Strengthening religious moderation awareness among post-conflict students' through interactive Indonesian language learning

(Memperkuat kesadaran moderasi beragama di kalangan siswa pasca konflik melalui pembelajaran bahasa Indonesia yang interaktif)

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Abstract: Information and communication technology plays an important role in realizing a society towards sustainable knowledge, but it can also trigger radicalization in socio-cultural life. One of the interventions to learning is done by instilling the value of religious moderation. This research aims to develop interactive gamification multimedia that integrates the concept of religious moderation that will be implemented in learning discussion texts in Indonesian language subjects. The research method was adapted from the Borg and Gall development research model, which consists of four stages, namely 1.) pre-field test to get validation from experts and fellow practitioners, 2.) main product revision, 3.) main product revision, 3.) main product revision, 3.) main product revision. Main product revision, 3.) field test to add information related to learning outcomes and awareness of religious moderation, and 4.) operational product revision. This research has successfully developed a gamified interactive multimedia product with an average expert validation result of 3 or in the high category. The attitude of religious moderation after being tested has largely shown an understanding and attitude towards moderation. Student learning outcomes in discussion text material increased significantly as evidenced by pre-experiment results of <0.005. However, this development research was only limited to a small scope of Indonesian language subject matter. This research provided a new direction in the development of teaching materials, especially interactive multimedia on language learning field. The interactivity and gamification side of the learning media could be further developed to make the game aspect more challenging, realistic, and related to students' daily lives.

| Keywords | Discussion text, Gamification, Interactive multimedia, Religious moderation |

Abstrak: eknologi informasi dan komunikasi memegang peranan penting dalam mewujudkan masyarakat menuju pengetahuan yang berkelanjutan, tetapi juga dapat memicu radikalisasi dalam kehidupan sosio-kultural. Intervensi terhadap pembelajaran salah satunya dilakukan dengan menanamkan nilai moderasi beragama. Penelitian ini bertujuan untuk mengembangkan multimedia interaktif bergamifikasi yang terintegrasikan nilai-nilai moderasi beragama pada pembelajaran teks diskusi mata pelajaran Bahasa Indonesia. Metode penelitian diadaptasi dari model penelitian pengembangan Borg and Gall, yang terdiri dari empat tahap yaitu 1.) pra-uji lapang untuk mendapat validasi dari ahli dan rekan praktisi, 2.) Revisi produk utama, 3.) uji lapang untuk menambah informasi terkait hasil belajar dan kesadaran moderasi beragama, dan 4.) revisi produk operasional. Penelitian ini telah berhasil mengembangkan sebuah produk multimedia interaktif bergamifikasi dengan rata-rata hasil validasi ahli berada di angka 3 atau dalam kategori tinggi. Sikap moderasi beragama setelah diujikan secara garis besar telah menunjukkan pemahaman dan sikap ke arah moderat. Hasil belajar siswa dalam materi teks diskusi meningkat secara signifikan dibuktikan dengan hasil pra-eksperimen sebesar < 0.005. Namun, penelitian pengembangan ini hanya terbatas pada lingkup kecil materi pelajaran Bahasa Indonesia. Penelitian ini dapat memberi arah baru dalam pengembangan materi ajar utamanya multimedia interaktif. Sisi interaktvitas dan gamifikasi dalam media pembelajaran dapat dikembangkan lebih jauh agar membuat aspek permainan lebih menantang, realistis, dan berkaitan dengan kehidupan keseharian siswa.

| Kata Kunci | Gamifikasi, Moderasi beragama, Multimedia interaktif, Teks diskusi |

INTRODUCTION

Sustainability has become a significant global conversation aimed at reshaping individual perspectives on social and economic practices to align more closely with environmental conservation efforts (Nomura, 2009). Nevertheless, in developing nations such as Indonesia, attaining this alignment necessitates more thorough and cohesive efforts, primarily due to a limited understanding among different stakeholders (Gayatri et al., 2023). Within the realm of education, education for sustainable development (ESD) is characterized as a framework that equips students to make informed and responsible choices regarding environmental preservation, economic viability, and social equity, thereby ensuring consideration for both present and future generations while honoring cultural diversity (Taimur & Sattar, 2020). The global pandemic has accelerated innovation, particularly in implementing ESD (Charina et al., 2022).

Open innovation needs to be a strategic step in the development of education. Educational institutions need to be encouraged to engage in the professional development of academics to raise public awareness of the importance of sustainability, including technology that is currently transforming all aspects of education (Lim et al., 2022). Information and communication technologies (ICTs) can enhance global connectedness, accelerate human progress, reduce the digital divide, and drive society towards sustainable knowledge (González-Zamar et al., 2020). The application of digital learning has contributed to resource savings through digital platforms and online learning (Sousa et al., 2022).

To achieve the 2030 agenda, the Ministry of National Planning and Development (Bappenas) is committed to fostering inclusive education through sustainable development, which is in line with Indonesia's Sustainable Development Goals (2022). This promise is intended to decrease gender inequity, promote peace, and foster cultural variety in education. While information and communication technologies (ICTs) have the potential to help sustainable development, they can also worsen societal division if not properly handled. Regarding religiosity, there is a risk that ICTs could encourage religious radicalism, endangering the viability of education within educational institutions (Achmad, 2023; Mujianto, 2018). This difficulty is particularly visible in Islamic campuses, where traditional approaches to religious practice are frequently used. Reports reveal the presence of persons displaying intolerance towards minority groups (Muhaemin, 2023; Suntana, 2022). Educational institutions may inadvertently facilitate the spread of These detrimental ideologies affect students, shaped by variables such as the curriculum and instructional methodologies (Al-Azhari, 2019; Suhendi, 2020). Faith-based curricula often adhere to confessional principles, which can be seen as a process of 'learning to be religious' (Grimmit, 1987, as cited in Raihani, 2017, p. 147). This approach tends to reinforce absolute truth claims.

