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Improving EFL learners' English skills through computer-mediated language strategy

Yoon, Tecnam 🔀

Chuncheon National University of Education, Republic of Korea (yoon@cnue.ac.kr)

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Abstract

The purpose of this qualitative research study aims to seek the academic potentials of digital storytelling as an English learning material in an EFL elementary school class in Korea. In order to find out the benefits and challenges of digital storytelling in EFL class, a qualitative research method was used, and research was conducted for 12 week in a rural elementary school. Digital storytelling technique was selected and utilized in the after-school English class, as main teaching and learning tool. Out of 31 students in a class, 10 students were chosen as focal participants. During the research period, student's reflective self-evaluation log, teacher's lecture report, classroom observation and in/formal interviews with focal students and the teacher were also collected to figure out the factors which gave an influence to students and the teacher. After analyzing all the data in a qualitative way, the results showed that participants indicated overall improvement in English learning in terms of reading, writing, listening and speaking. In addition to English proficiency, the learning attitude and motivation toward English learning was elevated, followed by the increase of their critical, creative thinking, and digital literacy skills.

Keywords: digital storytelling; English as a foreign language; Computer-Assisted Language Learning; ESL; EFL

Improving EFL learners' English skills through computer-mediated language strategy

1. Introduction

For many years since English became a required subject in public schools in Korea, a variety of teaching approaches and methodologies have been adopted, including Audio-Lingual Method (ALM), Direct Method (DM), Grammar Translation Method (GTM), or Total Physical Response (TPR) to enhance students' English proficiency. Although a demand for communicative language ability has been increasing, English teaching still focuses on grammatical structure patterns and vocabulary through the repetition and memorization of expressions or dialogues. To follow the trend of global English instruction, therefore, the Department of Education (DOE) revised the National English Curriculum in 2004. According to the DOE (2004), the subject of English at school should be taught based on the communicative approach; (1) fostering the ability to use English, (2) utilizing task-based learning, (3) devising instructional techniques appropriate for open education, (4) cultivating a patriotic sentiment and a view of the world, and (5) the realization of learning and teaching English, according to proficiency levels. Literally, the DOE put a strong emphasis on a method of communicative language teaching in delivering English lessons.

Against all expectations, the objective of the seventh National English Curriculum in Korea encountered several problems when it was applied into traditional classroom instruction. For example, the unitary teacher-centered pattern of English instruction remained the same as before, still placing great stress on the development of linguistic competence. To improve speaking and listening competence, an average 40-minute class with a Korean-speaking English teacher was still insufficient for EFL students to have authentic English exposure (Kim, 2008; Lee & Chang, 2012). In addition to insufficient class time, students did not have any physical places to use English to interact with their peers or others for communicating. Consequently, the effective learner-centered learning and teaching was not realized, and their purpose of learning English was not transferred nor reflected on their everyday life.

As current technology in language education continuously developed and made steady progress, it created a new medium of communication. Named 'CALL' (Computer Assisted Language Learning) or 'MALL' (Multimedia Assisted Language Learning) model was introduced in English teaching in order to cover weaknesses of traditional English education, and to promote students' communicative ability. CALL is regarded as a wide range of ICT applications and approaches to teaching and learning foreign languages. The traditional patterned drill practice CALL program was popular in the 1960s and 1970s, and today recent CALL features include learning in an online/virtual learning environment, and web-based distance learning. Due to the development of ICT, it has become an important new medium in a second and foreign language classroom. The role of CALL/MALL was intended to maximize the effects of English teaching and learning through computer or multimedia. As one of strategies to CALL/MALL, digital storytelling first emerged in 1995 by Joe Lambert who was a founder of the Center for Digital Storytelling.

Digital storytelling, as it is defined in the work of Banaszewski (2005) is "the practice of combining personal narrative with multimedia (images, audio and text) to produce a short autobiographical movie." It can be shared electronically all over the world by means of computer and the Internet. Many previous research studies (Blas, Paolini, & Sabiescu, 2012; Hathorn, 2005; Heo, 2009; Huffaker, 2004; McLellan, 2007) have already revealed that digital storytelling has distinctive features that develop skills of English language as well as improve other areas such as digital literacy skill, a part or interconnection of other subjects. In terms of English learning, Hull (2003) and Lathem (2005) pointed out it improves students' communicative skills, encourages their creative/critical thinking, and increases their motivation and interest, as well.

1.1 Rational of the Study

Some research studies conducted previously have proved that the use of digital storytelling in the ESL/EFL classroom showed two distinctive features after its intervention (Behmer, Schmidt, D., & Schmidt, J., 2006; Yang & Wu, 2012). One of the features that digital storytelling produced effect on the English class was the change of the learning environment. It was found to be successful in changing students' degree of confidence, interaction, and motivation. Partially influenced by digital storytelling, students in the ESL/EFL class came to gain a positive attitude toward learning English (Yoon, 2012), as well as self-confidence and motivation toward using English inside and outside the classroom (Burgess, 2006; Gravestock & Jenkins, 2009; Li & Morehead, 2006).

