

Interactive Multimedia Based on “Sumpah Pemuda” Values: An Innovation for Civic Education

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Abstract: The lack of value integration and character building in Civic Education learning occurred due to the running education system that prefers the cognitive aspect, which is a central issue discussed in this study. This paper aims to describe the development of interactive multimedia based on “Sumpah Pemuda” values as an innovation for Civic Education learning for Junior High Schools in Surakarta. This study followed Hannafin and Peck’s Research and Development (R&D) method. The data were collected through observation, interviews, and questionnaires. The media development phases cover the need analysis, design, and development & implementation. The developed values inspired by “Sumpah Pemuda” consist of patriotism, unity, willingness to sacrifice, nation spirit, accepting and respecting the differences, the spirit of brotherhood, and the spirit of “mutual cooperation”. The typically integrated instrument to multimedia includes texts, animations, pictures or photographs, videos, and sounds. Based on the practitioner experts’ questionnaire, it revealed that interactive multimedia based on “Sumpah Pemuda” values was feasibly used as a media to teach Civic Education, especially to develop student’s characters. This research and development study has successfully created learning media products which in line with current science and technological developments without neglecting the development of student’s characters.

Keywords: civic education learning, character, interactive multimedia

INTRODUCTION

One of the most critical challenges for education in Indonesia is the education quality (Sukasni & Efendy, 2017). The curriculum of 2013 constitutes of three competencies, namely attitude (spiritual and social attitudes), knowledge, and skills competencies. The learning process should be aimed at developing these three competencies as a whole (Regulation of The Minister of Education and Culture of The Republic of Indonesia Number 22 of 2016). In line with these three competencies, in learning Civic Education, it is directed to foster civic knowledge, civic skills, and civic disposition (Winarno, 2013).

In the common practice of our education, the learning process has been dominantly focused on achieving students’ cognitive competence instead of affective competence.. The applied methods, media, materials in learning have been adjusted to increase students’ knowledge acquisition. The lack of integrated values frequently happens in our learning model. Excellent character inculcation has not yet been our educational concern. It is certainly contrary to the enacted standard for the educational process, that learning should at least emphasizes on practical guiding of noble values through exemplary (Regulation of The Minister of Education and Culture of The Republic of Indonesia Number 22 of 2016).

This leads to emerging problems on the young people’s characters, such being lack of nationalism, intolerance, lack of brotherhood, individualism, and other disintegrations. To cope with those young generations’ character problems, alternatively, we need to integrate cultural values and national character in our education (Saidek, Islami, & Abdoludin, 2016). Throughout the nation’s journey to independence, Indonesian people experienced numerous national

historical events that were rich in values, such as the events of national revival, the “Sumpah Pemuda” (Youth Pledge) event, the proclamation of Indonesian independence, etc.

“Sumpah Pemuda” is one of the most important national historical events. The “Sumpah Pemuda” event continues to be celebrated every year, however, we nearly have forgotten the virtue underlying the event to our national lives. The event succeeded in uniting the entire Indonesian nation consisting of various regions, tribes, and religions. Through the “Sumpah Pemuda”, the Indonesian people reached an agreement as one homeland, one nation and one language of unity. The “Sumpah Pemuda” event contains values that can strengthen the nation's character, consisting of patriotism, unity, willingness to sacrifice, the spirit of nationality, accepting and appreciating differences, the spirit of brotherhood, and the spirit of “mutual cooperation”. The values are essential should be integrated into our education-oriented to refine the youth's national character.

In today's global era, a learning process should ideally be in harmony with current science and technology advancement which remain teaching students about behaving with noble character (Komalasari & Saripudin, 2017). The rapid technological development has been influencing on our system of education, there are currently more students and teachers and people in general who greatly depend their lives on those technological advancements (Leow & Neo, 2014; Nusir, Alsmadi, Al-Kabi, & Sharadgah, 2012; Wu & Tai, 2016). Similarly, in the school environment context, technology use has been inseparable from students. In fact, many students more preferred being taught with technology based-learning media (Erlina & Murti, 2013; Gunawardhana & Palaniappan, 2016).

One of the currently applied technologies in learning is on implementing interactive multimedia. The interactive multimedia offers various advantages to be used in the classroom learning process. The interactive multimedia integrates various media including text, images, animation, video, and audio in an application form (Hamidi, Kharamideh, & Ghorbandordinejad, 2011; Nusir, Alsmadi, Al-Kabi, & Sharadgah, 2012). The interactive nature of multimedia provides feedback to students, which similarly creates a student-centered learning environment. It turns students to be dependent on their learning (Gunawardhana & Palaniappan, 2016; Leow & Neo, 2014). Multimedia content constitutes of various media and colorfully designed contents and certainly fosters students' learning motivation.