Therefore, developing digital education content that promotes awareness of religious moderation early in school is essential. Multicultural awareness is crucial to preparing students for higher education, as it plays a significant role in creating an environment of open innovation that positively impacts society (Cherng & Davis, 2019; Masita, 2023). As a result, fostering awareness of religious moderation should be a fundamental element in shaping the profiles of researchers and innovators. The retrospective framework of this study seeks to impact higher education and establish a foundation for the profiles of future innovators (Mannucci & Shalley, 2022).

The use of an Acehnese student sample in the limited trial distinguishes this study from others. Aceh had the ninth-highest number of university applications in Indonesia in 2023, with 16,550. Despite the high number of candidates, the pass percentage was 41%. This demonstrates that Acehnese students have a tremendous opportunity to pursue higher education in Indonesia. However, additional factors contribute to the low enrolment rate. Aceh's 1976–2005 conflict substantially impacts students (Akob, 2016; Jayanti, 2018). Many students opposed the changes and contrasts in Aceh's socio-cultural setting. Various acknowledgement attempts continue, including introducing multicultural discourse (Akob, 2016; Sahlan et al., 2022).

This study aims to develop interactive gamification multimedia that incorporates the concept of religious moderation and will be used to teach discussion texts in the Indonesian language topic. This approach will be used in Aceh's secondary schools to encourage and strengthen religious moderation. This study intends to create interactive multimedia, such as Indonesian language learning media, based on discussion text material. This study focuses on product development based on past requirements analysis

assessments. The discussion text genre is employed because it involves controversial topics that are consistent with the value of religious moderation being integrated.

Researchers have collected several related scientific papers to provide an overview of previous studies. In relation to the value of religious moderation integrated into learning media, previous research was conducted by (Sukmawati, 2022; Suprapto, 2020; Faznur et al., 2021). Two development studies successfully integrated the value of religious moderation in learning media products. This innovative step can (1) build tolerance among different groups of students, both outside Islam and within Islam; (2) spread peace in their social environment; (3) promote interfaith dialogue, (4) instill an attitude of openness with outsiders and, 4) reject hate speech (HOAX) both inside and outside the school.

This research is also in line with the findings of interactive learning media research that has been conducted by previous researchers (Agustina et al., 2021; Deliany et al., 2019; Kurniawan et al., 2020; Novitasari, 2016; Rahmadani & Taufina, 2020). Interactivity focuses on experiences that can be directly felt by users. The playable nature of interactive multimedia makes it easier for students to understand learning materials. In addition, in some studies, advanced interactivity is developed, namely gamification. This approach is obtained to increase motivation, reduce anxiety in learning, and strengthen student engagement during the learning process.

Important considerations related to the need for an interactive multimedia product integrated with religious moderation refer to student and teacher assessments. With a unique research locus, students in Aceh tend to have less intercultural awareness in the aspect of confidence to interact interculturally. Using the 24-items Intercultural Sensitivity Scale (ISS), interactions confidence has the lowest mean value. This has a direct impact on motivation to learn Indonesian as a common language for intercultural interaction. Teachers also need teaching resources for discussion texts that are comprehensive, close to students' daily lives, and integrated with the noble values of national life. The objectives of this study are (1) to describe the development of Indonesian languages interactive multimedia products integrated with religious moderation, (2) to display the results of religious moderation awareness after being given learning multimedia, and (3) to display data on student learning outcomes in discussion text literacy objectives after being given interactive multimedia integrated with religious moderation.

This research contributes to the development of teaching materials, especially interactive multimedia on Indonesian language learning situation. The interactivity and gamification aspects of learning media further developed to give the game aspect more challenging, realistic, and related to students' daily lives. This development research is only limited to the scope of Indonesian language subject but it is also possible for other subjects to adapt the values of religious moderation.

METHOD

This research is part of research and development cycle adapting Borg and Gall's model. This research employed the research and development approach. To address the research questions, an in-depth research cycle was necessary to provide a comprehensive overview of the development product. Therefore, this study emphasized on the advanced phases that follow the previous analytical investigation. It encompassed three primary stages of inquiry. The first stage was preliminary field testing. It was the validation of the product that is conducted by subjecting it to scrutiny by content experts and media experts. Content validation was performed by AA, a lecturer at the Universitas Islam Malang. Meanwhile, media validation was carried out by three teachers from MTsN 6 Aceh Timur. Their expertise ensured an assessment of the accuracy and contextual relevance of the media within the research environment.

The second stage was main product revision. By conducting revisions based on expert validator comments, the researcher refined the product with consideration from the validators to ensure it delivers an improved product before testing it on students. The third stage was main field testing. It involved trialing the product in real classroom settings. The research employed a pre-experimental method with a one-group pretest-posttest as the design. To align with the research requirements, students were provided with two instruments: a concept test consisting of multiple-choice questions and a questionnaire on religious moderation awareness.
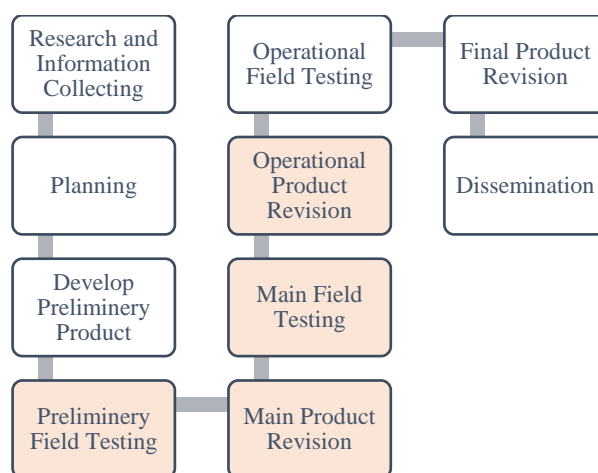
Figure 1. Borg and Gall's Research and Development Stages (Only the Highlighted Were Conducted)

The three previous stages were presented briefly in separate subsections within this study. The research was conducted at MTsN 6 Aceh Timur. The subjects used in the main field-testing stage were 14 students who had been physically affected by the conflict (family or relatives), selected through purposive sampling in the previous stage. The number of samples was based on a population of 82 individuals, considering the need for a representative profile that aligned with the research requirements.

