ATTA'DIB
Jurnal Pendidikan Agama Islam
p-ISSN: 2745-665X, e-ISSN: 2746-1572
Publisher By Islamic Education Study Program Faculty of Tarbiyah IAIN Bone.
Address: HOS Cokroaminoto Street, Watampone, South Sulawesi, Indonesia.
Email: attadib.iainbone@gmail.com / attadib@iain-bone.ac.id

DEVELOPMENT AND EVALUATION OF GOOGLE SITES-BASED LEARNING MEDIA FOR TEACHING TOLERANCE IN ISLAMIC RELIGIOUS EDUCATION

Mohammad Khizam Sukrillah[1], *Satria Kamal Akhmad* [1*]
[1] Sekolah Tinggi Ilmu Tarbiyah Raden Wijaya, Mojokerto

Corresponding Author: Satria Kamal Akhmad
(satriakamalakhmad@stitradenwijaya.ac.id)

Keywords:
Google Sites, Islamic Religious Education, learning innovation, tolerance.

Article History:
Received: August 10, 2026
Accepted: September 17, 2026
Published: October 30, 2026

Abstract
This study addresses the limited use of interactive digital learning media in tolerance-focused Islamic Religious Education (PAI) at the junior secondary level. The study aimed to develop and evaluate Google Sites-based learning media for teaching tolerance in PAI. The study employed a Research and Development (R&D) approach using the ADDIE model. Participants included one media expert, one subject-matter expert, five eighth-grade students in a limited attractiveness trial, and 17 eighth-grade students in a field trial at SMP Islam Plus Al Azhar Mojokerto. The product was developed through needs analysis, design, development, implementation, and evaluation. The study assessed feasibility through expert questionnaires, attractiveness through student responses, and learning-outcome improvement through a one-group pretest-posttest design and N-Gain analysis. The media expert and subject-matter expert rated the product at 93.3% and 98%, respectively, while the limited trial yielded an attractiveness score of 87%. The field trial produced a mean N-Gain of 0.79, indicating a high normalized gain. These findings provide preliminary evidence that the developed media is feasible and promising for supporting tolerance-focused PAI learning; however, the field trial involved only 17 students and did not include a comparison group, so the findings should be interpreted cautiously. The study contributes a context-specific digital learning resource that integrates text, video, images, and interactive assessment into tolerance-oriented PAI instruction.

How to cite:
Sukrillah, M. K., & Akhmad, S. K. (2026). Development and evaluation of Google Sites-based learning media for teaching tolerance in Islamic Religious Education. Atta'dib Jurnal Pendidikan Agama Islam, 7(2).
DOI: https://doi.org/10.30863/attadib.v7i2.12477

Author(s) retain copyright and grant the journal right of first publication with the work simultaneously licensed under a Creative Commons Attribution-ShareAlike License (CC BY-SA 4.0) that allows others to share the work with an acknowledgement of the work's authorship and initial publication in this journal.

INTRODUCTION

Digital transformation has changed how teachers design and deliver learning experiences. Digital learning environments can provide flexible access to multimedia resources and opportunities for students to revisit learning materials. However, their educational value depends on instructional design, learner engagement, access, and teacher support. (Akpen et al., 2024; Msambwa et al., 2024). Research on technology-enhanced learning emphasizes that digital tools should be aligned with curriculum goals and pedagogical approaches rather than adopted for novelty alone (Choi-Lundberg et al., 2023). Google Sites has been used to develop web-based learning media across school subjects, with studies reporting positive feasibility and learner-response findings (Adzkiya & Suryaman, 2021; Astarina et al., 2024; Devya et al., 2022; Hartari & Putra, 2025; Hidayat et al., 2023; Kurniawati & Ramadan, 2025; Laili et al., 2025; Maharani et al., 2024; Ramadannisa & Hartina, 2021; Salsabila & Aslam, 2022; Syahrani & Gunawan, 2024). However, the quality of such resources depends on how multimedia elements are organized to support meaningful learning, not simply on the number of media types included (Mayer, 2024). In Islamic Religious Education (PAI), technology integration also needs to maintain the subject's ethical and spiritual aims while responding to teachers' digital competence and classroom conditions (Mintasih et al., 2024; Suharsiwi et al., 2024; Susanti et al., 2024). Tolerance matters in plural educational settings because students encounter diverse social, cultural, and religious perspectives both offline and through digital media. Research in Indonesia shows that tolerance education depends on how teachers conceptualize and facilitate engagement with diversity (Sirry et al., 2024)while interreligious competence and religious moderation are relevant to equitable religious education and teacher preparation (Mukhibat et al., 2024; Purnomo et al., 2025; Purwanto et al., 2024; Utami, 2022; Yanuardianto et al., 2024).

