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Improving English as a Foreign Language (EFL) Learners' ICT Literacy Skills through Digital Storytelling

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Abstract

Building 21st century literacy skills in every field of education has become one of the objectives of educational policies in almost each country. In a broad sense, 21st century skills refer to a set of knowledge, skills, and characteristics which are believed to be of great importance for today's students' success in the ever-changing technological environment. There is no doubt that one of these skills which is desired to be enhanced is Information and Communication Technology Literacy Skill (ICT) of today's students. Educators and educational practitioners have been searching for how to foster students' ICT literacy skills best so that they can keep up with the recent developments. In this context, EFL learners' ICT literacy skills need to be improved as they will encounter digital natives when they start teaching. One of the effective ways of fostering ICT literacy skill is to utilize digital storytelling in foreign language classes. Because digital storytelling combines multiple modes of technology such as photographs, music, movie maker and recording tools, video clips, text, audio narration, and etc. to produce successful stories, EFL learners need to be competent enough to be able to use these tools effectively. Digital stories enable learners to produce oral, written, and visual messages and to interact with others. The present study attempts to highlight the possible benefits of digital storytelling and indicate how students' projects as to digital stories help them to improve their ICT literacy skills. To this end, prospective English language teachers' projects on creating digital stories were examined within the scope of computer-assisted language learning (CALL) course which was offered as an elective course for senior students in the spring term of 2015-2016 academic year at the department of English Language Teacher Education (ELT). Analyses of the projects prepared by the students show that students' ICT skills can be considered to be highly satisfying in terms of incorporating different technological materials into a single story. It can be concluded that being one of the most important 21st century skills, ICT literacy skill can be enhanced through preparing digital stories to a great extent.

Key words: digital storytelling, ict skills, technology, language teaching

Introduction

Educational policies of countries aim at improving learners' skills and competencies in various fields. These skills and competencies generally refer to 21st century skills

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including a set of knowledge, skills, and characteristics which are believed to be of great importance for today's students' success in the ever-changing technological environment. One of the skills that is expected to be improved is Information and Communication Technology Literacy Skill (ICT). Researchers, educators and teachers have been searching for the ways of how to improve students' ICT literacy in parallel with the recent developments in educational technology. In the English as a Foreign Language (EFL) context, it is crucial that prospective EFL teachers' ICT literacy skills should be improved during pre-service teacher education since they will probably encounter lots of digital natives when they start teaching.

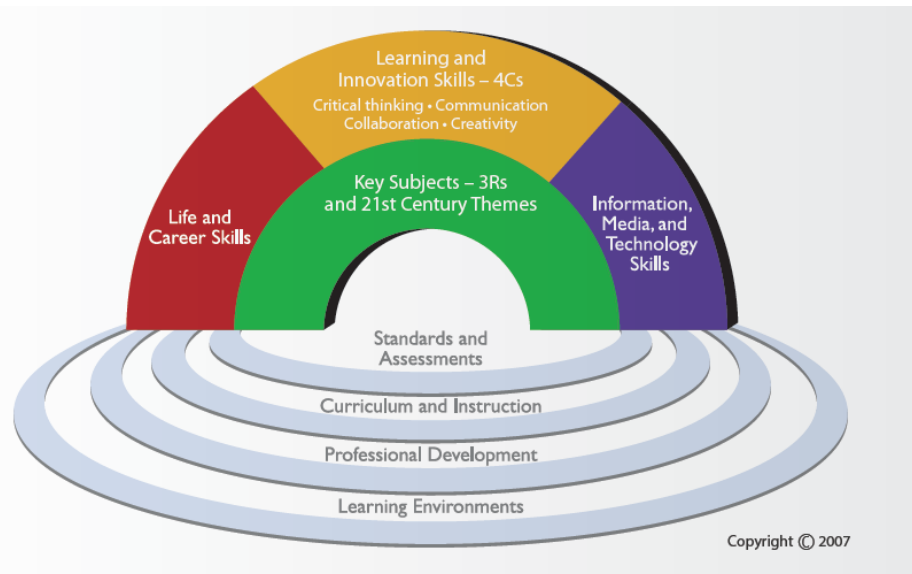
One of the effective ways of fostering ICT literacy skill is to utilize digital storytelling in foreign language classes. Because digital storytelling combines multiple modes of technology such as photographs, music, movie maker and recording tools, video clips, text, audio narration, and etc. to produce successful stories, EFL learners are expected to be competent enough to use these tools effectively. In addition, digital stories enable learners to produce oral, written, and visual messages and to interact with others. In this study, firstly characteristics of 21st century skills will be covered with a specific focus on digital ICT literacy. Then, the definition, objectives and advantages of digital storytelling will be provided. After that, through the analysis of students' projects, possible contributions of digital storytelling to students' ICT literacy skills will be discussed.