In this study, data were obtained from various research instruments. Expert validation was obtained from the results of judgment expert and peer to peer review. Quantitative data was obtained from the results of main field testing to 14 students with the aforementioned criteria. The pretest and posttest results were analyzed using SPSS to determine the significance of interactive multimedia on student learning outcomes. Data was also obtained in the main field-testing stage through the religious moderation awareness questionnaire instrument.

RESULTS AND DISCUSSION
Profile of Interactivity on Gamified Multimedia

Need analysis provides insight into student profiles, the need for learning media, the skills to be achieved, and the availability of learning environments (Arief et al., 2023). The processing of questionnaire data involving 14 purposively selected respondents using the 24-item Intercultural Sensitivity Scale (ISS) (Chen & Starosta, 2000) found that cross-cultural communication skills among the sampled students were still limited. This can be seen from the category of 'confidence in interaction' which has the lowest average score. Students often demonstrate insufficient confidence in their ability to communicate effectively with individuals from various cultural backgrounds.

The teachers from the target schools collectively emphasized the significance of incorporating interactive multimedia alongside multicultural awareness to enhance learning for all participants. The integration of these two elements anticipated to facilitate students' comprehension of key concepts and foster an increased awareness of religious moderation. Notably, the implementation of the Merdeka Curriculum in schools is grounded in inclusivity and open access principles (García-Campos, 2020; Sari et al., 2023). Accordingly, the educational goals of this study were designed to promote freedom of expression and critical discourse while aligning with the guiding principle of "Bhinneka Tunggal Ika," which underpinned the cultivation of Pancasila values among students.

This section outlines the critical features of the interactive multimedia employed in this study, highlighting the focus on enhancing user interaction with the system. This approach prioritized the user experience rather than merely simulating real-life scenarios. Thus, users can directly experience the material (Franco & DeLuca, 2019). Interactive modules are designed to encourage student participation through engaging and fun activities (Cheng, 2009; Hussein et al., 2023). Nowadays, interactivity has evolved into Virtual Reality (VR), where users can experience the virtual world sensorial. However, in this research

product, interactivity was only applied in an educational context and was fully accessible and controllable by students. One of this product's excellent features is gamification, a game-based approach to deliver educational material. Gamification in multimedia adds an element of interactivity and creates an engaging learning environment, allowing students to develop skills and competencies hands-on. This approach increases motivation, reduces learning anxiety, and encourages students' active engagement in learning (Chugh & Turnbull, 2023; Hossein-Mohand et al., 2021). Interactivity in gamification plays an important role in maintaining student interest and focus, helping to achieve learning objectives rather than just providing entertainment (Fatimah et al., 2023). Students' active engagement can deepen their understanding of the material taught in class and improve their instructional performance (Liew et al., 2023).

In this product, reading activities used linear interactivity (Figure 2). Gamification was applied in genre-based pedagogy as the learning syntax, which consisted of several stages: (1) Context was built through the role of an Arab trader involved in trading and spreading Islam in the archipelago. Through this activity, an understanding was gained that Islam in Indonesia resulted from local cultural acculturation. The integration of local culture in the reading process showed religious moderation indicators. Furthermore, (2) Text was modelled by raising issues related to controversial mosque architecture, (3) Text construction was done together by discussing the social function of the discussion text, and (4) Independent construction was done through a formative assessment where students were asked to design a mosque without a dome. Accommodation of local culture was used as the main indicator of religious moderation.
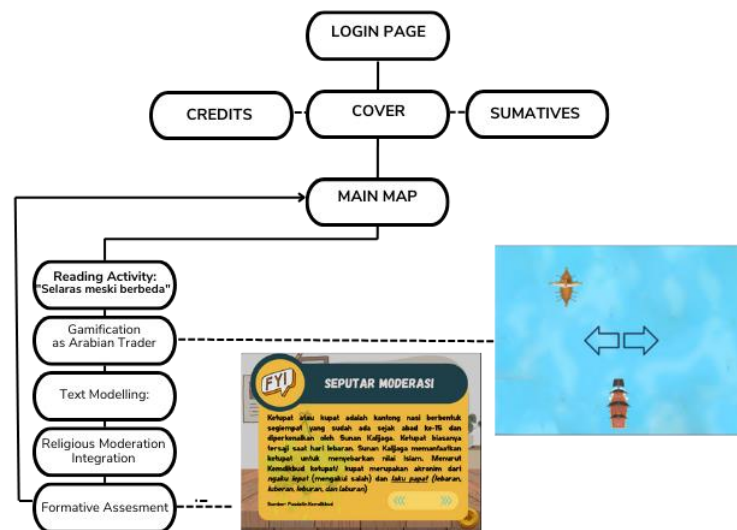

