Virtual gallery as a media to simulate painting appreciation in art learning

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Abstract. The limited numbers of gallery buildings that display art works become an inhibitor in art appreciation learning. On the other hand, the development of digital-based media has not been widely used as an art learning media. This study aims to analyse the development of art students in studying the painting by using the virtual gallery as a learning media based on digital technology. The research design employed the following steps: (1) designing & preparing virtual gallery; (2) inputting some art works as a learning resources; (3) implementing virtual gallery for painting appreciation learning; and (4) evaluating the learning process. The research subjects were 20 students in the art department who were studying painting appreciation. The results showed that students’ ability in appreciating painting artwork had increased using virtual gallery as a digital-technology-based media. The improvement includes students’ ability in (a) knowing, (b) understanding, (c) analysing, and (d) assessing the artwork. Therefore, it can be concluded that media learning based on technology can simplify art learning, especially in painting appreciation processes.

1. Introduction

Art education is an integral part of education in general. Art education has a strategic position in improving the aesthetic sensitivity and artistic experience of students. UNESCO has confirmed in the Road-map for Art Education that the purpose of art education has two main objectives, namely to develop creative capacity and cultural awareness. The purpose of art education is very important to be realized by every single teacher in carrying out art learning [1,2].

The limitations of the learning media for appreciation are one of the obstacles that are often experienced by students of the art department, especially the limitations of learning media that can directly contain sources of information on paintings from various places. A student must go to the building of an art gallery to appreciate painting works. Problems will occur, when there are only few art galleries in the area so you have to go to other areas. Hence, it is necessary to find a solution to the limitations of art appreciation learning through visiting the art gallery building.

On the other hand, the development of digital media which can be adapted in art learning is now very rapid [3]. Many digital media were developed in the industrial era 4.0 that was integrated online. There
are two major advances in the field of media and communication technology namely the World Wide Web (Internet) and cellular (wireless technology). The development of digital technology occurs especially in the way how to receive and provide information, as well as to provide wider access towards large information that was previously very limited. Today, media technology and ownership of information in various forms of e-books, games, videos, websites and social media appear virtually [4].

The progress of technology and information can be utilized because it can support the success of the objectives of learning art [5]. Through the use of virtual technology, we can improve the quality of fine art education, namely by opening wide open access to learning resources for art appreciation. Information and communication technology provides a broad, fast, effective, and efficient reach to the dissemination of learning resources [6,7].

With the availability of digital information facilities, painting appreciation learning no longer has to go directly to the gallery building, but can be simulated using a virtual gallery that can be done free of charge on several internet sites and applications [8,9]. Learning media is not only limited to something physical in the classroom, but can come from outside the classroom. Learning appreciation using virtual gallery media has advantages which are able to load extensive sources of artwork from various countries in the world [7]. Teachers and students do not have to rely on painting in the classroom, do not have to visit art galleries and museums to see paintings, and do not need to pay expensive fees for transportation and entrance tickets. Based on that, this paper discusses the development of art students in studying the painting by using the virtual gallery as a media based learning on digital technology.

2. Research method
This article is the result of art education research conducted in a mixed method using descriptive data and simple statistics. This research is empirical research [10], using controlled observation design by involving participatory actions from students in developing media for appreciation learning in the odd semester of 2018. This research was conducted on students in painting appreciation learning in the Visual Art Department of Universitas Negeri Semarang. Research design employed the steps of: (1) designing & preparing virtual gallery; (2) inputting some art works as a learning resource; (3) implementing virtual gallery for painting appreciation learning; and (4) evaluating the learning process. Research subjects were 20 students who were studying painting appreciation. Data was collected using controlled observation techniques, interviews, and tests.

3. Results and discussion
Appreciation learning is carried out by utilizing internet access to browse various works of art from various countries [9]. The lecturer developed virtual-based learning media through the deviantart.com website and then applied it to learning with 20 students. Learning outcomes were assessed to get an increase in the average score of appreciation competence.

3.1. Results
Virtual gallery was designed through the deviantart.com website. Computer-based multimedia instructions tend to be more interactive than traditional class lectures [11]. This site provides space to present painting works. Virtual gallery as a learning media is designed by lecturers by paying attention to the following principles: (1) relevance to the material, (2) suitability to learning objectives, and (3) interactive design. Interactivity is a relationship of actions that take place between students, learning systems, and learning materials [12].

Students register and also sign in as members to be able to access the gallery online. Student complete username, type email address, retype email address, password, and continue to sign in. After it, select the goals on deviantart.com (see on figure 1 and figure 2).
Figure 1. Registering as a member in deviantart.com for designing virtual gallery.

Figure 2. Menu for watching and appreciating paintings/other work of art.

