IJACT 20-12-26

Cyber University Students' Perceptions of a DST Project to Develop English Skills

Dosik Moon

Associate Prof., Dept. of English, Hanyang Cyber Univ., Korea
dmoon@hycu.ac.kr

Abstract

Digital storytelling, a 21st century educational tool that combines digital media with storytelling, is considered as a powerful tool to learn foreign languages in an authentic and meaningful way. This study explored cyber university students' perceptions and experiences with a digital storytelling project implemented to enhance their English writing and speaking skills. The results of 9 week-long research indicated that most of the students' attitudes were positive: the digital storytelling project was effective to increase their English skills, learning motivation and interest in learning English. Most students perceived that the process writing approach and videotaping tasks provided them with good opportunities to develop their English writing and speaking skills. Although many students had difficulties selecting a topic and writing a script in the initial stage, they could handle with these challenges with the help of professors' feedback and successfully completed their projects. After completing the project, most students expressed a strong sense of accomplishment. These results suggest that the digital storytelling project effectively met cyber university students' learning needs and facilitate their English learning.

Keywords: Digital Storytelling, Meaningful Learning, Process Writing Approach, Cyber University

1. Introduction

In recent years, the rapidly evolving digital and Internet technologies have revolutionized the way information is expressed and delivered. Unlike in the past, when only voice and text were relied upon, more diverse and rapid communication has been possible through multimodal mediums such as images, audios, videos and music. Along with these changes, in the field of English education, the digital technology has been increasingly used to create a learning environment where learners can acquire communication skills through active participation in meaningful interactions, shifting away from the monotonous lecture-centered approach focusing on grammar, vocabulary, and translation.

Digital storytelling (DST), which combines traditional storytelling with the up-to-date digital technology, has been drawing attention as an effective educational tool to help EFL learners experience authentic and meaningful language learning. DST, a compound word of digital and storytelling, is an activity that composes and shares a story by applying voice, text, photo, music, and video in a complex manner using digital devices and software [1]. In terms of language learning, learners engaged in DST can improve language ability through meaningful use of the target language appropriate for their level in an authentic way. A growing number of research studies have reported positive effects of DST on improving English learners' writing and speaking

skills, language learning motivation, and autonomy in learning [2].

Given these educational advantages, DST seems to have considerable potential as an educational tool that provide Korean learners with an authentic context where they can effectively improve their speaking and writing skills by actively participating in meaningful communication. However, no research has been conducted to investigate the use of DST to teach English to adult learners at a cyber university setting. The purpose of this study is to explore the educational usefulness of a DST project implemented at a cyber university.

2. Previous research

As the educational value of DST has been widely recognized, a growing number of research studies have been conducted to effectively use DST in English education. In the early days, research mainly focused on child education, but as storytelling was recognized as a universal activity of humans, suitable for adult education, research has been expanding to include college students [3]. The findings of these studies show that DST not only helps learners improve their English skills in a meaningful way, but also helps them acquire multi-literacy skills required to interact and communicate effectively in a rapidly digitalizing society [2-4].

The most direct educational usefulness of DST in the EFL settings is that it can help develop the four functions of language in a balanced way [5]. DST provides learners with opportunities to repeatedly use the target language appropriate to individual learner's level in authentic ways. Reviewing their audio or video, learners can recognize mistakes in their words, grammar, or contents, and revise their own narration [6]. Furthermore, as engaging in the process of repetitive pronunciation correction and speech practice, leaners can improve overall speaking ability and pronunciation, which leads to enhancement of their confidence in speaking [7].

In addition, DST was found to be highly effective in improving writing ability [8]. When DST is combined with a writing process approach (planning, drafting, revising, editing, and publishing), learners are given a number of opportunities to think and revise in the process of completing the writing step by step, thus improving writing skills Motivation to improve increases. Learners repeat the steps in the writing process and try to improve and correct the content and explanation of the story rather than accuracy or grammar. The cyclical and iterative processes and multiple modalities provided by DST provide a safe environment for students to take risks and experiment with new forms of language constructs.

