

Interactive Media Innovation Articulate Storyline Animation to Improve Fast Drawing Ability of Art and Design Students, Universitas Negeri Malang

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ABSTRACT

Student creativity in drawing projects is far from learning outcomes, where visual objects tend to be imitative. Therefore, student creativity needs to be honed again in order to optimize skills. In addition, it is also due to the lack of learning media used by teachers for students. This study aims to produce interactive learning media that is fun and uses technology in the painting competence of art and design students at the State University of Malang. The method used in this study uses the Moeljadi Pranata development model, namely five-D which consists of Define, Data, Design, Development, Disseminate. Data collection through observation, interviews, validation, and field trials. Observations were made at the Department of Art and Design, State University of Malang and conducted interviews with art lecturers and student representatives. This development resulted in an interactive media product, Articulate Storyline. The results of the study show that the use of interactive media Articulate Storyline can improve students' ability to make pictorial works more quickly. After using the media students are more interested in learning because the views of the material provided are more practical and unique. Apart from that, there is also a demonstration video in this media which can help students to make images more easily. This media development product is packaged creatively and interactively. This is supported by the validation results of media experts and material experts as well as field trials in small groups.

Keywords: Animation Media, Drawing Media, Articulate Storyline

INTRODUCTION

Fine Arts and Skills Education in schools provides its own benefits and meanings for students in providing artistic experience and expression. Learning Arts and Skills is not only oriented towards mastery of teaching materials, but also towards increasing student creativity in developing a skill (Prasetyo et al., 2021). Creativity is a way of thinking and doing things according to their style and different

for everyone. Based on this statement, creativity is so important in optimizing students' cognitive and psychomotor abilities in the learning process (Johansson-Sköldberg et al., 2013).

Learning methods that follow the development of technological advances at this time will provide convenience for various parties, one of which is lecturers in teaching. In addition, technological advances can also have an impact on student learning outcomes. The implementation of learning is carried out in an interactive, inspiring, fun, challenging learning atmosphere, motivating students to participate actively, and providing sufficient space for initiative, creativity, independence in accordance with the talents, interests, and physical and psychological development of students, the implementation of learning is carried out by educators by providing exemplary, mentoring, and facilitation (Aruna et al., 2021).

Based on the description above, it is so important that learning is innovative, creative, fun and can motivate students in the learning process. However, there are still many learning phenomena that are less efficient both in terms of the lecturer's method of teaching and the teaching media prepared (Dennick, 2016). One of the subjects that still needs further development is fine arts learning for students.

Observation activities were carried out at Malang State University in the fine arts lesson in April 2022. Through interviews with lecturers, it was found that in learning anatomical drawings in class there was still no appropriate media or method to attract interest and support student creativity. Lecturers only provide cognitive material through textbook teaching materials that have been provided by the school. However, the application and demonstration of how to draw has never been done. Researchers observed the results of student paintings mostly drawing landscapes. However, it can be seen that the level of creativity is still not optimal, as can be seen from the color gradation techniques and shapes that are applied. Based on the results of interviews with lecturers, this research took practical competence, namely making anatomical drawings with various materials and techniques. In its application, students will try to make naturalism style paintings with plaque techniques (Chan & Zhao, 2010).

The results of interviews and observations that have been made show how important student creativity is. One of the media that can help solve these problems is the development of interactive media based on learning technology. Through the use of technology-based learning media students can easily do assignments and help explore sources of information.

Seeing how important a student's understanding and creativity is in the learning process, research is very important to overcome the shortage of learning media in drawing material. Articulate Storyline learning media becomes interactive multimedia that can be applied creatively, fun and can attract attention and increase student creativity in learning (Gunawan, 2010).

Media in the teaching and learning process can generate new desires, generate motivation for learning activities, even have a psychological influence on students and the application of learning media will trigger a pleasant learning atmosphere. Articulate Storyline interactive media is an effective way to create fun, motivating, and effective learning content (Rifai et al., 2020). Media Articulate Storyline is one of the learning media that is deliberately made to package a lesson. Utilization of Articulate Storyline as a learning medium that involves students directly, so that students will be active in learning (Hadza et al., 2020). This interactive media can also be used through various devices, including desktops, laptops, tablets and cellphones, users can learn anytime and anywhere. This makes learning easier and more flexible for users. Articulate Storyline becomes an interactive multimedia medium in overcoming deficiencies in learning process problems (Daryanes et al., 2023).

