

Facilitating EFL with Storytelling on Tablet PCs

Kuo-Ping Liu & Chen-Chung Liu

Graduate Institute of Network Learning Technology, National Central University, Taiwan

*ccliu@cl.ncu.edu.tw

Abstract: Previous studies show that storytelling is a powerful approach in EFL (English as Foreign Language) elementary classroom because it can facilitate young EFL students to engage in acquisition, provide a rich source of materials, and open communication and interaction possibilities by telling their own stories. In recent years, digital storytelling in a classroom further provides a strategy for teachers to effectively move beyond the print-based texts and engage students in working with digital multimodal texts. Digital storytelling requires students to bring together various modes such as written words, images, and sounds into their own multimodal representations. Recently, many forms of electronic books such as tablet PCs have become available to facilitate English learning and may be applied to implement storytelling activities. Although theories and research support the significance and education value of using digital storytelling, however, empirical studies of using digital storytelling in EFL elementary context is scant because teachers are often overwhelmed by difficulties such as students' English limited English proficiency, teacher's pressure of existed curriculum and the lacking pedagogy of using digital storytelling. This study develops digital storytelling pedagogy with iPads to overcome the difficulties and conducts a five-month quasi-experimental study to determine whether digital storytelling pedagogy has the intended effect on participants' motivation and achievement. Two intact classes (N=32) were randomly assigned as the digital storytelling group and traditional teacher-centered group. Participants' achievement will be discussed.

Keywords: iPad, digital storytelling, EFL learning

1. Introduction

English as Foreign Language (EFL) learning has been implemented in Taiwan elementary schools for many years. After several years of implementation, government officials and scholars revisited the English-in-education policy for elementary schools. One of the most serious problems is students' English abilities showed a bimodal distribution, with a low-score peak and a high-score peak within each stage of formal education (Chen & