

The Effectiveness of Articulate Storyline 3 Application-Based Interactive Learning Media in Social Studies Learning for Elementary School

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ABSTRACT

The research problem is students' low reading skills and social studies learning outcomes. This research aims to apply interactive media Articulate Storyline 3 to improve students' general map reading skills and learning outcomes in elementary school subjects in Makassar City. This study uses the ASSURE Research and Development (R&D) research method (Analyze Learner Characteristics, State Objective Select Media, Utilize Media, Required learner participation Evaluate and revise) to develop learning media that can improve reading skills and learning outcomes for 28 elementary school students in Makassar city. The results showed that interactive learning media was declared effective because two indicators were achieved: the observations of student activities included in the very active category and the observations of teacher activities included in the very active category. Implications in learning can improve skills and student learning outcomes.

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1. INTRODUCTION

The progress of the Indonesian State depends on the education system, so the advancement of education greatly contributes to encouraging the progress of the Indonesian State. The quality of education is primarily determined by the quality of learning in schools, so every teacher is expected to innovate and have skills in using information technology and media (Widia, Syahrir, & Sarnita, 2020), Skills that teachers and students urgently need in the current era of globalization are abilities or skills in information technology and media or what is often referred to as 21st Century Skills (Ahlah & Melianah, 2020; Mishra, Koehler, & Henriksen, 2011), which will be actualized in all subjects in the School including Social Science Subjects.

It is essential to teach Social Science (IPS) material to elementary school students (Yuanta, 2020; Kanji, Nursalam, Nawir, & Suardi, 2019) so that teachers can develop the potential students both mental, social and spiritual potential to interact well with people in the social environment (Patmawati, Ws, & Halimah, 2018). Therefore, the role of the teacher in achieving learning goals in schools is significant.

However, based on the results of initial observations, researchers organizing social studies material for elementary school did not cover social, cultural, and value problems in children's lives and lacked motivation by the characteristics of elementary school students, causing students to get bored, because learning is only concerned with understanding and memorizing material, even though 21st-century learning prioritizes information and technology (Gultom et al., 2021), so it is necessary to create effective and innovative learning conditions that can create situations and needs for an active and fun learning environment, meaningful learning so that it will improve the quality of education.

The problem to be studied is the effectiveness of learning media based on articulate storyline three on general map reading skills. Through articulate storyline 3, it is used as a learning medium in social studies learning (Patmawati et al., 2018; Agustina, Roesminingsih, & Jacky, 2021; Husain, Ibrahim, Bulawa, & Bone, 2021). This is possible because students in elementary schools in the city of Makassar already have an android for each student, so more interactive learning media such as Storyline Articulation 3 can be applied. The articulate storyline is an application program that is supported by smart brainware in a simple way (Rohmah & Bukhori, 2020; Juhaeni, Safaruddin, & Salsabila, 2021) with interactive tutorial procedures to help users format CDs, personal web (Rohmah & Bukhori, 2020) and word processing (Rohmah & Bukhori, 2020; Triono, 2021; Juniantari, Gede Saindra Santyadiputra, Widyastiti, & Rupita, 2021), through templates published both offline and online (Triono, 2021; Juniantari et al., 2021; Rohmah & Bukhori, 2020). Students on laptops and androids can access this media, providing flexibility for students to use. Media Articulate storyline is expected to improve students' skills in reading general maps and improve student learning outcomes in social studies subjects (Patmawati et al., 2018; Agustina et al., 2021; Husain et al., 2021).

Various research results have been carried out using interactive media articulate storyline 3 in the education and learning process both in thematic learning (A. Aulia & Masniladevi, 2021) integrated (Anggraini & Reinita, 2021) theme 3 (Salwani & Ariani, 2021; Firdawela & Reinita, 2021), physical education (Gunawan, Wiguno, Kurniawan, & Mu'arifin, 2021), long jump material (Arrozi, Wahyudi, & Prayoga, 2021), pencak silat game (S. R. Aulia & Kurniawan, 2021), on subjects, social studies (Agustina et al., 2021), colonial era national events (Husain et al., 2021), in Mathematics (Kamang, Tarbiyah, & Bukittinggi, 2022), algebra material (Nissa et al., 2021), sum concept (Septiani, Nurfitriani, & Taupik Saleh, 2021), data presentation (Herman, I. R., & Ahmad, 2021), factors and multiples of a number (Fatia & Ariani, 2020), on science subjects (Amri, 2021), STEM Based (Nurmala, Triwoelandari, & Fahri, 2021), plant breeding material (Et al., 2021), diversity of animals and plants (Nugroho & Arrosyad, 2020), Carbon and Silicon Material (Afrida, Suyanti, & Sudrajat, 2021), environmental materials and their benefits (Ayu Ketut Sinta, Gede Astawan, & Made Suarjana, 2021), physics (Fatikhah & Anggaryani, 2021), style material (Syah, Nugrahadi1, Hidayat1, & Kholis, 2020), electrical engineering (Siti, 2015), digital physics (Midroro, Prastowo, & Nuraini, 2021), newton's law (Husna, Fajar, Science, Study, & Java, 2022), electronic module (Sadikin & Hardianti, 2021), Basic Computer System (I Gede Partha Sindu, Santyadiputra, & Permana, 2020), Arabic subjects (Sukmarini, Mauludiyah, Roziqi, & Nurdianto, 2021), correspondence (Rohmah & Bukhori, 2020), SPADA Learning (I. G.P. Sindu, Santyadiputra, & Permana, 2021), Indonesian (Indirawati Leztiyani, 2021) and Rose learning (Salsabila, Bandiyah, & Budiman, 2020), learning assessment (Juniantari et al., 2021), independent learning (Rahayu & Ulumiyah, 2021).

