelligence, and perseverance (Bela et al., 2022).

The practical implementation of Az-Zarnuji's ethical guidelines has also been a focus of empirical studies. Research reveals how applying "*Ta'lim Al Muta'allim*" fosters moral values among students in Indonesian Islamic boarding schools, such as love for Allah, knowledge, patience, and steadfastness (Setiyono et al., 2023). Other studies discuss the criteria for selecting ideal educators according to Az-Zarnuji, highlighting

attributes like piety and seniority (Hasanah & Aprilianto, 2020). Additionally, research extends this discussion by illustrating the ethical responsibilities of teachers towards themselves, their students, and their books to achieve ultimate spiritual goals (Hanipudin et al., 2023).

Further research outlines the dual role of teachers in Az-Zarnuji's framework, balancing sufistic and pragmatic approaches to moral education (Candra et al., 2020). Other studies emphasize the importance of a supportive learning environment for character development, advocating for carefully selecting educators and peers (Huda & Kartanegara, 2015a). Additional research details the role of Islamic education teachers in nurturing moral development, stressing the integration of faith and love for God as foundational elements (Aulia et al., 2022).

Despite the robust body of literature on "*Ta'lim Al Muta'allim*," notable gaps and limitations warrant further exploration. Contemporary critiques highlight the need to adapt ethical practices to modern educational contexts. For example, facing *Qibla* during study sessions may be less relevant in today's global and virtual learning environments (Ramadhan et al., 2023). Similarly, war can be perceived as overly restrictive, potentially hindering the openness and experimentation crucial for modern innovation (Auda, 2021). These limitations underscore the need to re-interpret Az-Zarnuji's ethics to accommodate contemporary educational demands.

This study aims to reinterpret the ethical values in "*Ta'lim Al Muta'allim*" to enhance their applicability and humanism in contemporary learning contexts. This research seeks to offer a nuanced understanding that bridges the gap between classical Islamic ethics and contemporary pedagogical practices by critically examining these traditional ethical principles through the lens of modern educational needs and dynamics. The findings of this study are expected to contribute significantly to the ongoing discourse on ethical education, providing a framework that integrates timeless values with the demands of modernity.

METHODS

The study employs a literature review methodology to examine and reinterpret the ethical values in "*Ta'lim Al Muta'allim*" for their application in contemporary learning contexts, adopting a qualitative and exploratory research design. The research topic was initially defined, and objective criteria for literature selection were established. Relevant sources were meticulously chosen from academic materials, including journal articles, books, research reports, theses, dissertations, and online content, and evaluated for relevance, quality, and contribution to the topic. Tools such as digital databases (Elsevier, Google Scholar, university library systems) and reference management software (EndNote, Mendeley) facilitated the literature review process by

ensuring systematic documentation and retrieval of references. Data collection involved systematic searching and screening of literature based on predefined criteria, followed by thematic analysis to extract and synthesize pertinent information on ethical values in "*Ta'lim Al Muta'allim*" for modern educational applications. To ensure reliability and validity, the quality and credibility of sources were critically assessed, triangulation was employed to enhance robustness, and opposing viewpoints were included to provide a balanced perspective. This methodological rigor aimed to contribute significantly to the discourse on enhancing educational quality by applying ethical values from "*Ta'lim Al Muta'allim*" in contemporary learning environments (citation needed).

RESULT AND DISCUSSION

Conflicting Ethical Values in Learning in the Book "*Ta'lim Al Muta'allim*" in the Modern Era

In the book "*Ta'lim Al Muta'allim*," Shaykh Az Zarnuji outlines various ethical points in seeking knowledge that has received criticism from modern figures for being incompatible with contemporary contexts. This criticism encompasses several aspects reflecting the changing values and needs in modern learning, which is more dynamic, flexible, and inclusive. One critique raised is the recommendation to face the *Qibla* when studying. Modern figures argue that such physical orientation is irrelevant in globalization and modern technology, where learning often occurs virtually and cross-culturally. According to them, the focus should be more on the substance and quality of learning rather than physical orientation.

Additionally, the concept of *Wara'*, or avoiding doubtful matters, is considered too restrictive in the modern context. Modern figures encourage openness to new knowledge and experimentation that can drive innovation and creativity as long as it does not violate universal moral principles (Shen et al., 2019). Respecting peers also remains essential, but perspectives on this can differ. In the modern era, healthy collaboration and critical discussion are valued more than mere respect without providing input or constructive criticism.

In choosing a teacher, in the digital era, access to knowledge is no longer limited to a specific teacher. Many modern figures encourage learning from various sources and online platforms and developing self-learning skills. While respecting teachers is still important, an overly hierarchical approach is criticized. Contemporary learning promotes a more egalitarian relationship between teachers and students, where dialogue and two-way feedback are more appreciated (Weiss et al., 2024).

Appreciating knowledge in the modern context is through symbolic respect and applying and developing that knowledge for societal advancement. Criticism arises if

the appreciation of knowledge is merely ceremonial without tangible implementation. Finally, respecting books remains essential, but modern figures emphasize that the value of knowledge is not only found in the physical form of books but also in various digital forms and other media that should be equally valued.

These critiques reflect efforts to adapt the tradition of ethical knowledge-seeking to the ever-changing times so that learning values can remain relevant and beneficial in a broader context. Fazlur Rahman criticized the intellectual stagnation in the Islamic educational tradition, focusing on memorization and commentary on classical texts without innovation. According to him, the dualism in Islamic education that separates religious and secular sciences hinders the development of holistic and integrative education. Rahman argues that traditional education emphasizes acquiring knowledge rather than encouraging creativity and critical thinking. In the context of *"Ta'lim Al Muta'allim,"* Rahman's approach underscores the importance of teaching methods that promote critical exploration, profound understanding, and systematic interpretation for solutions relevant to contemporary contexts. He proposed integrating Western intellectualism with the Islamic tradition, emphasizing creativity, systematic interpretive methodology, and applying Quranic values in modern social-moral contexts (Rahman, 2006).

Jasser Auda reinterpreted the Maqasid Shariah to ensure the relevance of Shariah in the modern context, expanding its scope to include universal values such as justice and freedom, which are not recognized in classical fiqh literature. Auda also responds to global challenges by incorporating human rights, social reform, and women's rights, following thinkers like Rashid Rida and Yusuf al-Qaradawi. In the context of *"Ta'lim Al Muta'allim,"* Auda's approach broadens the understanding of humanistic educational ethics, integrating universal values into learning. He introduces new concepts reflecting contemporary needs and values, ensuring Islamic law remains relevant and effective in the modern context (Auda, 2008).

Both thinkers contribute to efforts to make Islam more adaptive and responsive to contemporary needs in the context of learning. Rahman focuses on creativity and systematic interpretive methodology, while Auda offers a reinterpretation of Maqasid Shariah that encompasses universal values and global issues. They emphasize the importance of a holistic and integrative approach in Islamic education and interpretation, combining religious and secular sciences and ensuring the relevance of Shariah in the modern context. Their approaches reflect efforts to integrate universal human values with Islamic teachings, creating space for cross-cultural and interfaith dialogue and cooperation and paving the way for a just, balanced, and civilized society facing global and local challenges. This approach is highly relevant for reinterpreting *"Ta'lim Al Muta'allim,"* emphasizing the importance of human-centered educational

ethics in contemporary learning.

Reinterpreting the Ethical Values of Learning in the "*Ta'lim Al Muta'allim*" Book Humanistically in Contemporary Learning

This research aims to reinterpret the ethical values of learning in the book "*Ta'lim Al Muta'allim*" so that they can be humanistically applied in the context of contemporary learning. One of the values examined is the intention of learning, which is traditionally focused on worship and seeking the pleasure of Allah. In the modern context, this intention can be expanded to include goals such as improving the quality of life, contributing to society, and personal development. Additionally, praying before studying to seek guidance and blessings can be adapted into the practice of reflection or meditation to calm the mind before studying, recognized for its benefits across various traditions and scientific studies.

Furthermore, the value of facing the *Qibla* as a form of respect can be transformed into a mental orientation and deep focus on the material being studied, regardless of the location. The concept of *Wara'*, which means avoiding doubtful or suspicious matters, can be translated into the modern context as maintaining academic integrity and research ethics and being critical of the information received while remaining open to innovation. The value of *tawakkal*, rooted in surrendering to Allah after making an effort, can be understood in the contemporary context as acknowledging the importance of hard work and perseverance while accepting outcomes with a positive mindset and developing resilience in the face of failure.

Patience in the long learning process, as taught in the classical tradition, can be reinterpreted to emphasize the importance of patience in skill and knowledge development and in facing learning challenges and difficulties. The value of compassion towards fellow seekers of knowledge can be developed into efforts to foster empathy, cooperation, and mutual support within academic and professional communities.

Musya^{Wara'h}, or discussion and consultation with teachers and peers in the modern context, becomes the promotion of collaboration, scientific discussion, and peer review to enrich understanding and innovation. Selecting knowledge that benefits both this world and the hereafter can be adapted to choosing fields of study relevant to contemporary needs, personal interests, and social contributions. Similarly, choosing good friends who support the learning process can be translated into building positive and inspiring professional and academic networks.

Selecting pious and knowledgeable teachers in the past can now be translated into choosing competent and inspiring mentors and learning sources that facilitate intellectual and personal growth. Valuing knowledge as something noble can be realized through practical application, innovation, and the dissemination of knowledge

for the common good.

In the classical tradition, respecting teachers with obedience and reverence can be adapted into appreciating their contributions while encouraging open dialogue and constructive feedback. Honoring books as sources of knowledge can be interpreted as respecting all forms of knowledge, whether in physical books, electronic journals, or other digital media. Finally, respecting fellow learners can be adapted into professional attitudes, openness, and cooperation in modern learning communities.

Table 1. The reinterpretation of ethical values in seeking knowledge from traditional to modern contexts

No.	Ethical Values in Seeking Knowledge	Traditional Context	Modern Context
1	Intention to Learn	Learning with the intention of worship and seeking Allah's pleasure	The intention to learn can be expanded to include goals of improving quality of life, contributing to society, and personal development.
2	Prayer	Commencing learning with prayers for guidance and blessings	Prayer can be interpreted as contemplation or meditation to calm the mind before learning, recognized for its benefits in various traditions and scientific studies.
3	Facing <i>Qibla</i>	Facing <i>Qibla</i> as a form of respect and sacredness	Physical orientation can be replaced with mental orientation and deep focus on the material being studied, wherever it may be.
4	<i>Wara'</i>	Avoiding doubtful or suspicious matters	They uphold academic integrity and research ethics and are critical of received information while remaining open to innovation.
5	<i>Tawakkal</i>	Surrendering to Allah after making an effort	We acknowledge the importance of hard work and effort while accepting outcomes with a positive mindset and developing resilience in facing failures.

6	Patience	Patience in the lengthy learning process	It is understanding the importance of patience in developing skills and knowledge and facing challenges and learning difficulties.
7	Compassion	Showing compassion to fellow seekers of knowledge	Cultivating empathy, cooperation, and mutual support in academic and professional communities.
8	Consultation	Discussion and consultation with teachers and peers	Promoting collaboration, scientific discussions, and peer review enriches understanding and innovation.
9	Choosing Knowledge	Choosing knowledge beneficial for this world and the hereafter	Selecting fields of study relevant to contemporary needs, personal interests, and societal contributions.
10	Choosing Friends	Choosing good friends who support the learning process	Building positive and inspiring professional and academic networks.
11	Choosing Mentors	Choosing knowledgeable and righteous mentors	Selecting mentors and learning sources that are competent, inspiring, and facilitate intellectual and personal growth.
12	Valuing Knowledge	Valuing knowledge as something noble	I value knowledge through practical application, innovation, and dissemination of knowledge for the collective good.
13	Respecting Teachers	Respecting teachers with obedience and reverence	They respect teachers by appreciating their contributions while encouraging open dialogue and constructive feedback.
14	Revering Books	Revering books as sources of knowledge	I am revering all forms of knowledge, whether in physical books, electronic journals, or other digital media.
15	Respecting Peers	Respecting fellow seekers of knowledge	I respect peers in learning with a professional attitude, openness, and collaboration.

This table summarizes the reinterpretation of ethical values in seeking knowledge from traditional to modern contexts, aligning with the adapted thoughts of Syekh Az Zarnuji and Jasser Auda.

By reinterpreting these values, this research aims to make the ethics of seeking knowledge more relevant and applicable in the modern world without neglecting its essence and fundamental values. This adaptation seeks to bridge the gap between traditional teachings and contemporary needs, recognizing the evolving nature of knowledge acquisition and application. By embracing a broader perspective on the intentions behind learning, the methods of seeking guidance, and the attitudes towards fellow seekers and mentors, these ethical values can resonate more deeply with individuals navigating the complexities of today's educational and professional landscapes. Through this process of reinterpretation, the aim is to foster a culture of ethical conduct, critical thinking, and continuous learning that enriches both personal growth and societal progress..

Analysis of Reinterpreting the Ethical Values of Learning in the "*Ta'lim Al Muta'allim*" Book Humanistically

The primary objective of this research was to reinterpret the ethical values of learning as outlined in Shaykh Az-Zarnuji's "*Ta'lim Al Muta'allim*" and to apply them humanistically within contemporary learning contexts. This investigation was motivated by the critique that some ethical guidelines in the text may be outdated or incompatible with modern educational settings, emphasizing flexibility, inclusivity, and technological integration (Irfan Faruq, 2024; Ramadhan et al., 2023). These critiques reflect a broader trend within Islamic education to reconcile traditional teachings with contemporary needs, which involves critical reinterpretation and contextual adaptation (Huda & Kartanegara, 2015b).

The study found several conflicting ethical values in "*Ta'lim Al Muta'allim*" when applied to modern contexts. The recommendation to face *Qibla* during the study is notable among these, deemed irrelevant in a globalized, virtual learning environment. Similarly, *Wara'*, or avoiding doubtful matters, is seen as overly restrictive, potentially stifling innovation and openness to new knowledge (Candra et al., 2020). Furthermore, the hierarchical teacher-student relationship promoted by the text contrasts with contemporary educational practices that value egalitarian dialogue and mutual feedback (Putra, 2021; Setiyono et al., 2023).

These findings align with Fazlur Rahman's critique of intellectual stagnation in Islamic education, which he attributed to an overemphasis on rote memorization and commentary on classical texts without fostering critical thinking and innovation (Rahman, 2006). Rahman's advocacy for integrating Western intellectualism with

Islamic tradition mirrors the call for a more dynamic and inclusive approach to learning ethics. Additionally, Jasser Auda's reinterpretation of Maqasid Shariah, emphasizing justice, freedom, and universal human rights, supports updating educational values to remain relevant in a modern context (Auda, 2008).

The research also resonates with contemporary educational models prioritizing practical application and social contribution over ceremonial respect. For instance, the study's emphasis on modernizing the value of facing the *Qibla* to focus on mental orientation and deep engagement parallels global educational practices that stress mindfulness and reflective learning techniques (Abdurrahman, 2022). Moreover, the reinterpretation of *tawakkal* to highlight perseverance and resilience aligns with modern educational psychology, which values grit and a growth mindset as crucial for academic and personal success (Rosidah et al., 2024).

The findings suggest that while traditional ethical values in "*Ta'lim Al Muta'allim*" have foundational significance, their application requires adaptation to remain effective in contemporary learning contexts. This reinterpretation involves transforming physical and ceremonial practices into mental and practical orientations that align with modern educational philosophies. However, it is essential to approach this reinterpretation cautiously, ensuring that the core ethical principles, such as respect for knowledge and teachers, are preserved while making necessary adjustments (Maslani et al., 2018).

Significantly, this research underscores the need to balance traditional Islamic values with contemporary educational practices. The reinterpreted values, such as maintaining academic integrity and fostering collaboration, can enhance the relevance and effectiveness of Islamic education today. However, careful contextual understanding and application are crucial to avoid superficial or misaligned adaptations that may dilute the essence of the original ethical teachings (Hanipudin et al., 2023). This balanced approach ensures that ethical guidelines remain meaningful and practical in a rapidly changing educational landscape.