What are 21st Century Skills?

In order to define the skills, expertise, knowledge, and support system which students need, educators, education experts, and business leaders developed The P21 Framework for 21st Century Learning (P21). The P21 Framework stands for both 21st century student outcomes and support systems (Partnership for 21st Century Learning, 2015). Trilling and Fadel (2009, p 168) define P21 as follows;

Founded in 2002 as an outgrowth of a successful U.S. effort to bring the power of technology to all aspects of teaching and learning, P21 is designed to serve as “a catalyst to infuse 21st century skills throughout primary and secondary schools by building collaborative partnerships among education, business, community and government leaders.” P21 has been a growing force for “preparing young people to succeed as individuals, citizens and workers in the 21st century.

Figure 1. P21 Framework for 21st Century Learning (taken from: <http://www.p21.org/about-us/p21-framework>)



As is illustrated in Figure 1, the arches of the rainbow represent student outcomes while the pools at the bottom stand for support systems. Four areas of skills are defined in the student outcomes; key subjects and 21st century themes, learning and innovation skills, information, media and technology skills, and life and career skills. Key subjects consist of English, reading or language arts, world languages, arts, mathematics, economics, science, geography, history, government, and civics (P21, 2015). Life and career skills include flexibility and adaptability, initiative and self-direction, social and cross-cultural skills, productivity and accountability, and leadership and responsibility. Learning and innovation skills are enumerated as creativity and innovation, critical thinking and problem solving, communication, and collaboration, which is abbreviated as 4Cs. The other category in student outcomes is Information, Media, and Technology skills. Individuals in the educational context are expected to have some critical thinking skills such as information literacy, media literacy, and ICT literacy.

As support systems, 21st Century learning requires applicable skills and knowledge, appropriate technologies, and real-world connections to make learning relevant (P21, 2016). In order to ensure that all students get the kinds of learning experiences which build 21st century competency, five important support systems are identified; 21st century standards, assessments of 21st century skills, 21st century curriculum and instruction, 21st century professional development, and 21st century learning environments (P21, 2015).

This study primarily deals with how to improve ICT literacy skills of today's students. For this reason, what is expected from the students concerning ICT literacy competencies as a part of 21st century learning skills is quite important. Trilling and Fadel (2009, p 71) state this as;

Students should be able to:

Apply technology effectively

Use technology as a tool to research, organize, evaluate and communicate information

Use digital technologies (computers, PDAs, media players, GPS, etc.), communication/networking tools and social networks appropriately to access, manage, integrate, evaluate, and create information in order to successfully function in a knowledge economy

Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of information technologies.

Considering the above-mentioned competencies as to ICT literacy, it is crucial that students be provided with effective training about how to use technology in their lives. In this context, digital storytelling which will be focused on the next section is thought to be a beneficial way of improving students' ICT literacy.

Digital Storytelling

Digital storytelling has been defined in various ways, in general it means telling stories through a variety of digital multimedia tools such as video, audio, picture, images, and etc. By means of digital storytelling, texts, recorded audio narration, music, digital graphics, and so on are used together to create different stories (Robin, 2006). It has been reported that the use of digital stories in foreign language teaching in particular have remarkable positive effects on fostering students' language skills (Boster, Meyer, Roberto & Inge, 2002; Hibbing & Rankin-Erikson, 2003; Robin, 2006; Gregori-Signes, 2008; Rodríguez Illera&Londoño, 2009). The studies indicate that the use of multimedia tools in teaching facilitates students' learning and attracts the interests of the students. It also appeals to different learning styles and promotes pair and group work. Torres, Ponce, & Pastor (2012, p. 14) state that 'the use of digital storytelling in the class of second language acquisition constitutes a pedagogical tool that can be included within the frame of a didactic sequence.' They maintain that it is possible to carry out workshops by means of digital storytelling to practise linguistic elements and daily used communicative acts.

