GENRE-BASED DIGITAL STORYTELLING IN THE 21st CENTURY EDUCATION: A STUDENTS' PERCEPTION

DIGITAL STORYTELLING BERBASIS JENIS TEKS DALAM PENDIDIKAN ABAD KE-21: DALAM PERSEPSI MAHASISWA

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ABSTRACT

The present study is aimed at investigating the perception of elementary school pre-service teachers regarding the genre-based digital story telling projects in their General English (GE) class. The benefits and challenges of digital storytelling projects have been studied by many researchers. However, perception of elementary school pre-service teachers of the issue is still rarely investigated. The data were collected from open and closed questionnaire to 47 elementary school pre-service teachers of a public university in West Java, Indonesia. In the second semester, they had a GE class (kelas Mata Kuliah Umum/MKU Bahasa Inggris). They were given two genre-based digital storytelling projects i.e. the digital descriptive and narrative text projects. The findings are further explained in relation to the 4Cs skill in 21st century education. It is found that genre-based digital storytelling projects improve the elementary school pre-service teachers' communication, collaboration, creative thinking, and creativity skill. The pre-service teachers generally perceived the learning as meaningful, engaging, and enjoyable, supporting digital storytelling as a powerful media in the 21st century education.

Keywords: genre-based, digital, storytelling

ABSTRAK

Penelitian ini bertujuan mengkaji persepsi dari mahasiswa pendidikan guru sekolah dasar mengenai projek digital storytelling berbasis jenis teks (genre) di kelas Bahasa Inggris sebagai Mata Kuliah Umum (MKU). Beragam manfaat dan tantangan projek digital storytelling ini telah dipaparkan oleh banyak peneliti. Akan tetapi, persepsi mahasiswa calon guru masih jarang dikaji. Data penelitian ini diperoleh dari kuesioner terbuka dan tertutup terhadap 47 mahasiswa pendidikan guru sekolah dasar di salah satu universitas negeri di Jawa Barat, Indonesia. Di semester kedua, para mahasiswa mendapatkan kelas MKU Bahasa Inggris. Mereka diberikan dua tugas digital storytelling dalam jenis teks deskriptif dan naratif. Hasil temuan penelitian kemudian dipaparkan dalam kaitannya dengan konsep '4K' dalam pendidikan abad ke-21. Ditemukan bahwa projek digital storytelling, dalam persepsi para mahasiswa, telah meningkatkan keterampilan Komunikasi, Kolaborasi (Kerja Sama), Kekritisan (pemikiran), dan Kreativitas. Pembelajaran dengan projek ini diterima sebagai pembelajaran yang bermakna, erat unsur keterlibatan siswa, dan menyenangkan. Hal ini mendukung klaim yang menyatakan bahwa digital storytelling adalah sebuah piranti yang hebat dalam pendidikan abad ke-21.

Kata Kunci: berbasis jenis teks, digital, storytelling

INTRODUCTION

Our world has come to the 'industrial revolution 4.0' era. Wikipedia (2018) describes this fourth industrial revolution as the latest development of digital revolution (industrial revolution 3.0) with the breakthrough of robotics, artificial intelligence, nanotechnology, and etc. It strongly suggests the great advance of technology and its effect to all aspect of human's life including education. Since almost two decades ago, Prensky (2001) in his noteworthy paper 'Digital Native, Digital Immigrants part 1" has attempted to show us the importance of incorporating digital technology in education that the students have changed radically, and 'traditional' learning method and approach need to be adjusted or even changed.

There has been being a development of TPACK (Technological, Pedagogical Content Knowledge) which shows the importance of incorporating appropriate technology to the learning process along with the determined material delivered in a suitable teaching methodology (Koehler, Mishra, & Cain, 2013). It also applies to language education. There is a great call to develop students' digital literacy in the language program (Hafner, Chick, & Jones, 2015). One of the most popular attempts is the Digital Storytelling (DS) program. It has quite long been reported to have multifold benefit in the language learning program; for example, it is found to improve organizational and research skill (Paull, 2002), support understanding of the subject content (Sadik, 2008), and foster independent learning (Hafner & Miller, 2011). In relations to 21st century life, DS is claimed to exercise relevant skills needed for living the era (Ming, Sim, Mahmud, Kee, Zabidi, & Ismail, 2014) that it is even subbed as a powerful media for the 21st century education (Robin, 2008).