Despite these developments, three limitations remain evident. First, Google Sites development studies have commonly addressed general school subjects or broad learning outcomes, including science, mathematics, social studies, and information literacy (Bara et al., 2024; Devya et al., 2022; Salsabila & Aslam, 2022; Syahrani & Gunawan, 2024; Wahyuningsih & Lidyasari, 2025), with fewer studies focused specifically on tolerance-oriented PAI content. Second, research

on digital PAI has discussed technology use and instructional innovation (Mintasih et al., 2024; Susanti et al., 2024; Zulkifli et al., 2024), while studies on tolerance and religious moderation have emphasized teacher perspectives, interreligious competence, or curriculum initiatives (Mukhibat et al., 2024; Sirry et al., 2024; Utami, 2022) rather than the development and preliminary evaluation of a specific Google Sites product. Third, small-scale one-group pretest-posttest studies can describe changes among participating learners but cannot isolate the medium's effect from other possible influences; digital-learning reviews also note that outcomes vary with implementation and learner support (Akpen et al., 2024; Msambwa et al., 2024). This study addresses these gaps by developing "Ruang Toleransi," a Google Sites-based learning medium designed specifically for tolerance-related PAI instruction at the junior secondary level. It contributes by integrating needs analysis, expert validation, student attractiveness testing, and a field pretest-posttest evaluation within an ADDIE development process, with a broad development logic similar to recent Google Sites studies (Hartari & Putra, 2025; Syahrani & Gunawan, 2024). Accordingly, this study aims to develop and evaluate the feasibility, attractiveness, and preliminary learning-outcome improvements of the Google Sites-based medium.

METHOD

Research Design

This study used a Research and Development (R&D) approach based on the ADDIE model (Analysis, Design, Development, Implementation, and Evaluation). The model follows the instructional design framework described by (Branch, 2009). The study selected this model because it required a sequential process linking instructional needs identification, product design, product development, classroom implementation, and evaluation. Because the field evaluation used a one-group pretest-posttest design with 17 students and no comparison group, the study treats the N-Gain result as preliminary evidence of learning improvement associated with implementation rather than definitive causal evidence of effectiveness.

Participants

Participants included one media expert, one subject-matter expert, five eighth-grade students for the limited attractiveness trial, and 17 eighth-grade students for the field trial at SMP Islam Plus Al Azhar Mojokerto. The media expert was a lecturer at STIT Raden Wijaya Mojokerto, while the subject-matter expert was an Islamic Religious Education teacher at the study school. The two experts provided complementary judgments of technical/media quality and PAI content quality. Students were selected from the target grade because the product was designed for eighth-grade tolerance-related PAI instruction. The limited trial gathered initial user responses before the field trial, while the field trial examined changes in learning outcomes. The small, single-school sample limits the findings' transferability beyond the study context.

Data Sources

Primary data consisted of expert validation scores, student response questionnaires, pretest and posttest scores, observations, and interviews conducted during needs analysis and implementation. Secondary data included books and peer-reviewed journal articles on digital learning media, Google Sites, PAI, and tolerance education. The data served two purposes: formative product improvement during development and preliminary evaluation of the developed product.

Research Instruments

The instruments comprised expert validation questionnaires, a student response questionnaire, learning-outcome tests, observation notes, and unstructured interview guides. The expert questionnaires assessed visual quality, language, programming, content feasibility, presentation, and support for independent learning using a five-point Likert scale; the student questionnaire assessed attractiveness after limited exposure to the product. The pretest and posttest measured learning outcomes related to the tolerance material before and after implementation. Interviews and observations identified learning constraints, learner characteristics, and implementation conditions. The manuscript did not employ a separate psychometric validation study for the questionnaires; therefore, the instrument results are interpreted as expert-judgment and user-response evidence within the R&D process rather than as independently validated measurement scales.