Learning was carried out for three meetings in which there were twenty students who were attending subjects of appreciation and criticism of fine arts. The election shows that students have a keen interest in the discourse of appreciation and criticism of art. The learning procedures are as follows: (a) opening, (b) delivery of learning objectives, (c) delivery of material, (d) discussion and question and answer, and (e) evaluation. The first meeting was concerned with material lectures on the basics of appreciation of fine arts. The lecturer gives an introduction to painting materials, about intrinsic and extrinsic aspects, and invites students to see more foreign paintings virtually with Deviantart. The learning process can be seen in figure 3 and figure 4.
Figure 3. Lecturer explained the principles of fine art appreciation.

Figure 4. Students provided reviews on artwork.

The second meeting, lecturers and students opened laptops and displayed virtual galleries with projectors, and students appreciated paintings in virtual galleries. Appreciation was carried out by students with the support of their laptop or smartphone devices. The process of painting appreciation took place naturally as it did when students were in the exhibition room in an art gallery building. Question and answer and open discussion about the subject matter, composition, and meaning of paintings also occurred between students and lecturers during learning. Lecturers act as facilitators in the appreciation process. The lecturer also monitored online the activities of interaction, communication, and review of works carried out by students in the virtual gallery room at devianart.com.

3.2. Discussion

Appreciation practice refers to the identity of the work namely: (a) name, (b) price, (c) title, (d) dimension (size), and (e) brief review. Students can observe the identity of the work presented digitally as a consideration in assessing and appreciating the work. With their respective accounts on deviantart.com, students choose several works from several languages to be appreciated according to the lecturer's instructions. The first step, students must observe the painting work. Three aspects that can be observed at the initial stage are (a) work identity, (b) subject matter, (c) medium, and (d) style [13]. Second, students carry out activities on understanding paintings. Understanding is done through the process of examining the elements and principles of painting. In art studies, in-depth discussion of elements and principles of art is referred to as "formal analysis" [13,14]. Painting elements consist of line, shape, texture, color, and space. While the principles of art consist of balance, proportion, domination, movement, rhythm, and harmony. Third, students understand painting by interpreting its meaning. The ability to find meaning can be identified from the ability of: (a) conveying the background of the creation of the work, (b) conveying the link between one subject and another subject, and (c) conveying the message contained in the work which the artist wishes to convey to all appreciators. Fourth, students respond in the form of appreciative attitudes towards art online. Appreciative attitudes can be shown verbally with statements of likes or dislikes, happy or unhappy, and appropriate or inappropriate. Additionally, appreciative attitudes can also be shown by giving compliments or reviews of works or sharing works with others. The highest appreciation attitude can be shown to collect or buy works. Figure 5 shows the display of the virtual gallery on deviantart.com operated by students.
Figure 5. Artwork display at the virtual gallery at deviantart.

Overall, the student's appreciation process could be recorded from students' reviews of the artwork found in the comment column on Deviantart. The lecturer observed deeply the virtual activities carried out by students in appreciating the work in the comment column. Figure 6 is the display of the comment column on Deviantart.

Figure 6. Appreciative comment displays in devianart.

Learning outcomes were revealed from comparing the pretest scores and post test scores [13]. Pretest conducted before learning using virtual gallery simulation media was to see students' initial mastery of art appreciation. Assessment instruments used essays, with assessment criteria as follows: (a) the ability to see works visually in paintings, (b) the ability to understand the elements and principles of painting, (c) the ability to understand the meaning of paintings, and (d) the ability to provide appreciative reviews and assessment. Based on the results of the pretest and posttest, virtual gallery media learning for painting appreciation simulations has succeeded in increasing students' competence so that the learning outcome is achieved. Figure 7 and figure 8 are the chart that illustrates the increase in students' appreciation ability after using virtual gallery media.
Overall, the activities of students and lecturers took place very well. In general, from observations, lecturers and students were accustomed to applying appreciation learning using the virtual gallery. The researcher emphasized that learning media in the form of virtual galleries can be used in a fun and interactive manner. The media is appropriate to improve students' appreciation skills.

Interactive learning has the main characteristics, namely the existence of a relationship between stimulus and response, so as to foster inspiration and increase an interest [15]. The use of interactive media can certainly promote active communication between students and learning resources [16,17]. Thus, the use of virtual galleries in the process of learning relevant painting appreciation is interactive.

4. Conclusion
There is an increase in the learning outcomes of painting appreciation achieved by students from appreciation and art critics class after using virtual gallery media. The success was based on indicators of observation, understanding, interpretation, and appreciative assessment of paintings which increased from an average score of 67.78 to 79.67. Thus, it can be concluded that the Virtual gallery using deviantart.com can be effectively used as a medium to simulate appreciation of foreign paintings, especially in the conditions of limited number of gallery space around the campus.

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