However, despite numerous studies investigating the effect of DS projects, students' own perception regarding their experience completing the project is rarely conducted. Therefore, the present study aims at investigating it.

METHOD

The present study is a qualitative study aimed at investigating the perception of students (pre-service elementary school teachers) of a public university in West Java regarding the DS projects in their General English/GE (Mata Kuliah Umum/MKU Bahasa Inggris) class. In the second semester, the students have 16 meetings of GE class with 2 genre-based DS projects: digital descriptive text project and digital narrative text project. In the projects, the class (consisting almost 50 students) is divided into five to six groups. They are asked to create a descriptive and narrative video clips in 3 to 5 weeks starting from preparing, producing, and presenting which are the three stages in a DS project (Frazel, 2010).



Figure 1 Production Process of Digital Storytelling Project

The three DS stages are conducted in the framework of Genre-Based Approach (GBA). In Emilia (2011), it is explained that there are four stages of GBA taught in Indonesia i.e., Building Knowledge of the Field (BKoF), Modelling, Joint Construction, and Independent Construction. The 'preparation' stage of DS covers the BKoF and Modelling stage in which students are given examples and explanation of the genre studied. The 'production' stage of the group work creating the video clips until their 'presentation' are the Joint Construction. The last stage in GBA, the Independent Construction stage, is conducted in a test (the middle test, only for descriptive text).

Data were collected from 47 students with random purposeful sampling technique to add credibility of the data (Creswell, 2007a). It is a simple study in that data are derived from opened and closed questionnaire to gain fast and effective data (Davis, 2011). The closed questionnaire contains statements of perception of DS with 5 Likert scale of Strongly Agree (SA), Agree (A), Uncertain (U), Disagree (D), and Strongly Disagree (SD). Both the closed and opened questionnaire consist of questions studying the students' perception completing the project.

In order to maintain the validity of the data, member checking is conducted (Creswell, 2007b). Responds from some of the participants are clarified back to gain accurate and credible data.

Furthermore, the recap of the data is explained and interpreted in relation to the 4Cs of learning and innovation skills of the 21st Century Education Skills of Trilling and Fadel (2009) who are the co-founder of "p21", an endeavor to elaborate the dispositions needed for 21st century life. The 4Cs are Communication, Collaboration, Critical Thinking and Creativity.

RESULT AND DISCUSSION

Trilling and Fadel (2009) classifies three set skills that are needed in 21st century education, i.e., the learning and innovation skills, information, media and technology skills, and life and career skills. Trilling and Fadel are two important figures in Partnership for 21st Century Skills (P21), an endeavor to bring about cooperation of the stakeholders of education, business, community, and government leaders to be able to provide learners with 21st century learning opportunities to thrive the 21st century life (see www.p21.org for further detail information).

The present study focuses on the students' perception of genre-based DS in relations to the first set skills i.e., the learning and innovation skills which is also known with the 4 Cs' skill of communication, collaboration, critical thinking, and creativity skill. Each of the findings are elaborated below.

A. Communication

Trilling and Fadel (2009) explain the dispositions of good students in 21st century life in terms of 'communication'. Some of the dispositions are to be able to communicate and articulate ideas effectively in a diverse environment to achieve a certain goal of informing, clarifying, describing, persuading, instructing, etc.

Before the implementation of DS project, usually in the previous years, the students are assigned to create a descriptive and a narrative text but not in the form of a video. Both kinds of project require the students to plan and build their texts. In genre-based approach, they usually begin with noticing the generic structure of the texts, i.e., General Statement/Identification and description in descriptive text and orientation, complication, evaluation, resolution, and coda in narrative text (Emilia, 2011).

In building a descriptive text, for example, they begin with determining the topic (the object that is about to be explained; the person, the place, the thing). After that, they decide on the characteristics (usually in the form of adjectives) that they would like to set as the characters of the determined object. In the writing process, students may begin with giving an opening sentence stating the object directly as the general statement/identification part. Subsequent sentences are displaying the adjectives representing the object with some development of elaboration as the description parts. It is then closed with a statement that is usually summarizing the description.