Research and development of interactive multimedia have been carried out by several researchers. However, most of it is directed at increasing students' cognitive achievement. This research develops interactive multimedia aimed at enhancing affective aspects or strengthening the character of students. Multimedia can be an effective means of character education inculcation. Levie and Lantz (as cited in Park and Lim, 2004) outlined that multimedia not only can significantly improve students' cognitive abilities, but it also shares affective functions that influence students' emotions and attitudes. In addition, findings from Komalasari and Saripudin's research stated that the development of value-based interactive multimedia affects the character of students (Komalasari and Saripudin, 2017).

Thus, an effort to cope with the youth national character in the current global era, it is a great opportunity to develop technology-based learning media that contains of noble values to enhance students' characters. The product being developed is interactive multimedia based on “Sumpah Pemuda” values as an innovation in Civic Education learning. The objectives of this study are to describe the development of interactive multimedia based on “Sumpah Pemuda” values as an innovation for Civic Education learning and testing the feasibility of interactive multimedia to be used as a media in Civic Education learning.

METHOD

This study was carried out using Hannafin and Peck's research and development design. This model consists of three phases: the need analysis phase, the design phase, and the development & implementation phase (Mawardi, Mudjiman, Anitah, & Asrowi, 2014; Perinpasingam, Peng, Hussain, & Arumugam, 2016). The study was conducted at the Junior High School in Surakarta City, Central Java, Indonesia. The samples were taken from three junior high schools in Surakarta, among others; State Junior High School 2 of Surakarta, the Junior High School Pangudi Luhur Bintang Laut of Surakarta, and the Al-Abidin Junior High School of Surakarta.

Three data collection instruments were used in this study. The observation and interview were technically used to find out the learning process of implementation and conduct a needs analysis. The practitioners' validation questionnaires were used to test the feasibility of interactive multimedia being implemented as a learning media for Civic Education. The questionnaire were prepared using Likert scale with scoring range of 1-4.

The qualitative data were analyzed using the following stages: data reduction, data display, and conclusion/verification (Punch, 1999). While the experts' questionnaire data followed the quantitative-descriptive model of analysis to determine the feasibility percentage of interactive multimedia. The validity criteria followed Akbar's criteria (2013) as follows:

Table 1. Validity Criteria

Validity Results	Validity Criteria
85,01 % - 100,00 %	Very valid, or can be used without revision
70,01 % - 85,00 %	Quite valid, or can be used but needs minor revisions
50, 01 % - 70,00 %	Less valid, it is recommended not to be used because it needs major revisions
01,00 % - 50,00 %	Invalid, or may not be used

RESULTS AND DISCUSSION

Need Assesment Phase

The need assessment phase was carried out to find out potential problems and analyze product development needs. The need assessment was conducted through literature studies and field studies. The literature studies were carried out using curriculum analysis, the search for relevant results of studies and other library sources.

The field studies were carried out by conducting observations and interviews at school. The observation techniques used to find out the learning process of Civic Education in students' grades of eight, in addition, to know the schools' feasibilities in implementing the product, specifically the availability of computer technology-based facilities. The interviews were technically conducted to find out the constraints experienced by both teachers and students in Civic Education learning, in addition, to find out their needs.

The results of literature studies reveal that the education curriculum needs to pay special attention to science and technological developments, the dynamics of global development, and national values (Indonesian National Education System Act number 20 of 2003). The Civic Education learning process in the Curriculum of 2013, which was meant to develop learners' knowledge competencies (civic knowledge), attitude competencies (civic disposition), and skills competencies (civic skills). Numerous results of studies revealed that interactive multimedia improves the learning qualities such as the increase of students' learning motivation, attention,

understanding, learning outcomes, in addition to the increase on students' characters ((Leow & Neo, 2014; Nusir, Alsmadi, Al-Kabi, & Sharadgah, 2012; Kim, 2015; Komalasari & Saripudin, 2017).

The results of field studies reveal that the analyzed learning process focused on students' cognitive achievement. The learning process does not develop students' attitude competency as suggested in the basic competencies of social attitudes in the Civic Education curriculum. The use of technology in learning was still limited to the use of power points. The teachers realized their needs of reinforcing students' character, more specifically on students' character of religious tolerance. Additionally, the availability of technology-based learning media was highly needed to increase students' learning interest and attention, in addition, to improve their learning quality.

The results of both literature and field studies reveal that, it was highly necessary to develop an interactive multimedia product based on values inspired from "Sumpah Pemuda" event to create a better learning quality and strengthen students' character.