Figure 2. *"Selaras Meski Berbeda"* Reading Activity Storyline Flowchart

Listening exercise began with a virtual visit to the *Gampong Moderasi Beragama* in Banda Aceh (Figure 3). Banda Aceh was viewed as an example for national practices in which Islamic law, or qanun, was upheld alongside a dedication to tolerance for practitioners of other religions. This approach was consistent with indicators of religious moderation, particularly tolerance. An external link to YouTube was used to increase access to information and communication technology (ICT). Following the formative assessment, students participated in a gamified exercise to develop arguments based on the texts they listened to, using a fishbone mapping technique. The interaction was intended to be linear, moving from one frame to the next.
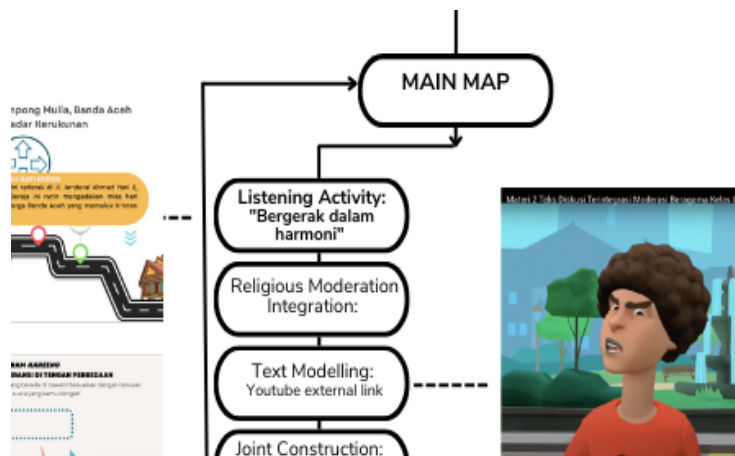
Figure 3. *"Bergerak dalam Harmoni"* **Listening Activity Storyline Flowchart**

The speaking exercise was constructed on the concept of non-linear or parallel interactivity, which allowed students to explore different locations (see Figure 4). Students were given a case of bullying based on *mazhab* differences and entrusted with obtaining evidence from several locations. The activity included the concept of religious moderation, particularly anti-radicalism. Educational materials were improved by introducing "modality" as a language tool for arguing. As a productive skill, the speaking activities used a blended learning method. In one session, students participated in face-to-face conversations in class, while using a structured learning syntax built for interactive multimedia. Both techniques strived to improve students' experiences and increase participation.
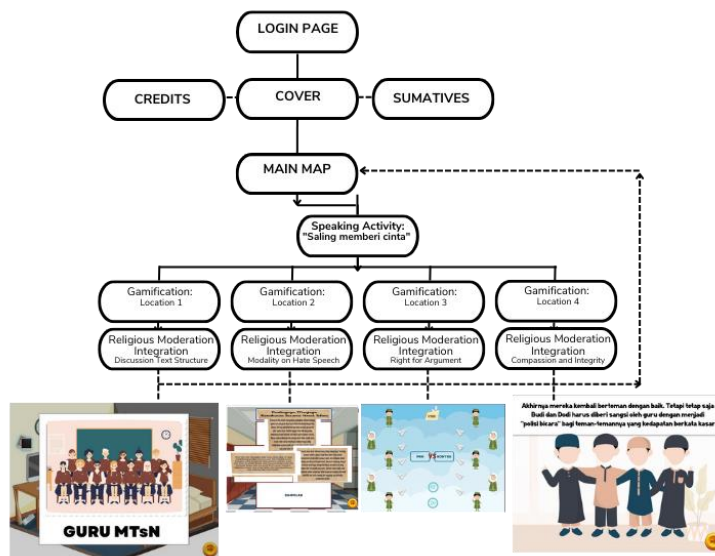

Figure 4. *"Saling Memberi Cinta"* **Speaking Activity Storyline Flowchart**

Another productive activity associated with Indonesian language learning was writing (Figure 5). This exercise encouraged students to learn about Indonesian traditions. They were entrusted with deciding which cultural practices should be kept because they were consistent with Islamic teachings and which should be abandoned because they contradicted with Islamic values. Integration was accomplished by combining the indicator of religious moderation with national devotion. Students were encouraged to create their own arguments about the issue. The accompanying learning resources covered ethics and etiquette in online discussion and communication. These two themes must be understood conceptually, especially considering the increasing digitization of information impacting students' daily lives.
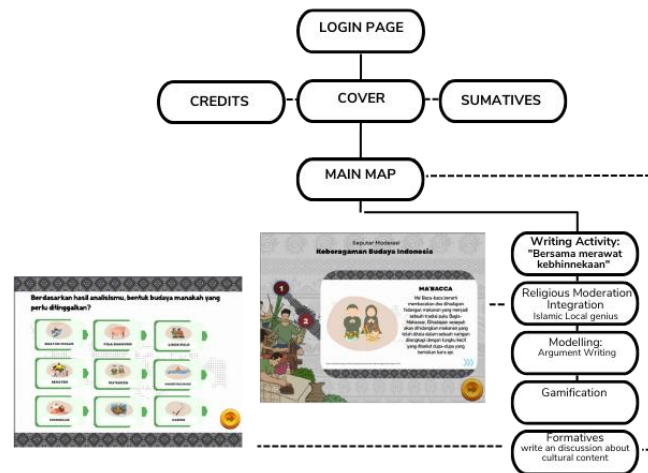
Figure 5. *"Bersama Merawat Kebhinnekaan"* **Writing Activity Storyline Flowchart**

Students could access this interactive multimedia through the URL s.id/multimediadiskusi on their PCs or laptops. Initially, the product was limited to a desktop version due to the need for script adaptation in the interactive multimedia production software, Articulate Storyline 3. However, a downloadable desktop version was also made available in the final stages of development through an Android .apk link. The visual elements and assets were created using various design platforms, including Plotagon, Canva, Midjourney, Corel Draw, and Adobe Illustrator.

Expert Validation Results

Following the development of a gamification-based interactive multimedia product, the subsequent step involves presenting it to relevant experts for validation. This evaluation focuses on two primary criteria: media and content. AA, a lecturer at the Islamic University of Malang, conducted the content validation. Her assessment covered several categories, including alignment with learning objectives tailored to students' developmental stages, conceptual accuracy, language clarity, and the quality of evaluation questions. Validation was conducted through a questionnaire using a 4-point Likert scale, where 1 = poor, 2 = fair, 3 = good, and 4 = very good.