The implications of these findings are profound for Islamic educational institutions and scholars seeking to modernize their curricula. By adapting traditional ethical values to contemporary contexts, educators can cultivate a learning environment rooted in Islamic principles and responsive to global educational standards. This approach promotes a holistic and integrative educational model that combines religious and secular knowledge, fostering intellectual growth, moral development, and social responsibility. Ultimately, this research contributes to the ongoing dialogue on educational reform within the Islamic tradition, highlighting the importance of human-centered ethics in contemporary learning.

CONCLUSION

This study aimed to reinterpret the ethical values of learning as delineated in the book "*Ta'lim Al Muta'allim*" to ensure their humanistic application within contemporary educational contexts. The main findings indicate that several ethical values prescribed by Shaykh Az Zarnuji face criticism in the modern era for being incompatible with the dynamic, flexible, and inclusive nature of contemporary learning environments. Critical critiques involve the physical orientation of study, restrictive avoidance of doubtful matters, hierarchical teacher-student relationships, and symbolic appreciation of knowledge. The implications of these findings are significant for the field of Islamic education. By modernizing these traditional ethical values, educators can create a learning environment that adheres to Islamic principles while meeting global educational standards. This dual approach fosters a holistic and integrative educational model, combining religious and secular knowledge to promote intellectual growth, moral development, and social responsibility. Such a model aligns with contemporary educational needs and preserves the essence of Islamic ethical teachings. However, this study has limitations that must be acknowledged. The reinterpretation of ethical values is context-dependent and may vary significantly across cultural and educational settings. Furthermore, the study primarily focuses on theoretical aspects, necessitating empirical validation through practical implementation in various educational institutions. Future research should aim to empirically test these reinterpreted values in diverse educational contexts to assess their practical applicability and effectiveness. Additionally, further exploring integrating universal values with Islamic teachings can provide deeper insights into creating a balanced and comprehensive educational framework. By addressing these areas, future studies can contribute to the ongoing dialogue on educational reform within the Islamic tradition, emphasizing the importance of human-centered ethics in contemporary learning environments.

REFERENCES

- Abdurrahman, A. (2022). Konsep Pendidikan Al-Zarnuji: Tujuan Pendidikan dan Metode Pembelajaran. *Al-Gazali Journal of Islamic Education*, 1(01), 1–12.
- Auda, J. (2008). *Maqasid Al-Shariah as Philosophy of Islamic Law*. International Institute of Islamic Thought. <https://doi.org/10.2307/j.ctvkc67tg>
- Auda, J. (2021). Maqasid Methodology for Re-Envisioning Islamic Higher Education. *Journal of Contemporary Maqasid Studies*, 1(1), 31–58. <https://doi.org/10.52100/jcms.v1i1.58>

- Aulia, E. R., P. F. R., & Siregar, B. (2022). The Role of Islamic Religious Education Teachers in Moral Development in MTs. Private Al-Azhar Medan Sunggal. *Britain International of Linguistics Arts and Education (BioLAE) Journal*, 4(3), 216–224. <https://doi.org/10.33258/biolae.v4i3.778>
- Bela, N., Jannah, S. R., & Jaenullah, J. (2022). An Analysis of Book T'alimul Muta'alim on Education Character and It's Relationship with Education Character Programs at Indonesia. *Bulletin of Pedagogical Research*, 3(1), 10. <https://doi.org/10.51278/bpr.v3i1.213>
- Candra, W., Amda, A. D., & Bariyanto, B. (2020). Peran Guru Dan Akhlak Siswa Dalam Pembelajaran: Perspektif Syekh Az-Zarnuji Kitab Ta'lim Muta'allim. *Andragogi: Jurnal Pendidikan Islam Dan Manajemen Pendidikan Islam*, 2(2), 262–279.
- Hanipudin, S., Subki, T., & Daliah, D. (2023). ETIKA PEMBELAJARAN GURU DALAM KITAB ADABUL ALIM WAL MUTA'ALLIM. *Al-Munqidz: Jurnal Kajian Keislaman*, 11(1), 68–77.
- Hasanah, M., & Aprilianto, A. (2020). Analisis model rekrutmen dan seleksi pendidik dalam kitab ta'alimul muta'allim syaikh az-zarnuji. *MANAGERE: Indonesian Journal of Educational Management*, 2(1), 20–32.
- Huda, M., & Kartanegara, M. (2015a). Aim Formulation of Education: An Analysis of The Book Ta'lim al-Muta'allim. *International Journal of Humanities and Social Science*, 5(2), 143–149.
- Huda, M., & Kartanegara, M. (2015b). Curriculum conception in the perspective of the book ta'lim al-muta'allim. *International Journal of Education and Research*, 3(2), 221–232.
- Irfan Faruq. (2024). Nilai – nilai Pendidikan Akhlak pada Kitab Ta'lim Muta'allim dan Aktualisasinya terhadap Pendidikan Karakter di Indonesia. *Bandung Conference Series: Islamic Education*, 4(1), 448–452. <https://doi.org/10.29313/bcsied.v4i1.12429>
- Maslani, M., Suntiah, R., Yasniwanti, Y., & Nurulhaq, D. (2018). Al-zarnuji's thought of Education and its Implementation at pesantren. *Jurnal Pendidikan Islam*, 3(2), 179. <https://doi.org/10.15575/jpi.v3i2.1312>
- Muntakhib, A., Syukur, F., Ma'arif, S., & Musthofa, M. (2020). Aktualisasi Etika Guru dan Murid Al-Āmili di Era Disrupsi. *Jurnal SMART (Studi Masyarakat, Religi, Dan Tradisi)*, 6(2), 159–172.

- Putra, R. A. R. (2021). Menilik nilai-nilai keislaman dalam etika profesi personal pengembang teknologi pembelajaran. *JIE (Journal of Islamic Education)*, 6(2), 158–172.
- Rahman, F. (2006). *Islam and Modernity: Transformation of an Intellectual Tradition*. Pustaka Press.
- Ramadhan, S., Himmawan, D., & Rusydi, I. (2023). Konsep Etika Belajar Menurut Syeikh Az-Zarnuji (Studi Analisis Kitab Ta'lim Muta'allim). *Journal Islamic Pedagogia*, 3(2), 107–114. <https://doi.org/10.31943/pedagogia.v3i2.92>
- Rosidah, U., Nurhakim, N., & Khozin, K. (2024). THINKING OF MORAL EDUCATION ACCORDING TO AL GHAZALI AND AL ZARNUJI PERSPECTIVE ON EPISTIMOLOGY AND AXIOLOGY. *Jurnal Konseling Pendidikan Islam*, 5(1), 203–216. <https://doi.org/10.32806/jkpi.v5i1.131>
- Setiyono, M. R., Rohimah, S., & Fatimah, M. (2023). THE APPLICATION OF LEARNING THE BOOK OF TA'LIMUL MUTA'ALLIM TOWARD THE FORMATION OF MORAL VALUES OF SANTRI PONDOK PESANTREN DARUL HIJROH SUKOHARJO. *Proceeding of International Conference of Islamic Education*, 1, 155–165.
- Shen, W., Yuan, Y., Yi, B., Liu, C., & Zhan, H. (2019). A theoretical and critical examination on the relationship between creativity and morality. *Current Psychology*, 38(2), 469–485.
- Weiss, S., Braun, A., Pacher, M., Schlegel, C. M., & Kiel, E. (2024). Adapting feedback to the demands of teaching in diverse classrooms. Novel feedback concepts for preservice teachers during practicum. *European Journal of Teacher Education*, 1–20.

INTRODUCTION

Today, we can witness many interesting changes in the domain of spirituality and religiosity. While technology and material progress continue to advance rapidly, interest in the search for deeper existential meaning and higher purpose is increasing. This development has changed our paradigm towards spirituality. Spirituality is an important aspect in the formation of a whole human character. Spirituality is not only related to religious beliefs, but also includes inner dimensions, values, meaning of life, and connection with something transcendent. The development of spirituality from an early age can provide a strong foundation for individuals in facing the challenges of life and forming a positive character. (Wasisto, 2012). Many factors influence a person's spiritual understanding, one of which includes individual experience and learning

things related to spirituality. One of the scientific disciplines that studies spirituality is neurospirituality, which is a branch of neuroscience.

But in recent decades, research in the field of neuroscience has provided new insights into how the human brain is involved in spiritual experiences and character development processes. Studies show that certain activities in the brain, particularly in the prefrontal, parietal and temporal areas, are associated with spiritual experiences, meditation and appreciation of values. Brain-based education is an approach to learning that takes into account the principles of the brain and neuroscience. By understanding how the brain learns, processes information and forms neuronal connections, learning methods can be designed to optimize the brain's potential and support the cognitive, emotional and spiritual development of individuals.

The development of neuroscience has influenced the understanding of spirituality. Spirituality includes the meaning of life, rituals, positive emotions, and spiritual experiences that direct life goals to be important (Asrori, 2020). The spiritual neuroscience approach is an important alternative to improve Islamic Religious Education learning (Fadkhulil Imad Haikal Huda, 2022). This approach has the advantage of integrating neuroscience in multidisciplinary studies. Therefore, education should capitalize on these advances in neuroscience, especially since in some countries, neuroscience has been incorporated into the education curriculum (Nurul Istiqomah & Rio, Pebrian & Susi, 2018).

Spiritual neuroscience is a sub-discipline that focuses on the study of the brain and human spirituality. This sub-discipline has a strong relevance to the characteristics of PAI as both are related to the study of God (Heni Listiana, Achmad Yusuf, Supandi, 2021). According to Ari Ginanjar, an Emotional Spiritual Quotient (ESQ) expert, within humans there is what is referred to as the "God Spot". God Spot refers to the spiritual potential that every human being is born with. It is the deepest aspect of the human personality that is connected to God or the Almighty. This God dimension is the center of a person's inner strength, intuition and spiritual awareness. It is the source of human values such as love, truth, justice, and benevolence. By developing and activating the God Spot, one can achieve a balance between intellectual intelligence (IQ), emotional intelligence (EQ), and spiritual intelligence (SQ) that complement each other (Al Ahyadi, 2015).

Neuroscience at MPAI UAD is an interesting and important course to learn. Neuroscience itself is the study of the human nervous system, especially the brain, and its relationship with behavior and mental processes. (Hidayat, 2017). In this course, students will study the structure and function of the brain in detail, starting from neurons as the basic unit of the nervous system to the division of major areas of the brain such as the cerebral cortex, limbic system, and others. The material also covers

the process of neurotransmission, brain development from the womb, and research methods in neuroscience. Neuroscience theories are combined with concepts in psychology to provide a complete understanding of mental processes (Taufik, 2010). In addition, this course also touches on current issues in neuroscience such as cognitive neuroscience, social neuroscience, as well as neuroscience applications in the fields of mental health, education, and spirituality. The discussion of neuroscience in Islamic religious education is certainly a major highlight in this MPAI study program (Yusmaliana et al., 2022). Although the material is quite challenging, this course is very important to broaden students' understanding in understanding psychological phenomena and their relationship with human spirituality as a whole (Yakin, 2018).

Some previous studies have reviewed character brain education in Islamic education, linking a sharp analysis of Islamic character education with neuroscience. In addition, there are also studies that examine character education through a neuroscience-based behavioristic approach. The results of these studies show that students need motivation and supervision from educators in internalizing religious teachings appropriately according to the goals of school education (Nashihin, 2018). In addition, there is also research that reviews the brain and mind from the perspective of the Quran and neuroscience. This research discusses human perfection that lies in the normality of reason, while the brain functions as the control center of human activity (Ahwinarto & Suyadi, 2020). According to Suyadi, character education actually helps develop the potential of the human brain, with the six brain systems playing a role in shaping individual attitudes and behavior. The importance of maintaining the balance and optimal performance of the brain allows better control of human behavior by involving the emotional and spiritual dimensions (Suyadi, 2017). Then in the research conducted by (Dahuri, 2023) By using the brain effectively and naturally in the thinking process, a person can demonstrate good morals that are reflected in spiritual values in their daily life. This will ultimately increase their faith and devotion to God, because as humans, they become more diligent and consistent in their worship.

This research presents a new perspective in the world of Islamic religious education by integrating the brain-based education approach and holistic spiritual character development. The brain education approach considers how the brain works in the learning and teaching process, involving an understanding of neurology, cognitive psychology and learning science. The aim is to create an optimal learning environment by utilizing the brain's potential to the fullest. On the other hand, spiritual character development is at the core of Islamic religious education, which focuses on building a strong character based on spiritual principles in Islamic teachings. It emphasizes on the appreciation of religious values, such as faith, piety, noble character, and relationship with Allah SWT. The aim is to form individuals who are not only

academically intelligent but also have spiritual maturity.

By integrating these two approaches, this research seeks to create a novelty in the context of Islamic religious education. It combines the brain education approach with spiritual character development efforts in the curriculum and learning methods. By utilizing an understanding of how the brain works, this research aims to facilitate effective learning in instilling Islamic spiritual values. This is done by creating a learning environment that is conducive to cognitive development as well as the formation of a strong spiritual character.

Through this integration, this research is expected to produce learning methods that are more effective and optimize the potential of students as a whole, both in terms of cognitive and spiritual. By integrating rational and spiritual aspects in the education process holistically, it is hoped that individuals can be formed who not only have high intellectual intelligence, but also have a strong spiritual character in accordance with Islamic teachings. The success of this research will provide a better understanding of the role of the brain in shaping spiritualist character, as well as provide a basis for developing more effective teaching methods in achieving the objectives of Islamic religious education, especially at advanced education levels such as Masters Programs. (Lalu Abdurrahman Wahid, 2022).

METHODS

In this study, researchers used the library research method (library research). Library research is a traditional research method that has been widely used by researchers to evaluate various scientific studies (Nashihin, 2023). By using this method, the researcher seeks to conduct an in-depth and comprehensive analysis and obtain optimal results. In the context of this research, the desk research method is used to explore and analyze the relationship between brain education and spiritual character development in the context of Islamic religious education. This research also involves collecting data from various sources relevant to the object of research, such as books, scientific works, and journals. The approach used is qualitative, where data is obtained through literature study by carefully examining articles, books, and scientific journals related to the influence of brain education on the character of special spirituality (Pahleviannur, M. R., De Grave, A., Saputra, D. N., Mardianto, D., Hafrida, L., Bano, V. O., ... & Sinthania, 2022). To enrich the data, researchers also conducted unstructured interviews with students of the Ahmad Dahlan University Master of Islamic Education Study Program (MPAI UAD) regarding their opinions on Neuroscience courses and their influence on their spirituality character. Data was collected by tracing and collecting information from various sources that became a reference for research. After the data is collected, a discussion is carried out on all the problems studied to produce

accurate and precise data and study materials. The data that has been collected is then analyzed qualitatively with an approach from the general to the specific, in accordance with the method used in this study (Hakim, 2023).

RESULTS AND DISCUSSION

1. The Role of Brain Education at MPAI UAD Yogyakarta

The brain is a very important part of humans. Not only as a physical organ, but also as a control center that regulates various bodily functions and complex mental processes. Even in religious views, the brain is also considered a tool that enables humans to carry out their duties as caliphs on earth. (Tamin, 2022). The brain's ability to adapt and develop over time is amazing. The concept of "use dependent development" that you mentioned is one of the things that makes the brain so unique. The brain's ability to renew itself and improve its performance as it experiences and learns is what sets it apart from machines or other inanimate objects (Ahwinarto & Suyadi, 2020). With its complex capabilities, the brain allows humans to do a variety of things, from thinking, feeling emotions, making decisions, to performing reflexes and survival. Without the brain, humans would not be able to do many things that make them unique and able to adapt to the surrounding environment. So, it can be said that the brain is one of the most defining aspects of human identity as an intelligent and complex being (Setyawan, 2017).