Design

The interactive multimedia learning media based on "Sumpah Pemuda" values is an integrated learning media between noble values reflected from the 1928 "Sumpah Pemuda" event and with the Civic Education learning materials in an interactive multimedia product. Prior to developing the product, the researchers first designed the products of interactive multimedia development, which include:

Determining the developed Characters

Typical characters being developed through interactive multimedia learning is on students' religious tolerance. Teaching students about having religious tolerance is part of the social attitudes competencies (civic disposition) in the Curriculum of 2013 for Civic Education learning for Junior High School students of eight grades.

Developing a learning plan

The learning process with interactive multimedia was designed through the observation learning model following Albert Bandura's Cognitive Social Theory. The interactive multimedia was used as a source of observation that provides information to students. After going through information processing, students were able to independently decide their actions.

Identifying for values

The values constitute in the interactive multimedia contents were the learnable values inspired by the 1928 event of "Sumpah Pemuda", which is a very important historical event for the Indonesian Nation. These values are explainable as patriotism, unity, willingness to sacrifice, the spirit of nationalism, accepting and respecting differences, the spirit of brotherhood, and the spirit of mutual cooperation.

Identifying the material sources used in the interactive multimedia

Material sources can be about events and values inspired by the "Sumpah Pemuda" event that was integrated into the interactive multimedia, combined with the material sources on Civic Education.

Collecting the media into the interactive multimedia

This phase includes collecting texts, pictures, animation, videos, and sounds applicable to illustrate and clarify the teaching materials and values in interactive multimedia.

Development

After the design phase, the next is the development phase. Before developing the product, flow charts and storyboards were arranged to facilitate the product development. Low, Low, & Koo (2003) mentioned, "The purpose of the storyboard is to develop the screen frame by frame on paper. The frame will describe each page or document in detail." The interactive multimedia development phase is illustrated in figure 1.



Figure 1. The Steps in the Product Development Phase

The interactive multimedia was developed using Swish Max software and was assisted with image processing software such as Corel Draw and Adobe Photoshop. The developed multimedia follows the main characteristics of multimedia, among others:

1. Combining some content such as texts, pictures, animations, videos, and audios
 2. Providing links and tools for navigation and interaction among other fellow users
- (Hamidi, Kharamideh, & Ghorbandordinejad, 2011; Gunawardhana & Palaniappan, 2016)

The developed interactive multimedia consists of the cover section, home section, a user instruction section, material section, and quiz section. Figure 2-7 displays the results of the developed interactive multimedia product.



Figure 2. The Cover Section of the Interactive Multimedia



Figure 3. The Home Section of the Interactive Multimedia



Figure 4. The User Instructions Section of the Interactive Multimedia Usage



Figure 5. The Material Section of the Interactive Multimedia



Figure 6. The Material Section of the Interactive Multimedia



Figure 7. The Quiz Section of the Interactive Multimedia

The Feasibility of the Interactive Multimedia based on Sumpah Pemuda Values

After developing the product, the next step was conducting the practitioners' validation test carried out by Civic Education teacher. This is aimed to seek out the feasibility of interactive multimedia usage as a learning media for Civic Education. This was done through a questionnaire filled by practitioner experts of two Civic Education teachers. The questionnaire consists of five indicators which were further explained into thirteen item statements. The questionnaires were arranged according to Likert scale with scoring range of 1-4. The results for practitioners' validation are presented in table 2.

Table 2. The Practitioners' Validation Test Results

Indicators	Items	Score	
		Practitioner 1	Practitioner 2
The use of multimedia	1. Easily used by students	4	3
	2. It is feasible to students' level of development	3	4
Fun and interesting learning	3. Multimedia display is attractive	4	4
	4. It increases students' learning motivation	3	4
	5. Learning with multimedia is fun	3	3
Improving learning outcomes	6. Multimedia helps students increase their knowledge	3	4
	7. The illustrated sources in the multimedia help students in comprehending the materials	3	3
	8. The contents of multimedia help students to develop their characters.	4	3
	9. Consisting of material sources affecting students' feelings	3	4
Students-centered learning	10. Engaging students to actively take part in a learning	4	4
	11. Providing opportunity for students to establish their own knowledge	3	3
Content organization	12. The contents are clearly elaborated	3	3
	13. The learning materials are well-organized	4	4
Total score		44	46
Score (Percentage)		84,62%	88,46%
Average score		86,54%	

The results for the descriptive statistical analysis of practitioners' data validation obtained an average of 86.54%. That is, the interactive multimedia based on Sumpah Pemuda values are compatible or applicable. The interactive multimedia is feasible to be used as a media in learning Civic Education.