Besides improving language skills, DST can strengthen the core competencies in the 21st century, such as problem-solving ability, critical thinking, collaborative learning ability, creativity, and multiple literacy skills. Furthermore, the process of selecting topics, creating and sharing stories in a self-directed manner is reported to enhance interest and motivation for learning and induce learners' active participation in learning [9]. In particular, while carrying out a project, learners are transformed into active self-directed learners who can autonomously select a topic, create a storyboard, and complete the final product. As a result, the learners can experience the transition from the standpoint of recipients who passively accept information and knowledge into that of producers who actively create knowledge that is meaningful to themselves in a real context [10].

However, simply performing DST tasks in the classroom does not automatically guarantee that all the students will improve their English language skills. In order for DST to be successfully implemented, the role of teachers is as important as the active participation of students. Throughout the whole process of DST process, teachers guide the composition and production of digital stories and provide feedback on the students' scripts [11]. In particular, introduce students to technology and provide appropriate guidance to students who have difficulty using technology tools and resources. However, since the main focus of DST is not the technology itself, but the content of the story, it is essential that teachers emphasize the content of the story and the writing process rather than the technical components of DST [12]. It is important to choose interesting topics. Teachers should carefully and systematically plan DST assignments so that learners are interested and continually involved in DST activities.

3. Methods

3.1 Background

This study was conducted in a course entitled "Graduation Project", which is a mandatory course for graduation for English majors at a cyber university in Seoul. The enrolled students had more than 10 years of experience studying English before entering the university, and studied further for 2-4 years majoring in English at the cyber university. Despite the long-term English learning experience, most of the students had low confidence in their English proficiency, especially in speaking and writing in English. However, they were eager for learning English with a strong desire to express themselves more fluently in English. After graduation, they hoped to improve their English skills by continuing to practice speaking and writing on their own. To meet the needs of these students, a DST project was adopted since DST has the advantage of converging and promoting four student-centered learning strategies including student participation, reflection on deep learning, project-based learning, and technology integration.

3.2   Designing Lesson Plans

In order to facilitate students' digital story project, an online course consisting of nine sessions was developed. As Table 1 shows, the course was divided into three stages: pre-production, production, and post-production. Each session, approximately 30-mininutes long, was recorded with Camtasia Studio 8 screen capture software. After taking the lectures for each stage, the students performed the assignment sequentially to complete their final product.

Table 1. Weekly lesson plans

| Stage	Week	Session	Contents	Assignment
Pre-production	1	Introduction	Concept and process of DST	Brainstorming about one's own project
	2	Personal narrative	Characteristics of Personal narrative	Choosing a topic
	3	Organizing ideas	Free writing, outlining	Making an outline
	4	Process writing	Writing process	Writing a first draft
	5	Revising and editing	Revision strategies	Revising the first draft
Production	6	Creating a storyboard	Outlining the flow of digital stories	Oral presentation practice
	7	Video production	Recording software	Recording narrations
	8	Making a PPT	PowerPoint	Completing PPT presentation
Post-Production	9	Publishing	Final editing	Submitting final production

In the pre-production stage, the concept and implementation procedure of the DST project were presented to the students. Since DST was an unfamiliar activity to the students, the lecture, along with an explanation of basic concepts, presented a variety of video and photographic materials to help them carry out the project smoothly and to induce interest and motivation for learning. Additionally, the actual digital story samples submitted by previous students were provided as models to emulate so that students could clearly understand what the DST project is and how to perform the project. During the script writing session, the students were guided to develop their stories through a process writing approach. The basic concepts of the process writing approach were introduced with model scripts created by the students, and then a multiple writing process was demonstrated step by step.

