REFLEKSI EDUKATIKA : Jurnal Ilmiah Kependidikan
Volume 15 Nomor 2 Juni 2025
ISSN: 2087-9385 (print) dan 2528-696X (online)
http://jurnal.umk.ac.id/index.php/RE

Creation of Interactive Android Learning Media Articulate Storyline 3 on Fusion Food Material For Vocational School (SMK) on Temanggung

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Info Artikel

Sejarah Artikel:
Diterima 27 September 2024
Direvisi 29 Mei 2025
Disetujui 17 Juni 2025

Keywords:
Learning Media; Articulate Storyline 3; Fusion Food Subject

Abstract

Learning in the modern era has a significant influence on student understanding. However, the use of conventional learning media is often less interesting, making students feel bored and less motivated, which ultimately reduces participation in learning activities. This study aims to develop more interesting interactive learning media and test its effect on student learning outcomes. This study uses a quantitative approach with the Research and Development (R&D) method modified from the 4D model to 3D, including the Define, Design, and Development stages. The measuring instrument used is the t-test with the Liliefors model to determine the effect of interactive learning media based on Articulate Storyline 3 on student learning outcomes. Data were analyzed using normality tests, homogeneity tests, and paired t-tests. The results of the study indicate that the development of interactive learning media can be done through the Define, Design, and Development stages. In addition, it was found that interactive learning media based on Articulate Storyline 3 has a significant effect on improving student learning outcomes in Basic Culinary material, especially in the Fusion Food element. Thus, the use of interactive learning media has proven effective in increasing student engagement and understanding during learning activities. The results of the Pre Test and Post Test research are 45.53 and 76.73, with an increase in the Pre Test score which has an average of 45.53 which is lower than the Post Test score with an average of 76.73 so that in this study the use of interactive learning media Articulate Storyline 3 on Fusion Food material has an influence on student learning, so the use of this interactive learning media has an influence on Fusion Food learning activities for class X at SMK Swadaya Temanggung.

INTRODUCTION

The digital era of the development of Information and Communication Technology (ICT) has experienced rapid progress. ICT includes all the technical devices needed to process and communicate information. The presence of ICT is very vital in the world of education, especially in the context of teaching and learning activities where communication between teachers and students is key. Learning media is one of the crucial elements in the learning process, providing tools for teachers to deliver learning materials effectively. As mentioned by Hamalik (in Wahyuningtyas, 2020:24), the use of learning media can generate new interests and motivation for students, which in turn increases the effectiveness of the teaching and learning process. Learning in the digital era offers high flexibility, providing convenience for students in the learning process. Especially for schools with limited facilities such as projectors, computers, and laptops, this is no longer an obstacle to learning efforts and increasing progress. Along with the development of the increasingly advanced digital era, innovations in Android-based learning media have begun to emerge, offering greater convenience and efficiency in learning activities. Given the large number of Android devices available in this era, this is an effective and efficient solution. The researcher's experience in the Field Experience Practice (PPL) activity at SMK Swadaya Temanggung on June 16, 2022, the researcher implemented learning activities using interactive learning media based on Articulate Storyline 3 in class X culinary 2 at SMK Swadaya Temanggung and it was proven to be effective and well received by students because it was not boring and not monotonous, so it was more effective and efficient. This encouraged the researcher to develop further research by creating an interactive learning media application Articulate Storyline 3 based on Android, especially in Fusion Food material.

Delivering learning materials, teachers should use learning media because there is already sophisticated ICT, this aims to make the material easy for students to understand. Especially for material that requires emphasis on process skills. According to Lestari & Istiqomah (2017), it is said that the learning method using computer media (the computer media used is Linux and Power Point based) can stimulate students to do exercises, carry out simulation activities because of the availability of graphic animations, colors and music. The use of learning media must be a concern for teachers.

The world of education, especially in the teaching and learning process, has greatly benefited from the rapid advancement of technology because it can use learning media to deliver material to students. This is one effort to increase students' learning motivation in participating in the learning process. By using learning media, students will be more interested and easier to understand so that learning objectives will be achieved. To achieve all that, it is necessary to design systematic learning by empowering learning media in the classroom, it requires commitment from teachers to be able to utilize learning technology and learning media in delivering material to their students.