DISCUSSIONS

Rapid technological developments have affected almost all aspects of life, including education. The use of technology in learning has become an important issue in the world of education lately. One of them is multimedia technology in learning. Multimedia is an integrated media of various media sources of texts, images, animations, videos, and audio in an application form (Rajendra & Sudana, 2017; Hamidi, Kharamideh, & Ghorbandordinejad, 2011; Nusir, Alsmadi, Al-Kabi, & Sharadgah, 2012).

The developed interactive multimedia became an innovation in Civic Education learning which was previously dominated by the use of textbooks and powerpoint slides. Textbooks and powerpoint slides do not actively involve students in learning. Learning with powerpoint is still passive, there is not much interaction other than clicking the next button (Huang, 2005).

The interactive multimedia based on "Sumpah Pemuda" values is applicable as a learning media of Civic Education subject. The interactive multimedia has been adjusted according to the development level of junior high school students. According to Jean Piaget's Moral Development Theory, at the age of more than 10 years, children have entered the stage of "autonomous moral development." At this stage, children begin to develop their own internal morality, determine moral actions based on personal considerations instead of the external influences (Farihen, 2012).

Interactive multimedia content consists of various media that creates an interesting and fun learning atmosphere. Multimedia that consists of various constructive media of texts, images, animations, colorfully designed, highly attractive to students' attention. The use of computer technology based-learning media through multimedia, it creates a fun learning environment. In line with Neo, Neo, & Yap's (2008) findings, that multimedia elements play a major role in increasing students' learning motivation and help to create a fun learning environment.

Multimedia completed with links and tools in it requires students to navigate the multimedia. Students not only passively listen to the teacher's explanation but also actively learn and acquire knowledge from the interactive multimedia. The use of interactive multimedia creates a student-centered learning environment (Leow & Neo, 2014).

Various developed contents constituted the multimedia enable students to easily comprehend the material. The colorful and creatively designed images, animations and videos help to illustrate the material, which is quite helpful for students instead of just learning from the textbooks. In line with the study results, i.e., as conducted by Rajendra & Sudana (2017) that multimedia is quite effective media in teaching knowledge as evidenced by the results of post-test students who were taught with multimedia achieved higher result compared to students who were not.

Interactive multimedia based on Sumpah Pemuda values constitute easily learnable contents that stimulates students' feelings and helps them strengthen their characters. Similarly, Levie and Lantz (as cited in Park and Lim, 2004) emphasized that one of the functions of multimedia is in its affective function; multimedia can influence emotions and attitudes. The use of value-based interactive multimedia can influence students' character inculcation.

Every student should equally be educated to gain proper knowledge, skills, and attitudes since all of these competencies are the spirit of education. Thus, an ideal learning process should be directed at developing these three competencies in a complete form. Learning should not be thoroughly focused on achieving the cognitive aspect and negating students' character. On the other hand, technology has developed and affected every aspect of human life. We cannot distance ourselves from technology. Therefore, in this global era, it is significant to create a learning process that is in line with current science and technological developments without ignoring the essence of students' character development. Providing good learning media oriented to foster students' character is important, for the students will be successors of the country's future development. Character is an important component in a child's personal life, community life, and state life.

The values contained in the "Sumpah Pemuda" event are very important to be internalized in students through education. These values will strengthen the character of students. Internalizing the value of the "Sumpah Pemuda" event needs to be done since Junior High School because at that age children begin to build their internal morality (Farihen, 2012). At that age, children also begin to develop themselves into autonomous individuals, begin to be able to think abstractly, consider hypotheses, and consider various dimensions of the problem (Eccles, 1999). Thus, it is important to internalize noble values that will influence students in determining their attitudes and actions, including the values of "Sumpah Pemuda".

CONCLUSIONS

The interactive multimedia based on Sumpah Pemuda's values is an integrated media which explores the Sumpah Pemuda values and Civic Education materials into interactive multimedia. The development of interactive multimedia was carried out through several steps : need analysis, design, and development. The results of both literature and field studies on the needs analysis phase, revealed the needs for developing interactive multimedia to improve students' learning quality in addition to develop their characters. The design phase was carried out by determining the developed characters, identifying the material to be taught, arranging learning plans, collecting contents (images, videos, audio), and designing evaluations. The development phase includes preparing a flow chart, story boards, and developing media using Swish Max software. The developed media produces interactive multimedia, which consists of cover section, home section, a user instruction section, material section, and quiz section. The product was produced in the '.exe' format, thus it is accessible on computer without being assisted by any software.

The results of the practitioners' expert questionnaire by the Civic Education teachers obtained an average score of 86%. This means that interactive multimedia based on Sumpah Pemuda values are worthy of being used as learning media in Civic Education learning. This developing study produces a learning media oriented to developing students' knowledge, skills, and characters, which is compatible with current science and technology development.

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