In the DS Projects, the students' work is not finished there. They must proceed to create the video. Often, the time doing this process serves as a second revision time because students have more opportunity to engage with the text. It gives students exposure to the text, to pay more attention to the vocabularies, grammar, idioms, and other linguistic features of the text, which is adjusted to the visual representation planned for the whole video.

In the present study, which investigated the improvement of the students' communication skill in English as a foreign language, it is found that more than 90% of the students suggest that

the genre-based DS projects exercise and improve their communication in English, especially in terms of vocabulary and grammar learning. It is made possible by the process of discussing and building scenario of every group's DS topic.

One of the students (student 1, the numbering/labelling of the student is subsequently made in order) states that,

"Project from you sharpen to our talent in English... We can speak and write English very well just then (compared to when) I'm (was) in senior high school." (Student 1)

It is similar to the studies of Kajder and Swenson (2004) and Sadik (2008) which suggest that DS project serves as a unique bridge to write, and it encourages oral expression because of the students' engagement to the project. In brief, it trains the communication skill of the students.

B. Collaboration

In terms of 'collaboration', 21st century students are expected to be able to demonstrate an effective ability to work with others that they are responsible, willing to work, share and adapt in any ways to achieve the group's target/purpose (Trilling & Fadel, 2009). Reinders (2010) acknowledges that a DS project is usually done by students in pair or in group. This setting allows students to communicate, exchanging knowledge (of English) and skills (of video editing).

In the present study, each group had two "leaders". The first leader was the one responsible for the linguistic body of the text. He/she was chosen based on the highest score of the middle test/quiz score. Second leader was proposed by the class based on the video-editing skill. Not all students are familiar and have experience in using video editing application, not to mention have the appropriate devices to process it. It was expected that each group have a relatively fair member competence to complete the project.

In the study, almost 98% respondents state that DS project is good in encouraging students to work with their teammate (59.57% SA and 38.29 A). One of the students said that DS project,

"It makes us more compact, solid, understand each other." (Student 2)

Furthermore, 84% of the students suggest that all members (students) contribute to the team. The rest, the 16%, indicates the dominant role of the leader to complete the project. It is a challenge of collaborative project, not only in a DS project. It will be very beneficial if teacher could supervise the progress of the project and develop a system to encourage and make sure that every member does their share of the work. For example, in the present study, the teacher develops a rubric of assessment in which each member of the team will give performance score to the members of the team including him/herself. By doing this, the tendency of dominant 'player-member' could be minimized.

In short, the study shows a great benefit of DS project in developing students' collaboration skill,

"I learn teamwork. (I learn) How to be a leader." (Student 3)

It is similar to the study of Robin (2008) who points out that the DS project exercises many skills, including the interpersonal skill that the process of designing, developing, and presenting the DS project exercise individual contribution to the teamwork.

C. Critical Thinking

The third skill in learning and innovation skill is the 'critical thinking' (CT) skill. There are some dispositions of the skill explained by Trilling and Fadel (2009) such as ability to reflect on processes, to analyze and evaluate claims and belief and to conduct a good problem solving after identifying the problems carefully.

As previously explained, a DS project requires students to plan, to build, to write a text. Writing is one of productive language skills often considered as the most complex skill. The ability of writing is often tied to critical thinking competence as Fisher (1990) (as cited in Emilia, 2011, p. 19) suggested:

Literacy, the ability to read and write, encourages a more abstract form of thinking, it brings greater precision to the definition of terms, and it allows us to refer back, to think about our thinking, to weigh arguments, to supplement memory... to communicate with others, and to learn in autonomous ways. No wonder such a powerful form of intelligence provides the key to success in school and beyond.

In the present study, students are asked to produce two types of text i.e., the descriptive and narrative text. The production of each text exercises students' critical thinking. In writing a descriptive text which function is to describe something, students deal with the notion of perception. They are better to be careful in assigning the adjectives as the description of the object, use objective language rather than subjective language (Chaffee, 2002). Meanwhile, a narrative text functions to inform and to tell a story usually in a chronological order. Students are better aware with the values it conveys as a narrative text is long used to pass values and traditions (Chaffee, 2002).