For centuries, humans have relied on brainpower and reasoning as the main foundation in various aspects of life. However, a view that puts intellectual intelligence above all else often neglects other aspects such as attitude and behavior. This can result in detrimental imbalances in the lives of individuals, which can eventually give rise to serious multidimensional crises (Dr. Jonaedi Efendi, S.H.I., M.H, Prof. Dr. Johnny Ibrahim, S.H., S.E., M.M., 2016). Thus, there are three important things that can be drawn from the description: first, the importance of responding to the findings of neuroscience in the development of education; second, the recognition that all aspects of humans, including character and knowledge, are related to brain processes; and third, the need for harmony between intellectual intelligence and emotional and behavioral aspects to achieve balance and a better quality of life (Rusuli, 2014).

Brain Education at MPAI UAD Yogyakarta offers a different approach amidst the density of materials and theories in education. Through this approach, individuals are guided to deeply understand how their brain works and reach their full potential. For example, activity in the prefrontal cortex and limbic system are

linked to meditation skills, emotional control, and self-awareness which are important in spirituality.

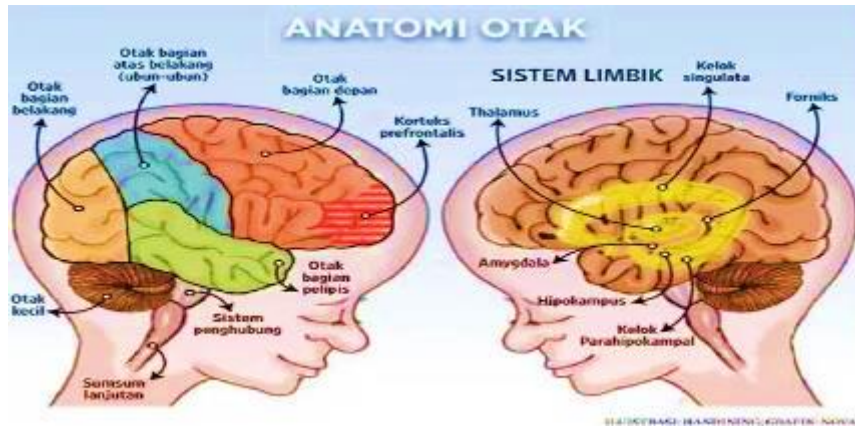


Figure 1. Anatomy of the Brain

Spiritual experiences such as meditation, prayer, and dhikr practices can be understood and analyzed in greater depth through neurospiritual education (Fitriani & Abdullah, 2021). This helps students understand spiritual aspects more scientifically and rationally, which can strengthen the foundation of their faith. This was expressed by Muhammad Ilham Baihaqqi, one of the MPAI UAD students.

"In the context of Islamic religious education, brain education can be a very valuable addition because it helps students understand religious teachings more deeply, and develop a strong spiritual character" (Baihaqqi, 2024).

Then in an interview with Reyhan, one of the MPAI UAD students, he also said

"In my opinion, brain education is an effort to optimize the potential of our brain through scientific approaches such as cognitive learning and strategies to improve brain performance. The role of brain education in spirituality character development is to help us understand and control cognitive and emotional processes related to spiritual values, such as self-awareness, empathy, and inner calm" (Reyhan, 2024).

From the interview, the researcher concluded that understanding the relationship between brain activity and spiritual experiences is important. Brain education helps us know how the brain functions while we are engaged in spiritual practices such as meditation, prayer or reading scriptures. By understanding these brain activation patterns, we can design strategies and exercises that can enhance brain performance in a spiritual context. For example, mindfulness or meditation practices can stimulate the brain regions responsible for emotion regulation, empathy and self-awareness.

Then further researchers explore how the role of brain education on the relationship between students' spiritual characteristics. Muhammad Ilham Baihaqqi as one of the students at MPAI UAD revealed the importance of brain education as a means of developing students' spiritualist characteristics. The following are the results of his interview:

"I think brain education is very important because the brain is the control center for all the functions of our body and mind. When we understand how the brain works, we can understand how our mindset and behavior are formed. This is particularly relevant in the development of spiritualist characteristics as spirituality involves a deeper understanding of the self and the purpose of life" (Baihaqqi, 2024).

This is also in line with Reyhan's expression who said.

"The brain also has parts associated with the subconscious, the place where our deepest beliefs, values and motivations are formed. Through brain education, we can open access to this subconscious and unearth spiritual potential that may not have been revealed" (Reyhan, 2024).

Based on the results of the interview above, the researcher concluded that the brain is the control center for all functions of the human body and mind. By understanding how the brain works, we can understand how our thought patterns and behaviors are formed. An understanding of the brain is particularly relevant in the development of spiritualist characteristics as spirituality involves a deeper understanding of self and life purpose. The brain has parts associated with the subconscious, the place where our deepest beliefs, values and motivations are formed. Through brain education, we can open access to the subconscious and unearth spiritual potential that may not have been revealed yet. Overall, brain education helps us understand ourselves deeply, including the spiritual aspect, so that we can better develop spiritualist characteristics (Akbar, et.al, 2023).

Furthermore, Professor Suyadi as Head of MPAI UAD Yogyakarta as well as a lecturer in Neuroscience and learning theory explained the influence of character education on brain education. It is explained in his journal article that character education actually helps develop the potential of the human brain, with the six brain systems playing a role in shaping individual attitudes and behavior. The importance of maintaining the balance and optimal performance of the brain allows better control of human behavior by involving the emotional and spiritual dimensions. (Suyadi, 2017).

In addition, several activities are often carried out at MPAI Ahmad Dahlan University in supporting the development of students' spiritual character. Such as always starting learning by saying a prayer together, and ending also with prayer.

Then conduct research whose approach always leads to Islamic studies with collaboration with other disciplines. Facilities for places of worship such as mosques in the campus environment also support activities to develop students' spirituality characteristics at MPAI UAD Yogyakarta. The following is a more detailed explanation.

1. Starting and ending learning with prayer together Before starting teaching and learning activities, lecturers and students pray together. This is a form of respect to Allah SWT and realizing that knowledge is a gift from Him. By praying, they ask for blessings and ease in the learning process. After finishing, they also close with a prayer as an expression of gratitude and ask that the knowledge gained can be useful.
2. Research with an Islamic studies approach and collaboration with other disciplines MPAI Ahmad Dahlan University encourages students to conduct research that integrates Islamic studies with other disciplines. For example, in the field of education, students can conduct research on learning methods that are in accordance with Islamic values. Or in the field of psychology, they can study spiritual aspects in the development of the human soul. This approach helps students understand the interrelationship between religious and general sciences and enriches their spirituality.
3. Facilities for Places of Worship (Mosques) in the Campus Environment The existence of a mosque in the campus environment provides a means for students to carry out worship regularly, such as congregational prayers and Islamic studies. This helps students to practice their spiritual values and grow closer to Allah SWT. In addition, the mosque can also be used as a place to gather and discuss spiritual issues, thus adding insight and fostering a spirit of spirituality among students.
4. Spiritual extracurricular activities MPAI Ahmad Dahlan University also organizes spiritual extracurricular activities, such as Quranic studies, religious lectures, and commemoration of Islamic holidays. These provide opportunities for students to deepen their religious knowledge and apply it in their daily lives. Such activities also facilitate interaction between students and spiritual sources, so that they can learn directly from people who have experience in the field of spirituality (Observation of Religious Activities of MPAI UAD, 2024).

With these various activities, MPAI Ahmad Dahlan University seeks to create an environment conducive to the development of the spiritual character of its

students. This is in line with the university's vision and mission to produce graduates who not only have intellectual intelligence, but also spiritual intelligence.

2. Spiritual Development and Modern Neuroscience

Developments in the field of cognitive neuroscience have revealed more in-depth information about the connection between the brain and spiritual experiences (Rohmadi, 2018). Neuroimaging technologies such as fMRI have enabled the identification of brain areas that are active while individuals engage in spiritual practices such as meditation, prayer, reading the Qur'an, prayer and other acts of worship. Some studies have also highlighted specialized brain networks involved in spiritual experiences, such as the default mode network and the saliency network. These networks have an important role in the processes of self-awareness, attention and emotion regulation that influence a person's spiritual experience. The neurobiology of spirituality is becoming a major focus in modern neuroscience research. This research includes understanding the neurobiological mechanisms behind spiritual experiences, such as the role of neurotransmitters, alpha and theta brainwave activity, and the impact of long-term spiritual practices on brain structure and function (Suyadi, 2020).

Neurospiritual research has uncovered complex neurobiological mechanisms behind spiritual experiences and religious practices performed by humans.

1. At the neurochemical level, there is an important role of several neurotransmitters such as dopamine, serotonin and endorphins associated with spiritual experiences (Irfan, 2017).
 - a. *Dopamine*, which plays a role in positive experiences, motivation, and rewards, increases in levels when individuals engage in spiritual practices such as prayer, scripture reading, prayer, meditation or other worship.
 - b. *Serotonin*, which is associated with mood regulation, emotions, and a sense of peace, also increases in levels during intense spiritual experiences.
 - c. *Endorphins*, known as natural happiness hormones, are also released during deep spiritual practices, providing a sense of calmness to the individual.

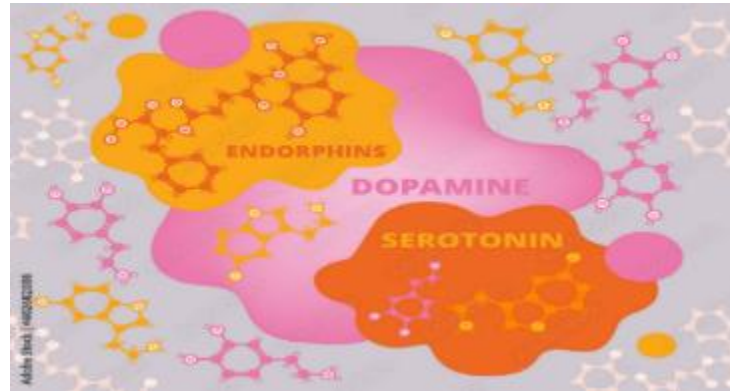


Figure 2. Structure of Neurotransmitters

2. At the level of brain activity, neurospirituals observed an increase in alpha (8-12 Hz) and theta (4-8 Hz) brainwave activity during spiritual practices (Ubudiyah, 2020). Alpha waves are associated with states of relaxation, meditation and increased awareness, while theta waves are associated with states of deep relaxation, intuition and emotional processing. During prayer, meditation or scripture reading, there is an increase in alpha wave activity in the prefrontal cortex and other brain regions, and an increase in theta waves as the spiritual experience reaches its peak.

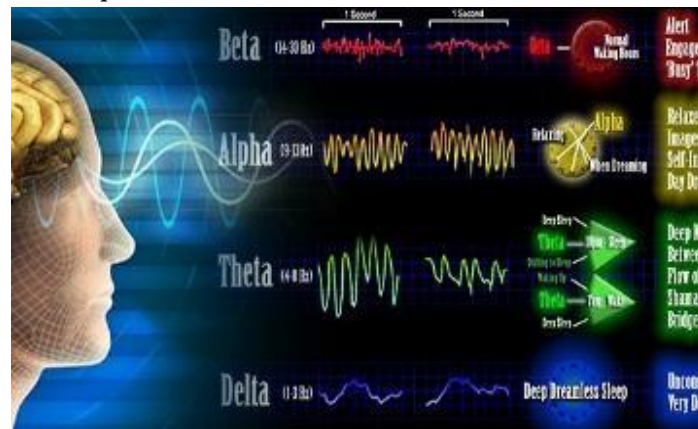


Figure 3. Brain Wave Activity

A more surprising finding was the impact of long-term spiritual practices on the structure and function of the brain itself. Individuals who meditate regularly show increased gray matter volume in brain regions associated with attention, emotion regulation, and empathy, such as the prefrontal cortex and insula. The more surprising finding is the impact long-term spiritual practices have on the structure and function of the brain itself. Individuals who meditated regularly showed

increased gray matter volume in brain regions associated with attention, emotion regulation, and empathy, such as the prefrontal cortex and insula (Novia, 2010). Connectivity between brain regions involved in spiritual experiences also increases after long-term meditation practice. In fact, long-term spiritual practice can improve cognitive capacities such as attention, working memory and emotion regulation. In addition, spiritual neuro-science also reveals differences in brain activation patterns in various spiritual practices. When praying, there is increased activity in brain regions associated with focused attention, emotions, and moral decision-making. Meanwhile, when reading the Quran, there is stronger activation in brain regions associated with language processing, memory, emotions, and spiritual experiences compared to reading a regular book.

Neuroscience studies have also revealed a strong connection between spirituality and mental health (Hanafi, 2016). Spiritual practices such as meditation can activate areas of the brain associated with emotion regulation, mindfulness and stress resilience, which in turn contribute positively to an individual's mental health. With this development, there is a greater effort to integrate scientific discoveries with spiritual traditions from different cultures and religions. This opens the door for dialogue between science and spirituality in deepening the understanding of the whole human experience. An interdisciplinary approach is also increasingly emphasized in the study of spiritual neuroscience, involving collaboration between various disciplines such as neuroscience, psychology, anthropology, philosophy and religious studies (Maunah, 2023).

According to Ari Ginanjar, an Emotional Spiritual Quotient (ESQ) expert, every human being has a spiritual potential called God Spot. God Spot refers to the deepest aspect of the human personality that is connected to God or the Almighty. It is the center of one's inner strength, intuition, and spiritual awareness. God Spot can be likened to a point or area within a human being that is the bridge between ourselves and the Creator. (Al Ahyadi, 2015). This God Spot has been present in every human being since birth, but is often neglected or covered by the busyness of daily life and the influence of the surrounding environment. Therefore, it is necessary to develop and revive this God Spot so that we can achieve a balance between intellectual intelligence (IQ), emotional intelligence (EQ), and spiritual intelligence (SQ) that complement each other.

This God dimension or God Spot is the source of human values such as love, truth, justice and virtue. When we are able to access and activate our God Spot, we will become more sensitive to these values and be able to apply them in our daily lives (Chaer, 2017). This will make us a more complete, thoughtful human being with strong integrity.

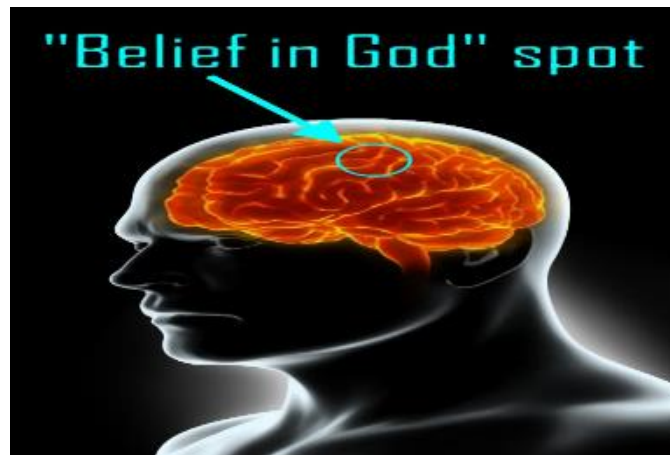


Figure 4. God Spot in the human brain

In addition, the God Spot is also the source of deep intuition and inner strength. This intuition can help us make the right and wise decisions, even in difficult or uncertain situations (Supriaji, 2019). This inner strength can also be a source of motivation and resilience in facing the challenges and trials of life. Developing and activating the God Spot requires a conscious and consistent effort in practicing spiritual activities such as meditation, prayer or contemplation. Through these practices, we can calm our minds and hearts, and open ourselves to the presence of the Almighty in our lives.

