

Integration of Local Wisdom Rapa'i Puloet Geurimpeng in Articulate Storyline-Based Learning Media to Improve the Learning Motivation of Junior High School Students in Bireuen Regency

Ayu Jauhari¹, Indar Sabri², Trisakti³

Universitas Negeri Surabaya^{1,2,3}

*E-mail: 25020865013@mhs.unesa.ac.id

Abstract

This study aims to develop an instructional media based on Articulate Storyline that integrates Acehese local wisdom into the material on Rapa'i Puloet Geurimpeng arts to enhance the motivation of junior high school students. The research employs a Research and Development (R&D) method using the ADDIE development model, which consists of the stages of analysis, design, development, implementation, and evaluation. The study was conducted at UPTD SMP Negeri 1 Bireuen, UPTD SMP Negeri 3 Bireuen, and UPTD SMP Negeri 4 Bireuen during the even semester of the 2025/2026 academic year, with the research subjects comprising 30 eighth-grade students, 2 media experts, 2 material experts, and 2 language experts. Data collection techniques included observation, interviews, questionnaires, and documentation. Data analysis was performed both quantitatively and qualitatively using percentage analysis, N-Gain, and Paired Sample T-Test with the assistance of SPSS software. The results indicate that the Articulate Storyline-based learning media is categorised as highly feasible based on validation from media, material, and language experts. The trial results show that teachers' and students' responses fall into the very good category. Furthermore, the product's effectiveness results demonstrate an increase in students' learning motivation after using the media, evidenced by improvements in pretest and posttest scores, N-Gain results in the moderate to high category, and statistical test results showing a significance value of less than 0.05. This study concludes that Articulate Storyline-based learning media, which integrates Acehese local wisdom, is effective for use in Junior High School Arts and Culture lessons, as it can enhance students' motivation and support the preservation of Acehese local culture, particularly in Bireuen district.

Keywords: Articulate Storyline, local wisdom of Aceh, learning motivation, learning media, Rapa'i Puloet Geurimpeng.



Licensees may copy, distribute, display and perform the work and make derivative works and remixes based on it only if they give the author or licensor the credits (attribution) in the manner specified by these. Licensees may copy, distribute, display, and perform the work and make derivative works and remixes based on it only for non-commercial purposes.

Introduction

The development of digital technology in the education sector opens real opportunities for teachers to create more innovative, interactive, and engaging learning processes. The use of technology-based media is no longer just supplementary but has become a strategic necessity in efforts to improve the quality of learning. In the context of Cultural Arts education, interactive media play a greater role than in other subjects because the material not only addresses knowledge aspects but also fosters appreciation of cultural values and the development of students' creativity (Hidayati, 2022). Unfortunately, the reality on the ground shows that Cultural Arts learning in many schools still relies

on conventional methods, such as lectures and textbooks, which tend to make students passive and easily bored. This condition directly impacts students' low motivation to learn (Sardiman, 2018); (Hamalik, 2014).

This situation is further exacerbated by the limited integration of local culture into the learning process. When the material taught feels distant from students' everyday lives, the learning loses its meaning. In fact, local wisdom is a cultural heritage that grows and develops within the community, making it naturally easier for students to understand and internalise if integrated into the learning. As stated by Pratama and (Pratama & Suherman, 2022), learning based on local wisdom has proven to increase cultural awareness, engagement, and students' motivation to learn because the material presented is relevant to their daily experiences.

Motivation to learn is one of the key factors determining students' success in education. Motivated students tend to be more active, diligent, and have a strong desire to understand the material (Keller, 2010); (Kuo et al., 2014). Therefore, designing learning media that can boost motivation is very important. One relevant solution is the development of media based on Articulate Storyline, an application for creating interactive media that can integrate text, images, audio, video, animation, and quizzes within a single platform. Several studies have shown that consistent use of Articulate Storyline can improve students' motivation and learning outcomes (Hidayat & Abdillah, 2019) ; (Nurrohmah & Adistana, 2021) A study by (Chen & Wu, 2015) also confirmed that interactive multimedia significantly increases student engagement and motivation across various educational levels.

One form of Aceh's local wisdom with high cultural and educational value is the Rapa'i Puloet Geurimpheg art. This traditional art combines the rhythm of rapa'i drums, movements, and poetry that embody religious, cooperative, disciplinary, and togetherness values within Aceh society. Despite its great potential as a Cultural Arts learning material, this art has not been widely incorporated into technology-based learning content. This research gap is significant, given that efforts to preserve regional culture through interactive learning media remain very limited, especially in Aceh.

Previous research has indeed demonstrated the effectiveness of media based on Articulate Storyline in learning, as well as the effectiveness of local wisdom approaches in enhancing cultural understanding. However, no studies have specifically integrated both, namely, interactive media based on Articulate Storyline with Aceh's local wisdom content in the form of Rapa'i Puloet Geurimpheg for junior high school Cultural Arts learning. (Hasbullah, 2019) This novelty forms the main basis and justification for this research. Thus, this study aims to develop Articulate Storyline-based learning media that integrate Aceh's local wisdom to improve junior high school students' motivation in Cultural Arts subjects, while also supporting the preservation of Aceh's culture through education.

The urgency of this research is increasingly relevant considering the Minister of Education and Culture Regulation No. 23 of 2015 on fostering character emphasises the importance of integrating local cultural values into the education process. Additionally, the currently implemented Merdeka Curriculum at the national level also emphasises contextual learning and a profile-based approach aligned with Pancasila, which includes recognising and appreciating Indonesia's cultural diversity. Therefore, developing learning media that combines local culture with digital technology is not only academically relevant but also holds strong policy significance in education.

Methods

This research uses the Research and Development (R&D) method with the ADDIE development model, which consists of five stages: Analysis, Design, Development, Implementation, and Evaluation. The ADDIE model was chosen because it has a systematic, measurable structure and is suitable for the development of technology-based learning media (Branch, 2009). Each stage of the ADDIE model is designed in a cyclical manner, allowing continuous improvement based on data from each phase.

This research was conducted in three schools in Bireuen Regency, namely UPTD SMP Negeri 1 Bireuen, UPTD SMP Negeri 3 Bireuen, and UPTD SMP Negeri 4 Bireuen during the even semester of the 2025/2026 academic year. The selection of these three schools was based on considerations of similar

demographic characteristics of the students, the limited availability of technology-based learning media, and the comparable conditions of Cultural Arts lessons which are still conducted in a conventional manner. The research subjects consisted of 30 eighth-grade students selected through purposive sampling, along with 2 media experts, 2 material experts, and 2 language experts. The object of the research was a learning media based on Articulate Storyline that integrates Aceh local wisdom into the material on Rapa'i Puloet Geurimpheng art (Mayer, 2021);(Setyosari, 2016).

The first stage is analysis. In this stage, a needs analysis for learning is conducted through direct classroom observation and semi-structured interviews with teachers and students. The interviews focus on identifying learning problems, media needs, and students' motivation conditions. Observations are conducted across three sessions of Cultural Arts lessons to obtain a comprehensive picture of the actual conditions in the field. The analysis results indicate that the learning process still relies on conventional methods, the available media are very limited, students' motivation to learn is low, and local Acehnese cultural materials have not been optimally integrated.

The second stage is design. In this stage, comprehensive planning is carried out, including the development of learning materials, media appearance design, storyboards, navigation, colour selection, audio, video, images, animations, and the preparation of research instruments. The learning materials are tailored to the basic competencies of the Cultural Arts subject for SMP (Year 8) and incorporate Rapa'i Puloet Geurimpheng arts as a representation of Aceh's local wisdom. Media design refers to instructional design principles that consider the characteristics of SMP students' learning, including visual preferences and interactivity.

The third stage is development. The learning media are developed using the Articulate Storyline application. The developed media are then validated by six validators: two media experts, two material experts, and two language experts, to assess their suitability across various aspects. Validation is conducted using a validation sheet based on a Likert scale of 1–5. The validation results and suggested improvements are used as the basis for revisions before the product is trialled.

The fourth stage is implementation. The learning media are trialled with 30 Year 8 students during the Cultural Arts learning process. The trial employs a one-group pretest-posttest design: students complete a motivation questionnaire before (pretest) and after (posttest) using the learning media. At this stage, teachers and students are also asked to fill out response questionnaires to assess the overall quality of the media.

The fifth stage is evaluation. A comprehensive evaluation is conducted on the entire media development process based on validation results, product trial outcomes, and effectiveness results. Formative evaluation is conducted at each ADDIE stage, while summative evaluation is conducted after implementation to assess the overall effectiveness of the learning media (Sugiyono, 2019).

Data collection techniques include observation, interviews, questionnaires, and documentation. The research instruments consist of validation sheets from media, material, and language experts, response questionnaires for teachers and students, and a student motivation questionnaire. The validity of the instruments has been tested through expert judgment by two supervising lecturers before use in the research. All instruments use a Likert scale ranging from 1 to 5. Data analysis is conducted both quantitatively and qualitatively: quantitative data are analysed using feasibility percentage formulas, N-Gain, and the Paired Sample T-Test with SPSS version 25, while qualitative data from validators' suggestions are analysed descriptively as a basis for media revisions (Merriam & Tisdell, 2016).

The media feasibility criteria are determined based on the percentage of validator assessments and user responses, where the media is considered feasible if it achieves a good (61%–80%) or very good (81%–100%) category (Spatioti et al., 2023). The media is deemed effective if there is a significant increase in motivation to learn based on N-Gain results (score ≥ 0.3) and Paired Sample T-Test results (significance value < 0.05).

Results and Discussions

1. Rapa'i Puloet Geurimpheng Art as a Local Wisdom of Aceh

The art of Rapa'i Puloet Geurimpheng is one of the traditional arts of Aceh that uses the rapa'i musical instrument as the main medium of performance. This art is performed collectively, combining rhythm, movements, poetry, and the harmony among players. More than just entertainment, Rapa'i Puloet Geurimpheng carries religious values, cooperation, discipline, responsibility, and togetherness, which reflect the values of Acehnese society.

Every movement in this art is performed synchronously and orderly, symbolising the spirit of unity and mutual cooperation. The poetry sung contains moral messages and religious values relevant to character building among the younger generation. From a character education perspective, this art holds values aligned with Indonesia's national education goals, particularly in shaping the Pancasila student profile faithful, creative, and globally diverse. Therefore, integrating Rapa'i Puloet Geurimpheng into educational media is not merely a cultural preservation effort but also a meaningful pedagogical strategy.



Figure 1. Rapa'I Puloet Geurimpheng Art Performance



Figure 2. Syeh Ayie, Artist & Speaker of Rapa'I Puloet Geurimpheng (Documentation. Ayu Jauhari, 2025).

2. Results of Developing Learning Media

This research produced an interactive learning media based on Articulate Storyline for the material on Rapa'i Puloet Geurimpheng art for the eighth-grade SMP Cultural Arts subject. The media was developed through all five stages of the ADDIE model consistently and systematically.

In the analysis stage, it was found that students need engaging, interactive, easily accessible learning media that can connect the material with their local cultural context. Teachers also expressed limitations in delivering content about Aceh traditional arts without adequate media support.

In the design stage, a storyboard was developed containing the navigation structure, visual design, and learning material flow (Kuo et al., 2014). The media was designed using a combination of text, images, audio, video, and animation, considering (Mayer, 2021) principles of multimedia

learning, which state that the simultaneous use of words and images is more effective in building understanding than using text alone.

In the development stage, the learning media was created using the Articulate Storyline 3 application. The media includes a main page, user instructions, interactive learning materials, a video performance of Rapa'i Puloet Geurimpheing, an interactive quiz with immediate feedback, a learning evaluation, and a developer profile. All content was designed with attention to color harmony, typography, and user-friendly navigation suitable for SMP students.



Figure 3. Main Page Display of the Articulate Storyline-Based Learning Media
(Documentation. Ayu Jauhari, 2026).

3. Expert Validation Results

Expert validation was conducted to assess the suitability of the learning media before it is used in actual teaching processes. The validation involved six validators consisting of two media experts, two content experts, and two language experts. Aspects evaluated included the appearance of the media, content material, language usage, audio and video quality, interactivity, and appropriateness to learning objectives.

The results of the media expert validation showed a percentage of 92% (very feasible), indicating that the appearance, navigation, visual design, animation, and interactivity of the media have met the quality standards for learning media. The content expert validation yielded a percentage of 89% (highly feasible), reflecting that the presented material aligns with the learning objectives and successfully integrates local wisdom content proportionally. Meanwhile, the language expert validation obtained 88% (highly feasible), demonstrating that the language used is communicative, appropriate to the cognitive development of middle school students, and complies with correct Indonesian language rules.

Table 1.
Expert Validation Result

Validator	Percentage	Category
Media Expert	92%	Very Worthy
Material Expert	89%	Very Worthy
Language Expert	88%	Very Worthy
Average	89,6%	Very Worthy

Based on the validation results, the Articulate Storyline-based learning media was declared highly suitable for use in Junior High School Cultural Arts education. The validator also provided several suggestions for improvement, such as clarifying the font size, improving the media layout, enhancing audio quality, and adding user instructions. These suggestions were then used as the basis for revising the product.



Figure 4. Display of the Revised and Improved Media Results
(Documentation. Ayu Jauhari, 2026).

4. Product Trial Results

After the media was declared feasible through expert validation and product revisions, a product trial was conducted on 30 eighth-grade students at three schools involved in the research, involving the subject teachers of Cultural Arts. The students used the learning media directly during their lessons, and then both teachers and students were asked to fill out response questionnaires to evaluate the quality of the media from the users' perspective.

The trial results showed that the teacher gave a score of 93.4% (very good category). The teacher assessed that the learning media was very helpful in delivering the material, making the learning process more efficient and engaging, as well as increasing students' active participation in class. Meanwhile, the students responded with a score of 91% (very good category). The students expressed that the colourful media display, challenging quizzes, and the authentic Rapa'i Puloet Geurimpheng performance videos made them more enthusiastic about following the lessons.

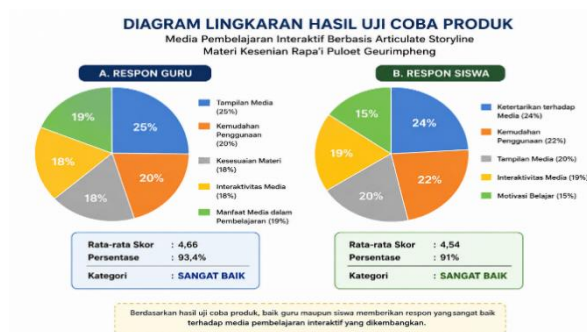


Figure 5. Circle Diagram of Product Test Results
(Documentation. Ayu Jauhari, 2026).

The high response from users is supported by the fact that media effectively integrates the principles of multimedia learning. Mayer (2021) emphasises that multimedia design that considers the principles of coherence, signalling, and redundancy will significantly enhance students' understanding and engagement. The integration of local cultural content also plays an important role: when students see content that is close to their cultural identity, the relevance and emotional connection to the learning material increase (Pratama & Suherman, 2022).

5. Results of Product Effectiveness

The effectiveness measurement was carried out through the distribution of a learning motivation questionnaire before (pretest) and after (posttest) the use of learning media. Based on the research results, the average pretest score was 65.12 and the average posttest score was 88.35, with an increase of 23.23 points.

Table 2.
Student Learning Motivation

Description	Average
Pretest	65,12
Posttest	88,35
Increase	23,23

The increase in learning motivation was also confirmed through N-Gain analysis. The N-Gain formula used is:

$$N\text{-Gain} = (\text{Posttest} - \text{Pretest}) / (\text{Maximum Score} - \text{Pretest})$$

The N-Gain calculation results show a value of 0.66, which falls into the moderate to high category based on Hake's criteria ($0.3-0.7 = \text{moderate}$; $> 0.7 = \text{high}$). This value indicates that the developed learning media is quite effective in significantly improving students' motivation to learn.

Table 3.
Evaluation Categories for Learning Media Feasibility

Persentase	Kategori
81%–100%	Very Worthy
61%–80%	Worthy
41%–60%	Quite Feasible
21%–40%	Less Suitable
0%–20%	Very Poor

Table 4.
N-Gain Result Categories

N-Gain Score	Category
$> 0,7$	High
$0,3 - 0,7$	Medium
$< 0,3$	Low

To ensure the statistical significance of the increase in learning motivation, a Paired Sample T-Test was conducted using SPSS version 25. The test results showed a t-value of 12.45, which is greater than the t-table value of 2.045, with a significance level of $0.000 < 0.05$. Therefore, H_0 is rejected and H_1 is accepted, indicating a significant difference in students' learning motivation before and after using Articulate Storyline-based learning media.



Figure 6. Figure 6. Product Effectiveness Chart
(Documentation. Ayu Jauhari, 2026).

6. Findings

Figures and tables are the most effective way to present results. Captions should be able to stand alone, such that the figures and tables are understandable without the need to read the entire manuscript. Besides that, The data represented should be easy to interpret. Please look at the examples bellow. The overall research findings indicate that the Articulate Storyline-based learning media, which integrates Acehnese local wisdom into the Rapa'i Puloet Geurimpheng arts material, is highly feasible and effective for use in Junior High School Cultural Arts education. These findings can be understood from three main dimensions: media quality, cultural content relevance, and the effectiveness of motivation enhancement.

Firstly, in terms of media quality, the high expert validation results (average 89.6%) suggest that the media has been designed in accordance with good multimedia design principles. This aligns with (Mayer, 2009) multimedia learning principles, which state that the integrative and coherent use of text, images, audio, and animation enhances students' understanding and motivation to learn. The principle that "People learn more deeply from words and pictures than from words alone" underpins the media design in this study.¹ The use of Articulate Storyline allows for the optimal implementation of these principles because its interactive features support active learning, which cannot be realised through static media such as textbooks or ordinary presentations.

Furthermore, an attractive, responsive, and easy-to-navigate media display also contributes to increased student attention, the first element in (Keller, 2010) ARCS motivation model. This finding is supported by research from (Nurrohman & Adistana, 2021), who developed Articulate Storyline-based media in vocational education and found that interactive designs with immediate feedback consistently yielded high ratings from users, both teachers and students.

Secondly, regarding the relevance of cultural content, the integration of Rapa'i Puloet Geurimpheng arts was proven to strengthen the relevance (relevance) of the second element in the ARCS model. When the material is linked to culture that students are familiar with and close to their lives, the learning becomes more meaningful and contextual. (Pratama & Suherman, 2022);(Kuo et al., 2014) in a research paper published in a reputable international journal, found that learning grounded in local wisdom significantly increased students' cultural awareness and motivation because the content presented was authentic and relevant to their cultural identity.

This finding also reinforces the argument that local wisdom is not merely an ornament in the curriculum but a substantive learning resource with high pedagogical value. (Sari & Putra, 2023) emphasise that learning based on local wisdom can foster a love for regional culture while also enhancing students' understanding of the values contained within it. In this study's context, the values of cooperation, discipline, and togetherness embedded in Rapa'i Puloet Geurimpheng are not only learned cognitively but also experienced through interactive and immersive learning experiences.

Thirdly, in terms of the effectiveness of motivation enhancement, the N-Gain score of 0.66 (moderate-high category) and the Paired Sample T-Test significance value of $0.000 < 0.05$ provide strong empirical evidence that the developed learning media effectively increases students' motivation to learn. Research (Chen & Wu, 2015), published in the journal *Education and Information Technologies*, also found that the use of interactive multimedia in learning consistently results in significant increases in motivation and student engagement, especially when the multimedia content is relevant to students' cultural context and life experiences.

The increase in learning motivation in this study can be comprehensively explained through Keller's (2010) ARCS model. All four elements of the ARCS model are fulfilled in this media: (1) Attention the media successfully captures students' attention through dynamic visual displays, authentic Rapa'i Puloet Geurimpheng performance videos, and interactive animations; (2) Relevance local Acehnese cultural content that is close to students' lives creates emotional connections and strong contextual relevance; (3) Confidence interactive quizzes with immediate feedback and structured difficulty levels build students' confidence in mastering the material; and

(4) Satisfaction evaluation and appreciation provided through the media give a sense of achievement that motivates students to continue learning.

Additionally, (Rahman, 2021);(Hidayati, 2022) research shows that applying the ARCS model in media design significantly sustains students' intrinsic motivation better than conventional approaches. This is because the ARCS model holistically considers psychological factors in learning, not only cognitive aspects but also affective and motivational ones.

Overall, this research makes a meaningful empirical contribution to the development of technology-based learning media in secondary schools, particularly within the context of Cultural Arts education rich in local cultural content. The combination of learning technology (Articulate Storyline) with local wisdom (Rapa'i Puloet Geurimpheung) has proven capable of creating an effective synergy: technology menyediakan medium yang menarik dan interaktif, sementara kearifan lokal memberikan konten yang bermakna dan kontekstual. Sinergi inilah yang pada akhirnya mendorong peningkatan motivasi belajar siswa secara signifikan.

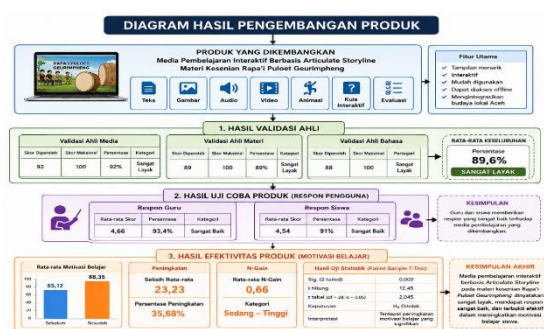


Figure 7. Overall Development Product Result Diagram (Documentation. Ayu Jauhari, 2026).



Figure 8. Cultural Arts Education in several schools in Bireuen Regency (Documentation. Ayu Jauhari, 2026).

Conclusion

Based on the research and development conducted, the Articulate Storyline-based learning media that integrates Aceh local wisdom into the Rapa'i Puloet Geurimpheung arts material is declared highly feasible and effective for use in SMP (junior high school) Cultural Arts learning. Expert validation results for media, material, and language consistently show a very feasible category with an average of 89.6%, demonstrating that the media has met quality standards in terms of appearance, content, language, and interactivity. The product trial results confirm that teachers (93.4%) and students (91%) responded very positively to the developed media. The media proved capable of creating a more active, interactive, and enjoyable learning atmosphere, thereby encouraging student engagement and enthusiasm in learning Cultural Arts. The effectiveness results indicate a significant increase in students' learning motivation after using the media, with an average pretest score of 65.12 rising to 88.35 in the

posttest (an increase of 23.23 points), an N-Gain value of 0.66 (moderate-high category), and a Paired Sample T-Test significance value of $0.000 < 0.05$. These findings provide strong empirical evidence that the developed media effectively enhances students' motivation to learn. This research also demonstrates that integrating Aceh local wisdom into digital learning media not only supports the preservation of regional culture through formal educational environments but also creates more contextual and meaningful learning for students. The combination of learning technology and local culture proves to be an innovative and effective alternative learning model, which can also serve as a template for developing local wisdom-based learning media in other regions of Indonesia.

References

- Branch, R. M. (2009). *Instructional Design: The ADDIE Approach*. Springer. <https://doi.org/10.1007/978-0-387-09506-6>
- Chen, C. M., & Wu, C. H. (2015). Effects of the use of interactive e-books integrated with computer gaming on the reading motivation and comprehension of students with reading disabilities. *Interactive Learning Environments*, 23(2), 139–158. <https://doi.org/10.1080/10494820.2014.982522>
- Hamalik, O. (2014). *Proses Belajar Mengajar*. Bumi Aksara.
- Hasbullah. (2019). *Dasar-dasar Ilmu Pendidikan*. Rajawali Pers.
- Hidayat, R., & Abdillah. (2019). *Ilmu Pendidikan: Konsep, Teori dan Aplikasinya*. Lembaga Peduli Pengembangan Pendidikan Indonesia.
- Hidayati, L. (2022). Pengembangan media pembelajaran berbasis Articulate Storyline untuk meningkatkan motivasi belajar siswa. *Jurnal Inovasi Pendidikan*, 8(3), 201–210.
- Keller, J. M. (2010). *Motivational Design for Learning and Performance: The ARCS Model Approach*. Springer. <https://doi.org/10.1007/978-1-4419-1250-3>
- Kuo, Y. C., Walker, A. E., Schroder, K. E. E., & Belland, B. R. (2014). Interaction, Internet self-efficacy, and self-regulated learning as predictors of student satisfaction in online education courses. *The Internet and Higher Education*, 20(1), 35–50. <https://doi.org/10.1016/j.iheduc.2013.10.001>
- Mayer, R. E. (2009). Multimedia Learning. *Multimedia Learning, Second Edition*, 1–304. <https://doi.org/10.1017/CBO9780511811678>
- Mayer, R. E. (2021). Multimedia learning and educational technology. *Educational Psychology Review*, 33(2), 421–442. <https://doi.org/10.1007/s10648-020-09587-9>
- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative Research: A Guide to Design and Implementation (4th ed.)*. Josse.
- Nurrohmah, F., & Adistana, G. A. Y. P. (2021). Development of interactive learning media based on Articulate Storyline in vocational education. *Journal of Education Technology*, 5(3), 404–412. <https://doi.org/10.23887/jet.v5i3.38029>
- Pratama, R. A., & Suherman, M. (2022). Local wisdom-based learning in improving students' cultural awareness and motivation. *International Journal of Instruction*, 15(2), 233–248. <https://doi.org/10.29333/iji.2022.15214a>
- Rahman, A. (2021). Penerapan model ARCS dalam meningkatkan motivasi belajar siswa. *Jurnal Pendidikan Indonesia*, 9(2), 88–97.
- Sardiman. (2018). *Interaksi dan Motivasi Belajar Mengajar*. Rajawali Pers.
- Sari, D., & Putra, M. (2023). Pembelajaran berbasis kearifan lokal untuk pelestarian budaya daerah. *Jurnal Pendidikan Budaya Dan Karakter*, 5(1), 33–42.
- Setyosari, P. (2016). *Metode Penelitian Pendidikan dan Pengembangan*. Prenadamedia Group.
- Spatioti, A., Kazanidis, I., & Pange, J. (2023). Educational Design and Evaluation Models of the Learning Effectiveness in E-Learning Process: a Systematic Review. *Turkish Online Journal of Distance Education*, 24(4), 318–347. <https://doi.org/10.17718/tojde.1177297>
- Sugiyono. (2019). *Metode Penelitian dan Pengembangan (Research and Development/R&D)*. Alfabeta.

Acknowledgment

The authors would like to express their sincere gratitude to the Directorate General of Higher Education, Research, and Technology, Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia for supporting the academic development of postgraduate students in the field of Arts and Culture Education. Appreciation is also extended to the Graduate Program of Arts and Culture Education, Faculty of Language and Arts, Universitas Negeri Surabaya, for providing institutional support and academic guidance throughout the research process.

The authors are deeply grateful to the supervisory team Prof. Trisakti and Dr. Indar Sabri whose scholarly direction, critical feedback, and continuous encouragement were instrumental in shaping both the conceptual framework and methodological rigour of this study. Their expertise in arts education and instructional media development has been invaluable.

Special thanks are due to the principals, teachers, and students of UPTD SMP Negeri 1 Bireuen, UPTD SMP Negeri 3 Bireuen, and UPTD SMP Negeri 4 Bireuen for their willingness to participate in this research and for their openness in embracing technology-integrated learning in the classroom. Without their active engagement, the implementation phase of this study would not have been possible.

The authors also wish to acknowledge Syeh Ayie, a respected artist and primary resource person for Rapa'i Puloet Geurimpheng, whose cultural knowledge and dedication to preserving Acehese traditional arts provided the authentic foundation for the learning material developed in this study. His contribution goes beyond academic assistance; it represents a living testimony to the importance of keeping local wisdom alive within educational contexts.

Finally, heartfelt appreciation is extended to all media experts, material experts, and language experts who participated in the validation process, as well as to colleagues and peers whose constructive input throughout the research contributed meaningfully to the quality of this work.