Therefore, the research aims to: 1.) Produce interactive learning media on drawing competence; 2.) Increase student creativity in drawing practice; 3.) Test the effectiveness of the media in the learning process.

METHOD

This research was conducted in April 2022 at Malang State University. The respondents of this study were 15 semester 3 students. The data analysis technique in this development uses the average percentage calculation using the formula, then it is interpreted so that the feasibility interpretation of the product being developed can be known. This development uses the Five-D model consisting of Define, Data, Design, Development, Disseminate which was developed by Moeljadi Pranata (Rahmadianto & Pranata, 2019). Here's the order of the Five-D model:



Figure 1. Five D Development Method

The procedures at each stage of the development of the Five-D model can be explained as follows: **1) Define**, the process of the initial stages of identifying problems from the background of the development. After that, the needs analysis is the stage of identifying the needs of the target subjects. Then, alternative solutions are used to identify solutions to overcome existing problems. **2) Data**, The process of collecting theoretical data from references and field data. Reference data is obtained from experts or experts. Field data obtained from the results of observations and observations made. Includes identification of strengths and weaknesses, characteristics and needs of its use. Furthermore, data analysis is the stage of merging the data obtained and concluded. **3) Design**, The stages of the prototype design process of the product are in accordance with the predetermined

concept. Product design is done by designing a rough framework of the product, then creating a product content framework in the form of media flows. **4) Develop**, the stage of knowing the feasibility level of the product being developed, consisting of validation, revision and trial. Validation was carried out by material experts and media experts. Revisions in the form of product manufacturing improvements. Trials were carried out on test subjects. **5) Disseminate**, the final stage of making product development is the dissemination of the resulting product. The form of dissemination can be in the form of seminars or workshops, writing articles in scientific journals.

RESULTS AND DISCUSSION

The results of the research are that interactive learning media in the form of Articulate Storylines have been developed. This learning media contains materials and video demonstrations about drawing. The criteria for assessing the quality of this media are based on aspects of ease of navigation, knowledge, aesthetics, and the function of the media. Following are the results of media development with the following stages:

Define

Identification of Problems. Based on initial observations with art lecturers at the State University of Malang, it is known that the problem that occurs is a lack of creativity in student paintings. This happens due to the lack of maximum learning media used in delivering the material. In addition, students also don't get a good demonstration of how to draw. Thus, the results of student work are still not optimal.

Needs Analysis

Based on the results of problem identification, alternative solutions can be provided for subject conditions through the development of Articulate Storyline interactive media. Articulate Storyline is software with features and functions like Microsoft PowerPoint and uses an e-learning system. This software has additional features in the form of animated icons, buttons, and graded questions that make it easier for users to create attractive and interactive learning media designs. The existence of these supporting applications can help students better understand the material presented in order to realize a good painting. In addition, it can also improve the professional competence of art lecturers.

Data

Reference Data, that in general lecturers only use simple media such as textbooks and pictures. This makes the development of media for students still not optimal. So that the attractiveness of learning and creativity, especially drawing, is also not maximized. Field Data, Observations carried out at Malang State University in the fine arts lesson in April 2022. Looking at the results of student works at the school shows that the level of creativity related to anatomical drawings is still lacking. Lack of exploration and deeper introduction to technique, style, and how to

give good color is still not found by students. Many of the students made naturalism style paintings using the placard technique. However, looking at the results of these works it is felt that they are still not visible in terms of how to make shapes and coloring techniques (Perdreau & Cavanagh, 2014).

Design

At this stage the mind map thinking process is very important. Mind maps or mind maps that can be used as a way of organizing and presenting concepts, ideas or information in relationships between materials. On the cover there is the title "LET'S DRAW, Natural Style with Plaque Techniques",






Then there is a start button to start operating the media. After that the next slide has 4 sections namely: 1.) Learning Objectives, 2.) Material, 3.) Evaluation, 4.) About the Maker. In the learning objectives section, there is a description of what will be learned (Kaplan, 1991). Then in the material section itself it is divided into 3 namely the understanding of creating anatomical drawings, explanations of naturalist styles and placard techniques, as well as video demonstrations of drawing naturalist styles with placard techniques. In the evaluation section, there is a student drawing worksheet, in which later students will try to draw on a 30 x 40 cm canvas. In the last section, which is about the maker, it contains a photo of the media maker and the identity of the maker.