The other distinctive feature was that digital storytelling had an influence on the development of students' learning progress. Research results from Daminco (2006), Di Blas, Garzotto, Paolini, and Sabiescu (2009), and Ohler (2008) indicated that students' academic development in English proficiency was identified through learning with digital storytelling. Hull & Katz (2006) valued that digital storytelling functioned as an alternative learning material in ESL/EFL class to promote students' overall English ability. In addition to increasing English skills, some studies also concluded that students viewed digital storytelling as a useful resource in learning English, since it provided an authentic personal learning experience and various technology mediums in which young digital natives today are interested (Felix, 2008; Sadik, 2008; Sanchez-Laws, 2010; Thesen & Kara-Soteriou, 2011).

There have been a few research studies on the effects of digital storytelling in Korean EFL context. Xu (2010) examined whether the activity of writing for digital storytelling in virtual worlds could affect learners' writing self-efficacy, and compared two groups which consisted of an online and offline group. The results showed that the overall score of writing self-efficacy in online group was significantly higher than that of offline group. Therefore, she concluded that writing for digital storytelling in virtual worlds was more effective in improving writing self-efficacy.

Another study by Lee (2008) indicated that digital storytelling was a powerful educational tool when it was used appropriately. She found digital storytelling had provided a strong motivation to impact students' learning, and directly contributed to learning objectives related to competition, cooperation, and group work. While, Jung (2010) explored how digital storytelling and face-to-face storytelling instruction could be integrated in the classroom and produce educational effects for the change of EFL learners' comprehensibility and affective domain. The results revealed that the instruction using digital storytelling showed a significant difference in terms of affective factors, interest and learning behavior in English, and displayed a positive effect to elementary students, leading their active participation in class.

To sum up the results of the studies above, the application of digital storytelling encouraged students to improve their English ability and to develop their motivation and interest toward English learning. Thus, utilizing digital storytelling was recommended as an effective learning strategy in teaching EFL students.

1.2 Purpose of the Study

In order to find out the solutions and make suggestions to rural English classes in Korea, the researcher made a decision to visit a local elementary school in a rural area of Jooyoung, and to conduct a research study with a local English teacher and his students. Prior to the study, I kept in mind that English should be taught in a communicative and meaningful way, and students in a rural area also have a right to receive a good quality education. When I met an English teacher who was a former co-worker of the researcher, I explained my teaching philosophy on English teaching, the concept of digital storytelling, and finally how the digital storytelling activity would fit the national English curriculum standard. Below is the English standard for the elementary level by Korean National Curriculum Information Center (2013).

English, at the elementary school level, should focus on developing the ability to understand and express basic language used in everyday life, which is the basis of communication. Technical aspects of language, especially spoken language, are essential. With regard to written language education, students should be able to read and write simple works which are composed in connection with spoken language education. Therefore, the objective of elementary English is to increase students' interest in English and foster their basic ability to comprehend and express themselves in English.

- > Acquire interest in English
- Build confidence in basic use of English
- Build a foundation for basic communication in English in everyday life
- Understand foreign customs and cultures through English education."

Based on the English standard of elementary English education, we also discussed the methods on how he could integrate digital storytelling into his English class. Showing the results from previous research data, I suggested that English teacher would adapt and pilot digital storytelling as a new material of teaching and learning English in his after school class. Finally, the lesson plans and flows using digital storytelling were planned and designed by both me and English teacher in order to figure out its benefits and challenges, and students' perspectives on that. Therefore, the main purpose of the study is to examine the effectiveness of digital storytelling in English class and the students' perspectives on digital storytelling. In addition, this study seeks to gauge whether it helps Korean EFL elementary school students in a rural area develop their overall English ability, and their learning attitude in learning English.

Specifically, this study aims to find out whether students using digital storytelling can demonstrate any improvement in their English proficiency in the area of reading, writing, listening and speaking. Additionally, this study explores students' perspectives and perceptions on the development of self-confidence, interest, satisfaction, motivation for digital storytelling, and how it affects their learning process. In order to answer those questions, the researcher conducted a mix-method research method through both a quantitative and qualitative analysis. By doing so, the present study is intended to provide the benefits and challenges of digital storytelling as computer assisted language learning strategy, and suggest pedagogical implications for the English teachers in a rural EFL school.