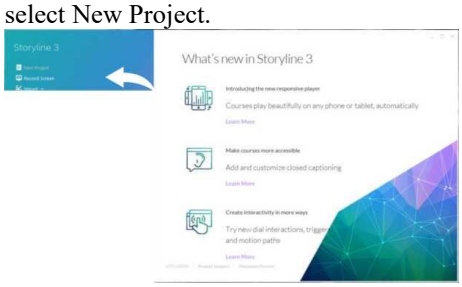
In a study conducted by Juhaeni, Safaruddin, Zuha Prisma Salsabila (2021) showed that the results of the articulate storyline study can replace the role of power point starting from its functions and features which prove that the use of this articulate storyline is suitable for use as a learning medium, and research from Made Sri Indriani, I Wayan Artiak, Dwi Ratih Wahyu Ningtias (2022) stated that with articulate storyline-based learning media, they get satisfactory results with effectiveness, usability and increase student motivation in learning so that this can be the reason researchers choose articulate storyline as an android-based learning medium. The research of Fina Suhailah, Muhammad Muttaqin, Idad Suhada, Dindin Jamaluddin, Epa Paujiah (2021) also provided positive research results, namely that the feasibility test of interactive learning media based on Articulate Storyline 3 on cell material obtained results of 85.28 percent. Student responses to learning media obtained results of 83.6 percent with very positive criteria.

The research of Ivin Karisma and Hendratno Hendratno (2022) stated that their research succeeded in proving that the learning media developed was suitable for use for grade V elementary school students, as evidenced by the level of validity obtained through media validation with a percentage of 86% and material validation of 95%. The results of these studies provide strong roots for researchers to make articulate storyline learning media in teaching and learning activities so that they can educate students and advance.

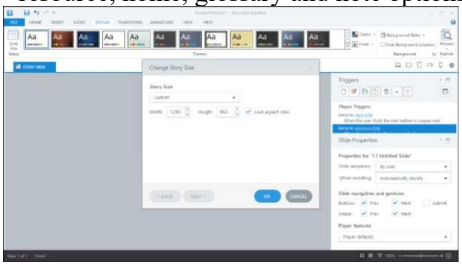
METHODS

This development stage shows the process of making an interactive learning media application Articulate Storyline 3 based on Android as follows:

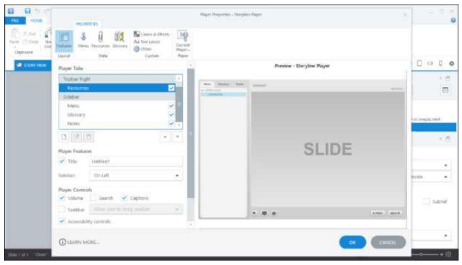
1. Open the Articulate Storyline 3 application, select New Project.



2. Set the layer display in the home section, then select the layer and uncheck the resource, home, glossary and note options.

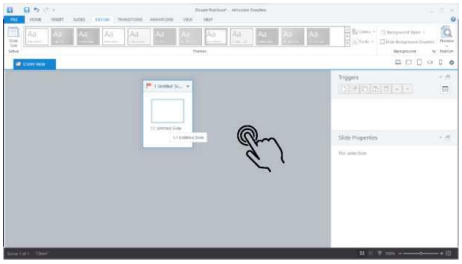


3. Determine the layer size by clicking design then select slide size set up, after finishing click ok.



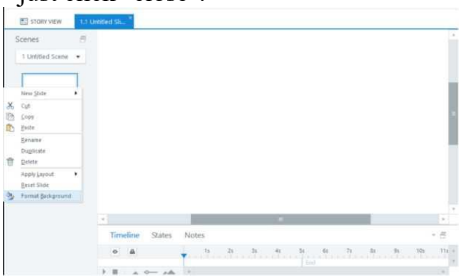
4. Apply the design to the storyboard that has been created, apply the design as a background for learning media.

5. Open the worksheet by double-clicking to start.

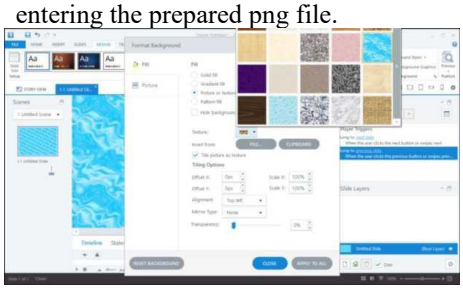


6. Add a background to the player by right-clicking on the left slide then select background format.

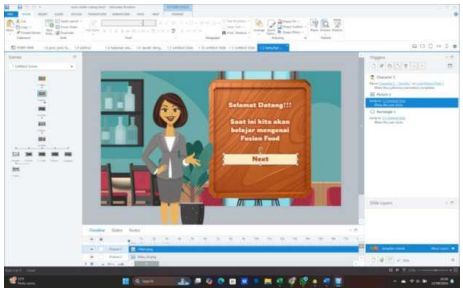
7. After entering the background format, select the png that has been applied to the abstract to be used as the background. If all slides want to use the same background, click "apply to all", but if not, just click "close".