Table 1
Material Expert Validation

No	Category	Items	Average
1	Aligned objective with students' developmental level	3	3.00
2	Concept/materials	6	3.17
3	Use of language principles	3	3.00
4	Evaluation test	6	3.00

Overall, the validation conducted by the experts yielded an average score of 3, placing it in the "good" category. Based on the open-ended responses from the validators, no major revisions were necessary for the developed product. The content structure had been tailored to students' cognitive level in phases D or E (grades 9-10 in junior high school). At this stage of development, the evaluation had also effectively integrated higher-order thinking skills (HOTS). The primary focus for improvement resided in the typography and visual elements.

It is recognized that experts may not always fully comprehend the usage context. Therefore, peer-to-peer evaluation was employed in this study, as it provided deeper insight into the usability and application of the product. The description and context of the situation were critical factors in assessing the media components. For this purpose, three teachers completed a validation questionnaire assessing five key aspects of the media: (1) interface quality, evaluating the visual appeal of the product; (2) software performance; (3) feasibility, assessing accessibility and functionality; (4) user interface, focusing on

media interactivity from the user's perspective; and (5) compatibility, ensuring the application was accessible across different device versions.

Table 2
Peer to Peer Media Validation

No	Category	Items	Average
1	Quality of Interface	5	3.73
2	Software	2	3.83
3	Feasibility	1	4.00
4	User Interface	4	3.83
5	Compatibility	2	3.00

The compatibility aspect received the lowest average score, as seen in Table 2, indicating that the product still had limitations. The product lacks support for access via mobile phones, leading validators to assign a lower rating. This shortcoming was also noted as an area for improvement in the open-ended responses on the expert rating sheet. Currently, students often preferred mobile phones as their primary devices, as they found mobile interfaces, functionality, and interactivity more intuitive and accessible than those of computers.

Main Revision

Based on the evaluation results from both validation components, revisions were done to the product. At this stage, the researchers enhanced the typographic elements on select slides or scenes identified by the content experts. Adjustments were made to the placement and layout of the Main Map, and modifications were applied to the script for tasks on the mobile version to improve responsiveness to touch screens. Additionally, the misspelling of "discoveri" was corrected to "discovery."

Figure 6. Main Map After Typograhic Revision

The script for the mobile user interface on the Main Map scene was also revised to improve touch responsiveness. Interactive products that serve as learning aids should meet several criteria, including ease of use, usability, enjoyment, and aesthetic appeal (Othman et al., 2023). These factors were essential for creating a positive learning experience through gamification, while compatibility remained critical in boosting students' engagement.

Figure 7. Mobile Version Compatibility Revision

Limited Trial

This study employed a pre-experimental design with a one-group pretest-posttest approach, involving 14 participants (n=14). Participants were selected based on an analysis identifying students who had experienced the physical impacts of the conflict in Aceh, making them relevant for this research which focused on a significant post-conflict social reconstruction area. Additionally, approximately 18% of the total population was considered representative of broader population characteristics, including economic impacts, social stigma, and engagement in national-level interactions.

Two distinct tests were used for the pre-test and post-test phases. To evaluate students' awareness of religious moderation, a questionnaire consisting of 13 items was administered, adapted from Latifa et al., (2021). This instrument included two main components: (1) Attitudinal indicators, addressing participants' beliefs, feelings, and experiences related to religious moderation; and (2) Religious moderation values, covering concepts such as tawassuth (moderation), i'tidal (fairness), tasamuh (tolerance), shura (deliberation), ishlah (reconciliation), qudwah (exemplarity), and muwwathanah (citizenship).

Table 3
Religious Moderation Awareness

No	Religious Moderation Attitude	Items	Average	Std. Deviation
1	Belief	1, 2, 3, 4, 5	20.29	2.054
2	Emotion	6, 7, 8, 9	16.64	1.692
3	Past behavior	10, 11, 12, 13	16.50	2.245

The Table 3 indicated that the variable reflecting past behavior attitudes has the lowest mean value, with a standard deviation of 2.245. This suggested that students' past experiences related to their actions were situated within the highest scale range of 82.5%. The scale employed was a five-point Likert scale. These statistical findings suggested an improvement in students' understanding and moderate attitudes concerning their conflict experiences. According to the measurement instrument for religious moderation, community attitudes, insights, and intentions in this domain were manifested through beliefs in moderate religious values, emotional regulation during conflicts, and previous experiences.

Religious moderation attitudes are an important key in forming an Islamic society that is open to new knowledge. This new knowledge can arise due to students' experience of recognizing other symbols outside Islamic culture, opening dialogue and communication without borders, which certainly increases tolerance towards others (Hafid & Hatsama, 2020). Moreover, Islamic education can provide a basic

framework for how Muslims live their lives and how Muslims treat fellow human beings (Djamdjuri et al., 2023). In addition, through this attitude, students can maintain Islamic values while increasing sympathy for people of other religions (Batool, 2022; Fatoni et al., 2021; Ihsan & Fatah, 2021).

Table 4
Pre-experiment Paired Samples Test

		Paired Samples Test							
		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	Pretest - Postest	-39.429	16.209	4.332	-48.787	-30.070	-9.102	13	.000

Furthermore, students were assigned a pre-test and post-test to evaluate the optimization of learning outcomes pre and post intervention. These questions were presented as interactive multimedia with summative evaluation, which included 15 multiple-choice and short-answer questions from the discussion text learning material. The questions measured students' concept understanding and literacy skills in discussion text. The statistical analysis results showed a significant difference between students' learning outcomes before and after the treatment, with a value of 0.000 < 0.005.

Limited Trial Revision

An observer directly supervised all stages of learning that we conducted with the selected students during the treatment phase. The learning process was divided into five stages. In the first stage, we conducted an initial test and guided students to read together in class room. In the second stage, we focused on careful listening. In the third stage, students practiced speaking by gathering evidence and corroborating their opinions. The speaking activities continued in the fourth stage, where students had a direct discussion to reach a common consensus on the issue of bullying. Each student was allowed the opportunity through coupons to express their opinions. Finally, we ended the lesson with a writing activity and a final test.