2. Review of Literature

2.1 Storytelling and learning

In the early days, stories were a part of cultures of people all over the world, delivered by word of mouth in a rich variety of ways. The art of storytelling was one of the oldest methods of communicating ideas and learning as they were passed down from generation to generation (Bell, 2002; Carter, 1993; Meadow, 2003). A form of storytelling was mainly oral based, combined with gesture and expression. Words spoken from one person were delivered to another in an effort to communicate a message or feeling. It was not until a writing system was invented later that stories were recorded, transcribed and shared widely among people. The commonly used medium with storytelling at that time was the novel or the storybook.

Gere, Kozolvich, and Kelin (2002) defined storytelling as the act of using language and gesture in colorful ways to create scenes. McDrury and Alterio (2003) described storytelling as a uniquely human experience which enables people to convey using words. Kang (2004) and Kim (2000) stated that storytelling is used not only for communication purposes, but also for teaching literacy, cooperative learning and critical thinking skills, as well as for building knowledge of different contexts. They stressed that to write the stories based on their prior experiences improved their writing proficiency as well as facilitated recognition of the meaning and

understanding of the context. Plus, by presenting and listening to a story, students could meaningfully increase communicative competence.

Tingöy, Günefler, Öngün, Demirag, and Köroglu (2006) identified that the storytellers share some values with the listeners, and through this, both of them can build intercommunication. In other words, because storytelling has the unique capability of helping the students interact as listeners or as storytellers, storytelling promotes student skills in listening, reading and comprehension

2.2 Change of Storytelling

As technology has made remarkable progress in teaching and learning environments, storytelling is also supported by various multimedia tools embedded in learning. Adding such multimedia components makes a story more mediated and digitalized through which the story becomes richer in content and application. The action referred as to the delivery of the story can be said as 'Digital Storytelling'. Today, digital storytelling is the modern concept of the ancient art of storytelling. Digital stories derive their strength by intermixing images, music, narrative and voice, thereby giving deep dimension and vivid color to characters, situations, experiences, and insights (Tingöy et al., 2006). In addition to this, digital storytelling provides rich teachable moments to help students become digital, and media literate. Digital stories can be made using PowerPoint, Windows Media Player, commercial animation software, or even special digital storytelling software such as Photo Story 3. The common denominator of digital stories is that they tell the story from the perspective of the storyteller, using technology to deliver the message.

2.3 15 Principles of Digital storytelling

There are a lot of factors that can affect the learning process of students in an ESL/EFL setting, such as teaching or learning styles, motivation, interaction, and many more. One of the most significant factors to be considered is the choice of proper learning material, which may directly impact the learning outcomes. As explained above, digital storytelling as a learning material has shown its positive effects in many research studies. Thus, when adopting and using digital storytelling in the classroom, teachers are asked to keep in mind how and why digital storytelling can contribute in students' learning in ESL/EFL context.

Basically, there fifteen principles exist in the use of digital storytelling in class, which was adapted and developed from Yoon (2012)'s definition. They can be simply called 'I AM GOING TO A CAMP' which literally stands for 'Interactive, Authentic, Meaningful, Graphical, Originative, Innovative, Narrative, Goal-directed, Technological, Organizing, Associative, Collaborative, Appealing, Motivating, and Productive'. Following are the detailed explanations of each item on how digital storytelling can make students in a class feel like having a camp.

- Interactive: as digital story is shared with each other, it is possible for student(s)-student(s), student(s)-teacher, the whole class-teacher to have continuous interaction during the learning process.
- Authentic: students can create and share their real, personal, meaningful story with others.
- Meaningful: digital story encourages students to become more conscious of the ability to tell their real story which catches the attention of the audience.
- > Graphical: digital story is made up using a computer program which contains visual display elements.
- > Originative: digital story includes from students' previous experience, thought and idea to any topic related to their life.
- Innovative: digital story offers an alternative path to language learning and disseminates simulation and storytelling approaches to language teaching and learning.

- Narrative: digital story is also a genre of narrative which shows a series of facts or events.
- ➤ Goal-directed: digital story as project-based learning makes students set a learning goal and become more persistent learners.
- Fechnological: students can gain experience with dealing with digital devices and become more proficient at the technical aspects of making their own story.
- Organizing: computer programs help students to organize their digital stories by creating, editing, add and deleting.
- Associative: students can link their ideas and experiences in creating digital storytelling and this helps students to enhance the learning process.
- Collaborative: by sharing with each other, digital story helps students to work collaboratively as a team or group.
- Appealing: digital story provides the pleasure of learning more than any other factor. Students are expected to gain high academic motivation, engagement, and achievement for further learning.
- Motivating: digital story allows students to gain personalization of the learning experience by increasing motivation.
- Productive: students can make their own voice, and produce their desired outcome, through their juxtaposition with visuals, recorded narratives and sounds which deliver their intended message.

3. Methods

The purpose of the current study is to seek the educational potentials or any challenges in using digital storytelling as a language learning activity in the context of a Korean elementary school in a rural area. As a classroom-based research, this study focuses on the sixth grade students and their English teacher's views and insights into digital storytelling as a tool for effective language learning and teaching. For this research, therefore, a qualitative research method was chosen to satisfy its intention. Student's reflective self-evaluation log, teacher's lecture report, classroom observation and in/formal interviews with focal students and the classroom English teacher were also conducted to figure out the factors which gave an influence to students and the teacher.

3.1 Curricular with Digital storytelling

In order to integrate the effects of digital storytelling into the English curriculum during the research from June to August, 2014, an introduction session was arranged by the researcher to help the main English teacher have a clear understanding about all of the research procedures. The main purpose of the introduction session was for the teacher to have further understanding on the effective use of digital storytelling in the class. Thus, the researcher set up a goal of the introduction session as follows:

The English teacher would be able to help students

- > to figure out digital storytelling as an effective learning tool in English class
- to understand the elements of digital storytelling
- > to find out the positive effect of digital storytelling for learning
- > to make a connection to students' learning into their life
- > to produce a creative multimodal digital story using Photo Story 3

> to save the completed work and to share it

3.2 Students' reflective self-evaluation logs

Students were asked to keep a reflective self-evaluation log every two weeks. It was intended to investigate students' perceptions and thoughts of learning English with digital storytelling. All of the questions in the reflective self-evaluation log were composed of open-end style, enabling each student to reflect as individuals on the process of creating their digital story.

3.3 Interviews with students' group and English teacher

Even though the questionnaire was used to find out about students' perceptions and attitudes toward English learning with digital storytelling, group interviews were also carried out to explore the students' own reflections more in depth. Through the group interview, the participants were encouraged to express their thoughts on the use of digital storytelling in English class in more detail rather than by completing a questionnaire. A total of ten students as interviewees participated. However, in order to listen to a wide range of ideas, thoughts, and comments from the participants, a group interview method was chosen in that it could provide a comfortable environment for students to communicate. In fact, it has been researched that a group interview method, particularly with young children can make it possible obtain greater depth and breath in responses than individual interviews (Lewis, 1992; Gibbs, 2012; Cohen, Manion, & Morrison, 2007). Bearing this in mind, group interviews were conducted total ten times during the research, and three students as a group carried out an interview per one time. On the other hand, interviews with the English teacher were also conducted twice to investigate his thoughts and feelings during the implementation of digital storytelling. The first interview was done at the beginning of the research, and the other conducted after the observations were completed. The interview was semi-structured and was focused on how effectively digital storytelling was being used in class.

3.4 Classroom observation

Ten classroom observations were conducted in order to examine the activities and interactions as they were happening during the class. Field notes about what was observed were written, the researcher played as a participant observer, and the essence of the information was documented through notes. During the classroom observation, particular attention was paid to student(s)-student(s) interaction, student(s)-teacher interaction, their language use, the students' patterns of learning using digital storytelling, and overall learning atmosphere. Jottings notes and artifacts from the class were also collected for data analysis.

3.5 English teacher's lecture review reports

A lecture review report was kept by the English teacher every two weeks because it was truly an expression of the teacher's opinion of utilizing digital storytelling into English curriculum. The entries of the report were employed as a means of gathering information on English teacher's opinions, and his perspectives on integrating digital storytelling into the regular English class.

4. Findings

4.1 Results of students' self-evaluation logs

During the digital storytelling class, each student was asked five times every two weeks to fill out a reflective self-evaluation log with the object of identifying any changes of affective factors. A reflective self-evaluation log was designed to help students increase the value of the learning experience by facilitating

meaning out of the process they were engaged in. Through a reflective self-evaluation log, the researcher could figure out how it helped the learners to connect the new material of learning to their prior knowledge and a better understanding for English learning. After categorizing the codes extracted from their logs, it was shown that there were four main themes that were interest, participation, understanding, and self-confidence for learning English using digital storytelling. Table 1 shows the result of students' responses.

Table 1 Results of Students' Reflective Self-Evaluation Logs

Contents				
Growing interest for	Active participation of the	Better understanding of	Gaining self-confidence	
English learning	class	the content	toward using English	

4.2 Results of classroom observation

Students' attitudes in the class were carefully observed. Field notes, jottings and artifacts were kept and gathered and then transcribed if needed. The transcripts were reviewed in conjunction with the field notes taken during the observation. Any challenges or difficulties encountered by students frequently were noted as an important issue for further classroom instruction and development.

4.3 Results of Interviews with English teacher

When asked the benefits of digital storytelling in EFL English classroom, the English teacher noted that the potential benefits of digital storytelling are its positive educational effects on the sixth grade ELL students' attitudinal changes in learning English. By creating multimodal digital storytelling, students were able to have deeper understanding of the lesson, which led to their voluntarily active class participation. He also emphasized that digital storytelling made students engaged in the content of the story not only by promoting motivation and interest, but also by providing confidence in learning English.