In the production stage, a hands-on approach was adopted to minimize the technical difficulties that students might confront while videotaping their speeches and making PowerPoint presentations, so that students could perform their own project without worrying about technical problems. In the post production stage, a guideline was presented about how to submit the final product, and the professor made the final evaluation from was

provided.
3.3 Performing Digital Story Project

The students, taking weekly lectures over 9 weeks, performed a DST project. following 5 steps as shown in Figure 1. Since this multi-step DST project was individual based, the students worked on the task at each step on their own except at step 1 and 2, where the professor provided feedback on the student-selected topic and drafts of the script.
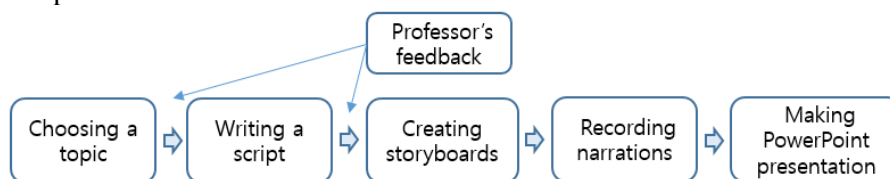
Figure 1. Digital story creation process

Step 1 choosing a topic: The students selected a topic closely related to their personal experiences such as travelling, family relationship, and English learning, and wrote a brief description of their story. The professor reviewed the proposals and provided feedback regarding the appropriateness of the topic. Based on the feedback, the students finalized their topic and wrote an outline of their story using a template. After receiving the professor feedback, the students revised and completed the outline.

Step 2 writing a script: The students wrote a first draft of the story based on the revised outline. The professor provided feedback on the first draft focusing on the contents and the organization, and the students revised the first draft and submitted it. This time, the professor gave feedback on linguistic features of the draft. After repeating revision multiple times, the students completed the 500-700 letter long final script.

Step 3 creating storyboards: After collecting images and audios related to the story to be presented, the students created storyboards suitable for the composition of their own story. outline the flow of the digital story with images, pictures and sounds that they wanted to include in their final product

Step 4 recording narrations: The students practiced their presentation for at least 2-3 days using the script completed in the previous step. If deemed necessary, they revised the script at this step. After practicing speaking enough to be confident in the presentation, the students videotaped their presentation several times with their smartphone.

Step 5 making PowerPoint presentation: The students selected the most satisfactory one from the videos they filmed and then completed the project by inserting the videos, scripts, and images into the PowerPoint.

3.4 Data Collection and Analysis

A questionnaire was administered to explore the students' perceptions about the DST project. A questionnaire consists of 7 items on a 5-point Likert-scale from 1 (strongly disagree) to 5 (strongly agree). The items address two areas: attitudes toward DST and effectiveness of instructional interventions. Open-ended questions were added to each item to understand students' perceived challenges and benefits of the DST project. Mean score analysis was conducted on the responses to the questionnaire, and some significant comments from the open-ended questions were reported.

4. Results and Discussion

At the end of the semester, 34 out of 46 students submitted the project and 33 students completed the questionnaire. As shown in Table 2, the students' overall attitude toward DST was very positive (M= 4.27). The students perceived that digital stories were very helpful in improving their writing and speaking English skills (M= 4.56) and helpful to enhance their motivation to learn English speaking and writing (M= 4.31). However, for the question regarding the helpfulness of DTS in increasing their interest in English learning, the mean score was 3.94, which was above the average but relatively low compared to the score of learning motivation. These results suggest that DST played a positive role in improving students' English proficiency,

their interest in learning, and their engagement.

Table 2. Overall attitudes toward DST

Items	Mean	SD
DST was helpful to improve my English writing and speaking skills.	4.56	0.59
DST motivated me to write and speak better.	4.31	0.76
DST was helpful to increase my interest in learning English.	3.94	0.63
Total	4.27	0.66

Table 3 shows that the students also had positive attitudes about the effectiveness of the instructional interventions applied to facilitate their performance of the DST project (M=4.21). In particular, the mean scores of the answers to the multiple-draft approach (M=4.54) and video production activities (M=4.42) were effective was the highest. The students mentioned that they were able to improve their writing by revising the script several times with the professor's feedback, and it was helpful to increase their confidence in English writing. They also stated that they could compensate for his English speaking shortcomings because he had the opportunity to repeat pronunciation and speaking practice through the recording process. The templets (M=4.06) and lectures (M=3.83) scored lower than the multiple-draft approach and video production activities, but they were perceived helpful in carrying out the project. These positive responses suggest that instructional interventions have successfully supported the students' DST projects.