Various research results can increase the potential that exists in students, such as increasing interest in learning (A. Aulia & Masniladevi, 2021; Hadza, Sesrita, & Suherman, 2020), critical thinking (Firdawela & Reinita, 2021), Learning outcomes (Agustina et al., 2021; Triono, 2021; Fardila & Arief, 2021; Octavia, Surjanti, & Suratman, 2021), increase motivation (Triono, 2021; Juhaeni et al., 2021; Sukmarini et al., 2021), learning activity (Juhaeni et al., 2021). There are many studies on interactive media articulate storyline three. Still, no one has researched interactive media articulate storyline 3 to improve general map reading skills in social studies subjects. Hence, this research has novelty or

research novelty in studying interactive media articulate storyline three on general map reading skills and social studies learning outcomes.

2. METHODS

This study employs research and development, generally referred to as R&D. This research methodology seeks to create a specific product or generate a novel product while also assessing the efficacy of said product through testing. The test subjects utilised for the product development outcomes consisted of 28 pupils from class IV B, who participated in the field trial. The research was conducted in an elementary school located in Makassar City. The process for conducting research and development of Articulate Storyline 3 media utilising the ASSURE paradigm.

The research and development procedure for Articulate Storyline 3 media uses the ASSURE model, which starts with the Analyze learner characteristics, State objective, Select or modify media, use media, Require learner response, and Evaluation stage. The research instrument used Learning Media Validation sheets, including Material Validation sheets, Presentation Validation sheets, Language Validation sheets, practical learning media sheets, student and teacher activity observation sheets, and student and teacher response questionnaire sheets. Data collection techniques used were observation, questionnaires, and documentation, which were analyzed using Interactive Learning Media Validation, practicality, and effectiveness analysis.

3. FINDINGS AND DISCUSSION

The assessment by three validators of the whole material and research instruments was declared valid, both the validity of observing student activities and the validity of following teacher activities. Student activity observation sheets include easy understanding of observation sheets, instructions for use, filling alternatives, covering all learning activities, observed criteria, activities contained in the lesson plans, language that is easy to understand and by general Indonesian spelling guidelines, an average score of 3.94 included in the very good criteria. The validity of teacher activity observations consists of the ease of understanding observation sheets, instructions for use, alternative filling, covering all learning activities, observed criteria, activities contained in the lesson plans, language that is easy to understand and general Indonesian spelling guidelines, an average score of 3 is obtained, 67 is included in the very good criteria. More details can be seen in the following table:

Table 1. Validation Results of Student and Teacher Activity Observation Sheets

Rated aspect	Criteria	Student		Teacher	
		P	Criteria	P	Criteria
1	Format	3,89	The observation sheet is easy to understand	3,89	Valid
			Instructions for filling in the observation sheet are clearly stated.		Valid
			Alternatives for filling out observation sheets are easy to understand		Valid
2	Contents	3,92	In general, it covers all learning activities	3,92	Valid
			The criteria for observed activities are clearly stated		Valid
			Teacher activities are contained in the RPP		Valid
3	Language Usage	4,00	Easy-to-understand language	4,00	Valid
			Following general Indonesian spelling guidelines (PUEBI)		Valid
			Average aspects of validator assessment		Valid

The effectiveness of interactive learning media based on the articulate storyline three application in Social Studies learning Theme 9 class IV is seen in the observations of teacher and student activities carried out during the social studies learning process, namely four meetings.

The results of student observations related to the use of interactive learning media based on articulate storyline 3 include several aspects, namely, students' attention to teachers during the learning process, student activity in asking questions and providing responses, listening to teacher explanations regarding the use of learning media, use of developed learning media, utilization of media learning in working on LKPD (students' worksheet), listening to friends who are presenting/talking, students feel not bored in the learning process, students' polite attitude during learning takes an average score of 4.38 with a very good category. At the same time, the results of observations of teacher activities include several aspects, namely, preparation of learning by doing apperception, conveying learning objectives, providing motivation, and providing learning references. Then, implementing education using learning media that has been developed, evaluating and reviewing student learning outcomes, time management, and learning atmosphere in a student-centred classroom obtained an average score of 4.18, which is very effective.

The observations of teacher and student activities as described above show that the use of interactive learning media based on the articulate storyline three application in social studies learning theme 9 for grade IV elementary schools is effectively used with a high score of 4.18. This shows that the learning process using interactive learning media based on the articulate storyline of three applications in social studies learning can activate students in education. This is in line with the opinion (Pribadi, 2017), which states that students who are active in the learning process try to find meaningful information and knowledge.