The next question inquired to the English teacher was about any challenges of integrating digital storytelling into the English curriculum. He answered that there were a few challenges found during the class. One of them was the complexity of the tasks which might be the most difficult issue to address in the classroom. Students needed to learn such four integrated skills as reading, writing, listening and speaking, and digital storytelling was helpful enough to cover those goals. However, he admitted that while teaching English for a communicative purpose sounds desirable and significant, to focus only on such aspects may prevent students from gaining good test scores. In this sense, he argued that the test-oriented learning, or learning for the test should be changed in learning English or any foreign languages at school. He also expressed many concerns about the lack of class time and learning tools when integrating digital storytelling into the regular English class. But for any assistant teacher or staff, it might be almost impossible to run a class of more than 30 students.

4.4 Results of interview with students group

In terms of a question about their satisfaction with digital storytelling in English class, students also uttered that creating digital stories helped them to understand the subject content better. A few students had the same idea that they were able to gain confidence, and positive outlooks for further English learning, and were satisfied with learning effect using digital storytelling. They also commented that they have become more self-aware in improving overall English ability. One student also showed a positive attitude and acknowledged that the class using digital storytelling was very useful and helpful.

4.5 Results of English teacher's lecture review reports

In order to find out English teacher's attitudes and feelings about digital storytelling, the task of writing a lecture review report was given to him five times throughout the research period. Similar answers from students' reflective self-evaluation logs were then categorized into five sections that explained how he felt on digital storytelling during the lesson.

 Table 2

 Categories of English Teacher's Lecture Review Report

Category	Review Comments	
Helpfulness	1. Digital storytelling is helpful to overall English learning	
Pleasure	2. Digital storytelling makes English class fun.	
Interest	3. Digital storytelling provides more interest in learning English.	
Motivation	4. I want to study English more with digital storytelling	
Necessity	5. Digital storytelling is necessary in English class.	

He agreed that one of the most beneficial effects of digital storytelling was helpfulness in learning. Next, he thought by gaining a sense of satisfaction and confidence, students were strongly motivated, which aided them to have a desire for further English learning. Based on some excerpts from his lecture review report below, it became much clearer why he felt satisfied with digital storytelling.

5. Conclusions

5.1 Summary of the Research

Results from the research findings mostly from the qualitative data which consisted of students' reflective self-evaluation logs, English teacher's lecture review reports, classroom observations and interviews with students and English teacher showed that both English teacher and the students considered digital storytelling activity interesting and useful for helping to teach and learn English in a pleasant manner. It was also revealed that using digital storytelling can not only provide opportunities to practice English for a communicative purpose, but also engage students in enjoyable learning experiences. After taking all the factors into consideration, the researcher reached this conclusion that the students had a positive learning motivation toward English learning using digital storytelling, and were also satisfied with its educational effectiveness.

5.2 Other Benefits of Digital Storytelling in EFL Classroom

Boosting Self-Confidence and Positive Outlook - Through a class activity with digital storytelling, students answered that digital storytelling has the potential to develop their creative confidence in English learning. It was evident that digital storytelling helped students achieve the ultimate learning objectives on why they should learn English, and this strengthened their English skills and self-confidence. Because students produced stories based on their prior knowledge and experience, they could practice skills for self-expression and sharing emotions with peers.

Doing Student-Centered Learning - In terms of students' view, the way of learning English in after school class was absolutely different from a conventional English class. Through a story-making project, all the students were encouraged to create their own story, by working as a group. The English teacher just facilitated the whole flow and played an instant feedback or assistant provider. Thus, the key agents in the learning process were the very ELL learners, not the English teacher, who has been regarded as a center of the class in a traditional classroom setting. By creating a story by themselves and solving a problem together, students could build self-awareness and achieved student-initiated learning.

Promoting Active Learning - Students responded that the digital storytelling project helped them to think that they could do something new and special, which they had never imagined they could do. Traditionally, as students got used to a rote learning led by a teacher, they had literally been a passive learner in English class. For the English teacher, it was even more important to teach grammar and vocabulary than to encourage EFL students to have a positive attitude. However, it was proved that the digital storytelling activity contributed greatly to the success of English language learning, as well as to a positive attitude toward the language and its use. Students felt that instructional activities and materials with digital storytelling was stimulating and exciting, and digital storytelling played an important role to promote students' active learning as a way to improve their conceptual understanding and thinking skills.

Increasing Interaction and Collaboration - One of the benefits of digital storytelling was that it made English class active and interactive. As students worked in a small group in a collaborative and cooperative manner, they could not but interact continually by discussing and sharing their ideas to have the story completed. The final production contained each student's personal perception and thoughts which reflected their previous experiences and life story. By sharing each story in class, other students were also able to gain indirect experiences and to think creatively or critically based on the different view point.

Fostering Creative and Critical Thinking - When it comes to building students' creative and critical thinking, learning with digital storytelling actively engaged students in the investigation of new knowledge. By working collaboratively with peers, each student could foster both their creative and critical thinking skills, which made them become self-directed learners later. Students also learned to monitor and improve their thinking skills, which are significant for success and achievement in learning. The majority of students answered that they loved the digital storytelling project, and learned from each other as they presented, shared and listened to their peers' production, and later watched the complete production. The English teacher also confirmed that digital storytelling was a meaningful instructional activity in class which helped to promote internalization of creative and critical thinking skills. In particular, he stressed that the digital storytelling activity was a powerful tool in that it enabled students to become not just receivers of information, but users of information.

Developing Multiliteracy Skills - For most of the students in this research, introducing digital storytelling as a new technology assisted learning into English class created a sense of pleasure or excitement. With proper scaffolding from the teacher, in combination with a supportive and collaborative environment, students showed gradual development. Using technology as a strategy and keeping the project-based learning encouraged students to enhance their multiliteracy skills, which also contributed to an increase in motivation for these students. It would be a lot better to enhance students' multiliteracy if teachers could develop their technical proficiency in multiple communication modes, using the prevalence of technology.

Heightening Motivation - Along with the overall improvement of English proficiency, the use of digital storytelling as a main learning material showed an increased level of satisfaction and motivation, as well as students' class participation. Regardless of the test results, it is significant to pay attention to the fact that digital storytelling was to promote students' motivation and encourage their active classroom participation. It can be inferred that the way of students' presentation in the class worked well. Young EFL students in this research were not reluctant to present their digital stories in front of the class. Rather, they enjoyed sharing their work and listening to opinions and thoughts from their peers regarding what was good and what would make their work better. Positively, this process aroused continuous motivation in the students.

Challenges of Digital Storytelling in EFL Classroom - As the English teacher has placed an emphasis in the interview and his lecture review report, it was apparent that the amount of time provided to students in creating a digital story was not sufficient. Students, as a team or group usually ended up continuing their work even after class at school in order to have their production completed. In terms of the teacher's standpoint, Mr. Suk also experienced a lack of time in preparing for the class where technologies were integrated in his lesson. Like this, there were some challenges in using digital storytelling which teachers who want to use digital

storytelling in their class need to pay attention to.

First, it usually takes a lot longer to prepare for the lesson, because of the use of multimedia in the classroom. In order not to face any technical issues or disconnection of the Internet, teachers should double check those prior to class, so that students are not discouraged when producing a digital story. Second, teachers also need to consider having an instant assistant or aid that students can ask questions to while creating their stories. During the process of creating a digital story, students may undergo a number of difficulties. Even though some are familiar with multimedia technology, others are not, or some students are of high English proficiency and others are not. Thus, supporting materials and feedback should be provided to make sure they can feel that learning with digital storytelling is interesting and meaningful. Lastly, teachers are strongly required to pay regard to working on the time management in class. Because a current class time lasts only forty minutes in an elementary school curriculum, part of tasks or activities may not be accomplished during the class. In this case, teachers can give students homework or allow them to use a computer at school for the extra work. When completing the work, students can present and share their finished production in class, so that students are to have an opportunity to receive a feedback and comments from the teacher and their peers in class.

Digital Storytelling as a Successful Language Learning Activity - Throughout this research study, it was clear that digital storytelling can be an effective avenue for EFL students to use for the improvement in academic development, or motivational increase. Thus, it is suggested that English language teachers in EFL environment pay attention to the educational benefits of digital storytelling as a successful learning activity. Some guidelines for a successful language learning activity are described below.

Meeting a Learning Goal - Digital storytelling can be used with and aligned to the students' real, practical needs on learning English. To meet such learning goal, the English teacher is required to design the curriculum and pedagogy and keep in mind that students can use English in real life, as a result of the meaningful learning with digital storytelling.

Doing a Student-Centered Learning - Learning with the digital storytelling engages and motivates students. Students are encouraged to learn by producing a digital story, using computer, and multimedia. Through project-based learning, students can become an active agent of learning who is not a passive receiver of knowledge and information.

Integrating Technology into Learning - Unlike the traditional classroom activity, the digital storytelling project can make students engaged and motivated in the learning process. The effects of educational technology show the academic development of students, providing a personalized learning environment. Also, it allows students to work collaboratively, and to enhance creative and critical thinking through the presentation of their stories, thoughts and ideas.

Suiting Young Learners' Learning Style - Young students called digital natives have a keen interest in absorbing and using a multimedia. Out of multiple intelligences, today's students tend to like using audio- and visual intelligence, which contains audio, sound, music, image, video and so on. Because digital story making requires using such intelligences to accomplish one story, it matches young students' learning style.