Speaking is one of the important skills in language learning. However, sometimes the portion in learning is very minimal. As a result, speaking activities must be designed accurately and effectively by language teachers. It is in line with research Atmazaki et al., (2021) that interactive media can be used as an alternative to speaking learning. By using interactive multimedia, learning materials can be integrated to students through text, audio, videos, animations, and graphics simultaneously. It can reduce learning anxiety and other speech defects on the language learning.

The pre-experiment results showed an improvement in students' discussion text reading ability after they were treated with interactive multimedia combined with gamification. The observations indicated a lack of time efficiency in task completion, as students appeared more engaged with the gamification elements. Consequently, a flipped classroom approach was implemented in the next dissemination activity to improve time efficiency. One significant advantage of mobile learning was that it allows students to access learning materials at any time and from any location (Syarifuddin et al., 2023; Tobin, 2016). The flipped classroom approach allowed students to explore interactive multimedia at home first, which can then be used as discussion material in class, thereby improving their understanding (Ahmed & Indurkhya, 2020).

The results proved that implementing educational games has a positive impact that can improve the quality of learning. This implication is also related to the research Putri et al., (2024) results showed that educational games could be a reference in improving learning outcomes. In addition, further research is suggested to test the effectiveness of this interactive multimedia more broadly. This research is only limited to a small scope of subjects, so it is recommended that further research can provide valuable insights for further development of this learning media.

CONCLUSION

This study successfully developed an interactive multimedia product for gamification that

incorporates moderation, utilizing a modified Borg and Gall model. Validation results from experts indicated that this product possesses a high level of validity, rendering it suitable for use in the learning process. Students' attitudes towards religious moderation were recorded at over 80%, reflecting a strong understanding and positive disposition towards moderation. Findings from the limited trial demonstrated a significance value below 0.05, indicating a measurable improvement in students' skills in reading discussion texts following the implementation of the interactive multimedia product utilizing gamification. This product has demonstrated effectiveness in teaching discussion texts and improving students' learning outcomes. The integration of gamification concepts within this module offered hands-on experiences through interactive multimedia elements, thereby enhancing students' comprehension of the concepts and learning materials. Additionally, this product has the potential to be scaled as a comprehensive learning module. However, its current development is constrained to specific learning objectives. Consequently, this research can be expanded to encompass a broader range of learning objectives in the context of discussion texts. The interactivity and gamification aspects can be further enhanced to incorporate more challenging, realistic, and relevant game elements that resonate with students' daily lives.

DECLARATIONS

Author contribution	:	Akhmad Tabrani leads and is responsible for all research projects entitled "Strengthening religious moderation awareness among post-conflict students' through interactive Indonesian language learning". Akhmad Tabrani and Tono Viono wrote the whole manuscript and collaborated with another author. Akhmad Tabrani did the translation and corresponding author, is responsible for submitting, revising, and making sure that the article is plagiarism free. Tono Viono gave insights into religious moderation and multicultural education especially in Aceh. The all of authors also approved the final manuscript.
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REFERENCE

Achmad, N. (2023). Radicalism movement in higher education in Indonesia: Students' understanding and its prevention. *Kasetsart Journal of Social Sciences*, *44*(1), 123–128. https://doi.org/10.34044/j.kjss.2023.44.1.13

Agustina, H., Roesminingsih, M. V., & Jacky, M. (2021). Pengembangan Multimedia Interaktif Berbantu Articulate Storyline untuk Meningkatkan Hasil Belajar Kognitif Siswa Pada Pelajaran IPS di Kelas V Sekolah Dasar. *Jurnal Education and Development*, *9*(2), 567-571.

Ahmed, M. M. H., & Indurkhya, B. (2020). Investigating cognitive holding power and equity in the flipped classroom. *Heliyon*, *6*(8), 1-9. https://doi.org/10.1016/j.heliyon.2020.e04672

Akob, B. (2016). The Development of Multicultural Discourse in the Historical Learning: A Case Study on Samudra University Langsa Aceh. *International Journal of Multicultural and Multireligious Understanding*, *3*(5), 1-8. https://doi.org/10.18415/ijmmu.v3i5.51

Al-Azhari, Z. U., & Khan, M. K. U. (2019). Radicalization and Academia: Its Impacts on Students and Counter-Radicalization Strategies. *Journal of Islamic Thought and Civilization*, *9*(1), 1-9.

Arief, N. F., Viono, T., & Tabrani, A. (2023). Promoting Religious Moderation Among Post-Conflict Students': A Need Analysis of Gamification Interactive Multimedia. *Education Quarterly Reviews*, *6*(3), 12-25. https://doi.org/10.31014/aior.1993.06.03.780

Atmazaki, A., Ramadhan, S., Indriyani, V., & Nabila, J. (2021). Dialogic-interactive media: Alternative learning media to improve speaking skills. *KEMBARA: Jurnal Keilmuan Bahasa, Sastra, dan Pengajarannya*, *7*(2), 286-296. https://doi.org/10.22219/kembara.v7i2.16402

Batool, S. (2022). Islamic Principles to Combat Radicalization in Academia: An Exploratory Study in Pakistani Context. *Journal of Islamic Thought and Civilization*, *12*(2), 255–270. https://doi.org/10.32350/jitc.122.18

Charina, A., Kurnia, G., Mulyana, A., & Mizuno, K. (2022). Sustainable Education and Open Innovation for Small Industry Sustainability Post COVID-19 Pandemic in Indonesia. *Journal of Open Innovation: Technology, Market, and Complexity*, *8*(4), 215. https://doi.org/10.3390/joitmc8040215

Chen, G.-M., & Starosta, W. J. (2000). The Development and Validation of the Intercultural Sensitivity Scale. *Human Communication*, *3*, 1–15.