As already mentioned before, digital storytelling can be utilized in foreign language classes to create meaningful platforms for communication. In other words, digital storytelling enables students to utilize interdisciplinary technology integrating reading, writing, drama, and technology (Casta, 2013). It is also reported that digital stories can help students engage in authentic tasks which lead to self-construction of meaning (Jonassen, Peck, & Wilson, 1998, as cited in Casta, 2013). Lambert (2006, pp. 9-19, cited in Robin, 2006, p. 2) as a co-founder of Center for Digital Storytelling (CDS) provides seven elements of digital storytelling as in the following figure;

The Seven Elements of Digital Storytelling

- (1) Point of View – what is the perspective of the author?
- (2) A Dramatic Question – a question that will be answered by the end of the story.
- (3) Emotional Content – serious issues that speak to us in a personal and powerful way.
- (4) The Gift of your Voice – a way to personalize the story to help the audience understand the context.
- (5) The Power of the Soundtrack – music or other sounds that support the storyline.
- (6) Economy – simply put, using just enough content to tell the story without overloading the viewer with too much information.



- (7) Pacing – related to Economy, but specifically deals with how slowly or quickly the story progresses.

Lambert (2010) revises these elements later and transforms them into steps in order to guide the storytellers during the process of creating their stories. Lambert (2010, pp. 9-23) enumerates these steps of digital storytelling as; 1) Owning your insights 2) Owning your emotions 3) Finding the moment 4) Seeing your story 5) Hearing your story 6) Assembling your story and 7) Sharing your story. Thanks to these seven steps, storytellers are able to visualize their stories before beginning to write their scripts. As for the types of stories, Robin (2006) categorizes digital stories as personal narratives, digital stories that examine historical events, and stories that inform or instruct. Personal narratives are stories containing details of important events in one's life. Digital stories that examine historical events serve as if a guide helping us understand the past, and stories that inform or instruct the people about a specific concept.

In the context of foreign language education, creating meaningful environments in which students will find reasons to communicate is extremely important. Considering the characteristics of digital storytelling, it seems that students can use different technological tools to convey their messages. In other words, they also learn how to digitize the materials to create stories in a meaningful way. In this way, they improve some specific skills unconsciously by utilizing different multimedia skills. Robin (2006, p. 5) states these crucial skills which the students will be able to enhance through digital storytelling;

Research Skills: Documenting the story, finding and analysing pertinent information;

Writing Skills: Formulating a point of view and developing a script;

Organization Skills: Managing the scope of the project, the materials used and the time it takes to complete the task;

Technology Skills: learning to use a variety of tools, such as digital cameras, scanners, microphones and multimedia authoring software;

Presentation Skills: Deciding how to best present the story to an audience;

Interview Skills: Finding sources to interview and determining questions to ask;

Interpersonal Skills: Working within a group and determining individual roles for group members;

Problem-Solving Skills: Learning to make decisions and overcome obstacles at all stages of the project, from inception to completion; and

Assessment Skills: Gaining expertise critiquing their own and others' work.

As Robin puts it, digital storytelling presents students great opportunities to equip themselves with 21st literacy competencies. It can be noted that improving ICT literacy skill is just one of the skills obtained during digital storytelling. Similarly, Brown, Bryan and Brown (2005, cited in Robin, 2006, p. 4) define some literacy types within the framework of *Twenty-first Century Literacy*. Their categorization is as follows;

Digital Literacy – the ability to communicate with an ever-expanding community to discuss issues, gather information, and seek help;

Global Literacy - the capacity to read, interpret, respond, and contextualize messages from a global perspective

Technology Literacy - the ability to use computers and other technology to improve learning, productivity, and performance;

Visual Literacy - the ability to understand, produce and communicate through visual images;

Information Literacy - the ability to find, evaluate and synthesize information.

Among the *Twenty-first Century Literacy* categorization, digital and technology literacy is directly related to digital storytelling. Technology literacy in particular requires students with knowledge on how to make use of technological tools to improve learning and productivity. While preparing digital stories, students need various technological tools such as recording audio, microphones, music, graphs, pictures, cameras, scanners, and so on. In this way, they will get a chance to improve their skills.

Concerning the literacy types needed in the 21st century, every country has set priorities in education and employment systems recently. In line with the educational and vocational developments in the world, Turkey launched Turkish Qualifications Framework (TQF) in 2003. TQF was in harmony with European Qualifications Framework and prepared to meet the education and training needs of all individuals through lifelong learning support (Vocational Qualifications Authority, 2013).