Table 2. Student Activity Results

	Meeting	Student			Teacher		
		Score	Average	Criteria	Score	Average	Criteria
1	I	34	4,3	Very active	77	4,1	Very active
2	II	35	4,4	Very active	80	4,2	Very active
3	III	34	4,3	Very active	76	4	Very active
4	IV	36	4,5	Very active	84	4,4	Very active
	Average	34,75	4,38	Very active	79,25	4,18	Very active

Primary data source 2022

Based on the calculation results of the average value of student and teacher activities above, a score of 4.28 is obtained. The score falls into the "Very Active" category. Based on the criteria that have been made, the interactive learning media based on the articulate storyline 3 application is very good at increasing student and teacher activity in learning.

Storyline 3 application-based interactive learning media can not only make students actively ask questions but also actively listen to teacher and student explanations, give presentations or speak, actively use media that has been developed, and actively utilize storyline 3 application media in working on student worksheets. Sukmarini et al. (2021) show that using Articulate Storyline 3 can increase students' motivation to ask questions, pay attention to the teacher's explanation, and answer questions. Research results (Juhaeni et al., 2021) show that media such as Storyline 3 are effectively used as learning media.

Another important aspect of using Storyline 3 application-based interactive learning media is that students enjoy learning. Media Storyline 3 can create a sense of fun in learning (Firdawela & Reinita, 2021; Juniantari et al., 2021) and pleasure that arises in terms of knowledge, attitude, and skills (A. Aulia & Masniladevi, 2021). Elementary school students like to play, move, and act independently or in groups; articulate storyline media can make children play, move, and work alone or in groups (S. R. Aulia & Kurniawan, 2021). Research results (Ayu Ketut Sinta et al., 2021) and (Fatia & Ariani, 2020) explained that elementary school students have characteristics that they prefer to learn while playing.

The utilisation of interactive learning media, specifically the Storyline Three application, is greatly enhanced by the thorough preparation of the previous teacher. This preparation includes conducting apperception, effectively communicating learning objectives, providing motivation, offering learning references, utilising appropriate media, conducting teaching evaluations, managing

time efficiently, and creating a student-centered learning atmosphere. The teacher has executed these tasks with great proficiency and effectiveness. Utilising the Storyline 3 application as a medium facilitates the attainment of learning objectives (Juhaeni et al., 2021). In order to effectively achieve the learning objectives, it is essential for teachers to utilise storyline application media to clarify the meaning of the subject matter. This holds true even in the context of distance learning (Firdawela & Reinita, 2021; Arwanda, Irianto, & Andriani, 2020; Nurmala et al., 2021; Rohmah & Bukhori, 2020). The use of Storyline 3 learning medium facilitates efficient communication to achieve learning objectives (A. Aulia & Masniladevi, 2021).

The development of interactive learning media based on the articulate storyline three application is very effective in increasing the activity of students and teachers in the learning process with very good criteria. The fluent storyline application also improves student learning outcomes (Juniantari et al., 2021; Salsabila et al., 2020; Agustina et al., 2021). Another study concluded that the articulate storyline three application can increase student creativity (Nurmala et al., 2021). Besides that, this learning media can support the learning process and increase student motivation (Ayu Ketut Sinta et al., 2021).

Fardila & Arief (2021) concluded that applying articulate storyline 3 can also improve self-regulated learning and increase learning outcomes. In other studies such as (Agustina et al., 2021), the articulate storyline three application can also enhance self-regulated learning (Fardila & Arief, 2021), the articulate storyline three application can also support student understanding (Juhaeni et al., 2021), the articulate storyline three application can also improve students' psychomotor aspects (Arrozi et al., 2021) because the developed media has an easy understanding of observation sheets, instructions for use, alternative fillings, covers all learning activities, observed criteria, activities contained in the lesson plans, language that is easy to understand and following general Indonesian spelling guidelines, is included in very good criteria. In general, articulate storyline 3 is easy in media design (Juhaeni et al., 2021; Firdawela & Reinita, 2021), media usage (S. R. Aulia & Kurniawan, 2021; Gunawan et al., 2021) (Ayu Ketut Sinta et al., 2021), both for teachers and students (Juniantari et al., 2021) to receive study material (Salwani & Ariani, 2021), without the guidance of others (Husain et al., 2021).

The utilisation of interactive learning media, specifically the Storyline Three application, proves highly effective in the educational process. It not only aids teachers in lesson planning but also facilitates the delivery of instructional content. Moreover, it assists students in comprehending the subject matter, resulting in comprehensive learning outcomes. The application-based interactive learning media of Storyline Three not only enhances cognitive aspects, such as learning outcomes, but also promotes psychomotor aspects, including active participation in the learning process and the ability to ask insightful questions. Interactive learning media, namely those based on the storyline three application, also have a positive impact on students' emotional elements, including their learning motivation and enjoyment of the learning process.

4. CONCLUSION

The effectiveness of interactive learning media was confirmed based on the attainment of two indicators. The observations yielded findings indicating that both student activities and gastrointestinal activities fell under the highly active category.

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