Then recent findings in neurospirituality have changed the paradigm on the neurobiological basis of spiritual experiences. Previously, many believed that spirituality originates from one specific brain region called the God Spot. However, recent research reveals that spiritual experiences instead involve the activation of a complex and integrated set of brain networks or circuits (Husnaini et al., 2021). This spiritual circuit is a network consisting of several brain regions that are interconnected and work in synergy. These brain regions include the prefrontal cortex, anterior cingulate cortex, insula, and several other regions associated with cognitive, emotional, and spiritual functions. During spiritual experiences, there is increased functional connectivity between these brain regions, which means that the communication and synchronization of neural activity becomes stronger. This connectivity allows for better integration of information and coordination in processing spiritual experiences holistically (Handojoseno, 2016). Interestingly, the activation of spiritual circuits is dynamic and fluctuates according to the stage and intensity of the spiritual experience.



Figure 5. Spiritual Circuit

This concept of spiritual circuits provides a more comprehensive understanding of the Neuorospiritual basis. By understanding these circuits, we can better understand how the brain processes and integrates cognitive, emotional and spiritual aspects holistically, and how spiritual practices can shape and optimize these circuits in the long run. These findings open new avenues in exploring the potential of spirituality in improving mental health and overall human well-being.

CONCLUSION

The brain has a central role in enabling humans to perform various activities, including spiritual experiences. Brain education helps to understand how the brain works and optimize its potential, including in the context of spirituality. At MPAI Ahmad Dahlan University, brain education is integrated into learning to develop students' spiritual character through neurobiological understanding of spiritual experiences such as reading prayers at the beginning and end of learning, conducting research on Islamic studies, mosque facilities that become the center of student rituals and spirituality, reading the holy book Alqur'an, and PHBI activities that are always held. Modern neuroscience research reveals the neurobiological mechanisms behind spiritual experiences, such as the role of neurotransmitters, patterns of brain wave activity, and changes in brain structure due to long-term spiritual practices. God Spot findings refer to the deepest aspect of the human personality that is connected to God or the Almighty. It is the center of a person's inner strength, intuition and spiritual awareness. Recent research has also found that there are complex spiritual circuits in the brain, which involve a network of several brain areas in processing spiritual experiences in an integrated manner. Brain education and understanding spiritual neuroscience helps to develop spiritual character in a more in-depth and scientific manner, while respecting religious and cultural values. This opens up opportunities for

dialogue between science and spirituality in understanding the human experience in a holistically selected manner

REFERENCES

- Ahwinarto & Suyadi. (2020). Character Brain in Islamic Education: A Critical Analysis of Neuroscience-Based Character Education. <https://doi.org/10.21831/Jpk.V10i1.29693>.
- Akbar, et.al, J. S. (2023). Foundations of Education (Theories and Basic Concepts of the Foundations of Education in the Era of Industry 4.0 and Society 5.0 in Indonesia). In *Correspondencias & Análisis* (Issue 15018). Sonpedia Publishing Indonesia.
- Al Ahyadi, A. (2015). Emotional Spiritual Quotient (Esq) According to Ary Ginanjar Agustian and its Relevance to the Development of Spiritual Competence and Social Competence Curriculum 2013 Thesis. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 53(9), 1689-1699. <http://publications.lib.chalmers.se/records/fulltext/245180/245180.pdf>
<https://hdl.handle.net/20.500.12380/245180>
<http://dx.doi.org/10.1016/j.james.2011.03.003>
<https://doi.org/10.1016/j.gr.2017.08.001>
<http://dx.doi.org/10.1016/j.precamres.2014.12>
- Chaer, M. T. (2017). Islam and pacifist education" Istawa: Journal of Islamic Education. *Journal of Islamic Education*, 2(1), 73-94.
- Dahuri, D. (2023). Character Education as Brain Education from the perspective of Spiritual Neuroscience Study. *Journal of Interdisciplinary Islamic Education and Science*, 2(2), 76-85. <https://doi.org/10.59944/jipsi.v2i2.106>
- Dr. Jonaedi Efendi, S.H.I., M.H, Prof. Dr. Johnny Ibrahim, S.H., S.E., M.M., M. H. (2016). *Legal Research Methods: Normative and Empirical* No Title. Prenada Media.
- Fadkhulil Imad Haikal Huda. (2022). Neuroscience-Based Religious Character Building: Construction of Teacher Efforts in Islamic Religious Education Learning. *Journal of Islamic Religious Education Al-Thariqah*, 7(2), 491-502. [https://doi.org/10.25299/al-thariqah.2022.vol7\(2\).11138](https://doi.org/10.25299/al-thariqah.2022.vol7(2).11138)
- Fitriani, H., & Abdullah, Z. (2021). The Relevance of Taufiq Pasiak's Spiritual Neuroscience Concept to Sufistic Psychotherapy. *JOUSIP: Journal of Sufism and Psychotherapy*, 1(2), 141-160. <https://doi.org/10.28918/jousip.v1i2.4458>
- Hakim, L. (2023). Gender Equality in Islamic Education Perspective of M. Quraish Shihab. *Civilization Journal of Interdisciplinary Educational Research*, 1(1), 1-20.

<https://doi.org/10.59001/pjier.v1i1.101>

- Hanafi, I. (2016). Neuroscience-Spirituality and Creative Potential Development. *An-Nuha*, 3(1), 23-38.
[http://sindikker.dikti.go.id/dok/permendikbud/permendikbud 154 years old](http://sindikker.dikti.go.id/dok/permendikbud/permendikbud%20154%20years%20old)
- Handojoseno, A. (2016). *I'm Connected So I Exist: Perspectives on Connection-Based Pedagogy in the Digital Age*. Digital Era. Sanata Dharma University Press.
- Heni Listiana, Achmad Yusuf, Supandi, M. W. (2021). Development of an Islamic Religious Education Curriculum Based on Spiritual Neuroscience. *AL MURABBI Journal*, 6(2), 99-111.
- Hidayat, B. (2017). Learning the Quran in Early Childhood According to Religious Psychology and Neuroscience. *Proceedings of The 2nd Annual Conference on Islamic Early Childhood Education*, 2, 60.
- Husnaini, R., Adnan, & Ahmad, C. F. (2021). The Urgency of Spiritual Maturity on Brain Health. *Syifa Al-Qulub*, 6(1), 35-41.
- Irfan, M. (2017). Effect of lavender aromatherapy (*Lavandula Angustifolia*) on anxiety of white rats (*Rattus Norvegicus*) after exposure to unpredictable chronic mild stress.
- Lalu Abdurrahman Wahid. (2022). DEVELOPMENT OF ISLAMIC RELIGIOUS EDUCATION LEARNING BASED ON BRAIN POTENTIAL DEVELOPMENT USING NEUROSCIENCES THEORY. *Tarbiyatuna: Journal of Islamic Education*, 15(1), 164.
<https://doi.org/10.36835/tarbiyatuna.v14i2.1111>
- Maunah, B. (2023). *DIGITAL NAVIGATION, TECHNOLOGICAL INNOVATION, AND RELIGIOUS SCIENCE SUPPORT SYSTEM*. Akademia Pustaka.
- Nashihin, H. (2018). Praxis of Internalizing the Character of Independence in the Pesantren Yatim Piatu Zuhriyah Yogyakarta. *J-PAI: Journal of Islamic Education*, 5(1). <https://doi.org/https://doi.org/10.18860/jpai.v5i1.6234>
- Nashihin, H. (2023). Research Methods (Qualitative, Quantitative, Experimental, and R&D). *PT GLOBAL EXECUTIVE TECHNOLOGY*.
- Novia, A. (2010). Training the razor-sharp brain. Media Pressindo.
https://books.google.com/books?hl=en%5C&lr=%5C&id=pzO5RKYR5bwC%5C&oi=fnd%5C&pg=PA1%5C&dq=kulit+kiwi+preservatives%5C&ots=zfRrFxA5h_%5C&sig=fi907IjIFclKYvmlkoD6PLXzBBw
- Nurul, Istiqomah & Rio, Pebrian & Susi, M. (2018). Spirituality, Prayer and Learning Achievement. *Belajea Journal of Islamic Education*, 3(2).

- Pahleviannur, M. R., De Grave, A., Saputra, D. N., Mardianto, D., Hafrida, L., Bano, V. O., ... & Sinthania, D. (2022). *Qualitative Research Methodology*. Pradina Library.
- Rohmadi, K. (2018). Development and Implementation of Islamic Education Curriculum from Neuroscience Perspective. *Ruhama Journal*, 1(1), 39-50.
- Rusuli, I. (2014). Reflection of Behavioristic Learning Theory in Islamic Perspective. 8(1), 38-54. <https://doi.org/10.13170/jp.8.1.2041>
- Setyawan, F. E. B. (2017). *INTRODUCTION TO RESEARCH METHODOLOGY: (Practical Statistics)*. Zifatama Jawara.
- Supriaji, U. (2019). The concept of spiritual education. *Cakrawala, Journal of Islamic Education Management and Social Studies*, 3(1), 16-46.
- Suyadi. (2017). Early childhood learning theory in neuroscience studies. PT Rosadakarya.
- Suyadi. (2020). *Islamic Education and Neuroscience: Tracing the Traces of Intellect and Brain in the Qur'an to the Development of Neuroscience in Islamic Education*. Prenada Media.
- Tamin, A. K. (2022). An Examination of the Concept of the Brain in the Qur'an. *Tanzil: Journal of Quranic Studies*, 5(1), 15-28. <https://doi.org/10.20871/tjsq.v5i1.190>
- Taufik, P. (2010). *Unlimited Potency of the Brain: Recognize and Fully Utilize the Unlimited Potential of the Brain*. Mizan Library.
- Ubudiyah, F. (2020). Counseling Through Interfaith Meditation at Karangdjati Monastery Yogyakarta. *AL-IRSYAD: Journal of Islamic Counseling Guidance*, 2(1), 231-250.
- Wasisto, R. J. (2012). Urban Sufism in Urban Areas: Construction of New Muslim Middle Class Faith. *Journal of Da'wah Management Studies & Development*, 5(2), 175-199.
- Yakin, A. (2018). *Islamic Education and Neuroscience in the Modern Era*. MAHAROT: *Journal of Islamic Education*, 2(2), 2.
- Yusmaliana, D., Suyadi, S., Widodo, H., & Zakaria, G. A. N. (2022). Planning Framework and Outline of Neuroscience-Based Creative Imagination (IKBN) Model in Islamic Religious Learning at Elementary School Level. *EDUKASI: Journal of Religious Education Research*, 20(2), 233-251. <https://doi.org/10.32729/edukasi.v20i2.764>

INTERACTIVE AND MEANINGFUL ISLAMIC RELIGIOUS EDUCATION LEARNING IN THE METAVERSE; POTENTIAL FOR INTEGRATION OF EDUCATIONAL CONTEXTS IN INDONESIA

Umar *

* Universitas Islam Ahmad Dahlan Sinjai

oemar.tech.iaim@gmail.com

Abstract

Islamic religious education learning seeks to transform various basic potentials of students to form a perfect human being. This effort requires learning that must be meaningful. However, the problem of interactivity and meaningfulness of learning affects many students. On the other hand, the empirical paradigm in various countries speaks for futuristic Metaverse-based learning, while Islamic religious education learning in Indonesia is faced with challenges as well as opportunities in the Metaverse era. The demand for information, fulfillment of access, interactivity and meaningfulness of learning is increasingly needed, in fact, it is urgent to pay attention to innovation that must be adaptive. The metaverse carries the transformation of virtual reality-based, immersive and imaginary learning technology which is predicted to provide learning comfort. The various literature that preceded as the foundation for this study. The aim of this research is to examine and to propose a paradigm regarding the potential and integration of Islamic religious education learning in the Metaverse as an effort to realize interactive and meaningful learning, especially in the educational context in Indonesia. This research uses a qualitative literature review approach, Namely, credible and scientific data sources were collected and analyzed in-depth. After scientific data processing, a meaningful and informative paradigm is put forward which is proposed as a finding. Islamic religious education learning is relevantly integrated into the Metaverse, where learning can manifest interactively and meaningfully for learners by considering the affective essence. Its innovation requires a holistic, adaptive, and integrative approach without neglecting the fundamental, social, and cultural values of the Indonesian nation. Therefore, it can be a consideration in optimizing Islamic religious education learning broadly.

Keywords: *The Metaverse; Interactive and Meaningful Islamic Religious Education Learning; Education in Indonesia.*

INTRODUCTION

The technological transformation in the era of industrial revolution 4.0 has recently become more intense in line with human needs. A new imaginative era has emerged in human life, further complemented by various platforms and social media such as Instagram, Facebook, WhatsApp, and TikTok. Alongside the popularity of other technologies such as Unity and Unreal Engine, Virtual Reality (VR), Augmented Reality (AR), 5G MEC, Blockchain, Digital Currencies, and Artificial Intelligence (AI) (Ning et al., 2021). Even though it is considered not directly connected to the world of reality, it has brought the concept of interactive media and the future digital transformation such as the birth of the Metaverse which will have a big impact on the education and learning system. The potential of Metaverse media in learning is a development of information technology science that actually started from Islamic civilization until now (Umar, 2016).

Therefore, it emphasizes that the learning system must adapt to more futuristic changes in educational technology. Contemporary learning demands a vast amount of information, and access to learning must be relevant. This suggests that as technology advances, there is a parallel need for adapting teaching methods to technology to better meet the needs of learners. The significant changes should go hand in hand with the use of instructional media. The modern learning is characterized by real-time digital-based interaction patterns, the internet, and the virtual world, which are increasingly attractive and essential for educators and learners.

Empirically, digital and online-based Islamic Religious Education (PAI) learning has been adapted, especially in Indonesia, during the Covid-19 pandemic (Koeswanti, 2021) (Novia & Wasehudin, 2021), at the same time, the use of hybrid learning systems has created a different learning environment, signaling a significant change in the education system adapted to digital methods (Wahid et al., 2020), (Kim et al., 2022). The study results indicate ineffectiveness, with 77.8% of Islamic Religious Education (PAI) teachers expressing dissatisfaction with online learning outcomes (Rahayu & Kejora, 2022). When observed, the consistency and practice of Islamic teachings in daily life are decreasing, such as congregational prayers, collective prayers in classrooms, and other routine worship activities, due to social restrictions (social distancing).

This is different from the essence of Islamic Religious Education (PAI) learning, which prioritizes meaningful learning principles. In this context, learning is not just about transforming knowledge but rather an effort to understand and to actualize the

values of Islamic teachings in a concrete and consistent manner in daily life, making it truly meaningful. According to (Hude, M. D. (2018) the meaningfulness of Islamic Religious Education (PAI) learning lies in its consistency and application, not merely in the extent of knowledge.

Realizing more meaningful Islamic Religious Education (PAI) learning can pay attention to the optimal utilization of instructional media, especially the media that embraces the concept of the new imaginary realm “Metaverse,” which is based on virtual reality and augmented reality. Virtual-based learning is believed to provide a different learning atmosphere compared to other media. However, how can Islamic Religious Education (PAI) learning be linked with the concept of the Metaverse to make it more meaningful? And how can this learning occur, ensuring that learners can truly practice it meaningful? This undoubtedly requires a profound analysis.

If we refer empirically, although countless Islamic Religious Education (PAI) learning applications have been predominantly designed to meet learning needs, such as web platforms, smartphones, YouTube, and real-time connected videos, the evidence shows that these applications have significantly increased the interest of learners (Mujianto, 2019), (Balbay & Kilis, 2017), ven assisting learners in enhancing conceptual and factual understanding (Rabiman et al., 2021). In line with the findings of Areepong et al., (2022) the learning within an interdisciplinary framework can involve elements of the Metaverse such as software, hardware, and content.

The use of various and conventional PAI learning media is in fact not yet satisfactory, now it is faced with new challenges and is even immediately remembered and slowly abandoned after the presence of the Metaverse concept in human life. It is predicted that the Metaverse concept, which is slowly emerging as a learning medium in Indonesia, will be more enjoyable for students in the future. Experts predict that the Metaverse concept will become an impressive learning trend and provide comfort for students (learners) because they have the opportunity to be present and witness phenomena, experience values, explore life and build on past existences, someone who learns in this dimension will find it easy transcends time and space but remains in the present life.