Cheng, G. (2009). Using game making pedagogy to facilitate student learning of interactive multimedia. *Australasian Journal of Educational Technology*, *25*(2), 204-220. https://doi.org/10.14742/ajet.1150

Cherng, H. Y. S., & Davis, L. A. (2019). Multicultural Matters: An Investigation of Key Assumptions of Multicultural Education Reform in Teacher Education. *Journal of Teacher Education*, *70*(3), 219-236. https://doi.org/10.1177/0022487117742884

Chugh, R., & Turnbull, D. (2023). Gamification in education: A citation network analysis using CitNetExplorer. *Contemporary Educational Technology*, *15*(2), ep405. https://doi.org/10.30935/cedtech/12863

Deliany, N., Hidayat, A., & Nurhayati, Y. (2019). Penerapan Multimedia Interaktif untuk Meningkatkan Pemahaman Konsep IPA Peserta Didik di Sekolah Dasar. *Educare*, *17*(2), 90-97. https://doi.org/10.36555/educare.v17i2.247

Djamdjuri, D. S., Thoyib, M., Supriadi, D., Handayani, I., Furqan, M., & Nurmuntazlimah, K. S. (2023). Systematic Literature Review: Integrating Islamic Education in English Language Teaching Ika Handayani. *KEMBARA: Jurnal Keilmuan Bahasa, Sastra, dan Pengajarannya*, *9*(1), 336–350. https://doi.org/10.22219/kembara.v9i1.28651

Fatimah, K., Viono, T., & Ambarwati, A. (2023). Pengembangan e-modul interaktif berbasis gamifikasi pada pembelajaran teks fabel. *Diglosia: Jurnal Kajian Bahasa, Sastra, dan Pengajarannya*, *6*(4), 945-958. https://doi.org/10.30872/diglosia.v6i4.728

Fatoni, F., Susanto, I., Pratama, H. O., & Julaihah, S. (2021). Multicultural Inclusive Education in the Deradicalization of Islamic Education in Indonesia. *Tadris: Jurnal Keguruan dan Ilmu Tarbiyah*, *6*(2), 401-408. https://doi.org/10.24042/tadris.v6i2.10246

Faznur, L. S., Fadly, A., & Nufus, F. A. (2021). Pengembangan Buku Digital BIPA Berbasis Nilai Moderasi Islam. *Pena Literasi*, *4*(2), 92-98. https://doi.org/10.24853/pl.4.2.92-98

Franco, P. F., & DeLuca, D. A. (2019). Learning Through Action: Creating and Implementing a Strategy Game to Foster Innovative Thinking in Higher Education. *Simulation & Gaming*, *50*(1), 23–43. https://doi.org/10.1177/1046878118820892

García-Campos, M. D. (2020). Executive functions in universal design for learning: moving towards inclusive education. *International Journal of Inclusive Education*, *24*(6), 660–674. https://doi.org/10.1080/13603116.2018.1474955

Gayatri, P., Sit, H., Chen, S., & Li, H. (2023). Sustainable EFL Blended Education in Indonesia: Practical Recommendations. *Sustainability*, *15*(3), 2254. https://doi.org/10.3390/su15032254

González-Zamar, M. D., Abad-Segura, E., López-Meneses, E., & Gómez-Galán, J. (2020). Managing ICT for sustainable education: Research analysis in the context of higher education. *Sustainability (Switzerland)*, *12*(19), 8254. https://doi.org/10.3390/su12198254

Hafid, A., & Hatsama, A. (2020). Penggunaan simbol bahasa berlatar agama antara mahasiswa muslim dan nonmuslim serta manfaatnya bagi dakwah Muhammadiyah. *Kembara: Jurnal Keilmuan Bahasa, Sastra, dan Pengajarannya*, *6*(1), 10-26.. https://doi.org/10.22219/kembara.v6i1.11828

Hossein-Mohand, H., Trujillo-Torres, J. M., Gómez-García, M., Hossein-Mohand, H., & Campos-Soto, A. (2021). Analysis of the use and integration of the flipped learning model, project-based learning, and gamification methodologies by secondary school mathematics teachers. *Sustainability*, *13*(5), 2606. https://doi.org/10.3390/su13052606

Hussein, E., Kan'an, A., Rasheed, A., Alrashed, Y., Jdaitawi, M., Abas, A., Mabrouk, S., & Abdelmoneim, M. (2023). Exploring the impact of gamification on skill development in special education: A systematic review. *Contemporary Educational Technology*, *15*(3), ep443. https://doi.org/10.30935/cedtech/13335

Ihsan, I., & Fatah, A. (2021). Pancasila and Islamic Education: The Deradicalization Model of Madrasahs Based on Islamic Boarding Schools in Central Java. *QIJIS (Qudus International Journal of Islamic Studies), 9*(1), 245-278. https://doi.org/10.21043/QIJIS.V9I1.8941

Jayanti, K. (2013). Konflik Vertikal Antara Gerakan Aceh Merdeka di Aceh dengan Pemerintah Pusat di Jakarta Tahun 1976-2005. https://doi.org/10.15408/bat.v19i1.3698

Kurniawan, F. Y., Siahaan, S. M., & Hartono, H. (2019). Pengembangan multimedia interaktif berbasis adventure game pada materi prinsip animasi. *Jurnal Inovasi Teknologi Pendidikan*, *6*(2), 183-195. https://doi.org/10.21831/jitp.v6i2.28488

Latifa, R., Fahri, M., & Mahida, N. F. (2021). *Instrumen Sikap Moderasi Beragama*. Yogyakarta: Rajawali Press

Liew, C. Y., Voon, L. L., & Leong, S. H. (2023). Innovative Approach to Enhance Active Online Learning: Engagement, Feedback and Classroom Environment. *Asian Journal of University Education*, *19*(2), 339–351. https://doi.org/10.24191/ajue.v19i2.22233

Lim, C. K., Haufiku, M. S., Tan, K. L., Farid Ahmed, M., & Ng, T. F. (2022). Systematic Review of Education Sustainable Development in Higher Education Institutions. *Sustainability (Switzerland)*, *14*(20), 13241. https://doi.org/10.3390/su142013241

Mannucci, P. V., & Shalley, C. E. (2022). Embracing multicultural tensions: How team members' multicultural paradox mindsets foster team information elaboration and creativity. *Organizational Behavior and Human Decision Processes*, *173*, 104191. https://doi.org/10.1016/j.obhdp.2022.104191

Masita, E. (2023, June). Multiculturalism and Multicultural Education in Kurikulum Merdeka. In *English Language and Literature International Conference (ELLiC) Proceedings* (Vol. 6, pp. 473-486).