Develop

At the development stage, namely making interactive media Articulate Storyline. The design framework that has been created is then developed into a media. At this development stage validation tests were also carried out by media experts and material experts as well as small group trials. Media expert validation test I was carried out by Animation Game Lecturer, Department of Art and Design, Faculty of Letters, State University of Malang. Media expert validation test II was carried out by Visual Communication Design Alumni, Department of Art and Design, Faculty of Letters, State University of Malang who also works in the field of making children's illustration book media. Material expert validation test I was carried out by an Arts and Culture Lecturer, who is also an anatomical drawing activist in Malang Regency. Material Expert Validation Test II is carried out by Alumni of Fine Arts Education, Department of Art and Design, Faculty of Letters, Universitas Negeri Malang.

After the validation test, the researcher revised the suggestions from media experts and material experts which were then tested in a small group of 15 students at Malang State University. During the small group trials, the researchers provided media files and assessment instrument sheets. Then the students give a value on the sheet (Egana-delSol et al., 2019). The following is the final product of the Articulate Storyline interactive media:

Table 1 – Procedure of development

Content Menu	Description
	<p>At the beginning of the cover. There is an inscription entitled "LET'S DRAW, Naturalism Style with Plaque Techniques". In the middle there is a "start" button to start, when clicked it goes to the "table of contents" slide. In the upper left corner there is a guide button, when clicked it will go to a guide slide for using the navigation buttons.</p>
	<p>This slide contains instructions for using the navigation buttons. There is a button image and a description beside it. In the upper left corner there is the "home" button when clicked goes to the "cover" slide.</p>
	<p>On the slide in the middle there is a table of contents in the form of Learning Objectives, Materials, Creativity Practices, About the Maker. For each content description, you can click on the writing. When clicked it goes to the next slide. In the upper left corner there is a "home" button that goes to the "cover" slide. In the lower right corner there is an "exit" button that goes to the final "thankyou" slide.</p>
	<p>On this slide in the middle there are 3 sub-chapters of the material to be studied. To open each material, click on the book image. In the upper left corner there is a "home" button that goes to the "cover" slide. In the lower left corner there is a "back" button that goes to the "table of contents" slide.</p>
	<p>On this slide in the middle there is an explanation of the naturalist style and placard technique along with examples of paintings. In the upper left corner there is a "home" button that goes to the "cover" slide. On the title slide "naturalist style" in the lower left corner there is a "back" button that goes to the "material" slide. In the lower left corner there is a "next" button that goes to the "example of a naturalist style painting" slide.</p>

The data analysis technique in this development uses the average percentage calculation, then it is presented so that the feasibility interpretation of the product being developed can be known (Gunduz & Hursen, 2015).

Table 2 – Result Validation Expert

Research Stages	Total Score	Percentage	Information
Media Expert I	32	32 80%	Very Valid
ExpertMedia II	37	37 92 %	Very Valid
Media Expert I	38	38 95 %	Very Valid
ExpertMedia II	35	35 87%	Very Valid
Group Trials Small	552	552 92 %	Very Valid

Average Percentage Overall 89%
HIGHLYVALID.

The formula is as follows:

$$P = \frac{\sum x}{\sum x_i} \times 100\%$$

P : Percentage

$\sum x$: Number of respondents' answers in all items

$\sum x_i$: Sum of ideal values the whole question

100 %1: Constant

Description Percentage Code

A 80 % - 100 % Very Valid

B 60 % – 79 % Valid

C 50 % - 59 % Less Valid

D < 50 % Invalid

Based on table 2 above, the Articulate Storyline interactive media from all stages of the research obtained a percentage score of 89% which stated that the Articulate Storyline interactive media was "VERY VALID AND REASONABLE" to be used as a learning medium.

The interactive media Articulate Storyline was assessed by Media Expert I (Lecturer of Game Animation, Department of Art and Design, Faculty of Letters, State University of Malang) with a score of 32 which, if percentage, gets 80%. Media Expert II (Visual Communication Design Alumni, Department of Art and Design, Faculty of Letters, State University of Malang) with a score of 37 which if percentage gets 92%. Material Expert I (Lecturer of Fine Arts and Anatomical Drawing Activities in Malang Regency) with a score of 38 which if percentage gets 95%. Material Expert II (Alumni of Fine Arts Education, Department of Art and Design, Faculty of Letters, State University of Malang) with a score of 35 which if percentage gets 87%. Small group trial with a score of 552 which, if it is percentage, gets 92%.