Table 1. Likert-Scale Assessment Categories

Response	Description	Score
Strongly Agree	SS	5
Agree	S	4
Somewhat Agree	KS	3
Disagree	TS	2
Strongly Disagree	STS	1

Data Analysis

Data analysis combined qualitative and quantitative descriptive procedures. The team reviewed qualitative comments and suggestions from validators and students and used them to guide product revision. Questionnaire data were converted into percentages using:

$$P = \frac{\sum x}{\sum n} \times 100\%$$

Description:

- P = feasibility percentage
- Σx = total score obtained
- Σn = maximum possible score

The resulting percentages were interpreted using the feasibility categories in Table 2. We examined learning-outcome improvement using normalized gain (N-Gain) calculated from pretest and posttest scores. N-Gain described the magnitude of change among participating students, not a causal effect compared with an untreated group.

Table 2. Feasibility Scale

Validity Criteria	Category
81% -100%	Highly Feasible
61% - 80%	Feasible
41% - 60%	Moderately Feasible
21% - 40%	Less Feasible
0% - 20%	Not Feasible

We summarized learning-outcome change using normalized gain (N-Gain), calculated from pretest and posttest scores in Microsoft Excel. N-Gain was used as a descriptive indicator of the magnitude of change within the participating group. The study did not treat the value as a causal estimate because it did not include a comparison group. The N-Gain value was calculated using the following formula:

$$g = \frac{post\ test\ score - pretest\ score}{maximum\ score - pretest\ score}$$

We interpreted N-Gain results using the commonly applied categories of high ($g > 0.70$), medium ($0.30 \leq g \leq 0.70$), and low ($g < 0.30$). Therefore, the term "effective" is used cautiously; the result indicates a high normalized gain within the field-trial group, but the study design does not allow attribution of the change solely to the media or generalization to other populations. (Hake, 1998).

RESULTS AND DISCUSSION

The R&D process produced "Ruang Toleransi," a Google Sites-based PAI learning medium for tolerance-related content for eighth-grade students at SMP Islam Plus Al Azhar Mojokerto. The results are presented according to the five ADDIE stages. The Analysis, Design, and Development stages describe how the product was constructed, while the Implementation and Evaluation stages report expert/user assessments and field learning-outcome results. For the analysis stage, I conducted a needs analysis through interviews with the PAI teacher and eighth-grade students and through direct observation. The analysis identified limited instructional time, continued reliance on lecture-based instruction, and limited use of digital media. The school had 20 Chromebook units and stable internet access, providing a feasible infrastructure for web-based learning. The

analysis also identified diverse learner preferences and the need for a medium that could combine visual, audiovisual, and interactive elements. These findings informed the decision to develop a Google Sites product containing text, videos, images, and interactive assessment activities aligned with the tolerance-related learning objectives.

At the design stage, the product centered on the concept "Ruang Toleransi." The design process included determining the website structure and theme, preparing learning objectives and content, developing a storyboard, arranging the page layout, and selecting supporting visual materials. The design emphasized simple navigation and multiple content formats so students could access explanatory text, visual examples, videos, and quizzes in one learning environment. During development, the team implemented the design in Google Sites, resulting in the product shown in Figures 1–7. The product includes a home page, user guide, attendance, learning materials, supporting videos, quiz/evaluation, and developer profile. A media expert and a subject-matter expert then reviewed the product. The media expert assessed visual quality, language, and programming, while the subject-matter expert assessed content feasibility, language, presentation, and support for independent learning.



Figure 1. Home Page



Figure 2. User Guide Menu



Figure 3. Attendance Menu



Figure 4. Learning Materials Menu



Figure 5. Supporting Videos Menu



Figure 6. Quiz and Evaluation Menu



Figure 7. Developer Profile

After development, experts validated the product and conducted a limited student trial. The media expert gave a score of 93.3%, categorized as highly feasible, while the subject-matter expert gave 98%, also categorized as highly feasible. The limited trial with five eighth-grade students produced a score of 520 out of 600, corresponding to an attractiveness score of 87%. These results indicate that, within the development context, the product was viewed positively in terms of feasibility and attractiveness. They do not, by themselves, establish that the product improves learning outcomes; the field trial examined this separately. At the implementation Stage. A field trial involved 17 eighth-grade students using a one-group pretest-posttest design. The learning process was conducted over two sessions. It included media orientation, teacher- and student-guided use of the website, and learning activities involving text, videos, images, and quizzes. The mean pretest score was 70.00, while the mean posttest score was 92.94. The observed increase indicates improvement in the participating group after the learning sessions. However, because there was no comparison group and the sample was small and drawn from one school, the result should be interpreted as preliminary evidence of change rather than a causal estimate of the media's effect.