Enhancing Collaboration - The digital storytelling activity plays a notable role in facilitating collaborative inquiry within a group, because students can interact continuously, increasing their knowledge, and conducting reflective thinking about their own and others' works. By enhancing collaboration, students also can get a sense of team work to create a motivational framework in which students increasingly build both conceptual and procedural knowledge.

Providing Pleasure in Learning - Creating a digital story can boost students to have a self-confidence and satisfaction for the learning outcomes. It has the potential for the development of affective, social, cognitive, emotional, and cultural components in the students. By utilizing digital storytelling, students can elevate their

internal motivation for learning, and gain benefit of expanding their knowledge and ability to think.

5.3 Pedagogical implication

This research revealed that young EFL students showed interest in using multimedia to learn English, as opposed to the sole use of paper-based materials. Therefore, for English teachers concerned about the academic achievement with young EFL learners, the use of digital storytelling can be one solution. Getting to know digital storytelling enables students to get involved in learning process, and increases their motivation, interest and a desire for further learning. Another significant reason the digital storytelling activity needs to be considered is that it helps to develop four integrated skills in learning a language, in particular. The digital storytelling projects provide a wealth of authentic written, audio and video material which might be of personal or professional interest to students. The use of digital storytelling also can be exploited in a regular English classroom, not only to provide practice in the receptive skills, but also to stimulate the productive use of language.

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6. References

- Antonova, A. (2011) Empathy as speech manipulation target in pre-election discourse of Great Britain. *GEMA Online Journal of Language Studies*, 11(3), 97-107.
- Banaszewski, T. (2005). *Digital storytelling: Supporting digital literacy in grades 4-12*. Georgia: Georgia Institute of Technology.
- Behmer, S., Schmidt, D., & Schmidt, J. (2006). Everyone has a story to tell: Examining digital storytelling in the classroom. In C. Crawford, R. Carlsen, K. McFerrin, J. Price, R. Weber, & D. Willis (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference* 2006 (pp. 655-662). Chesapeake, VA: AACE.
- Bell, J. S. (2002). Narrative inquiry: More than just telling stories. *TESOL Quarterly*, *36*(2), 207-213. http://dx.doi.org/10.2307/3588331
- Blas, N. D., Paolini, P., & Sabiescu, A. G. (2012). Collective digital storytelling at school: a whole-class interaction. *International Journal of Arts and Technology*, *5*(2), 271-292. http://dx.doi.org/10.1504/IJART.2012.046277
- Burgess, J. (2006). Hearing ordinary voices: Cultural studies, vernacular creativity and digital storytelling. *Continuum: Journal of Media and Cultural Studies*, 20(2), 201-214. http://dx.doi.org/10.1080/10304310600641737
- Carter, K. (1993). The place of story in research on teaching and teacher education. *Educational Researcher*, 22(1), 5-12. http://dx.doi.org/10.3102/0013189X022001005
- Cohen, L., Manion, L., & Morrison, K. (2007). Research Methods in Education (6th ed.). London, Routledge.
- Daminco, J. (2006). Exploring freedom and leaving a legacy: Enacting new literacies with digital texts in the elementary classroom. *Language Arts*, 84(1), 34-44.
- Department of Education. (2004). *The 7th National curriculum information*. Retrieved from http://ncic.kice.re.kr/nation.dwn.ogf.inventoryList.do
- Di Blas, N., Garzotto, F., Paolini, P., & Sabiescu, A. (2009). Digital storytelling as a whole-class learning activity: Lessons from a three-year project. In the *Proceedings of ICIDS* (pp. 14-25). Springer. http://dx.doi.org/10.1007/978-3-642-10643-9 5
- Dörnyei, Z. (1994). Motivation and motivating in the foreign language classroom. *The Modern Language Journal*, 78(3), 273-284. http://dx.doi.org/10.1111/j.1540-4781.1994.tb02042.x
- Felix, U. (2008). The unreasonable effectiveness of CALL: What have we learned in two decades of research?