Both the results of the validation of media experts I and II as well as small group trials if added up and averaged get results with a percentage of 89%, so that the media made by the researcher is said to be "VERY VALID OR REACH".

Disseminate

The results of the Articulate Storyline interactive media product that has been created will be disseminated through the publication of scientific journal articles and used by lecturers in preparing interesting learning media for students. This media is in the form of a link where lecturers or students can easily access it. Apart from that, this interactive media is uploaded on the research channel's

YouTube to provide new information and education for the surrounding community regarding examples of interactive media (Rahmawati & Prasetyo, 2021).

Discussion

The development of learning media has been carried out at the State University of Malang to produce an Articulate Storyline interactive media for learning anatomical images. This research has been successfully developed with a success rate of 89% which can be said to be feasible, practical, and effective to be used as learning media in the classroom. The development of Articulate Storyline interactive media that has been developed by researchers has succeeded in helping the process of increasing the creativity of student paintings supported by the results of validation by media experts, materials, and group trials. Before being distributed through trials the research group also made several revisions based on suggestions from media experts and material experts. This is done to make the media Articulate Storyline is even more optimal.

The interactive media Articulate Storyline has also been tested for the feasibility of learning media by measuring the TKT standard (Technology Readiness Stage). TKT is a systematic measurement system to understand technological maturity so that a result of technological development is ready to be applied the researcher checked the measurements with the result that the TKT level achieved was 9 (out of 9 levels). This shows that the development of Articulate Storyline technology-based learning media is ready to be implemented by users.

Based on some of the results of previous studies which show that Articulate Storyline has succeeded in helping the student learning process, such as: (1) Development research entitled Development of Learning Media Using Articulate Storyline 3 Based on Discovery Learning in Class III Elementary School (Hadza et al., 2020). In this development, it is the same as utilizing technological and information developments, namely the design of learning media based on interactive media Articulate Storyline. Based on the results reviewed by the researcher, it shows the effectiveness of using Articulate Storyline in the learning process. ; (2) Development research entitled Development of Articulate Storyline-Based Interactive Media in Thematic Learning for Class V Elementary School Students. In this development, it is the same as researchers who use Articulate Storyline to develop media because Articulate Storyline software is easier to manufacture. Media Articulate Storyline provides the following features complete to support the creation of interactive media. Besides that, it also provides attractive template choices, and its simple appearance will make it easier for researchers to make media; (3) Development research entitled Development of Articulate Storyline 3 Media in STEM-Based Science Learning to Develop Creativity of SD/MI Students (Hamzah, 2016). This development shows that the existence of interactive media Articulate Storyline can increase creativity and maximize learning both face-to-face and online (online) learning. This is also supported by the results of media trials on validators and field trials.

Through the Articulate Storyline, students are assisted in creating more original works with their own characteristics and increased imagination. This is in line with the notion of creativity according to Pamilu that creativity is a person's

ability to create which is marked by originality in imaginative expression (Wiraseptya et al., 2019).

In this study, it is assumed that the development of learning media can help overcome problems in the learning process of anatomical images. Choosing a good learning model or media can help learning activities take place, so that learning objectives can be achieved. The application of interactive learning media in the form of Articulate Storyline is assumed to be an interesting medium. In this case, it is necessary to find something that makes students interested, such as by making media that combines elements such as video, text, and images so that the learning process is more fun and renews conventional learning to keep up with globalization

Articulate Storyline Interactive Media is a multimedia authoring tool that can be used to create interactive learning media with content in the form of a combination of text, images, graphics, sound, animation, and video. The results of publishing Articulate Storylines are in the form of web, articulate online, LMS, CD, and word so that the resulting products can be used on PCs, laptops, or smartphones. Therefore, it can make it easier for users to study anywhere and. This Articulate Storyline application has advantages in the form of easy trigger functions or button navigation without the need for difficult coding. It can be said that this media is easy for beginners who want to learn how to make this application (Johansson-Sköldberg et al., 2013).

Through interactive media it really helps students in improving learning outcomes. Interactive media is very suitable for use in learning to improve the quality of student learning both during the process and results. Interactive media is designed with aesthetic message design in mind. This is in line with the explanation of Pranata's aesthetic message design theory, that if the explanation of learning multimedia uses an aesthetic-seductive message design to increase the attractiveness of the message so that the message conveyed can be well received.