In TQF, eight key competences are defined that each individual is expected to achieve within the scope of life-long learning. The eight identified key competences describing the basic knowledge, skills, and attitudes are;

- (1) Communication in the mother tongue
- (2) Communication in foreign languages
- (3) Mathematical competence
- (4) Digital competence
- (5) Learning to learn
- (6) Social and civic competences
- (7) Sense of initiative and entrepreneurship
- (8) Cultural awareness and expression.

Vocational Qualifications Authority (2013, p. 23)

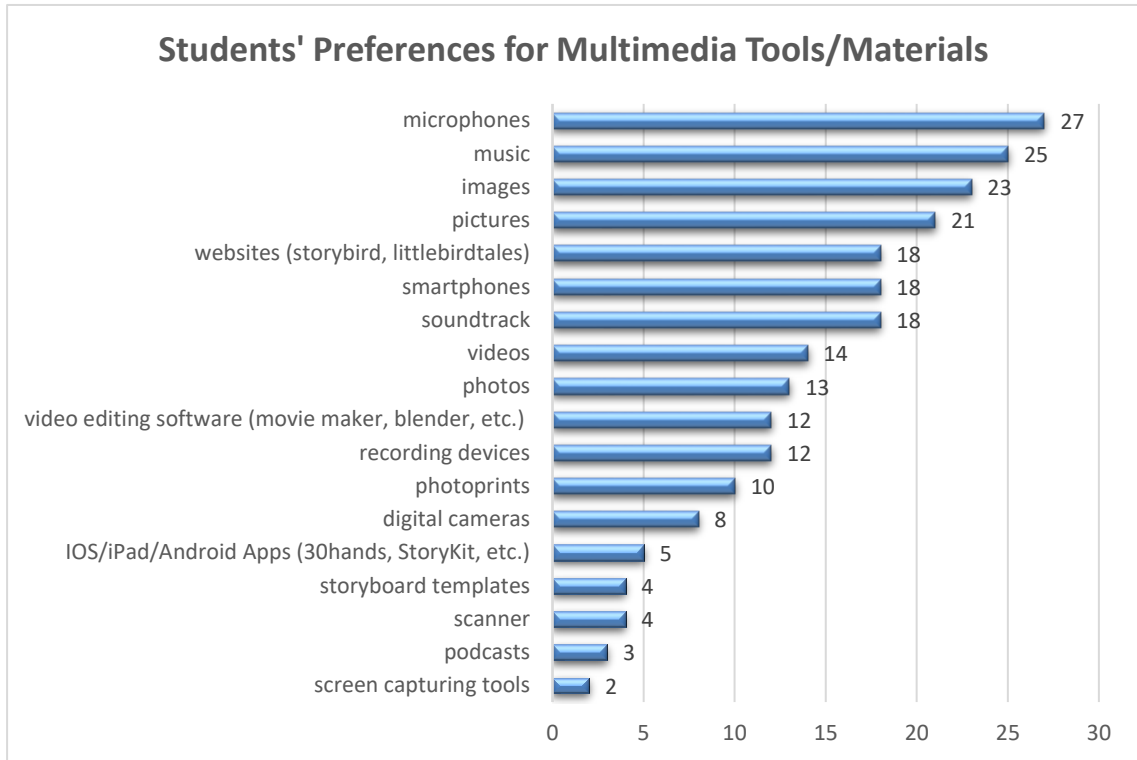
Among the identified eight key competences, digital competence which is related to our study is described in TQF as ‘Digital competence involves the confident and critical use of Information Society Technology and thus information communication technologies’ (p. 23). In brief, digital competence or digital literacy requires students with adequate ICT literacy competence as a part of 21st century learning. The rest of our study will focus on the analysis of students’ projects prepared with various multimedia tools and their contributions to ICT literacy skills.

Analysis of the Students’ Projects on Digital Storytelling

In the current study, prospective English language teachers’ projects on creating digital stories were examined within the scope of Computer-assisted Language Learning (CALL) course which was offered as an elective class for senior students in the spring term of 2015-2016 academic year at English Language Teaching Programme (ELT). Thirty projects related to digital storytelling were analysed on the basis of preferred multimedia tools and