The Metaverse has depicted characteristics as a medium that presents diverse information, interactive concepts that will be connected to the human physical world, an imaginative world that goes beyond mere social reality, interconnected computing devices with new information presentations. Its combination comprises both hardware and software as a system, convincingly making its users believe they are in a different place (Antin, 2020). The visualization of technology and the vibrant scenes provides a

meaningful atmosphere for users to experience the context of reality. (Zhao et al., 2022).

The future prediction is that the Metaverse will become more integrated with human physical life, including in Islamic Religious Education (PAI) learning activities. The Metaverse innovations enable the fulfillment of access and learning services in a more futuristic manner. The research findings confirm that this digital future will be more interactive, more realized, and integrated with the physical world but will require a holistic approach (Lee et al., 2021). Therefore, the progress of online education programs and their quality will be more enjoyable for millennial students (Saxena et al., 2020). The hypothesis illustrates that the concept of the Metaverse in future Islamic Religious Education (PAI) learning will pose a challenge and an inevitability for the education community to adapt to the Metaverse technology concept, alongside the availability of adequate infrastructure, the sufficiency of user skills, and the financial support underpinning digital learning systems.

The above perspective suggests that if the Metaverse can introduce the concept of Islamic Religious Education (PAI) learning to be more interactive and meaningful by integrating it into the virtual reality system, it is highly possible that PAI learning can become more challenging without neglecting the principles inherent in education. In addition, to the shift in learning paradigms in the 21st century accompanying a new, more meaningful learning system, the existing learning system has increasingly constructed literacy and digital-based learning (Umar & Ismail, 2021).

The focus of this article aims to further explain; The Metaverse in education, the interactive and the meaningful Islamic Religious Education (PAI) learning in the context of meeting the learning needs of learners, and the integration of Metaverse in PAI learning as an alternative interactive and the meaningful media in Indonesia. Thus, this discussion attempts to propose another paradigm in the midst of the void regarding Islamic Religious Education (PAI) learning in the context of Indonesia, taking into consideration the challenges and the opportunities that can be maximized in PAI learning.

METHODS

This study is conducted in line with the growing issue of the Metaverse, which has sparked the attention of educational technology developers, academics, and business players in various countries, especially in Indonesia, following the rebranding of “Facebook” to “Meta” in October 2021. This research employs a qualitative literature review method, conducted through the steps of identification, examination, evaluation, and interpretation of all related themes, namely the potential integration of the

Metaverse in more interactive and meaningful Islamic Religious Education (PAI) learning in the context of education in Indonesia. The author gathered relevant literature in the form of books and journal articles in a structured manner. In addition, the researcher also utilized online data such as opinions, descriptive reviews, and narratives, as they strengthen the data acquisition found from other sources (Creswell, 2012). Subsequently, the researcher classified articles related to the keywords potential integration of the Metaverse, interactive and meaningful Islamic Religious Education (PAI) learning, in the context of education in Indonesia. In the next process, all selected articles were read, identified, compared, synthesized, interpreted, and clarified to obtain a comprehensive understanding and meaningful insights to be communicated. After the scientific and systematic data processing, a constructive paradigm is then presented, which is informative and proposed as the research findings.

RESULTS AND DISCUSSION

The Metaverse in Education

The term of Metaverse is a combination of “meta” and “universe,” which has been utilized as a new medium for learning since the Covid-19 pandemic (Yohan, 2022). Historically, the term of Metaverse has been present for approximately three decades, referring to the fictional concept of a virtual realm initiated by Neal Stephenson in his novel “Snow Crash” as an imaginative shared space. This paradigm may differ from the concept of the future Metaverse, where people can interact and engage using Augmented and Virtual Reality technologies.

Recently, the facebook has put forth its vision for the concept of the Metaverse, which represents a highly intriguing future internet technology concept (Narin, 2021). The meta's CEO emphasizes that the Metaverse will cater to needs such as socializing with friends, working, educationing, gaming, and shopping, offering various options for Metaverse users. As the future of Metaverse unfolds, developers can construct virtual archaeological sites that are more advanced than the real world.

The above paradigm asserts that the concept of the Metaverse is a blend of real-world and virtual reality, depicting visual representations of life from the past, present, and future. The concept of the virtual Metaverse refers to patterns of artificial intelligence (AI), Virtual Reality (VR), Augmented Reality (AR), Bigdata, Cloud, Blockchain, Digital currencies. Hence, it illustrates the transfer of avatars (self-

representations) and real-world elements into the virtual spaces of the Metaverse, creating a distinct world. It means, users will be represented by an avatar that matches their character, movements, and voice. Therefore, interactions occur between avatars and other avatars, as well as between avatars and the environment within the Metaverse.

In broad terms, a virtual reality-based the Metaverse signifies the realization of a persistent virtual existence that remains active even when users are not actively engaged in the Metaverse. The support of Augmented Reality, with the integration of physical and digital existence, presents a universal virtual space that is virtually boundless. This includes the integration of the internet and the Metaverse, which will depict a fusion of the physical and digital worlds (Nevelsteen, 2018).

The key components in realizing the future Metaverse include hardware, software, and content, facilitated through the interaction between users, implementation, and applications (Kye et al., 2021) (Park & Kim, 2022). The Metaverse has relied on immersive realism, accessibility, and identity, as well as interoperability and scalability. Therefore, supporting factors for the realization of a viable Metaverse include the interest of institutions, sustainable utilization, and hardware performance (Dionisio et al., 2013). According to ASF (2007) Metaverse roadmap overview, the characteristics of the Metaverse include Augmented Reality (AR), which presents information in the external environment that appears real; lifelogging, which integrates real-life information between individuals and groups; mirrorworlds, combining information from the external environment into the virtual world; and virtual worlds, providing activities for individuals and entities in the virtual world, (Jung, 2021). Although the use of the Metaverse is enjoyable as a new medium for distance learning, it can significantly influence the cognition, emotions, and behavior of its users (Suh, 2023). However, scientists suspect various potentials that may impact the health and safety of users.

Interactive and Meaningful Islamic Education (PAI) Learning

Learning is the effort to educate an individual or student (Degeng, 2013), it means that an individual or learner is involved in the learning process, and the involvement of the learner indicates the occurrence of learning. The fundamental understanding also indicates that learning aims to facilitate individuals in the learning process, which does not only occur in a rigid condition but can take place in various conditions (time and place). Specifically, in Islamic Religious Education (PAI), learning

can take place anytime and anywhere because a learner can find lessons from anyone in any form around them, including in virtual digital spaces that suit their needs.

In essence, Islamic Religious Education (PAI) learning is an effort to fulfill the learning needs of students, where educators transform knowledge and internalize values to foster motivation and cultivate interest in comprehensively studying the teachings of Islam. The goal is for students to embody the concept of “*insan kamil*,” characterized by noble character. As its main goal, it aims to strengthen beliefs, realize understanding, internalize, and practice teachings in accordance with Islamic principles (Muhaimin, 2002). Hence, Islamic Religious Education (PAI) learning encompasses content that transforms knowledge, skills, spirituality, and positive character values comprehensively.

The process of Islamic Religious Education (PAI) learning undoubtedly requires high interactivity, as the principles of PAI learning emphasize an active interaction between educators and learners. Educators can serve as a medium, a role model figure where an emotional and a humanistic relationship is formed through the process of dialogue, exemplary behavior, and practical application, fostering the development of self-consistency.

According to Wahab, (2016) the interactive learning is a teaching process that involves the interactive engagement between teachers and students, as well as among students with their environment. Through the use of teaching material presentation strategies, the teacher, as a facilitator, creates an interactive environment, often supported by interactive media. Therefore, the interactive learning emphasizes the use of both conventional in-person teaching tools such as classroom settings and chalkboards, as well as technology-based digital media like e-learning platforms, video conferencing tools like Zoom and Google Meet, chatting media, and even virtual reality Metaverse.

Furthermore, a meaningful learning in David Ausubel’s theory emphasizes the strengthening of cognitive structures. If learning is seen as acquiring new knowledge or constructing meaning about the world (discovery and acceptance), then meaningful learning occurs. According to Jonassen & Strobel, (2006) a meaningful learning requires meaningful tasks that arise from simulating various activities, manipulating ideas and artifacts. The process involves humans interacting with the environment, observing, constructing understanding of phenomena, and sharing interpretations with others. Learning resources relate to various materials, content, or objects that can be used logically and appropriately (Vallori, 2014).

There are three main principles of meaningful learning: 1) The cognitive structure grows when learners have learning experiences. 2) The knowledge is created and shaped by individual minds, with objects serving as mere mediums. 3) Through social interaction and relationships, children will learn more effectively. David Ausubel emphasizes the steps of meaningful learning, which include learning through the surrounding environment, creating concept maps, presenting problems to be solved in small groups, discussing to make collective decisions based on individual experiences, inquiry, and conducting exercises (Noor, 2013).

In the context of Islamic Religious Education (PAI) learning, a meaningful learning not only prioritizes the ongoing learning process but also demands that learners consistently practice intrinsic values as a result of the learning. In line with (Suyuti et al., 2021) The product of Islamic Religious Education (PAI) learning is the growth of intrinsic motivation and awareness to practice without external pressure or coercion. Hence, there are two fundamental characteristics in Islamic Religious Education (PAI) learning: the content of knowledge and the content of intrinsic values. Through both fundamental characteristics, students will not only acquire knowledge from the learning process but also be able to practice it in their daily lives. In other words, in Islamic Religious Education (PAI) learning, there is a simultaneous transfer of knowledge along with the internalization of moral values. This is because the most emphasized aspect in PAI learning is to cultivate the character and morality of the learners.

The meaningful learning process in Islamic Religious Education (PAI) should ideally occur in a humanistic manner. The teacher imparts knowledge creatively and dynamically, creating enjoyable impressions, motivating learners to gain in-depth understanding, and guiding in the form of practical application. This condition indicates the professionalism inherent in the educator. According to Hude, (2018) Stating that to fulfill the meaningfulness of Islamic Religious Education (PAI) learning, it certainly involves the key roles and strategies of PAI teachers such as redefining concepts due to transformations, rationalizing the embodiment of wisdom, acting as actual examples, connecting various disciplines, and implementing combinative methods.

The meaningfulness of Islamic Religious Education (PAI) learning also considers various influencing factors. According to Reigheluth & Merrill, variables affecting learning include: (1) Conditions, which encompass goals, characteristics of the field of study, characteristics of learners, and learning constraints; (2) Methods, which are diverse approaches to achieving goals; and (3) Learning outcomes, the beneficial impact of learning in various conditions (Setyosari, 2001) (Degeng, 2013). Meaningful

Islamic Religious Education (PAI) learning can genuinely consider both instructional effect, which originates from the PAI subject in the curriculum, and nurturant effect or accompanying impact, which is the cumulative effect of various indirect learning experiences (Joyce et al., 2003). The impacts of learning can manifest in various learning spaces for learners, whether in the physical world or in digital virtual realities, such as the potential virtual Metaverse in the future.

Purposeful and Interactive Islamic Religious Education Learning in the Metaverse

Several studies confirm that learning in the Metaverse is quite promising in terms of interactivity and meaningfulness, such as the implementation of Problem-Based Learning (PBL) presented in the virtual world. Although this project is still in the process, indications suggest that problem-based learning efforts can support the realization of PBL in the Metaverse (Barry et al., 2009). Furthermore, the Vortex Metaverse platform can be utilized in collaborative learning, fostering experiences and addressing learning challenges in the virtual world (Kim et al., 2022).

According to Fromkin, (2022) studies have found that learning in the era of the Metaverse allows learners to connect widely, as the Metaverse empowers and ensures meaningful interactions, providing new accessibility experiences that make learning more interactive and immersive. According to hypothesis (Fromkin, 2022) Stating that the development of learning in the context of the Metaverse refers to a program from SAP and Jobs for the (JFF) Providing secondary school students with technology-facilitated immersive learning can have a positive impact on skill abilities. The immersion lab skill shows that 85% of students are confident in interacting with others, 85% are able to find the right words to convey ideas, and 90% acknowledge an improvement in tasks following the learning process. Thus, it can be concluded that immersive learning contexts are successful. The research findings illustrate that Metaverse media can address learning challenges by providing positive impacts and interactive experiences for students.

In Indonesia, virtual reality learning is increasingly inspiring various communities and educational institutions. The emergence of the Metaverse concept is disrupting the education landscape, as many communities and educational institutions are racing to offer Metaverse-based learning services with the support of Augmented and Virtual Reality. This is evident in the growth of schools that transform into Metaverse schools, such as Suluh Bangsa Mulia School, Santa Ursula School, and others.

Similarly, Islamic educational institutions in Indonesia can harbor hopes to create and adapt enjoyable, interactive, and meaningful Islamic Religious Education (PAI) learning experiences in the Metaverse. Considering that the characteristics of Islamic Religious Education (PAI) encompass aspects of Fiqih, Al-Qur'an and Hadith, Aqidah and Akhlak, and the History of Islamic Culture, the digital and virtual era makes it highly feasible to teach these four content aspects of PAI (Aryanti et al., 2022).

An interactive and a meaningful Islamic Religious Education (PAI) learning can present materials related to fiqh, for example, learners and educators can represent themselves as avatars, express themselves in new ways, interact with each other in practicing Islamic laws, engage in buying and selling land, practice ablution, and perform prayer rituals. Similarly, in learning Al-Qur'an and Hadith, materials can be presented about the history of the Quranic manuscript. Learners can attend international-level Quranic memorization competitions, witness and listen to beautiful recitations of the Quran from the best Qari and Qariah, explore the chain of narration (sanad), and even interact with narrators of hadith transformed into avatars.

As for the lessons on Aqidah and Akhlak's learner, they can study the signs of the greatness of Allah SWT through accessing virtual representations of the universe. Those who wish to learn about the solar system no longer need to passively look at pictures in books, complicated videos, or hardware-based planetary arrangements. Learners can directly enter the Metaverse environment and explore each of God's created planets. They can identify types and characteristics, experience the panorama, the atmosphere of outer space, and the sensations of natural disasters. They can feel the varying warmth from the sun at different distances between planets, observe Earth from outer space, and explore the universe—akin to astronauts and space explorers. Afterward, they can share their experiences about the magnificence of Allah SWT, thereby strengthening the learners' of Aqidah.

Similarly, in teaching morality, learners can study values of social interaction and humanity played out among avatars. They can interact to build camaraderie, show empathy and concern for others, engage in mutual cooperation, foster a spirit of hard work and performance, and fulfill entrusted responsibilities. Tasks involving social interactions in virtual spaces can be carried out in real-world situations by learners, and conversely, positive values of social relationships can be brought by learners from the real world into the virtual Metaverse.

Currently, learning in the context of the Metaverse opens new opportunities to present materials for the learning of Islamic Cultural History. For example, a reported study by (Hirsh-pasek et al., 2022), depicts how children can learn in the Metaverse,

visiting different time periods. The learning is designed to stimulate students' appetites, taking into account their varied backgrounds of interests, enthusiasm, and learning motivations. With this impressive learning environment, they then gain interesting experiences with various informative presentations about the past. In this learning context, learners will acquire information by witnessing the Arab culture during the spread of Islam, the construction of pyramids and ancient Greek sites, the history of Hajj and the construction of the Kaaba, dating back to the time of Prophet Ibrahim. They will explore the history and construction of temples in Indonesia, the history and practice of spreading Islam by the Wali Songo, and even the existence of Islamic Kingdoms in Indonesia. All of this is presented as if they are in the present time. In this scenario, the teacher simply changes positions and time, allowing students to suddenly witness projections of life from various periods with the remarkable characteristics and phenomena of the past.

On the other hand, children are then engaged in exploring various cultural realities by participating as archaeologists equipped with the necessary media and supporting tools. The findings from the students' explorations in that projection become interesting information that will be presented in class and serve as material for the learning outcomes report. Hirsh-pasek et al., (2022) Expressing that there is an opportunity for collaborative learning and joint innovation embedded in the virtual space built by the children.