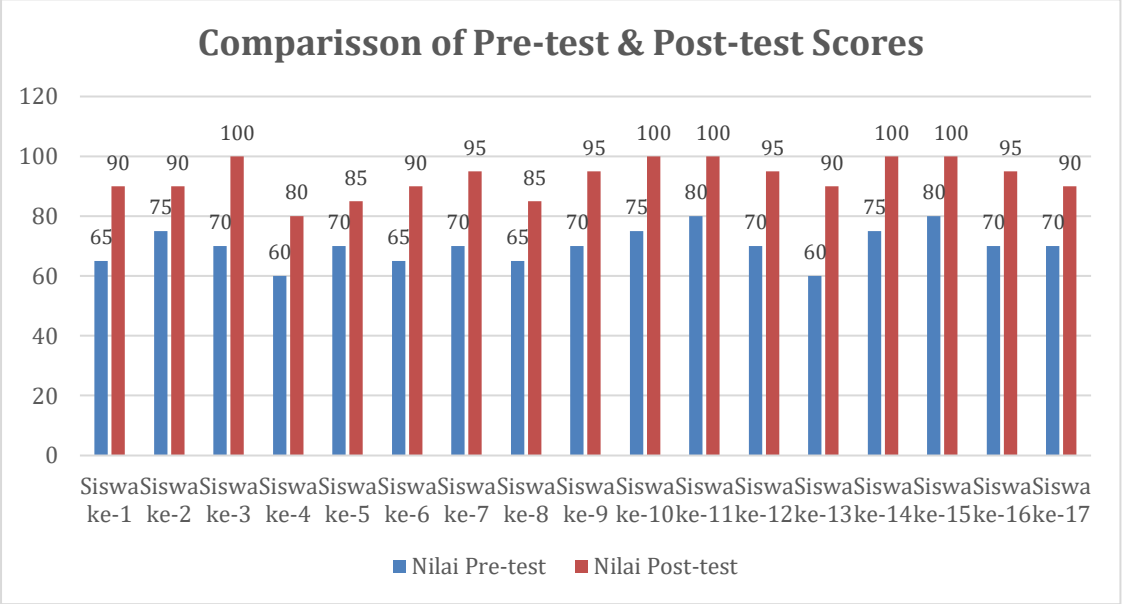


Figure 8. Comparison of Pretest and Posttest Scores

The increase in learning outcomes may relate to the medium's combination of multiple representations and interactive activities. The website integrates text, images, videos, and quizzes, allowing students to encounter tolerance concepts through different forms of representation and revisit material. The cognitive theory of multimedia learning proposes that meaningful learning depends on selecting, organizing, and integrating verbal and visual information, while instructional design should avoid unnecessary cognitive load (Mayer, 2024). This interpretation is also consistent with reviews indicating that digital learning can support performance when resources, engagement, and instructional support are appropriately designed, although outcomes vary by context (Akpen et al., 2024; Choi-Lundberg et al., 2023; Msambwa et al., 2024). Previous Google Sites development studies have reported positive feasibility, student-response, or learning-outcome findings across different school subjects (Adrian & Saputra, 2025; Bara et al., 2024; Devya et al., 2022; Hartari & Putra, 2025; Salsabila & Aslam, 2022; Syahrani & Gunawan, 2024; Wahyuningsih & Lidyasari, 2025). This study extends this line of work to tolerance-focused PAI content, where the instructional goal involves not only understanding concepts but also connecting them to examples of respectful interaction and diversity. Work on digital PAI likewise stresses that technology should be integrated with pedagogical objectives and the ethical aims of Islamic education (Mintasih et al., 2024; Susanti et al., 2024; Zulkifli et al., 2024).

At the evaluation stage, the study interpreted validation, attractiveness, and learning-outcome data while identifying the limits of the evidence. Experts rated the product highly for feasibility, and the limited student trial showed high attractiveness. In the field trial, the mean N-Gain was 0.79, placing the group in the high normalized-gain category. The result is encouraging but should not be interpreted as proof that Google Sites alone caused the improvement because the study did not use a control or comparison group and involved only 17 students. This caution is important because research on digital learning and technology integration identifies context, teacher support, student engagement, and implementation quality as factors that can shape outcomes (Akpen et al., 2024; Mintasih et al., 2024; Msambwa et al., 2024).

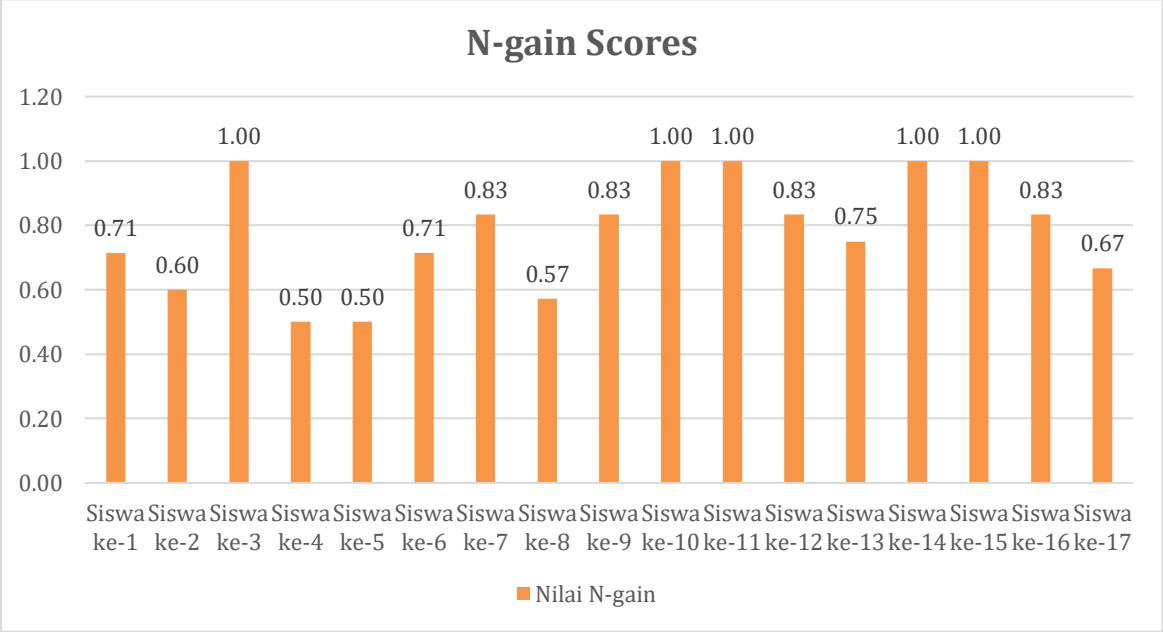


Figure 9. Distribution of N-Gain Scores

The N-Gain distribution provides additional descriptive information about the field trial. Based on the reported individual scores, students' N-Gain values ranged from 0.50 to 1.00, with most students falling in the medium-to-high range and no student in the low category. The mean N-Gain of 0.79 indicates a high normalized gain for this group. This pattern suggests substantial within-group improvement, but it does not establish uniform causal effectiveness because the design does not control for maturation, testing effects, prior exposure, or other instructional influences. The finding is therefore best

understood as preliminary evidence supporting further testing with larger samples and comparison groups.

CONCLUSION

This study developed and evaluated "Ruang Toleransi," a Google Sites-based learning medium for tolerance-focused Islamic Religious Education at the junior secondary level. A media expert rated the product highly feasible (93.3%) and a subject-matter expert rated it highly feasible (98%), and a limited student trial produced an attractiveness score of 87%. In the field trial with 17 students, the mean N-Gain was 0.79, indicating a high normalized gain within the participating group. The study contributes a context-specific digital learning resource that integrates text, video, images, and interactive assessment to support tolerance-related PAI instruction. Its findings should be interpreted as preliminary evidence, not definitive causal evidence of effectiveness, because the evaluation used a one-group pretest-posttest design with a small sample from one school and no comparison group. Future research should test the product with larger, more diverse samples and, where feasible, use controlled or quasi-experimental designs.

BIBLIOGRAPHY

Adrian, M. F. P., & Saputra, G. Y. (2025). Development of Interactive Learning Media Based on Website Using Google Sites at SMK Negeri 1 Samarinda. *Buletin Poltanesa*, *26*(1), 260–268. https://doi.org/10.51967/tanesa.v26i1.3268

Adzkiya, D. S., & Suryaman, M. (2021). Penggunaan Media Pembelajaran Google Site dalam Pembelajaran Bahasa Inggris Kelas V SD. *Educate : Jurnal Teknologi Pendidikan*, *6*(2), 20–31. https://doi.org/10.32832/educate.v6i2.4891

Akpen, C. N., Asaolu, S., Atobatele, S., Okagbue, H., & Sampson, S. (2024). Impact of online learning on students' performance and engagement: a systematic review. *Discover Education*, *3*(1), 205. https://doi.org/10.1007/s44217-024-00253-0

Astarina, R., Yerizon, Bentri, A., & Zainil, M. (2024). Development of Interactive Learning Media Assisted by Google Sites in Building Materials for

Elementary Schools Grade V. *Jurnal Penelitian Pendidikan IPA*, *10*(SpecialIssue), 226–233. https://doi.org/10.29303/jppipa.v10iSpecialIssue.8555

Bara, C. B., Yulianti, Y., & Sulistyowati, P. (2024). Pengembangan Media Pembelajaran Berbasis Google Sites pada Muatan Pelajaran Pendidikan Pancasila Kelas IV SD. *Jurnal Basicedu*, *8*(4), 2672–2682. https://doi.org/10.31004/basicedu.v8i4.8185

Branch, R. M. (2009). *Instructional Design: The ADDIE Approach*. NY: Springer.

Choi-Lundberg, D. L., Butler-Henderson, K., Harman, K., & Crawford, J. (2023). A systematic review of digital innovations in technology-enhanced learning designs in higher education. *Australasian Journal of Educational Technology*, *39*(3), 133–162. https://doi.org/10.14742/ajet.7615

Devya, L. M., Siswono, T. Y. E., & Wiryanto, W. (2022). Penggunaan Google Sites untuk Materi Pecahan untuk Meningkatkan Aktivitas dan Kemampuan Numerasi Siswa Sekolah Dasar. *Jurnal Basicedu*, *6*(4), 7518–7525. https://doi.org/10.31004/basicedu.v6i4.3550

Hake, R. R. (1998). Interactive-engagement versus traditional methods: A six-thousand-student survey of mechanics test data for introductory physics courses. *American Journal of Physics*, *66*(1), 64–74. https://doi.org/10.1119/1.18809

Hartari, R. O., & Putra, G. M. C. (2025). Development of Google Sites Learning Media to Improve Learning Outcomes of Class III Elementary School. *JTP - Jurnal Teknologi Pendidikan*, *27*(1). https://doi.org/10.21009/jtp.v27i1.53590

Hidayat, H., Hidayat, O. S., & Widiasih, W. (2023). Development of Google Sites-Based Learning Resources to Improve Mastery of Concepts and Process Skills in Electrical Circuit Materials. *Jurnal Penelitian Pendidikan IPA*, *9*(6), 4624–4631. https://doi.org/10.29303/jppipa.v9i6.3612

Kurniawati, S., & Ramadan, Z. H. (2025). Development of Learning Media Based on Google Sites on the Material I Am a Pancasila Student for Third Grade Elementary School Students. *Jurnal PAJAR (Pendidikan dan Pengajaran)*, *9*(3), 432–442.

https://doi.org/https://doi.org/10.33578/pjr.v9i3.118

Laili, A. M., Widarti, H. R., Puspita, A. P. I., Anantayani, A., Amrullah, N. K., & Aini, R. G. (2025). Development Of Google Sites-Based Learning Media To Increase Student Learning Interest. *IJCER (International Journal of Chemistry Education Research)*, *9*(2), 165–175. https://doi.org/10.20885/ijcer.vol9.iss2.art6

Maharani, P. A., Risdianto, E., & Setiawan, I. (2024). Pengembangan Media Pembelajaran Interaktif Berbantuan Google Sites untuk Meningkatkan Hasil Belajar Siswa pada Materi Momentum dan Impuls. *Jurnal Penelitian Pembelajaran Fisika*, *15*(1), 31–42. https://doi.org/10.26877/jp2f.v15i1.17458

Mayer, R. E. (2024). The Past, Present, and Future of the Cognitive Theory of Multimedia Learning. *Educational Psychology Review*, *36*(1), 8. https://doi.org/10.1007/s10648-023-09842-1

Mintasih, D., Sukiman, S., & Purnama, S. (2024). Integration of Digital Technology in Islamic Religious Education Learning: A Qualitative Study on Teachers' Competence and Implementation Models in Secondary Schools. *Jurnal Pendidikan Islam*, *13*(1), 85–96. https://doi.org/10.14421/jpi.2024.131.85-96