Table 3. Effectiveness of instructional interventions

Items	Mean	SD
Lectures were effective to perform my DST project.	3.83	0.81
Templets were effective to perform my DST project.	4.06	0.74
Multi-draft approach was effective to perform my DST project.	4.54	0.49
Video production was effective to perform my DST project	4.42	0.51
Total	4.21	0.64

As shown in Table 4, of the five steps taken during the implementation of the DST project, the students perceived that script writing was the most challenging (31), topic selection the second challenging (28), and recording narrations the third most challenging (27). However, contrary to the students' concerns at the beginning of the semester, fewer than half of the students felt that making PowerPoint (14) and creating storyboards (11) imposed challenges on them.

Table 4. Students' perceived challenges

Step	Challenging	Not Challenging
Writing a script	31	2
Choosing a topic	28	5
Recording narrations	27	6
Making PPT presentations	14	19
Creating storyboards	11	23

Considering that students have no experience in writing more than 500 words and lack of confidence in English writing, it seemed natural that they felt difficulties in script writing. However, it was an unexpected result that selecting a topic imposed challenge on them. Most students liked having freedom to choose a topic, but a considerable number of students expressed it was challenging to decide the topics to focus on. Some

students stated that there were too many things they wanted to tell, and others mentioned that their topic seemed to be too trivial to talk about. In order to prevent the situation where students cannot start writing because they can't decide on a topic, it can be helpful to suggest several topics that the professor has decided in advance and have them select the appropriate one [13].

On the other hand, some students had difficulty in the narration recording process. It was not due to technical difficulties such as inexperience in digital device operation. As many students indicated, it took too much time to repeat the videotaping several times until they were satisfied. Worse still, since feedback was not given while they were videotaping their oral presentation, they had difficulties in confirming whether the pronunciation or intonation was correctly presented. This result suggests that instructors need to provide educational tools such as Text-to-speech to support the students' oral presentation while performing DST [14].

Relatively a small number of students responded that making PPT presentations and storyboards were difficult. Since most of the students had never created a PPT or had written a storyboard, they were concerned about dealing with them properly before the start of the project. However, after taking a lecture adopting a hands-on approach, they found the task easier than expected, and some students reported that they enjoyed working on PPT and the storyboard.

Although there being some challenges while undertaking the DST project, the students who completed the project expressed a very strong sense of accomplishment. Many of the students appreciated the fact that they were able to learn English in a very meaningful way since they had opportunities to tell what they wanted to say based on their actual experiences. Since dealing with the stories based on their own experiences, the students got deeply immersed into the project, which increased motivation to learn on their own. In fact, many students mentioned that they reviewed what they had learned in class or browsed the dictionary or the Internet looking for appropriate, correct, or better expressions to improve their scripts. Going through this process, the students seemed to experience a kind of autonomous learning beyond the passive learning of simply memorizing vocabulary and sentence patterns. As they tried to express their stories better, the students became more interested and confident in studying English, which led some students to realize that English is actually a means of expressing themselves.

5. Conclusion

This study explored cyber university students' perceptions and attitudes on the educational usefulness of DST project to improve their English writing and speaking skills. The results reveal that most of the students' attitudes were positive. They responded that the DST project was helpful to increase their English skills, learning motivation and interest in learning English. The students perceived that the process writing approach and videotaping tasks were very effective to develop their English writing and speaking skills. Although many students had difficulties selecting a topic and writing a script in the initial stage, they could handle with these challenges with the help of professors' feedback and successfully carry out their projects. After completing the project, most students expressed a strong sense of accomplishment. These experiences of the students suggest that the DST project effectively met cyber university students' learning needs for English and facilitate their English learning.