8. Create a greeting, enter the finished png file to be used as an interface on the learning media. Then, create a greeting by entering the prepared png file.



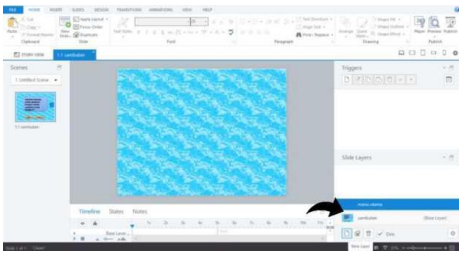
9. Add a background, click insert then click text box, in the brown box add the text "welcome" and "now we will learn about Fusion Food".



10. Create a button to go to the next page.

11. Click the button that has been created then select trigger on the right menu, click add trigger then set the button function, in the action select the command task that will be used, if using a layer like on the bottom right select show layer, but if using jump to slide then use the worksheet on the middle left.

12. Create a new main menu layer by on the bottom right there is a slide layer, then select new layer.



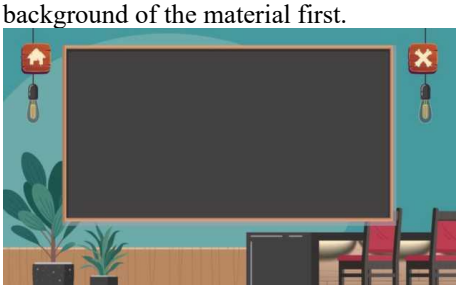
13. Create the main menu by inserting the png file that has been designed on the storyboard.

14. After inserting the png background, enter the interaction button that will be used to go to the next material.

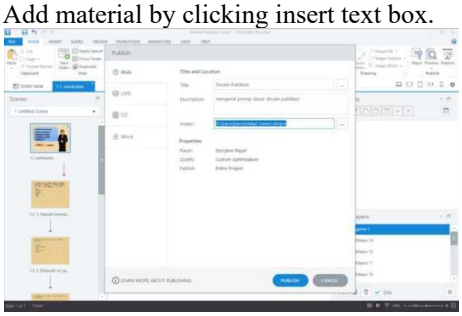
15. Add text using the text box in the insert with the description "Definition", "Characteristics", and "Benefits" on each button that has been prepared.

16. Create a developer info framework in the layer section, select new layer in the lower right corner, then enter the png that has been designed in the storyboard.

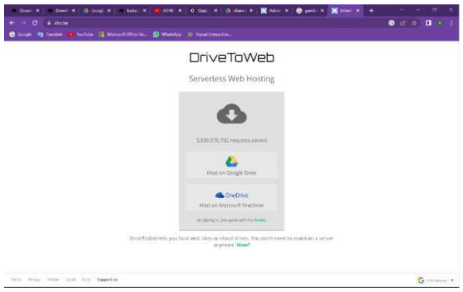
17. Create a layer that contains the material. Design one layer as the basis for the background of the material first.



18. Add material by clicking insert text box.



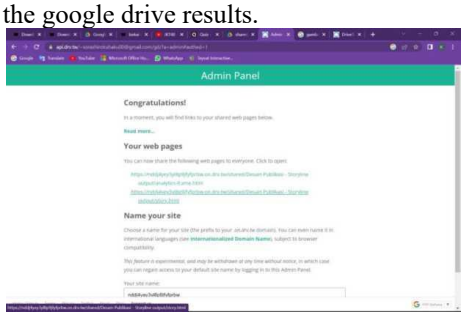
19. After that, right-click on the material layer and click duplicate, then fill in the material that will be delivered on the learning media.



20. Select web then set the application description title and place the folder as desired, then click publish.

21. Open the storage folder from the publish results, open google drive and make sure the browser and google drive are connected to the same email, create a new file on google drive with the title share, click and hold the publish file in the storage folder then drag it towards the folder in the google drive share folder,

22. Open google that has been used to open google drive before then type drive to web in the search table, after it appears select the google drive results.



23. After the search results come out, select the web that is the project on Google Drive, then copy the link, copy the link that can be opened.

24. After that, open a new tab on Google then download the website 2 apk converter, then the options and downloads will appear, install the application by clicking the application that has been downloaded in the download folder and is ready to use.