Muhaemin. (2023). Religious Moderation in Islamic Religious Education as a Response to Intolerance Attitudes in Indonesian Educational Institutions. *Journal of Social Studies Education Research*, *14*(2), 253–274.

Mujianto, G. (2018). Analisis Wacana Kritis Pemberitaan Tentang Ormas Islam pada Situs Berita Online. *KEMBARA: Jurnal Keilmuan Bahasa, Sastra, dan Pengajarannya*, *4*(2), 155–172. https://doi.org/10.22219/kembara.v4i2.7035

Nomura, K. (2009). A perspective on education for sustainable development: Historical development of environmental education in Indonesia. *International Journal of Educational Development*, *29*(6), 621–627. https://doi.org/10.1016/j.ijedudev.2008.12.002

Novitasari, D. (2016). Pengaruh Penggunaan Multimedia Interaktif Terhadap Kemampuan Pemahaman Konsep Matematis Siswa. *FIBONACCI: Jurnal Pendidikan Matematika dan Matematika*, *2*(2), 8-18. https://doi.org/10.24853/fbc.2.2.8-18

Othman, N. A. F., Jaini, A., Ismail, M., Zainoddin, A. I., Radzi, S. F. M., & Sundram, V. P. K. (2023). Gamification in Online Learning: A Case Study among University Students in Malaysia. *Asian Journal of University Education*, *19*(2), 282–293. https://doi.org/10.24191/ajue.v19i2.22239

Putri, E. N., Rahmawati, L. E., Sufanti, M., & Mansoor, H. S. (2024). Teacher and Student Responses to Educational Games Based on the Fisher-Yates Shuffle Algorithm in Learning Advertising

Texts, Slogans, and Posters. *KEMBARA: Jurnal Keilmuan Bahasa, Sastra, dan Pengajarannya*, *10*(1), 100–114. https://doi.org/10.22219/kembara.v10i1.29715

Rahmadani, R., & Taufina, T. (2020). Pengembangan Multimedia Interaktif Berbasis Model Problem Based Learning (PBL) Bagi Siswa Sekolah Dasar. *Jurnal Basicedu*, *4*(4), 938-946. https://doi.org/10.31004/basicedu.v4i4.465

Raihani. (2017). *Pendidikan Islam dalam Masyarakat Multikultural.* Jakarta: Pustaka Pelajar.

Sahlan, M., Ilham, I., Amin, K., & Kamil, A. I. (2022). Pendekatan Budaya dalam Resolusi Konflik Politik Aceh: Suatu Catatan Reflektif. *Jurnal Sosiologi USK (Media Pemikiran & Aplikasi)*, *16*(1), 28-41. https://doi.org/10.24815/jsu.v16i1.25272

Sari, F. I., Sunendar, D., & Anshori, D. (2023). Analisis perbedaan kurikulum 2013 dan kurikulum merdeka. *Jurnal Pendidikan dan Konseling (JPDK)*, *5*(1), 146-151. https://doi.org/10.31004/jpdk.v5i1.10843

Sousa, M. J., Marôco, A. L., Gonçalves, S. P., & Machado, A. de B. (2022). Digital Learning Is an Educational Format towards Sustainable Education. *Sustainability (Switzerland)*, *14*(3), 1140. https://doi.org/10.3390/su14031140

Suhendi, S. (2020). Preventing Radicalism Through Integrative Curriculum at Higher Education. *Jurnal Pendidikan Islam*, *6*(1), 79–94. https://doi.org/10.15575/jpi.v6i1.8498

Sukmawati, Z. (2022). *Pengembangan E-Modul Terintegrasi Nilai Moderasi Beragama untuk Siswa Kelas IV Pada Materi Kisah Keteladanan Wali Songo II.* Skripsi tidak Diterbitkan. IAIN Batusangkar. Batusangkar

Suntana, I., & Tresnawaty, B. (2022). The tough slog of a moderate religious state: Highly educated Muslims and the problem of intolerance in Indonesia. *HTS Teologiese Studies/Theological Studies*, *78*(1), 23-39. https://doi.org/10.4102/hts.v78i1.7933

Suprapto, S. (2020). Integrasi Moderasi Beragama dalam Pengembangan Kurikulum Pendidikan Agama Islam. *Edukasi*, *18*(3), 355-368. https://doi.org/10.32729/edukasi.v18i3.750

Syarifuddin, Alian, Safitri, S., Abidin, N. F., Sinta, Oktaviani, R. R., & Zarro, M. (2023). Developing Mobile Learning Activity Based on Multiple Learning Objects for the South Sumatra Local Wisdom Course. *Asian Journal of University Education*, *19*(1), 12–27. https://doi.org/10.24191/ajue.v19i1.21225

Taimur, S., & Sattar, H. (2020). Education for Sustainable Development and Critical Thinking Competency. In W. Leal Filho, A. M. Azul, L. Brandli, P. G. Özuyar, & T. Wall (Eds.), *Quality Education* (pp. 238–248). Springer International Publishing.

Tobin, T. J., & Honeycutt, B. (2017). Improve the flipped classroom with universal design for learning. In *Handbook of research on innovative pedagogies and technologies for online learning in higher education* (pp. 449-471). IGI Global. https://doi.org/10.4018/978-1-5225-1851-8.ch019