- ReCALL, 20(2), 141-161. http://dx.doi.org/10.1017/S0958344008000323
- Gere, J., Kozolvich, B., & Kelin, D. (2002). *By word of mouth: A story telling guide for the classroom*. Honolulu, HI: Pacific Resources for Education and Learning.
- Gibbs, A. (2012). Focus groups and group interviews. In J. Arthur, M. Waring, R. Coe, & L. V. Hedges (Eds.), *Research methods and methodologies in education* (pp. 186-192). Thousand Oaks: Sage.
- Gravestock, P., & Jenkins, M. (2009). Digital storytelling and its pedagogical impact. In T. Mayes, D. Morrison, H. Mellar, P. Bullen, & M. Oliver (Eds.), *Transforming higher education through technology-enhanced learning* (pp. 249-264). York: Higher Education Academy.
- Hathorn, P. P. (2005). Using digital storytelling as a literacy tool for the inner city middle school youth. *The Charter Schools Resource Journal*, *1*(1), 32-38.
- Heo, M. (2009). Digital storytelling: An empirical study of the impact of digital storytelling on pre-service teachers' self-efficacy and dispositions towards educational technology. *Journal of Educational Multimedia and Hypermedia*, 18(4), 405-428.
- Huffaker, D. (2004). The educated blogger: Using weblogs to promote literacy in the classroom. *AACE Journal*, 13(2), 91-98. http://dx.doi.org/10.5210/fm.v9i6.1156
- Hull, G. A., & Katz, M. L. (2006). Crafting an agentive self: Case studies of digital storytelling. *Research in the Teaching of English*, 41(1), 43-81.
- Hull, G. A. (2003). Youth culture and digital media: New literacies for new times. *Research in the Teaching of English*, 38(2), 229-233.
- Jung, J. (2010). A comparative study of face-to-face storytelling and digital storytelling in elementary students' English class. Unpublished Masteral thesis, Hanyang University, Seoul.
- Kang, H. S. (2004). *Toward an efficient storytelling in elementary school education*. Unpublished Masteral thesis, Dongguk University, Seoul.
- KCIC. (2013). Retrieved from http://ncic.kice.re.kr/english.kri.org.inventoryList.do;jsessionid=D01D226B9BFC0843953E80121BB3 F77F#
- Kim, J. H. (2008). The effects of English teaching practicum on pre-service teachers' perception of teaching English in elementary schools. *Primary English Education*, 14(2), 5-22.
- Kim, M. H. (2000). *The effects of storytelling on learning of elementary school English*. Unpublished Masteral thesis, Gyeongin National University of Education.
- Lambert, J. (2009). Digital storytelling: Capturing lives, creating community. Berkeley, CA: Digital Diner Press.
- Lathem, S. (2005). Learning communities and digital storytelling: New media for ancient tradition. In the *Proceedings of Society for Information Technology and Teacher Education International Conference* 2005 (pp. 2286-2291). Chesapeake, VA: AACE.
- Lee, E.-J. (2008). *Designing English class using digital storytelling*. Unpublished Masteral thesis, Busan University of Foreign Studies, Busan.
- Lee, S., & Chang, K. (2012). A study on the development of pre-service elementary teachers' educational connoisseurship on English teaching through class analysis. *Primary English Education*, 18(2), 295-321.
- Lewis, A. (1992). Group child interviews as a research tool. *British Educational Research Journal*, 18(4), 413-421. http://dx.doi.org/10.1080/0141192920180407
- Li, L., & Morehead, P. (2006). Digital storytelling: Self-efficacy and digital literacy. In T. Reeves & S. Yamashita (Eds.), *Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2006* (pp. 2159-2164).
- McDrury, J., & Alterio, M. (2003). *Learning through storytelling in higher education*. Sterling, VA: Kogan Page Limited.
- McLellan, H. (2007). Digital storytelling in higher education. *Journal of Computing in Higher Education*, *19*(1), 65-79. http://dx.doi.org/10.1007/BF03033420
- Ohler, J. (2008). *Digital storytelling in the classroom. New media pathways to literacy, learning and creativity*. Thousand Oaks, California: Corwin press.

- Sadik, A. (2008). Digital storytelling: A meaningful technology-integrated approach for engaged student learning. Educational Technology Research and Development, 56(4), 487-506. http://dx.doi.org/10.1007/s11423-008-9091-8
- Sanchez-Laws, A. L. (2010). Digital storytelling as an emerging documentary form, International Journal of Media. Technology and Lifelong Learners, 6(3), 359-366.
- Thesen, A., & Kara-Soteriou, J. (2011). Using digital storytelling to unlock student potential. The NERA Journal, 46(2), 93-100.
- Tingöy, O., Günefler, A., Öngün, E., Demirag, A., & Köroglu, S. (2006). Using digital storytelling in education. In the Proceedings of the 4th international symposium of interactive media design. Yeditepe University.
- Xu, J. (2010). Using multimedia vocabulary annotations in L2 reading and listening activities. CALICO, 27(2), 311-327. http://dx.doi.org/10.11139/cj.27.2.311-327
- Yang, Y.-T. C., & Wu, W.-C. I. (2012). Digital storytelling for enhancing student academic achievement, critical thinking, and learning motivation: A year-long experimental study. Computers & Education, 59(1), 339-352. http://dx.doi.org/10.1016/j.compedu.2011.12.012
- Yoon, T. (2012). Are you digitized? Ways to provide motivation for ELLs using digital storytelling. International Journal of Research Studies in Educational Technology, 2(1), 25-34.