Although this study highlighted some positive effects of DST on improving English learners' writing and speaking skills, the results are not conclusive since the research was conducted in a short period of time on a single project with a small number of participants. In addition, since the data were collected only from the students who successfully completed the project, the results may be biased. To understand the whole picture of DST, further research needs to be conducted including the students who failed to finish the project.

REFERENCES

[1] G. Yan, and X. Zhao, "A REVIEW OF THE USE OF STORYTELLING TO IMPROVE STUDENTS'ORAL PROFICIENCY IN EFL TEACHING," *European Journal of English Language Teaching,* Vol. 5, No. 1, pp. 44-61, 2019. DOI: https://doi.org/10.5281/zenodo.3334120

[2] M. Rahimi, and S. Yadollahi, "Effects of offline vs. online DST on the development of EFL learners'

literacy skills," *Cogent Education,* Vol. 4, No.1, 2017.
DOI: https://doi.org/10.1080/2331186X.2017.1285531

[3] H. S. Mirza, "Improving university students' English proficiency with DST," *International Online Journal of Education and Teaching,* Vol. 7, No. 1, pp. 84-94, 2020.
DOI: https://doi.org/10.1007/sl 1423-008-9091-8

[4] L. Lee, "Digital news stories: Building language learners' content knowledge and speaking skills," *Foreign Language Annals,* Vol. 47, No. 2, pp. 338-356, 2014. DOI: https://doi.org/10.1111/flan.12084.

[5] K. Hava, "Exploring the role of DST in student motivation and satisfaction in EFL education," *Computer Assisted Language Learning,* Vol. 36, No. 2, pp. 1-21, 2019.
DOI: https://doi.org/10.1080/09588221.2019.1650071

[6] P. Nampaktai, and W. Suksiripakonchai, (2018). "The Use of DST in Fostering English Speaking Ability of Thai Secondary Students," *Veridian E-Journal,* Vol. 11, No. 4, pp.1192-1206, 2018.

[7] W. Y. Hwang, R. Shadiev, J. L. Hsu, Y. M. Huang, G. L. Hsu, and Y. C. Lin, "Effects of storytelling to facilitate EFL speaking using Web-based multimedia system," *Computer Assisted Language Learning,* Vol. 29, No.2, pp. 215-241, 2016. DOI: https://doi.org/10.1080/09588221.2014.927367

[8] M. E. Castañeda, ""I am proud that I did it and it's a piece of me": DST in the foreign language classroom," *CALICO Journal,* Vol. 30, No. 1, pp. 44-62, 2013. DOI: https://doi: 10.11139/cj.30.1

[9] Q. Wei, P. Siriyothin, and A. P. Lian, "Improving Chinese University EFL Students' Speaking Skills through DST," *Suranaree Journal of Social Science*, Vol. 12, No. 2, pp. 47-68, 2018.

[10] J. W. Hur, and S. Suh, Making learning active with interactive whiteboards, podcasts, and DST in ELL classrooms. Computers in the Schools, Vol. 29, No. 4, pp. 320-338, 2012.

[11] M. Kearney, "A learning design for student-generated DST," *Learning, Media and Technology,* Vol. 36, No. 2, pp. 169-188, 2011. DOI: http://dx.doi.org/10.1080/17439884.2011.553623

[12] B. S. Pardo, "DST: A case study of the creation, and narration of a story by EFL Learners," *Digital Education Review,* No. 26, pp. 74-84. 2014.

[13] F. O. Salamanca González, "Personal narratives: A pedagogical proposal to stimulate language students' writing," *How,* Vol. 22, No. 21, pp. 65-79. 2015. DOI: http://dx.doi.org/10.19183/how.22.1.134

[14] D. Moon, "Development and evaluation of an English speaking task using Smartphone and Text-to-Speech," The Journal of the Institute of Internet, Broadcasting and Communication (JIIBC), Vol. 16, No. 5, pp. 13-20, October 2016. DOI: https://doi.org/10.7236/JIIBC.2016.16.5.13