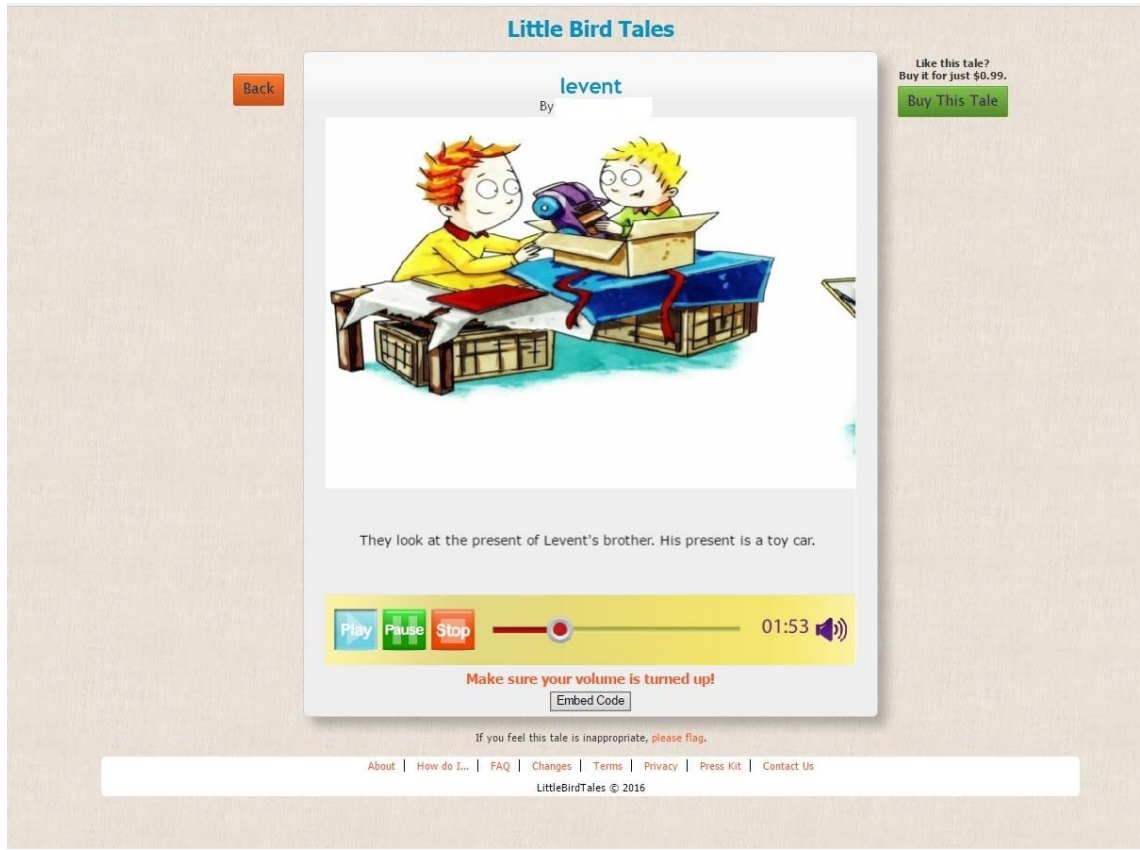
materials. The following graph indicates the multimedia tools/materials students have utilized while digitizing media content.

Figure 1.



Analysis of the projects prepared by the students show that students' ICT skills can be considered to be highly satisfying in terms of incorporating different technological materials into a single story. Microphones, music, images, and pictures were among top four most preferred tools/materials. Most of the students also preferred websites together with soundtracks, videos, photos, and smartphones to produce their stories. Video editing software, recording devices, photoprints, digital cameras, IOS/iPad/Android applications, storyboard templates, scanners, podcasts, and screen capturing tools were utilized by the students as well. Considering this wide range of technological tools and materials preferred, it can be inferred that students can foster their ICT literacy skills remarkably during the process of creating their digital stories. The screenshot of a sample digital story project prepared via web site Little Bird Tales is presented in Figure 2.

Figure 2. The Screenshot of a Sample Project Prepared via Little Bird Tales



Conclusion

Analyses of the digital storytelling projects prepared in CALL course indicate that the students have made use of highly rich content in terms of multimedia tools and materials to produce their stories. It can be concluded that digital storytelling can help students in foreign language classrooms improve 21st century literacy skills. In other words, digital storytelling aligns with P21 Framework for 21st century Learning and Turkish Qualifications Framework. In addition, digital storytelling enables students to produce coherent and complete stories, thus having an opportunity to produce comprehensible output by employing various multimedia tools. In the process of digital storytelling, students have a chance of testing out the target language as well. They can listen to language production and realize their mistakes in pronunciation and intonation. Students can also foster their writing skills together with use of technology. In brief, it can be concluded that being one of the most important 21st century skills, ICT literacy skill can be enhanced through preparing digital stories to a great extent.

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