In the stage of Building Knowledge of the Field (BKoF) of this genre-based digital storytelling project, students are given an explanation of the aforementioned bias that might occur in their writings. In the modelling stage, they are also being shown some examples of texts containing the biases. The practice of explicitly explaining what critical thinking is and showing some examples of it is approved in Genre Based Approach (GBA) (Emilia, 2011).

Furthermore, in the joint construction and independent construction stages in which students start to develop the text, their CT competence is exercised from the time they choose the topic up to the time they consider the elements to fulfill the generic structure of their text (Abdel-Hack & Helwa, 2004).

From the study, almost 100% respondents agree that genre-based DS projects exercise their CT in terms of carefully choosing the topic of their projects (51.1% SA, 46.8% A) and in exercising problem solving (53.2% SA, 44.7%A).

An interesting statement regarding CT is stated by a student,

"Uniquely, Miss (the teacher) teaches CT through what people might consider trivial: descriptive and narrative texts, but you wrap these two materials up to date by assigning the digital projects so the 'kids zaman now' are not bored, have fun instead." (Student 4)

Study conducted by Yang and Wu (2012) also suggests a positive correlation of DS project with students' CT improvement. It adds even more value of DS project in 21st century language learning.

D. Creativity

Lastly is the 'creativity' skill. The elements of creativity include creative thinking (brainstorming, analyzing, elaborating, refining, and evaluating ideas), creatively working with others (developing ideas, openness and responsiveness to the diverse ideas and ability to learn and bounce back from mistake/failure), and implementing innovations (Trilling & Fadel, 2009).

The present study suggests a very good students' perception regarding the 'creativity' skill in DS project. All students (100%) agree that the DS projects improve their creativity (78.7% SA,21.3%A) and are a good way to equip students in facing 21st century life (74.5% SA, 25.5% A)



Figure 2a Students' DS Presentation



Figure 2b Students' DS Presentation

"I have the new experience... I learn how to make video, edit video... I'm very happy, my skill and creativity (is) more than before." (Student 5) "Don't give many projects Miss. Hehe." (Student 6)

"The task is given quite a lot. Especially in project video. Hehe." (Student 7)

"It's hard, but it makes me know how to make a video." (Student 8)

"Amazing, so many projects make us happy." (Student 9)

From the responds of the students above, it can be seen that in completing the projects, the university students learn to be more digital literate. The projects of DS in the form of video clips are admitted being challenging as well as exciting (as observed in the comment of student 1 and 8), but generally many students give positive attitude to the given projects. Widodo (2016) conducted similar study on genre-based DS in the form of picture to young learners. It is observed that the young learners are able to complete the project well, in fact, the DS project serves as a great avenue to learn digital literacy and multi-literacy skills (cultural, information, narrative, visual, and media literacy skill) (Widodo, 2016).

Being "creative," i.e., to be able to "create," is now considered the highest cognitive competence in the Bloom's Taxonomy after memorizing (remembering), understanding, applying, analyzing, and evaluating (Forehand, 2010). It suggests that the ability to create something is a complex process requiring many mental (thinking, sensing, feeling, and etc.)

and physical efforts (senses and body-motoric coordination to move and make something). Therefore, to be able "to create" is classified as one of the Higher Order Thinking Skill (HOTS), higher than "to analyze" and "to evaluate". This creativity can be more powerful with the implementation of the advance technology which offers many innovation and benefits.

From the overall elaboration of findings, we can observe that DS projects improve students' 4C, Communication, Collaboration, Critical Thinking, and Creativity. (Previous study of Choo, Tina, & Abdullah, 2020), in fact, it also shows teacher exercises' 4C hence, in the learning process, it benefits both students and teachers.

At this point, we might want to be more agree with Prensky (2001) that our students 'have changed' and teachers also have to change. Walsh (2007) states that students do different digital literacy practices outside the class, teachers should start to adapt and use it to foster students' creativity. We are in a hope that personal technology knowledge and skill would turn into a beneficial educational use (Heo, 2009).

CONCLUSION

Studies have shown an important need to incorporate the advance of digital technology in education. In the present study, DS has shown to be warmly welcomed by the students as one powerful tool in language learning, which improves the 'communication', 'collaboration', 'critical thinking' and 'creativity' skills considered important in thriving the 21st century live.

Further studies might want to investigate the challenges of DS project implementation in any levels of education in Indonesia to develop better understanding and shape the form of DS projects appropriately.

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