25. Open the website 2 apk builder application, after that fill in the title that will be the title of the application and enter the link that has been copied on the drive to web into the url table after finishing, click build android apk

26. Open the output location from the application creation earlier and the application is finished for use.

ANALYSIS AND FINDINGS

Edgar Dale's cone of experience theory states that there are several levels of student acceptance of a material. the level of understanding when reading is 10% which means that in student learning activities if only asked by the teacher to read textbooks or materials presented, students experience boredom and only get 10% understanding, listening 20% which means when students only carry out teaching and learning activities only with lecture theory, students also feel bored so they get 20% understanding, seeing pictures or diagrams to demonstrating them 30% which means that if you see pictures and real examples, students get 30% understanding, tied in a discussion 50% which means that if you only do group work, students get 50% understanding, presenting

material or presentations 70% which means that by doing interactive activities, students get 70% understanding. Learning experiences that involve many senses and practical activities have been shown to be more effective in helping students understand learning materials more deeply and increase engagement and flexibility in learning. Based on the results of the Pre-Test with an average of 45.53 and Post-Test 76.73, based on the results of the statistical tests conducted, the T count value -0.01 and T Table -1.68 were obtained with the T count result being smaller than the T Table, so the null hypothesis (H_0) is rejected, which means there is a significant difference between the results of the students' pre-test and post-test. The T count value which is smaller than the T Table confirms that interactive learning media plays an important role in improving learning outcomes. The significant difference between the pre-test and post-test values indicates that Articulate Storyline 3 has an influence in improving students' understanding of the Fusion Food material. Android-based learning media facilitates easier access and a more dynamic and interactive learning experience, which ultimately improves the quality of student learning.

Edgar Dale explains that the more concrete the learning experience experienced by students, the greater their chances of understanding and remembering information. The use of interactive media places students at a more real level of learning experience, such as simulations and directed experiences, which are deeper than traditional learning methods such as reading or listening. Juhaeni, Safaruddin, and Zuha Prisma Salsabila (2021) also emphasized the importance of using Articulate Storyline 3 as an interactive learning media in Madrasah Ibtidaiyah. They found that the use of this technology-based interactive media can increase the influence of the use of articulate storyline 3 learning media in the learning process of religious education, this is in line with research on Android-based Articulate Storyline 3 interactive learning media on Fusion Food material. Research by Made Sri Indriani, I Wayan Artiak, and Dwi Ratih Wahyu Ningtias (2022) related to independent learning using Articulate Storyline on negotiation texts also supports this idea. Independent learning that allows students to learn through various interactive media provides a richer learning experience. In this study, the use of Articulate Storyline 3 influenced the ease of students in understanding negotiation text material, increasing the effectiveness of independent learning, and motivating students to learn more independently and actively. This is in line with the results of research on the interactive learning media Articulate Storyline 3 based on Android on Fusion Food material that there is an influence on the use of articulate storyline 3. Research by Fina Suhailah and colleagues (2021) on the use of Articulate Storyline on cell material is also in line with these findings. They showed that interactive media improves students' understanding of complex concepts, which is supported by validation by media and material experts. Research by Ivin Karisma and Hendratno (2022) on English vocabulary mastery also confirms the same thing. Learning media based on direct interaction and simulation have proven to be more effective in developing students' abilities. Thus, the use of Articulate Storyline 3 based on Android, which presents various media such as text, audio, video, and interactive activities, is in line with research on the interactive learning media Articulate Storyline 3 based on Android on Fusion Food material.

CONCLUSIONS

In making interactive learning media based on Articulate Storyline 3, 3 stages are needed, namely making a storyboard as an initial description of the interface design that will be used as the interface display on the interactive learning media application that will be created, after that there is a stage of collecting learning materials, by collecting materials that are in accordance with the learning objectives, namely Fusion Food in order to meet the content needs in the interactive learning application that will be created, after that there is an application stage which will later illustrate the abstract image that has been planned on the Storyboard, after the application is complete where the material elements and interface design have been combined, it is continued with the installation stage where the learning media file is made into an application that will be used on Android as an interactive learning media so that it can increase insight into learning activities.

There is an influence of the use of Articulate Storyline 3 learning media in improving learning outcomes for Fusion Food

material in class X students of SMK Swadaya Temanggung. With the emergence of the results of the t-test table, namely the Pre-Test results of 45.53 and Post-Test with the results of 76.73 using interactive learning media based on articulate storykine 3 Ho is rejected, meaning Ha is accepted, namely there is an influence of the use of Articulate Storyline 3 learning media in improving learning outcomes for Fusion Food material for class X students of SMK Swadaya Temanggung. The existing data shows that the use of articulate storyline3 learning media has a positive impact on improving learning outcomes for Fusion Food subjects for class X students of SMK Swadaya Temanggung. This is reinforced by the results of the t-test which shows that the null hypothesis (Ho) is rejected, so the alternative hypothesis (Ha) is accepted, which shows that there is an influence of the use of articulate storyline3 learning media in improving learning outcomes for fusion food subjects for class X students of SMK Swadaya Temanggung.

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