The design by the researcher considering various aspects such as choosing the background, buttons (navigation buttons), to the design flow made must be easily understood by students. The material chosen by the researcher is in accordance with the class conditions, namely drawing a naturalism style with the placard technique. Through this media the researcher made an interesting material design containing several writings about understanding, techniques, examples of paintings and video demonstrations. The existence of video demonstrations makes the material presented more easily accepted by students, because it is supported by drawing procedures and voice dubbing from researchers explaining the stages for making naturalist paintings. Demonstration videos can provide a new learning atmosphere by presenting real concept visualizations thereby increasing student learning experiences, motivating students when they see them, and being able to reduce boredom and boredom in the learning process (Flynn, 2004).

With this interactive media student can more easily understand and practice styles and techniques in drawing. In addition, students can participate directly in the operation of Articulate Storyline media, which can provide a more enjoyable learning experience. Articulate Storyline improves the quality of education that is fun, innovative, and creative triggers students to be more motivated in the learning process (Nissa et al., 2021). This interactive media can also help lecturers or the surrounding community in applying interesting learning media. The dissemination

of media carried out by researchers can provide new insights or education that is packaged in an interactive manner attractive and practical. One of them is uploading the results of the researcher's Articulate Storyline media through the YouTube channel and several social media platforms. Overall, Articulate Storyline is a very useful and powerful tool for anyone looking to create fun and interactive learning content. With extensive features and tools, Articulate Storyline enables creative, effective, and efficient content creation.

In this study, the limitations of developing instructional media can be seen from the Articulate Storyline system. These limitations such as the presence of navigation buttons to connect between slides. Thus, appropriate steps or procedures are needed so that users are not confused in operating the learning media. If the placement of triggers or navigation buttons is wrong, it will make the media messy and irregular. Especially for beginners who want to try to make media from Articulate Storyline, they need to open several tutorials, you can go through YouTube or Google to make it. Articulate Storyline requires technical knowledge and skills to make good interactive presentations. For people with no experience with technology or multimedia content creation, it can take some time to learn how to use it.

Some design restrictions can limit creativity and prevent users from creating truly unique presentations. Even though in reality Articulate Storyline is almost the same as PowerPoint, there are still a lot of features that need to be learned too. Not only that, the size of the layout in Articulate Storyline also cannot be changed. When selecting the "new create" menu it will automatically look like that. Therefore, the developer certainly needs to adjust the arrangement of the background and the ornaments that will be pasted on it.

Articulate Storyline requires access to a stable computer and internet to work properly. This can be a problem for schools or developers who don't have access to good enough technology. When the output of Articulate Storyline is in the form of a link, of course there needs to be strong enough network strength so that users can operate the media smoothly. With a bad network, users cannot open the contents of the media, thus hindering the learning process. Not only that, it costs money to produce this media (Chai & Fan, 2016). Completion of the Articulate Storyline project to be used as a link also requires a fee to buy the hosting and domain. The coding process in making this media is also carried out so that the product results run optimally. In the preparation stage for making an Articulate Storyline, of course, you need to pay attention to the eligibility of the laptop and the software in it.

CONCLUSION

Develop an interactive media in the form of Articulate Storyline on the basic drawing competence of Art and Design students. This begins with the problem of student drawing results that are still not optimal. Seeing that lecturers at school still use textbooks when delivering material, students have never received a demonstration on how to draw naturalists properly. So, the researcher developed an Articulate Storyline teaching media which was packaged in an interesting way.

The media contains knowledge and demonstrations of placard techniques that are easy for students to understand, and invites students to create naturalist drawings. With students drawing directly, students' creativity is more honed. So that the research objective to increase student drawing creativity can be achieved.

Selection of Articulate Storyline interactive media that allows users to actively interact with content. This offers a more dynamic and enjoyable experience for students compared to passive media such as books. Overall, Articulate Storyline interactive media is an effective way to create fun, motivating, and effective learning content. By offering active and fun interactions, interactive media helps improve learning outcomes and makes the learning process more optimal.

The development of this media has been carried out in accordance with predetermined stages. According to the results of validation tests and group trials reaching a percentage of 89%, interactive media Articulate Storyline is very feasible and can be disseminated. Publication from this media is carried out through publishing educational journals and social media platforms.

This research contributes to the development of learning media that can increase student creativity. In addition, the development of interactive media using Articulate Storyline can be an alternative to improve the quality of learning fine arts on campus. It is hoped that this research can provide benefits for the development of art education in Indonesia.

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