Msambwa, M. M., Daniel, K., & Lianyu, C. (2024). Integration of information and communication technology in secondary education for better learning: A systematic literature review. *Social Sciences & Humanities Open*, *10*, 101203. https://doi.org/10.1016/j.ssaho.2024.101203

Mukhibat, M., Effendi, M., Setyawan, W. H., & ... (2024). Development and evaluation of religious moderation education curriculum at higher education in Indonesia. *Cogent Education*. https://doi.org/10.1080/2331186X.2024.2302308

Purnomo, M. E., Muchtar, A., & Makhshun, T. (2025). Enhancing Interfaith Tolerance in PAI Learning: The Role of Interactive Digital Image Media in Multicultural Elementary Schools. *PPSDP International Journal of Education*, *4*(2), 853–865. https://doi.org/10.59175/pijed.v4i2.585

Purwanto, Y., Firdaus, E., & Faqihuddin, A. (2024). Teaching Religious Moderation to Pre-Service Teachers: An Indonesian Case Study. *Religious Education*, *119*(4), 307–320.

https://doi.org/10.1080/00344087.2024.2385174

Ramadannisa, R. F., & Hartina, M. M. (2021). The Design of Web-Based Learning Using Google Sites for Teaching Heat and Temperature Topic. *Jurnal Penelitian & Pengembangan Pendidikan Fisika*, *7*(2), 107–114. https://doi.org/10.21009/1.07202

Salsabila, F., & Aslam, A. (2022). Pengembangan Media Pembelajaran Berbasis Web Google Sites untuk Pembelajaran IPA di Sekolah Dasar. *Jurnal Basicedu*, *6*(4), 6088–6096. https://doi.org/10.31004/basicedu.v6i4.3155

Sirry, M., Suyanto, B., Sugihartati, R., Tri Kartono, D., & Yani, M. T. (2024). Teachers' perspectives on tolerance education in Indonesian high schools. *British Journal of Religious Education*, *46*(4), 505–519. https://doi.org/10.1080/01416200.2024.2345213

Suharsiwi, S., Shofiyah, S., Nurmulia, F., Setiyanti, A., Rutska, R., & Santiago, P. V. da S. (2024). Development of Technology-Based Teaching Materials in Islamic Religious Education Subjects. *Atthulab: Islamic Religion Teaching and Learning Journal*, *9*(1), 19–34. https://doi.org/10.15575/ath.v9i1.30515

Susanti, S. S., Nursafitri, L., Hamzah, I., & … (2024). Innovative digital media in Islamic religious education learning. *… Agama Islam*. https://ejournal.uin-suka.ac.id/tarbiyah/jpai/article/view/v21i1.7553

Syahrani, L., & Gunawan, R. (2024). Pengembangan Media Pembelajaran Berbasis Web Google Sites pada Pembelajaran IPS Kelas V SDN Cinangka 5 Depok. *Ideguru: Jurnal Karya Ilmiah Guru*, *9*(3), 1768–1773. https://doi.org/10.51169/ideguru.v9i3.1230

Utami, P. T. (2022). Raising religious inherency: the role of interreligious competence in achieving religious education equality in multireligious public schools in Indonesia. *Humanities and Social Sciences Communications*, *9*(1), 271. https://doi.org/10.1057/s41599-022-01298-y

Wahyuningsih, S., & Lidyasari, A. T. (2025). Google Sites Interactive Multimedia to Improve Information Literacy of Elementary School Students. *International Journal of Elementary Education*, *9*(2), 360–369.

https://doi.org/10.23887/ijee.v9i2.94047

Yanuardianto, E., Wibowo, D. R., & Crismono, P. C. (2024). Innovation in Islamic Religious Education in The Digital Era for Students' Religious Tolerance Character Building in Elementary School: An Implementation of Beyond the Wall Learning Model. *JIP Jurnal Ilmiah PGMI*, *10*(2), 49–61. https://doi.org/10.19109/jip.v10i2.25306

Zulkifli, Z., Rosadi, K., Susanti, A., Yusnita, E., & Octafiona, E. (2024). Technology and Learning Media in Islamic Religious Education. *Permata : Jurnal Pendidikan Agama Islam*, *5*(1). https://doi.org/10.47453/permata.v5i1.2003