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Developing Validation Instrument for Virtual Fairy Tale Products as an Alternative to Character Building in Elementary Schools

Septiana Agustin
Doctoral Program of Educational Science
Sebelas Maret University
Surakarta, Central Java, Indonesia
septiana.agustin@gmail.com

Dewi Rochsantiningsih
Educational Science, Teacher Training and Education
Sebelas Maret University
Surakarta, Central Java, Indonesia

Sunardi
Educational Science, Teacher Training and Education
Sebelas Maret University
Surakarta, Central Java, Indonesia

Gunarhadi
Educational Science, Teacher Training and Education
Sebelas Maret University
Surakarta, Central Java, Indonesia

***Abstract*— This research aims to develop instruments to validate virtual fairytale products as an alternative to character building in elementary schools. The research method used was a quantitative descriptive. The data were collected using questionnaires distributed to validators according to their respective fields. The experts involved in developing this instrument were a Javanese linguist, a multimedia expert, an educational technology expert, and education practitioners. The data analysis technique used was the Likert Scale. To assess the validity and reliability of the product using the SPSS 16.0 program. It is concluded that 17 items in the instrument validation for virtual fairy tale products are valid. This is evidenced by the results of the $F_{XY} > F_{table}$ at a significance value of 5%. The reliability test resulted in the value of the instrument reliability coefficient of 0.994. Thus, it can be concluded that the validation instrument for virtual fairy tale products as an alternative to character building in elementary schools is valid and reliable. It is recommended that further research presents expert judgment results for virtual fairytale products as an alternative to character building in primary schools.**

Keywords: virtual fairy tale, learning, character building, elementary school

I. INTRODUCTION

Storytelling is an effort to instill noble values in children. Through storytelling activities, noble values (morals, character, honesty, kindness, independence, or religion, etc.) can be instilled easily in children. Through fairy tales too, children can learn to develop imagination, express themselves, foster a sense of humor, expand imaginary horizons, train emotional experiences, and take the message implied [1]. Storytelling is also useful as entertainment, sharpening the brain, and changing children's behavior [2-3]. When storytelling at school, teachers can use storybooks [4] wearing loud costumes like the characters of the figures told [5]. In addition, the teacher can also invite the students to be communicative by involving them to participate in the role of characters in fairy tales [6].

The term virtual is not only used among students but also among college students. Some universities run technology-based environments, or so-called virtual campuses [7]. The virtual campus conditioning aims to make it easier for students to access various information needed for their assignments and work. Another impact of the existence of a virtual campus program is an added value for the university, especially in terms of promotion for students graduating from high schools.

Modernization of technology has been carried out since the 1980s, of course, adjusted to the possible direction and perspective of the future [8]. The development of technology has now entered the online world, which covers all aspects of life. One of them is the field of education, which not only appears but also impacts on its progress. Education conducted online can create a virtual community [9]. This learning model shapes students to build networks in a community and the interaction between students and between teachers and students. Learning is done through mentoring and guidance about information technology and the structure of the exercises. Thus, students can have effective experience in online education.

Virtual technology in the digital age is not only booming among the younger generation or elementary and high school student levels, but also among bachelor, master, and doctoral students [10]. Specifically, for schools and universities that have advanced ICT (Information Technology and Computer) management capabilities, they will begin to develop digital technology systems [11]. Virtual fairy tale products adopt virtual technology to provide updates in learning activities. Specifically, it becomes one of the learning media, which at the same time, can shape the students' characters. Therefore, it is

necessary to develop instruments by experts to validate the application of virtual fairy tale products in elementary schools.

II. MATERIALS AND METHODS

The familiar fairy tales in the community [12] include (1) Myth, a fairy tale that tells the stories of the gods, usually associated with community beliefs. (2) Fable, a fairy tale that tells the lives of animals that are depicted and can talk like humans. (3) Folklore, a fairy tale that is generally created with an educational mission that is important to the world of children. Fairy tales are useful as an effective medium in communication and foster reading interests of children [13]. Fairy tales are one of the appropriate methods used to cultivate literacy to the illiterate [14]. Specifically, for adults, fables that are displayed digitally can improve their literacy abilities [15]. Fairy tales that are displayed digitally require components that are more detailed and complete. Also, learning using digital fairy tales requires good design and representation of space and time [16]. The use of digital storytelling [17] is also applied in several universities, especially in the elementary school teacher study program. Not only teachers but prospective teachers are also given materials about storytelling methods to children, especially, the application of digital storytelling learning media.

The development of technology in the globalization era is increasingly sophisticated. Various means of communication continue to be developed broadly in order to support the progress or development of the nation. One of them is the development of virtual-based technology. Where what is meant by virtual is a simulation of phenomena or real events. With the sophistication of virtual technology, currently, the education sector also applies a system that implements virtual learning [18]. Virtual technology has a lot of potentials and strongly supports students' knowledge, especially to be applied in learning activities [19-20].

One of the virtual technologies that are popular for students is the application of The Second Life [21]. In it, students can choose characters who have a variety of characters and personalities. Through the Second Life program, they can also interact with each other and the environment. They tend to enjoy this application because it brings them into another dimension of their everyday world. Virtual Classroom, or the so-called online environment, is used by several educational institutions based on technology [22]. The online environment makes students comfortable and gives a positive impression. Students can easily interact socially online, enjoy easy access to learning, and enhance their creativity and experience [23-26].

The method of this research is quantitative descriptive. The instrument development technique used was a questionnaire distributed to validators according to their respective fields. The experts used in the development of this instrument were one Javanese linguist, one multimedia expert, one educational technology expert, and 3 education practitioners. The data analysis technique used was the Likert Scale [27], while to assess the validity and reliability of the product, SPSS 16.0 for Windows was used. The components to be assessed by the experts include: (1) the framework of the development model of a virtual fairy tale video; (2) virtual fairy tale video content; (3) the application of virtual fairy tale videos in learning activities; and (4) the effectiveness of virtual fairy tale products on students' character building. Each component consists of indicators with different numbers. The first component consists of three indicators, the second component consists of five indicators, the third component consists of three indicators, and the fourth component consists of six indicators. The intervals used in developing expert instruments include strongly agree (4), agree (3), disagree (2), and strongly disagree (1).

III. RESULTS AND DISCUSSION

Based on the four components consisting of 17 indicators, the development of the instrument was carried out by testing the validity and reliability. The validity test was done by using the bivariate person correlation formula with SPSS version 16.0. Questionnaire items in the validity test are valid if the r > table with a significance value of 5%. On the other hand, the questionnaire items in the validity test are valid if the $r < r_{table}$ with the significance value of 5%. The validity test summary is, as shown in the following Table 1.

TABLE I. RESULT OF INSTRUMENT VALIDITY TEST BY EXPERT

No. Item	F_{xy}	F_{table} 5%	Remark
1	0,963	0,482	Valid
2	0,997	0,482	Valid
3	0,997	0,482	Valid
4	0,947	0,482	Valid
5	0,963	0,482	Valid
6	0,947	0,482	Valid
7	0,963	0,482	Valid
8	0,947	0,482	Valid
9	0,997	0,482	Valid
10	0,936	0,482	Valid
11	0,997	0,482	Valid
12	0,936	0,482	Valid
13	0,997	0,482	Valid
14	0,767	0,482	Valid
15	0,997	0,482	Valid
16	0,936	0,482	Valid
17	0,997	0,482	Valid

Based on the results of the instrument validity test by the experts in Table 1, seventeen (17) items are valid. This is evidenced by the result of the $r > r_{table}$ at the significance value of 5%. The r of items 1 to 17 is greater than r_{table}. Thus, it can be concluded that 17 items to be used on expert instruments are valid. In the validity test results, there is one item that has the lowest value. Item number 14 is included in the product effectiveness component for use in learning activities in elementary schools. Item number 14 is an indicator that virtual fairy tale products are effective to be applied in learning activities in the lower class. Educational practitioners provide advice that the products will be effectively used in learning if delivered with supportive teaching methods. The application of virtual fairy tale products in the lower class will be effective if framed with teaching methods that are active, interesting, and fun. Thus, there is a need for additional notes or information on the use of products for the lower class.

The Javanese language expert recommends that teachers provide a repeat of showing the product in learning activities. The teacher needs to confirm students' understanding through the questions raised in stages. That is because the language of instruction used in virtual fairy tale products includes two, namely Indonesian and Javanese. The teacher needs to provide guidance so that students understand the flow of fairy tales presented virtually. Thus, the students will get knowledge about virtual fairy tales and language learning experiences. The educational technology expert provides advice that after students see a virtual fairy tale, the teacher guides them to make self-reflection. An evaluation note of good deeds can serve as a guide or example for students. Thus, virtual fairy tale products will be truly effective for shaping the character of students, especially in elementary schools.

The reliability test resulted in the value of the instrument reliability coefficient of 0.994 consistently greater than the value of the r_{table} of 0.482. Based on the value of the reliability coefficient, it can be concluded that the instrument used in this research is reliable. It can be seen in Table 2.

TABLE II. RESULT OF RELIABILITY TEST

Cronbach's Alpha	N of Items
0,994	17

Variable	F_{xy}	F_{table} 5%	Remark
X1	0,994	0,482	Reliable
X2	0,994	0,482	Reliable
y	0,994	0,482	Reliable

IV. CONCLUSION

This research developed a validation instrument for virtual fairy tale products as an alternative to character building in elementary schools. The instrument to be validated is a questionnaire that will be distributed to experts according to their respective fields. Based on the results of the validity and reliability tests, it can be concluded that the instrument developed to validate virtual fairy tale products as an alternative to character building in elementary schools is valid and reliable. Based on the expert advice, this research will be refined in terms of presentation and adjustments to user characteristics. Thus, the instrument can be used to carry out testing to the next stage.

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