The description above suggests that virtual Metaverse-based Islamic Religious Education (PAI) learning can provide positive hope for educators and learners in the future, making PAI learning more interactive and meaningful. It can bring interactive platforms and enjoyable experiences from the abstract world to virtual reality, freeing their learning environment. Therefore, the potential integration of Islamic Religious Education (PAI) into the Metaverse can be considered. Similarly, considering the characteristics of PAI learning, it is not significantly different from the characteristics of other general learning that requires similar media.

The Affective Essence and the Considerations for Islamic Education Learning in the Metaverse

The Metaverse media may be dominated by the transformation of knowledge and the skills alone, possibly overlooking the affective essence of Islamic education learning and the internalization of fundamental values. The values in Islamic education learning cannot truly be represented through the virtual reality space of the Metaverse,

such as the obligation of performing the pilgrimage to the holy land of Mecca, where the sequence of rituals must take place in the real physical space (Fernando & Larasati, 2022). Therefore, not all materials and practices of Islamic teachings in Islamic education learning can be done virtually. It remains important to be transformed in real life as it should be.

In the context of the character education, the transformation of life values such as exemplary behavior and emotional relationships with educators is also highly needed. The spirit or soul of educators becomes crucial for students (Umar et al., 2021). Such factors pose a challenge when the virtual space of the Metaverse becomes an option for use in the Islamic education learning process. Therefore, the quality of education, the spirit of learning, the transformation of life values, the humanity must be preserved, and the alternatives to Metaverse disruptions also need to be considered.

The Metaverse has the characteristic of a virtual world that not only presents the simultaneous transformation of knowledge, as in Islamic education learning. The learners certainly need more than mere knowledge, such as emotional engagement, sensory touch, and expression of feelings. However, is all of that easily attainable in the virtual world of the Metaverse? This can be a concern when developing Islamic education learning in the Metaverse. The values of affection, character, culture, and morality are the most important domains and need to be preserved from the real-world culture into the interactive culture in the Metaverse space. In line with what has been suggested (Joyce et al., 2003) If, besides paying attention to the direct impact (instructional effect), the curriculum also needs to focus on the crucial presence of indirect impact (nurturant effect), which involves the values transformed by educators.

The Metaverse has been considered as a new communication space and a gateway to a better future for Islamic religious education (PAI) learning. Therefore, the use of Metaverse in this learning context can take into consideration the suggestions proposed (Kye et al., 2021) The suggestions are: the importance of teachers first analyzing carefully so that students can understand the Metaverse properly, creatively designing classes for problem-solving, and ensuring data security when using the Metaverse. The implementation also needs to consider four phases, namely: (1) Design; setting goals, concepts, time, costs, risks, scenarios, implementation requirements, and feasibility, (2) Training models; data analysis, user modeling, methods, and learning, (3) Operation; system and simulation, learning scheduling, network environment, and prototype introduction, and (4) Evaluation; content material, learning interaction, and implementation feasibility. (Park & Kim, 2022).

The innovation, the strategies, and the learner adaptation are essential to be carried out, according to Hirsh-pasek et al., (2022) It suggests the importance of designing learning that supports learners' ways of learning should be developed based on the research framework. Learning involving online and distance-based platforms should prioritize the social and the emotional interactions that need to be built within the Metaverse. There are four principles of developing learning applications that support learners, namely; learning should occur actively, the attractiveness of learning applications is essential to be integrated into life, developing applications should be useful and meaningful for learners, and supporting social interactions both in the virtual application environment and in real life is important. Learning should be repetitive, and the learning experience should be enjoyable. (Hirsh-pasek et al., 2022).

Relevant to that development, the study of Zulazizi & Nawi, (2020) states in the context of skills as learning outcomes, the transformation of technology-based multimedia learning must be significant and support 21st-century education, especially literacy skills, communication, technology, interpersonal, and intrapersonal skills, including providing opportunities in Islamic education. The digital literacy skills are indeed an essential requirement for meaningful Islamic education to take place in the Metaverse. Additionally, it requires a holistic and integrative approach, a constructivist learning paradigm, as students will actively engage in exploring and constructing meaningful learning experiences (Umar, 2017).

Although the virtual Metaverse is considered to support learning, there are concerns from various parties about potential threats that may harm students if the Metaverse becomes an alternative media for Islamic education. This implies the presence of negative impacts on online learning (Roller, 2010), Among the concerns are the potential to strain social relationships and personalities due to the use of essential aspects of virtual 3D, leading to a weakening of social warmth compared to real-life interactions (Gilbert et al., 2011). High levels of interactivity pose threats to the safety and security of data, including the security of adolescent users (Maloney, 2021). Has the potential to have a significant positive impact on mental health care (Usmani et al., 2022) and negative impacts on physical, energy, and workload if there is excessive interaction with Augmented Reality (AR) and Virtual Reality (VR) (Xi et al., 2022).

The interactive and the meaningful Islamic religious education in the Metaverse demands educators and learners to understand interactive learning methods, prioritize ethics and learning interactions, and establish a learning system that prioritizes personal security to ensure the effective implementation of Islamic religious education. Furthermore, educational communities and Islamic educational institutions must

constantly adapt to the developments in future media technologies such as the Metaverse, while ensuring that their existence remains rooted in the values of Islamic teachings, Indonesian culture, history, fundamental goals, and real human life.

Certainly, all the negative impacts need to be considered in line with the principles of Islamic teachings in Islamic religious education (PAI) because PAI aims to optimize the physical and the spiritual potential of learners positively. It implies the importance of caution for users (educators and learners), paying attention to the patterns and the benevolence of interactivity in PAI learning positively. This challenge needs to be taken into account by developers and practitioners of digital media, learning innovators, and educators to develop alternative media in different, more humane, and meaningful patterns.

This strengthens the findings of (Jung, 2021) (Ayiter, 2008) (Rhee, 2021) using the Metaverse platform does not only involve online learning but needs to encompass all aspects of education in a holistic manner, such as communication and empathy, so that learning becomes more meaningful and fosters motivation.

The Learning of PAI in the Metaverse can be a pioneer for Islamic education at large in developing more adaptive and relevant innovations without neglecting the principles and essence of Islamic education. This is important to be addressed through in-depth studies to unlock the potential challenges of the future and create Metaverse media alternatives, considering the future prospects of Metaverse becoming an uncontrollable reality. Because PAI learning gives hope that the Metaverse context will support the goals of PAI learning by utilizing the resources of reality, technological tools, and virtual power in an integrated manner with the lives of learners.

CONCLUSION

The Metaverse is not yet fully present in the current life and educational system of Islamic religious education. However, the Metaverse concepts that lean toward learning have proposed important indicators and outlined the potential and possibilities of integrating learning within the Metaverse system in Indonesia. This positive potential will manifest in the interactive and the meaningful learning experiences for educators and learners due to the availability of digital tools and systems such as Virtual Reality glasses, Augmented Reality, 3D Games, and so on. The characteristics of Islamic religious education materials in Indonesia are constructively relevant for learners through virtual reality experiences in the Metaverse, even aligning with the characteristics of other general learning approaches.

The interactivity and the meaningfulness of the Islamic religious education learning are the most important goals of the learning process. Therefore, learning must be truly meaningful for the learners. In addition to comprehending the context and values of Islamic religious education, efforts should be made to consistently practice and cultivate these values culturally.

The interactive and the meaningful Islamic religious education learning in the Metaverse inherently retains the urgency of social interaction in the real world. The presence of individuals remains a source of value and is crucial in transforming the learning experience and the life values imparted by educators. The virtual Metaverse technology should be used as a support for learning without neglecting the essence and nature of education. The challenges of value-free Metaverse technology, the spirit of Islamic religious education, and the cultural values of Indonesian society must be taken into account by the developers, the communities, and the Islamic educational institutions when developing meaningful learning in the Metaverse.

REFERENCES

- Antin, D. (2020). The Technology of the Metaverse, It's Not Just VR. The Startup. <https://medium.com/swlh/the-technology-of-the-Metaverse-its-not-just-vr-78fb3c603fe9>
- Areepong, T., Nilsook, P., & Wannapiroon, P. (2022). A Study of a Metaverse Interdisciplinary Learning Community. Proceedings - 2022 Research, Invention, and Innovation Congress: Innovative Electricals and Electronics, RI2C 2022, 290–296. <https://doi.org/10.1109/RI2C56397.2022.9910268>
- Aryanti, N., Haryono, B., Genua, V., Triani, L., & Sarah Ayu Ramadhani. (2022). Sistem Informasi dan Teknologi Digital Era Metaverse (D. Adi Wijayanto (ed.). Akademia Pustaka.
- Ayiter, E. (2008). Integrative art education in a Metaverse: ground<c>. Technoetic Arts, 6(1), 41–53. https://doi.org/10.1386/TEAR.6.1.41_1
- Balbay, S., & Kilis, S. (2017). Students' Perceptions of the use of a YouTube channel specifically designed for an Academic Speaking Skills Course. EURASIAN JOURNAL OF APPLIED LINGUISTICS, 3(2), 235–251. <https://doi.org/10.32601/EJAL.461003>
- Barry, D. M., Kanematsu, H., Fukumura, Y., Ogawa, N., Okuda, A., Taguchi, R., & Nagai, H. (2009). International Comparison for Problem Based Learning in Metaverse. The ICEE and ICEER 2009 Korea (International Conference on Engineering Education and Research), 1(4), 60–66.
- Creswell, W. (2012). Educational Research, Planning, Conductin and Evaluating Quantitative and Qualitative (Four Edition). Person.
- Degeng, I. N. S. (2013). Ilmu Pembelajaran; Klasifikasi Variabel untuk Pengembangan Teori dan Penelitian. Aras Media.
- Dionisio, J. D. N., Burns, W. G., & Gilbert, R. (2013). 3D Virtual worlds and the Metaverse. ACM Computing Surveys (CSUR), 45(3). <https://doi.org/10.1145/2480741.2480751>
- Fernando, H., & Larasati, Y. G. (2022). Metaverse and Hajj: The Meaning of Muslims in Indonesia. KURIOSITAS:Media Komunikasi Sosial Dan Keagamaan, 15(2), 195–217. <http://ejurnal.iainpare.ac.id/index.php/kuriositas>.
- Fromkin, S. (2022). Metaverse opportunities for education. Fact Company. <https://www.fastcompany.com/90718919/the-Metaverse-can-provide-a-whole-new-opportunity-for-education-heres-what-to-consider>
- Gilbert, R. L., Murphy, N. A., & Clementina Ávalos, M. (2011). Realism, idealization, and potential negative impact of 3D virtual relationships. Computers in Human Behavior, 27(5), 2039–2046. <https://doi.org/10.1016/J.CHB.2011.05.011>

- Hirsh-pasek, K., Zosh, J. M., Hadani, S., Golinkoff, R. M., Clark, K., Donohue, C., & Wartella, E. (2022). A whole new world : Education meets the Metaverse (Issue February).
- Hude, M. D. (2018). Mengemas Pembelajaran Pendidikan Agama Islam yang Bermakna. *Qiro'ah*, 1(1), 25–43.
- Jonassen, D. H., & Strobel, J. (2006). Modeling for meaningful learning. *Engaged Learning with Emerging Technologies*, 1–27. https://doi.org/10.1007/1-4020-3669-8_1
- Joyce, B., Marsha, W., & Calhoun, E. (2003). *Models of Teaching* (Fifth Edition). Indian, Reprint.
- Jung, J. J. S. K. (2021). Exploring the educational applicability of Metaverse-based platforms. *The Korean Society for Information Education*, 12(2), 361–368.
- Kim, J., Jovanović, A. J., & Milosavljević, A. M. (2022). VoRtex Metaverse Platform for Gamified Collaborative Learning. *Electronics* 2022, Vol. 11, Page 317, 11(3), 317. <https://doi.org/10.3390/ELECTRONICS11030317>
- Koeswanti, H. D. (2021). Optimization of Online Learning with A Combination of Offline Practices in The Post-Pandemic Era. *International Journal of Elementary Education*, 5(2), 315–322. <https://doi.org/10.23887/IJEE.V5I2.34752>
- Kye, B., Han, N., Kim, E., Park, Y., & Jo, S. (2021). Educational applications of Metaverse: possibilities and limitations. *Journal of Educational Evaluation for Health Professions*, 18. <https://doi.org/10.3352/JEEHP.2021.18.32>
- Lee, L.-H., Braud, T., Zhou, P., Wang, L., Xu, D., Lin, Z., Kumar, A., Bermejo, C., & Hui, P. (2021). All One Needs to Know about Metaverse: A Complete Survey on Technological Singularity, Virtual Ecosystem, and Research Agenda. *Journal of Latex Class Files*, 14(8). <https://arxiv.org/abs/2110.05352v3>
- Maloney, D. (2021). A Youthful Metaverse: Towards Designing Safe, Equitable, and Emotionally Fulfilling Social Virtual Reality Spaces for Younger Users. *All Dissertations*. https://tigerprints.clemson.edu/all_dissertations/2931
- Muhaimin. (2002). *Paradigma Pendidikan Islam Upaya Mengefektifkan Pendidikan Agama Islam di Sekolah*. Remaja Rosdakarya.
- Mujianto, H. (2019). Pemanfaatan Youtube Sebagai Media Ajar Dalam Meningkatkan Minat Dan Motivasi Belajar. *Jurnal Komunikasi Universitas Garut: Hasil Pemikiran Dan Penelitian*, 5(1), 135–159. <https://doi.org/10.10358/JK.V5I1.588>
- Narin, N. G. (2021). A Content Analysis of the Metaverse Articles. In *Journal of Metaverse* (Vol. 1, Issue 1, pp. 17–24). İzmir Academy Association. <https://dergipark.org.tr/en/pub/jmv/issue/67581/1051382>
- Nevelsteen, K. J. L. (2018). Virtual world, defined from a technological perspective and applied to video games, mixed reality, and the Metaverse. *Computer Animation and Virtual Worlds*, 29(1), e1752. <https://doi.org/10.1002/CAV.1752>

- Ning, H., Wang, H., Lin, Y., Wang, W., Dhelim, S., Farha, F., Ding, J., & Daneshmand, M. (2021). A Survey on Metaverse: the State-of-the-art, Technologies, Applications, and Challenges. *Pracetak ArXiv* ArXiv:2111.09673 .
<http://arxiv.org/abs/2111.09673>
- Noor, A. F. (2013). Pembelajaran Bermakna Untuk Mencapai Pendidikan Karakter. *Anterior Jurnal*, 12(2), 54-60-54-60.
<https://doi.org/10.33084/ANTERIOR.V12I2.308>
- Novia, W., & Wasehudin, W. (2021). Dampak Pandemi Covid Terhadap Pembelajaran Daring Mata Pelajaran Pai. *TARBAWY : Indonesian Journal of Islamic Education*, 8(1), 23-37. <https://doi.org/10.17509/t.v8i1.28551>
- Park, S. M., & Kim, Y. G. (2022). A Metaverse: Taxonomy, Components, Applications, and Open Challenges. *IEEE Access*, 10, 4209-4251.
<https://doi.org/10.1109/ACCESS.2021.3140175>
- Rabiman, R., Sudira, P., Sofyan, H., & Nurtanto, M. (2021). Practical Learning Media in Subject Maintenance of Chassis and Power (MCP) Based Online: Simple Learning Using Videos on YouTube. *International Journal of Interactive Mobile Technologies*, 15(3), 130-145. <https://doi.org/10.3991/ijim.v15i03.14943>
- Rahayu, S., & Kejora, B. M. (2022). Guru Pendidikan Agama Islam dalam Pembelajaran Online di Masa Pandemic Covid 19. *Jurnal Pendidikan*, 10(1), 89-103.
<https://doi.org/10.36232/pendidikan.v10i1.1253>
- Rhee, H. (2021). Necessity of Establishing New Concept of Empathy Across Metaverse for AI Era. *Journal of Korea Game Society* 2021, 21(3), 79-90.
- Roller, M. (2010). Universal Adaptation of Avatar Technology and the Metaverse for Online... *Global Learn*, 2010(1), 50-53. <http://www.learntechlib.org/p/34220/>
- Saxena, C., Baber, H., & Kumar, P. (2020). Examining the Moderating Effect of Perceived Benefits of Maintaining Social Distance on E-learning Quality During COVID-19 Pandemic. <https://doi.org/10.1177/0047239520977798>, 49(4), 532-554.
<https://doi.org/10.1177/0047239520977798>
- Setyosari, P. (2001). *Rancangan Pembelajaran (Teori Dan Praktek)*. Elang Mas.
- Suh, A. (2023). How users cognitively appraise and emotionally experience the Metaverse: focusing on social virtual reality. *Information Technology and People*, ahead-of-print(ahead-of-print). <https://doi.org/10.1108/ITP-06-2022-0461/FULL/XML>
- Suyuti, H., Fitriyana, S., & Farida, E. Y. (2021). Teknologi Pembelajaran Pai. *Al-Iltizam: Jurnal Pendidikan Agama Islam*, 6(2), 68. <https://doi.org/10.33477/alt.v6i2.2444>
- Umar. (2016). *Studi Tekhnologi PAI Dari Sejarah Islam Hingga Era Modern (Tinjauan Historis Pemanfaatan, Agenda Aksi dan Perubahan Pendidikan)*. Al-Qalam: Jurnal Kajian Islam & Pendidikan, 8(1), 108-123.

