



Developing Digital Learning Media by Using Articulate Storyline in Reading Narrative Text of Grade IX at MTsN 2 Medan

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ABSTRACT

This study aims to develop digital learning media based on Articulate Storyline for reading narrative texts for grade IX students at MTsN 2 Medan. This study employs the Research and Development (R&D) method using a modified ADDIE model, consisting of three stages: Analysis, Design, and Development. Research data were collected through student needs questionnaires and interviews with English teachers. The results of the needs analysis indicated that students require more interactive, engaging, and accessible learning media to aid in understanding narrative texts. Based on these needs, the researcher developed a digital learning medium named Interactive Islamic Narrative Text (I-INT): Digital Learning for Grade IX using Articulate Storyline. The developed medium includes learning materials, Islamic story videos, analysis of generic structure and language features,

interactive quizzes, educational games, a glossary, and digital assessments. The developed product was then validated by subject material experts and media experts. The results showed that the digital learning media developed met the feasibility criteria and are suitable for use in supporting the learning of narrative text reading for Grade IX students at MTsN 2 Medan.

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INTRODUCTION

Reading comprehension plays a crucial role in English language learning because it enables students to obtain information, interpret the meaning of texts, and supports the development of other language skills (Grabe & Stoller, 2020). However, reading literacy remains a challenge for many students in Indonesia. The OECD PISA report (2023) states

that Indonesia's reading achievement is still below the international average, indicating that students often struggle to identify key information, understand text structure, and interpret implied meaning. These challenges highlight the need for a learning approach that actively engages students in the reading process.

As technology in education advances rapidly, digital learning media is playing an increasingly important role in supporting the learning process in the classroom (UNESCO, 2023). Integrating technology into learning activities gives students the opportunity to access materials through more interactive and engaging formats (Dinda & Munir, 2025). However, digital tools are not always used to their full potential in schools (Kemendikbud, 2024). In many classrooms, learning activities still rely heavily on teacher-led instruction, limiting student participation and interaction. Consequently, students may become less motivated to explore learning materials on their own.

This study is based on the concepts of Constructivism and Cognitive Theory of Multimedia Learning. Constructivism emphasizes that knowledge is developed through active learning experiences in which students relate new information to their existing understanding (Piaget, 1952). Meanwhile, multimedia learning theory states that a combination of visual and verbal information can enhance students' understanding if presented appropriately (Mayer, 2009). Therefore, learning media that combine text, images, animations, and interactive exercises can provide meaningful learning experiences and facilitate deeper understanding (Asilestari & Henjilito, 2025).

Several previous studies have highlighted the effectiveness of interactive digital media in English language learning. Riyadi et al. (2024) found that learning materials developed using Articulate Storyline significantly improved students' vocabulary mastery in narrative texts. Similarly, Istiq'faroh et al. (2024) reported that interactive applications created using Articulate Storyline improved students' understanding of English learning materials. These findings indicate that Articulate Storyline holds significant potential as an interactive learning platform that supports student engagement and academic achievement.

Although there are these positive findings, previous studies have largely focused on vocabulary mastery (Widagdo & Junaedi, 2023) and general learning outcomes, rather than specifically addressing students' reading comprehension of narrative texts. Furthermore,

studies conducted in Islamic junior high schools (Madrasah Tsanawiyah) are still limited. Therefore, this study offers a unique approach by developing digital learning media using Articulate Storyline, specifically designed to enhance grade IX students' understanding of narrative texts within the Madrasah educational context while integrating relevant educational values.

Preliminary observations and interviews conducted with one of the English teachers at MTs Negeri 2 Medan revealed that students exhibit varying levels of interest in learning English. Many students consider English to be a difficult subject due to limited vocabulary and difficulties in understanding the structure of narrative texts. Consequently, student participation in reading activities remains relatively low. Furthermore, student achievement in narrative text learning shows that the average score for Class IX-H is 68.09, which is below the Minimum Proficiency Criteria (KKM) of 75. Of the 32 students, only 13 (40.6%) met the expected standard, while 19 (59.4%) failed to meet the criteria. The limited use of interactive digital media in classroom learning may have contributed to these learning difficulties.

Based on these findings, this study focuses on the development of digital learning media using Articulate Storyline for teaching narrative texts to grade IX students at MTs Negeri 2 Medan. The developed media is expected to provide an interactive, engaging, and effective learning environment that can improve students' reading comprehension skills and participation in learning activities. Therefore, this study aims to develop digital learning media using Articulate Storyline for teaching narrative texts to ninth-grade students at MTs Negeri 2 Medan.

METHOD

This study employs a Research and Development (R&D) methodology to develop digital learning materials using Articulate Storyline for teaching narrative text reading (Sugiyono, 2018). The development process was adapted from the ADDIE model proposed by Branch (2009). Given the scope of this study, the model was modified into six stages: Analysis, Design, Development, Expert Validation, Product Revision, and Final Product. These stages were carried out systematically to ensure that the developed media met students' learning needs and educational objectives.

This study was conducted at MTs Negeri 2 Medan, involving Grade IX students and an English teacher as the primary data sources. Qualitative and quantitative data were collected during the study. Qualitative data were obtained through classroom observations, interviews with the English teacher, and feedback from experts. Quantitative data were collected from questionnaires used for needs analysis and product validation.

Several instruments were used to collect data, including observation sheets, interview guides, and questionnaires. Classroom observations were conducted to identify students' levels of participation and learning behaviors during reading activities. Semi-structured interviews were conducted to explore teachers' perceptions of the difficulties students faced in understanding narrative texts and the use of digital learning media. In addition, questionnaires were distributed to identify students' learning needs.

The collected data was analyzed using qualitative and quantitative methods. Data from observations and interviews was analyzed descriptively to identify students' needs and the learning challenges they faced. Questionnaire data was analyzed by calculating percentages and averages. The results of the expert validation were interpreted using predefined criteria, ranging from poor to excellent. Feedback provided by content and media experts was used as the basis for revising and improving the product before producing the final version of the Articulate Storyline-based digital learning material.

RESULTS

Needs Analysis

The needs analysis was conducted through questionnaires administered to 32 Grade IX students and an interview with an English teacher at MTs Negeri 2 Medan. The findings revealed that students faced difficulties in understanding narrative texts, particularly in identifying main ideas, understanding vocabulary, recognizing text structures, and answering comprehension questions. Furthermore, students expressed a strong preference for interactive learning materials supported by multimedia elements such as images, animations, videos, and quizzes. The teacher also reported that students often showed low engagement during reading activities and that the use of interactive digital media in English instruction was still limited.

Table 1. Summary of Students' Needs Analysis

Category	Main Findings	Result B
Necessities	Need materials that facilitate understanding of narrative texts and text structure	96.9%
Lacks	Difficulties in comprehension, vocabulary, main ideas, and text structure	90.6%
Wants	Preference for interactive digital learning media	96.9%
Learning Needs	Need multimedia-supported learning materials and interactive activities	96.9%

The results indicate the necessity of developing interactive digital learning media to support students' reading comprehension and engagement in learning narrative texts.

Digital Learning Media Design

Based on a needs analysis, an initial concept was designed using Canva to create a storyboard illustrating the layout, navigation flow, content sequence, and interactive features of the media before it was developed in Articulate Storyline. This design process integrates five learning objectives aligned with the 9th-grade English curriculum and Bloom's Taxonomy (Anderson & Krathwohl, 2001) cognitive levels C4 through C6, namely: enabling students to explain the definition and social function of narrative texts, identify their general structure and linguistic features, read narrative texts aloud, analyze the story's content and moral message, and produce their own simple narrative texts.

The instructional content was adapted from relevant chapters in the Grade IX English textbook and modified to include Islamic-themed folk narratives, presented in simplified language with supporting examples. Visual elements such as illustrations, colors, animations, audio, and video are included to align the media with the characteristics and interests of Grade IX students, in accordance with the principles of Constructivism and Cognitive Theory of Multimedia Learning. The resulting storyboard serves as the foundation for further media development in Articulate Storyline.

Product Development and Validation

The development stage produced a digital learning medium titled Interactive Islamic Narrative Text (I-INT): Digital Learning for Grade IX, built using Articulate Storyline with an

Islamic visual theme. The medium was published in a web-based format so that it could be accessed through either a laptop or a smartphone connected to the internet, allowing flexible use for classroom instruction as well as independent study.

The final media consists of a Login Page, a Start Page, and a Main Menu providing access to six core sections: Information, Material, Example, Quiz, Assessment, and Profile. The Information section presents the subject, topic, grade level, learning outcomes, and learning objectives, framed according to Bloom's Taxonomy levels C4 through C6. The Material section delivers the core content on narrative texts, including their definition in both English and Indonesian, generic structure (orientation, complication, resolution, and re-orientation/coda), common text types such as folktales, fairy tales, legends, fables, romances, and science fiction, and key language features including direct speech, past tense, time adverbials, time conjunctions, action verbs, and the use of specific characters, each illustrated with examples.

The Example section provides two video-based Islamic narratives, after which students are guided to analyze the generic structure and language features demonstrated in each story. The Quiz section contains two game-based activities: a Match Up drag-and-drop exercise in which students arrange story segments according to generic structure, and a crossword puzzle integrated from Puzzel.org covering key narrative text concepts. The Assessment section requires students to read an Islamic-themed narrative text and answer multiple-choice questions designed to measure their comprehension of social function, generic structure, and language features. The Profile section presents information about the developer together with a closing motivational message.

Several interactive features of Articulate Storyline were employed in the development of the media, including triggers and navigation buttons connecting all pages, slide layers used to display supplementary information and feedback, a drag-and-drop interaction implemented in the Match Up activity, an embedded video player for the Islamic story videos, and adjustable audio controls.

Expert Validation of the Digital Learning Media

The developed media was evaluated by two validators, an English language education lecturer and an English teacher, using a validation instrument covering content validation

(media, activities, setting, and layout) and media validation (design and layout). Each indicator was scored on a five-point scale and interpreted using the conversion categories shown in Table 2.

Table 2. Conversion Categories for Validation Scores

Scale Range	Category
$1.00 \leq M < 1.79$	Very Poor
$1.80 \leq M < 2.59$	Poor
$2.60 \leq M < 3.39$	Fair
$3.40 \leq M < 4.19$	Good
$4.20 \leq M \leq 5.00$	Very Good

Table 3. Summary of Content Validation Results

No	Aspect	Expert I	Expert II	Mean
1	Media Aspect	4.80	4.80	4.80
2	Activities Aspect	3.60	5.00	4.30
3	Setting Aspect	3.60	4.00	3.80
4	Layout Aspect	5.00	5.00	5.00
Average		4.25	4.70	4.48

Content validation yielded an overall average score of 4.48, placing this resource in the “Very Good” category. The media and layout aspects received the highest ratings, both achieving a maximum score of 5.00, indicating that the validators found the content to be accurate, aligned with the curriculum, and clearly presented. The activity aspect (4.30) and the setting aspect (3.80) also fell within the Good to Very Good range, indicating that while interactive activities and the media’s usability were generally rated positively, certain elements, particularly the difficulty level of activities and their suitability for various learning settings, were viewed as areas that needed to further improvement.

Table 4. Summary of Media Validation Results

No	Aspect	Expert I	Expert II	Mean
1	Design Aspect	3.86	5.00	4.43
2	Layout Aspect	4.57	4.29	4.43
Average		4.21	4.64	4.43

The media validation resulted in an overall average score of 4.43, which is also categorized as “Very Good.” Both the design and layout received an average score of 4.43, indicating that the visual design, color selection, navigation, and overall structure of the media were considered attractive, consistent, and supportive of student understanding.

Table 5. Overall Validation Results

No	Validation Aspect	Mean Score	Category
1	Content Validation	4.48	Very Good
2	Media Validation	4.43	Very Good
Average		4.46	Very Good

The combined results of the content and media evaluations showed an average overall score of 4.46, which falls into the “Very Good” category. These findings indicate that the Interactive Islamic Narrative Text (I-INT) media has met the established criteria for suitability regarding content accuracy, learning activities, ease of use, design, and layout, and is considered suitable for use in teaching narrative text reading to grade IX students at MTsN 2 Medan.

Product Revision

Following the validation process conducted by experts, several revisions were made to improve the quality of the learning materials based on feedback provided by the validators. First, the learning objectives were revised into five clearer and measurable statements, aligned with levels C4 to C6 in Bloom’s Taxonomy, covering the definition and social function of narrative texts, generic structure and linguistic features, oral reading, analysis of content and moral messages, and the writing of simple narrative texts.

Second, additional teaching materials were incorporated. Four new slides were added containing two complete examples of narrative texts along with analyses of their generic structure and linguistic features, addressing the validators’ feedback that the original materials lacked applied examples for students to analyze.

Third, the Match Up quiz activity was expanded from a single matching task to five tasks covering a broader range of content, including matching definitions with social functions, generic structures with linguistic features, story events with moral messages, and

grouping story elements based on the narrative of Prophet Ishmael (AS). The order of answer options was also randomized to increase engagement.

Fourth, a glossary of two slides was added, presenting vocabulary in alphabetical order along with Indonesian translations, in response to the lack of vocabulary support in the original media.

Fifth, the assessment was restructured to better align with the learning objectives, resulting in an assessment consisting of 20 questions, including 10 multiple-choice questions and 10 essay questions regarding social functions, generic structures, linguistic features, content, and moral messages. The assessment format was also changed to Google Forms to make it easier for students to complete and for teachers to monitor.

Final Product

The final result of this research and development study is a web-based digital learning platform titled Interactive Islamic Narrative Text (I-INT): Digital Learning for 9th Grade, developed using Articulate Storyline. The platform consists of six main sections: Information, Materials, Examples, Quizzes, Assessments, and Profile. The product integrates instructional videos, a glossary, game-based quizzes, interactive exercises, and assessments using Google Forms. Based on the validation results described above, this final product received an overall rating of “Very Good” and is considered suitable for supporting the teaching of narrative text reading to 9th-grade students at MTsN 2 Medan.

DISCUSSION

The findings of this study indicate that Grade IX students at MTs Negeri 2 Medan experienced various difficulties in learning narrative texts, particularly in understanding text content, identifying main ideas, recognizing narrative structures, and interpreting unfamiliar vocabulary. In addition, students expressed a strong preference for learning materials that incorporate multimedia elements such as images, animations, videos, and interactive activities (Sunjayanto & Basuki, 2025). These findings suggest that conventional learning methods have not fully accommodated students’ learning needs and preferences, highlighting the importance of developing more engaging instructional media.

The development of the Articulate Storyline-based learning media was carried out based on the results of the needs analysis. The media was designed to provide students with opportunities to actively interact with learning materials through multimedia content, educational games, quizzes, and assessments. This approach is consistent with Piaget's (1952) Constructivist Theory, which emphasizes that knowledge is constructed actively through learning experiences rather than passively received from teachers. Through interactive features such as drag-and-drop activities, quizzes, and multimedia presentations, students are encouraged to participate actively in the learning process and construct their own understanding of narrative texts.

The findings also support Mayer's (2009) Cognitive Theory of Multimedia Learning, which states that students learn more effectively when information is presented through both verbal and visual channels. The developed media combines textual explanations, images, videos, audio, and interactive exercises within a single platform. Such integration allows students to process information through multiple sensory channels (Paivio, 2006), thereby facilitating comprehension and reducing cognitive overload. The positive validation results suggest that the multimedia elements were successfully integrated and contributed to the effectiveness of the learning media.

The expert validation results further demonstrated the quality and feasibility of the developed product. Content validation achieved a mean score of 4.48, while media validation obtained a mean score of 4.43. The overall validation score of 4.46 categorized the media as "Very Good." These results indicate that the developed media fulfilled the criteria related to content relevance, instructional activities, design quality, and usability. The experts also agreed that the media was appropriate for the characteristics and learning needs of Grade IX students.

The findings of this study are in line with previous research on the use of Articulate Storyline in language learning (Uzmi, 2023). Riyadi et al. (2024) reported that Articulate Storyline-based learning media contributed positively to students' vocabulary acquisition and learning engagement. Similarly, Istiq'faroh et al. (2024) found that interactive learning applications developed using Articulate Storyline enhanced students' understanding of English learning materials. The present study extends these findings by focusing specifically

on narrative text reading comprehension and by implementing the media within the context of Islamic junior secondary education.

Another important contribution of this study lies in the integration of Islamic-themed narrative stories within the learning materials. The use of stories related to the Prophet Muhammad and his companions not only supports students' reading comprehension but also provides opportunities to introduce moral and educational values (Halizah et al., 2024). This feature distinguishes the developed media from many previous studies that focused primarily on general English learning content. Therefore, the media serves both linguistic and character-building purposes within the Madrasah learning environment.

The revision process also played an important role in improving the quality of the final product. Based on expert feedback, several modifications were made, including the refinement of learning objectives, the addition of narrative text examples and analyses, the expansion of interactive quiz activities, the inclusion of a glossary, and the improvement of assessment instruments. These revisions enhanced the alignment between learning objectives, instructional materials, and evaluation components, contributing to the overall quality of the media.

Overall, the findings demonstrate that the development of digital learning media using Articulate Storyline provides a promising solution to support narrative text learning. The integration of digital learning media and interactive activities can address students' learning difficulties while increasing their motivation and engagement (Cahyani, 2024). Therefore, the developed media can serve as an alternative instructional resource for English teachers, particularly in teaching narrative texts at the junior secondary school level.

CONCLUSION

This study aimed to develop digital learning media using Articulate Storyline for teaching narrative texts to Grade IX students at MTs Negeri 2 Medan. The development process followed a modified ADDIE model consisting of analysis, design, development, expert validation, product revision, and finalization stages.

The results of the needs analysis revealed that students experienced difficulties in understanding narrative texts and required more interactive learning materials supported

by multimedia elements. Based on these findings, a digital learning medium entitled *Interactive Islamic Narrative Text (I-INT): Digital Learning for Grade IX* was developed using Articulate Storyline.

The validation results demonstrated that the developed media was highly feasible for instructional use. Content validation obtained a mean score of 4.48, media validation achieved a mean score of 4.43, and the overall validation score reached 4.46, all categorized as Very Good. These findings indicate that the developed media meets the required standards in terms of content quality, instructional design, usability, and visual presentation.

Therefore, the Articulate Storyline-based digital learning media is considered appropriate for supporting the teaching and learning of narrative texts among Grade IX students at MTs Negeri 2 Medan. Future studies are recommended to conduct classroom implementation and effectiveness testing to examine the impact of the media on students' reading comprehension achievement.

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