- Umar, Setyosari, P., Kamdi, W., & Sulton. (2021). Exploration of Moral Integrity Education and Superior Cadre Leadership at Madrasah Boarding School Indonesia. *International Journal of Instruction*, 14(4), 753–774. <https://doi.org/10.29333/iji.2021.14443a>
- Umar, U., & Ismail, I. (2021). Learning Construction of Students of Prospective Teacher Based on Digital Literacy in the Era of Pandemic Covid-19. *Proceedings of the 2nd Borobudur International Symposium on Humanities and Social Sciences, BIS-HSS 2020*, 2–9. <https://doi.org/10.4108/eai.18-11-2020.2311617>
- Usmani, S. S., Sharath, M., & Mehendale, M. (2022). Future of mental health in the Metaverse. *General Psychiatry*, 35(4). <https://doi.org/10.1136/gpsych-2022-100825>
- Vallori, A. B. (2014). Meaningful Learning in Practice. *Journal of Education and Human Development*, 3(4), 199–209. <https://doi.org/10.15640/jehd.v3n4a18>
- Wahid, R., Pribadi, F., Pribadi, F., Wakas, B. E., & Wakas, B. E. (2020). Digital Activism: Covid-19 Effects in Campus Learning. *Budapest International Research and Critics in Linguistics and Education (BirLE) Journal*, 3(3), 1336–1342. <https://doi.org/10.33258/birle.v3i3.1174>
- Xi, N., Chen, J., Gama, F., Riar, M., & Hamari, J. (2022). The challenges of entering the Metaverse: An experiment on the effect of extended reality on workload. *Information Systems Frontiers* 2022 25:2, 25(2), 659–680. <https://doi.org/10.1007/S10796-022-10244-X>
- Yohan, H. jin L. H. (2022). Technology-Enhanced Education through VR-Making and Metaverse-Linking to Foster Teacher Readiness and Sustainable Learning. *Sustainability*, 14(4786). <https://doi.org/https://doi.org/10.3390/su14084786>
- Zhao, Y., Jiang, J., Chen, Y., Liu, R., Yang, Y., Xue, X., & Chen, S. (2022). Metaverse: Perspectives from graphics, interactions and visualization. *Visual Informatics*, 6(1), 56–67. <https://doi.org/10.1016/J.VISINF.2022.03.002>
- Zulazizi, M., & Nawati, M. (2020). Transformasi Pengajaran dan Pembelajaran Multimedia dalam Pendidikan Islam: Satu Perbincangan: Transformation of Multimedia Teaching and Learning in Islamic Education: A Discussion. *Journal of ICT in Education*, 7(2), 14–26. <https://doi.org/10.37134/JICTIE.VOL7.2.2.2020>

Implementation Of Differentiation Learning With The Project Based Learning Model In Primary School IPAS Learning

Elya Umi Hanik*

Institut Agama Islam Negeri Kudus

elyaumi@iainkudus.ac.id

Nafila Fitrotul Laili**

Institut Agama Islam Negeri Kudus

nafila209@gmail.com

Abstract

The purpose of this research is to describe the implementation of differentiated learning using the Project Based Learning model in science and science learning, to find out the impact of implementing differentiated learning with the Project Based Learning model in science and science learning, to find out the supporting and inhibiting factors for implementing differentiated learning with the Project Based Learning model in science and science learning. . This type of research is field research with a qualitative approach. Data collection techniques use observation, interviews and documentation methods. Test the validity of the data using credibility with three triangulations (source, technique and time). Data analysis techniques are carried out by reviewing all the data, reducing, compiling, and drawing conclusions or verification. The results of this research show that the implementation of differentiated learning using the Project Based Learning model in class IV science and science learning at SD 2 Kedungdowo Kaliwungu Kudus went through 3 stages, namely planning, implementation and evaluation. The impact of implementing differentiated learning using the Project Based Learning model in class IV science and science learning at SD 2 Kedungdowo Kaliwungu Kudus can be seen from the achievement of indicators of students' creative abilities, namely Fluency, Flexibility, Elaboration, Originality, so that can be guaranteed to increase students' creativity. The impacts after using indicators of student creativity include: students are able to think creatively, students' curiosity is high, students' enthusiasm for learning is high, and students' feelings of confidence are high. Supporting and inhibiting factors for implementing differentiated learning using the Project Based Learning model in class IV science and science learning at SD 2 Kedungdowo, namely supporting factors include professional teachers, social conditions related to the school environment, students' motivation and interest in new things, and infrastructure. Meanwhile, the inhibiting factor is that it requires quite a long time and requires tools and materials to be prepared which are usually not available in schools.

Keywords: *Differentiated Learning, Model Project Based Learning, IPAS*

INTRODUCTION

The progress of education in Indonesia has been transformed by progress in the education sector, namely the transition from the KTSP curriculum to the Merdeka curriculum. This development has had a tremendous impact on the education system, especially in elementary schools. The Independent Curriculum is an educational strategy that was recently implemented and was introduced by the Ministry of Education, Culture, Research, Technology, and Higher Education, namely by Nadiem Anwar Makarim, on February 11, 2022, online. Nadiem stated that the independent curriculum is a more concise, efficient, and adaptable curriculum designed to help learning loss recovery due to the COVID-19 pandemic. The aim is to bridge the gap between Indonesian education and other countries (Safitri et al., 2023). The implementation of the independent learning policy is to facilitate transformative education with the aim of developing human resources that realize the Pancasila Student Profile. Currently, many schools, especially at the elementary school level, are starting to implement the independent learning curriculum. (Wulandari Erika, Pangestika Rintis, 2023)

In connection with this, educators try to make efforts to improve learning, especially by implementing differentiated learning, which adapts the learning process to the individual needs of students. This differentiated learning aims to improve students' creative thinking abilities. Differentiated learning refers to the practice of presenting educational content in a captivating way as an alternative approach. (Sarie, 2022) Differentiated learning is not a new educational approach; differentiated learning is a very good and effective educational approach to meet the individual needs of students. It is highly recommended to use this approach because it prioritizes the specific needs of each student. Emphasizing concern for students is an important aspect of this learning approach because it prioritizes attention to students' strengths and needs. Differentiated learning is an educational approach that focuses on meeting students' individual needs, including their readiness to learn and students' learning profiles, interests, and skills. (Nuryani dkk., 2023)

There are three approaches to implementing differentiated learning, namely content, process, and product. Content differentiation refers to the specific knowledge and skills that students acquire in relation to the curriculum and learning materials. Process differentiation refers to the way students engage and understand concepts and information, including the selection of particular learning styles. Product differentiation refers to the process by which learners demonstrate their acquired knowledge and skills. Even though differentiated learning is not a new concept, the implementation of teaching and learning activities is still rarely carried out. (Yuono Audy, Toharudin Moh, 2023) In this case, the researcher will focus his research on the implementation of differentiated learning IPAS in elementary schools.

Science learning is a curriculum development that combines science and social studies content into one subject. Studying Natural and Social Sciences (IPAS) involves acquiring knowledge about sciences relating to living things and inanimate objects in

the universe; this also includes an understanding of human existence both as individuals and as creatures involved in social relations with their environment. (Wicaksana & Rachman, 2018) The aim of IPAS learning is so that students can develop the skills and knowledge needed to be in line with the Pancasila Student Profile; this will empower them to actively contribute to the preservation and management of the natural environment and natural resources in a sustainable manner. Acquire and understand IPAS concepts and apply them in practical situations, while growing the ability to investigate, define, and solve problems through real action. (Safitri dkk, 2023)

Based on the results of initial observations carried out by researchers, it can be seen that differentiated learning using the project-based learning model really helps students in improving their creative abilities. This encouraged researchers to conduct research at SD 2 Kedungdowo Kaliwungu Kudus using differentiated learning with the project-based learning model. The main factor behind students is the change in the curriculum, namely the Merdeka curriculum. Besides that, it is also influenced by the existence of IPAS subjects, which are a combination of science and social studies subjects, so that students are required to think creatively.

The existence of the problems above explains that a way is needed to encourage students' creativity so that they can immediately create an interest in learning. One model that suits these problems and can be used in learning is differentiated learning with the project-based learning model, where the definition of the project-based learning model is a learning model that invites students to create a project or activity that produces a product based on creativity. Alone. The focus in learning lies on core concepts, involving students in solving problems and other task activities, and providing opportunities for students to construct their own thoughts and reach the peak of producing real products.

This research is relevant to the results of research conducted by Amelia Diah Fernanda and Raras Seto Retno with the title "Project-Based Learning as a Form of Independent Learning to Increase Science Learning Achievement Through Differentiated Learning for Class V Students at SDN 1 Mojorejo." The aim of this research is to determine the success of learning outcomes using the application of the project-based learning model through differentiated learning for fifth grade elementary school students. This research is Classroom Action Research (PTK), consisting of 2 cycles. In accordance with research conducted using differentiated learning with the project-based learning model is effective in improving student learning outcomes compared to using conventional learning. (Wulandari et al., 2022) Given the problems above, the researchers intend to use the project-based learning model in IPAS learning because, according to the researchers, in their research they succeeded in determining the level of students' creative thinking abilities. This is a pretty good technique and maximizes the learning process. So, it can be concluded that the use of a differentiated learning model makes students more challenged to discover knowledge through direct interaction between students and the environment.

METHODS

The type of research used in this research is field research. Field research is research where the source of the data obtained must be collected directly from the field on the object being studied. This research uses a qualitative approach. A qualitative approach is a research process that is carried out fairly and naturally in accordance with objective conditions in the field without any engineering, as well as the type of data collected. (Albi Anggito & Johan Setiawan, 2018) A qualitative approach is an approach that collects information obtained from research activities, not from statistical tools. According to Bogdan and Taylor, quoted by Lexy J. Moleong, the qualitative approach is defined as a research procedure that produces descriptive data in the form of written or spoken words from people and observable behavior (Muhammad, 2019). The collection techniques use observation, interviews, and documentation methods. Next, to obtain data, the author took primary data sources, namely the school principal, class IV teacher and class IV IPAS subject teacher, and class IV students. Secondary data includes the school profile of SD 2 Kedungdowo, the vision, mission, and objectives of SD 2 Kedungdowo, and archive documents relating to the school and students. Test the validity of the data using credibility with three triangulations (source, technique, and time). Data analysis techniques are carried out by reviewing all the data, reducing, compiling, and drawing conclusions or verification.

RESULTS AND DISCUSSION

Implementation of Differentiated Learning with the Project Based Learning Model in Class IV IPAS Learning at SD 2 Kedungdowo Kaliwungu Kudus

The implementation of differentiated learning using the project-based learning model, which is carried out on natural resource material and its conservation, can provide opportunities for students to improve students' creative learning abilities. The implementation of differentiated learning using the project-based learning model, which is carried out on material on natural resources and their conservation at SD 2 Kedungdowo, is also considered effective because it makes it easier for students to learn a learning concept. This type of differentiated learning with the project-based learning model is suitable for effective learning in the classroom because it can be used and applied to identify the diversity of students and can facilitate learning outcomes. (Harianja, 2020)

Differentiated learning is learning that is tailored to the abilities and needs of each student so that they can be creative and think creatively. In this regard, when students have different learning abilities, they can complement each other in achieving maximum learning. Students who have fast abilities can help students who have slow abilities. Likewise, students who have slow abilities can help students who have fast abilities to expand their knowledge. The diversity of students is known based on the results of diagnostic assessments, which become a reference for teachers in applying the important components of differentiated learning. (Avandra & Desyandri, 2023)

The components in differentiated learning that must be considered are differentiation of content, process, product, and learning environment. Content differentiation is a way to provide material that can facilitate the readiness of students' level of learning understanding. Process differentiation is a meaningful learning activity or model that students use to gain learning experience in the classroom. Product differentiation is the final result of learning to demonstrate students' knowledge, skills, and understanding after completing one lesson material. Meanwhile, differentiation of the learning environment is the personal, social, and physical structure of the class. The learning environment can create a pleasant atmosphere for students to feel safe, comfortable, and calm when studying because their needs are met. (Elviya & Sukartiningsih, 2023)

Implementation of differentiated learning using the project-based learning model prepares learning concepts that will take place starting from diagnostic assessments, teaching modules, worksheets, formative assessments, summative assessments, and learning media aimed at achieving learning objectives. (Puspitasari & Wahyuni, 2023) Then, the stage of implementing the learning process using the project-based learning model begins with giving starter/basic questions to students. The next step is to design a project plan that will be completed during the learning process. The project designed is to make glowing decorative bottles consisting of used bottles from the surrounding environmental health. Students are given the freedom to be creative to see their creative abilities. This is a form of product differentiation. Give students the freedom to be creative in making projects or products. The next step is to arrange scheduling, monitor students, and monitor project progress, assessing results. The project that is assessed is where students present the results of the project by explaining the glowing decorative bottles they made. Other groups are given the freedom to ask questions to the group that is making a presentation in front of the class. The final step is evaluating the results of the project. At the end of the lesson, the teacher provides an evaluation regarding the project work process and during the presentation. The teacher said that during the project creation process, each group had its own advantages and disadvantages. (Dinda & Sukma, 2021)

This is in accordance with research conducted by Richard Adony Natty, Forosalia Kristin, and Indri Anugraheni using the project-based learning model to measure student creativity and learning outcomes. This research uses creativity-measuring tools and high, medium, and low-scoring rubrics. In the learning process, students are asked to create their own project assignments or products, where students look for their own ideas about the product that are related to the material being studied. Students will plan what project assignments they will create with teacher guidance, then students in groups schedule the completion of the project assignments. Once completed, each group will make a final report regarding the project assignment, which will then be presented in front of the class. After that, students work on evaluation questions as a form of assessing learning outcomes in accordance with learning indicators. (Natty et al., 2019)

In this way, if implementing differentiated learning using the project-based learning model is carried out appropriately and well, the learning objectives will be achieved, students' learning motivation will increase, and they will be able to increase students' creative abilities. Studying differentiated learning with the project-based learning model can show very positive results for students in learning. To create a lively, interesting, and enjoyable learning environment.

Impact of Implementation of Differentiated Learning with the Project Based Learning Model in Class IV IPAS Learning at SD 2 Kedungdowo Kaliwungu Kudus

The application of differentiated learning using the project-based learning model to improve creative abilities has several indicators that will be achieved in learning. implementing an independent curriculum that includes 21st century skills, which are often called 4C skills, including creativity skills. Skills can be interpreted as learning outcomes in the psychomotor domain, which are shaped like cognitive learning outcomes and the ability to do or carry out something well and optimally. This skill has several categories, including the creativity category, which can be interpreted as a person's skill in creating new combinations (Marzoan, 2023).

The application of differentiated learning with the project-based learning model in class IV IPAS at SD 2 Kedungdowo has several benefits for students, including improving the skills students have in solving problems and making real decisions, improving creative thinking skills that will emerge if knowledge increasingly grows through processes with real situations that are of interest to students, and increasing curiosity and objective ways of thinking individually and in groups. (Donni Juni Priansa, 2017)

In the context of IPAS learning for class IV SD 2 Kedungdowo, the implementation of differentiated learning using the project-based learning model focuses on the topic of natural resources and their conservation. Teachers apply 4 indicators, namely fluency, flexibility, elaboration, and originality, to ensure the success of the learning process. This learning activity allows students to improve their creative talents, facilitating the exploration of new and creative ideas. Yunita Lema's statement is in line with the idea that using the project-based learning model in varied learning can foster a fun and focused learning environment, as well as increase students' abilities in creativity and innovation. This is demonstrated through the successful implementation of a structured learning approach that fosters an environment conducive to students' self-expression and the development of individual talents and abilities. In addition, evaluation of creativity and innovation skills is carried out through project-based activities and video production that displays extraordinary levels of creativity. The implementation of differentiated learning using the project-based learning model in class IV IPAS learning at SD 2 Kedungdowo on natural resources and their conservation can be said to be successful because the learning that has been implemented has been achieved, including:

- a. *Fluency*, This creative ability is meant by fluency. The fluency in creating a multitude of ideas can be seen in how someone can find these ideas smoothly. The fluency referred to here is when students can answer the problems given by finding ideas or suggestions smoothly. (Adi, 2023) In assessing the creative abilities of class IV students at SD 2 Kedungdowo Kaliwungu Kudus, the teacher looked at their fluency in expressing ideas, especially in conveying their ideas fluently. The teacher's role here is in motivating students, namely by encouraging creative thinking skills so that they have the courage to always express their opinions or ideas to their friends according to their daily activities.
- b. *Flexibility*, What is meant by this creative ability is flexibility. Flexibility shapes student behavior that produces many ideas and suggests answers from different directions of thought. Students' flexibility to have high imagination and manage group activities. (Adi, 2023) This achievement is proven in the fact that the majority of students' answers do not just follow the commonly taught solution method. Answers that include many ideas or thoughts are not limited to one point of view but are able to consider various views. It was even found that students' answers presented many different concepts. However, a number of common or standard answers were identified, even though these ideas were less relevant to the given case.
- c. *Elaboration*, What is meant by this creative ability is detail. Detailedness is defined as the ability to communicate creative ideas; the category of student ability is to develop ideas and try new things. (Adi, 2023). In assessing the creative abilities of class IV students at SD 2 Kedungdowo Kaliwungu Kudus, the teacher looked at the ability to develop ideas and try new things by working on the glowing decorative bottle project and completing it well.
- d. *Originality*, This creative ability is meant by authenticity. The authenticity of students' thought processes can be seen in ideas or concepts that are unique and unusual. (Adi, 2023). Learners see general concepts expressed in their own language and based on their personal experiences. Students have the ability to produce ideas that originate from their own thoughts. Unfortunately, there are still examples of the same answers, thus showing that many students collaborate in solving the problems given.

With this explanation, it can be analyzed that the impact of implementing differentiated learning using the project-based learning model in IPAS learning for class IV SD 2 Kedungdowo Kaliwungu Kudus really motivates students to participate and develop creative abilities by explaining their ideas and relating their ideas to everyday life. -day. This is characterized by student activity, enthusiasm, increased interest in learning, and not feeling bored when learning takes place. So this can help students hone their creative abilities to contribute to producing experiences in everyday life. Proven as follows:

- 1) 1 Students are able to think creatively. Differentiated learning with the project-

based learning model can train students to think creatively about problem-based questions. Students are able to think creatively because they are trained how to solve a concrete problem so that students can think about how the problem can be solved..

- 2) 2) Students' high curiosity. Students who are curious about learning are more effective and prefer it. One of the benefits of differentiated learning using the project-based learning model is finding that students' curiosity always keeps their brains in a condition that allows them to learn and retain information. This makes students motivated to learn and absorb all information about the environmental challenges around them.
- 3) High level of student enthusiasm. Based on observations made during learning, it shows that students are involved and complete the work without experiencing boredom while studying. It can be seen from their actions and behavior that these students are very enthusiastic about learning and have a strong drive to succeed academically.
- 4) High self-confidence of students. Students gain self-confidence and the will to succeed after using differentiated learning with the project-based learning model. They are also more willing to take risks and overcome challenges. Apart from that, students show enough courage to move forward on their own to work in groups because they are able to understand their friends' mistakes. When given the opportunity to grow as individuals, students develop bold ideas and gain self-confidence because they want to be recognized for their abilities.

Supporting and inhibiting factors in the Implementation of Differentiated Learning with the Project Based Learning Model in Class IV IPAS Learning at SD 2 Kedungdowo Kaliwungu Kudus.

In a learning process, of course there is something that hinders and supports the learning process. Supporting and inhibiting factors are always related to various components in the implementation of learning. Based on the research results, supporting and inhibiting factors can be analyzed in implementing differentiated learning using the project-based learning model in class IV IPAS learning at SD 2 Kedungdowo. Supporting factors during learning activities include professional teachers, social conditions related to the school environment, students' motivation and interest in new things, and facilities and infrastructure that support success in learning. Not only are there supporting factors in the implementation of differentiated learning using the project-based learning model in class IV IPAS learning at SD 2 Kedungdowo, but there are also inhibiting factors, including requiring quite a long time and requiring a lot of materials to be prepared. (Harianja, 2020)

Supporting factors for the implementation of differentiated learning using the Project Based Learning model in class IV IPAS learning at SD 2 Kedungdowo, namely:

- a. Professional teacher: A teacher, as a professional and qualified educator, must

be able to pay attention to his qualified staff with real behavior in the learning process.

This action can take the form of interactions between teachers and students; a teacher not only carries out routine educational activities but is also required to be proficient in using strategies, models, and media that are appropriate to the students' conditions. (Suhelayanti, 2023) Therefore, teachers are part of supporting success in implementing differentiated learning using the Project Based Learning model.

- b. Social conditions related to the school environment, maintaining good and harmonious relationships with each other. During the learning process, the implementation of differentiated learning using the project-based learning model, communication between teachers and students goes well, and students and students also do so, so that a harmonious relationship can be created and can be supported during the learning process..
- c. Students' motivation and interest in new things; students' learning motivation can grow students' enthusiasm for learning. The role of the teacher has a very important and significant action in the learning process. The implementation of differentiated learning using the project-based learning model helps increase students' motivation and interest in learning new things. The results of the research show that students increase their motivation and interest in learning; apart from that, students' creative abilities also increase due to the use of differentiated learning with the project-based learning model..
- d. The facilities and infrastructure owned by the school at SD 2 Kedungdowo are sufficient and complete to be able to support the implementation of differentiated learning using the Project Based Learning model..

Factors inhibiting the implementation of differentiated learning using the Project Based Learning model in class IV IPAS learning at SD 2 Kedungdowo, namely:

- a. Differentiated learning with the Project Based Learning model requires quite a long time because it has to go through several learning stages such as looking at students' learning needs, students looking for new ideas to solve the problem, then students analyzing the ideas that have been found so that they can be applied so that they can solve the problem. , after students apply the ideas that have been found, students design conclusions from the problems that have been solved. After that, students need to plan projects, determine projects, and evaluate projects. Learning by implementing differentiated learning using the Project Based Learning model in class IV IPAS learning at SD 2 Kedungdowo, each meeting takes 2 class hours or 2 JP x 35 minutes.

- b. Implementing differentiated learning using the Project Based Learning model requires a lot of materials that must be prepared by teachers, and these are usually not available in schools, so teachers have to prepare their own tools and materials because they don't want to burden students. However, this can be overcome by utilizing used goods in the surrounding environment.

CONCLUSION

There are three steps in implementing differentiated learning using the project-based learning model in class IV IPAS learning at SD 2 Kedungdowo Kaliwungu Kudus, including planning, implementation, and evaluation. Planning is the main thing; initially, the teacher will prepare teaching modules, learning materials, diagnostic assessments, learning approaches and models, as well as learning objectives. The stages of implementing differentiated learning using the project-based learning model in IPAS learning are in accordance with those in the teaching module; there are three preliminary, core, and closing activities. The introduction includes preparation for learning by chanting Asmaul Husna, followed by the teacher making the presence of students and conducting an apperception. The core activities include the delivery of material and the explanation of procedures for implementing differentiated learning using the project-based learning model, starting with providing a diagnostic assessment sheet to students to determine the level of understanding of the teaching material presented. After providing a diagnostic assessment to students, learning continues by applying the four components of differentiated learning, namely differentiation of content, processes, products, and learning environments. Content differentiation begins with the teacher preparing problems that occur around them by watching the video on the projector screen. Process differentiation begins with the application of the steps of the project-based learning model, namely, providing trigger/fundamental questions, designing a project plan, creating a schedule, monitoring and supervising project progress, assessing results, and evaluating project results. In these steps, product differentiation begins to be implemented, followed by differentiation of the learning environment by appreciating the results of students' projects by reflecting on activities during learning. The final stage is the evaluation of assignments and questions and answers regarding the material carried out by the teacher as a form of confirmation to determine the level of understanding and creative abilities of students regarding the material that has been presented. The impact of implementing differentiated learning with the project-based learning model on class IV IPAS learning at SD 2 Kedungdowo using observations carried out aimed at observing learning activities in the classroom using indicators of creative ability. So that the researchers obtained observation

results with an indicator of creativity ability, namely fluency, students were able to convey ideas well, as evidenced by the students being able to answer questions from the teacher regarding natural resource material and its conservation. Flexibility: Students can produce free thinking, as evidenced by students being able to express opinions by communicating and exchanging opinions with their friends. Elaboration (detailedness): students can organize ideas and expand them into better ideas, as evidenced by students being able to analyze solutions to problems by creating projects. Originality: Students can provide an idea that originates from their own thoughts, proven by students being able to draw conclusions from project results from problems to completion of the project. The impacts after using indicators of student creativity include: students are able to think creatively, students' curiosity is high, students' enthusiasm for learning is high, and students' feelings of confidence are high. Supporting and inhibiting factors for implementing differentiated learning using the project-based learning model in class IV IPAS learning at SD 2 Kedungdowo. Supporting factors for implementing differentiated learning using the project-based learning model include professional teachers, social conditions related to the school environment, students' motivation and interest in new things, and infrastructure. Meanwhile, the inhibiting factor in implementing differentiated learning using the project-based learning model is that it requires quite a long time and requires tools and materials to be prepared, which are usually not available in schools..

REFERENCES

- Adi, Y. K. (2023). Profil Kemampuan Berpikir Kreatif Peserta Didik Kelas VI Ditinjau Dari Prestasi Akademik. *Jurnal Sinektik*, 5(1), 82–87. <https://doi.org/10.33061/js.v5i1.7533>
- Albi Anggito & Johan Setiawan. (2018). *Metodologi Penelitian Kualitatif*. CV. Jejak.
- Avandra, R. & Desyandri. (2023). Implementasi Pembelajaran Berdiferensiasi Terhadap Keterampilan Berpikir Kritis Peserta didik Pada Pembelajaran IPA Kelas VI SD. *Didaktik : Jurnal Ilmiah PGSD STKIP Subang*, 8(2), 2944–2960. <https://doi.org/10.36989/didaktik.v8i2.618>
- Dinda, N. U., & Sukma, E. (2021). Analisis Langkah-Langkah Model *Project Based Learning* (PjBL) Pada Pembelajaran Tematik Terpadu di Sekolah Dasar Menurut Pandangan Para Ahli (Studi Literatur). *Journal of Basic Education Studies*, 4(2), 54–62.

- Donni Juni Priansa. (2017). *Pengembangan Strategi & Model Pembelajaran*. CV PUSTAKA SETIA.
- Elviya, D. D., & Sukartiningsih, W. (2023). *Penerapan Pembelajaran Berdiferensiasi Dalam Kurikulum Merdeka Pada Pembelajaran Bahasa Indonesia Kelas IV Sekolah Dasar Di SDN Lakarsantri I/472 Surabaya*. 11.
- Harianja, J. K. (2020). Model Pembelajaran *Project Based Learning* Dalam Meningkatkan Keterampilan Berpikir Kreatif dan Komunikasi Matematis Peserta didik. *JARTIKA Jurnal Riset Teknologi dan Inovasi Pendidikan*, 3(2), 201–214. <https://doi.org/10.36765/jartika.v3i2.114>
- Marzoan. (2023). *Penerapan Pembelajaran Berdiferensiasi Di Sekolah Dasar (Tinjauan Literature dalam Implementasi Kurikulum Merdeka)*. 3(2), 113–122.
- Natty, R. A., Kristin, F., & Anugraheni, I. (2019). *Peningkatkan Kreativitas Dan Hasil Belajar Peserta didik Melalui Model Pembelajaran Project Based Learning Pada Peserta didik Sekolah Dasar*. 3(4).
- Nuryani, S., Nugraheni, N., & Artiningsih, A. (2023). Pembelajaran Berdiferensiasi Untuk Meningkatkan Kemampuan Berpikir Kreatif Peserta Didik Menggunakan Media Kantong Budaya. *Madani: Jurnal Ilmiah Multidisiplin*, 1(6), 1018–1030.
- Puspitasari, V., & Wahyuni, A. (2023). Analisis Penerapan *Project Based Learning* (PjBL) Pada Pembelajaran IPAS Peserta didik Kelas 4 Dengan Kurikulum Merdeka. *Jurnal Ilmiah Pendidikan Dasar*, 8(2), 2517–2530.
- Safitri, R., Subekti, E. E., & Nafiah, U. (2023). Analisis Penerapan Model Problem Based Learning Pada Pembelajaran IPAS Kelas IV Di SD Supriyadi Semarang. *Journal Of Social Science Research*, 3(2), 297–308.
- Sarie, F. N. (2022). Implementasi Pembelajaran Berdiferensiasi dengan Model Problem Based Learning pada Peserta didik Sekolah Dasar Kelas VI. *Tunas Nusantara*, 4(2), 492–498. <https://doi.org/10.34001/jtn.v4i2.3782>
- Suhelayanti, Syamsiah Z, Ima Rahmawati, Year Rezeki Patricia Tantu, Wiwin Rewini Kunusa, & Nita Suleman. (2023). *Pembelajaran Ilmu Pengetahuan Alam Dan Sosial (IPAS)*. Yayasan Kita Menulis.
- Wicaksana, A., & Rachman, T. (2018). Pembelajaran Ilmu Pengetahuan Alam Sosial (IPAS). In *Angewandte Chemie International Edition*, 6(11), 951–952. (Vol. 3, Issue 1).
- Wulandari Erika, Pangestika Rintis, S. (2023). Efektivitas Strategi Pembelajaran Berdiferensiasi Terhadap Hasil Belajar Peserta didik Pada Mata Pelajaran IPAS Kelas IV SD Muhammadiyah Bayan. *JIPDAS : Jurnal Ilmiah Pendidikan Dasar*, 1(3), 74–82.

- Wulandari, I., Selamat, K., & Suardana, I. N. (2022). Analisis Pengelolaan E-Learning pada Pembelajaran IPA Di MTsN Karangasem Tahun Ajaran 2020/2021. *Jurnal Pendidikan dan Pembelajaran Sains Indonesia (JPPSI)*, 5(1), 20–31. <https://doi.org/10.23887/jppsi.v5i1.45677>
- Yuono Audy, Toharudin Moh, N. (2023). Implementasi Pembelajaran Berdiferensiasi Pada Mata Pelajaran Bahasa Indonesia Kelas II DI SDN Klampok 01. *Jurnal Pendidikan*, 2(5), 282–288.

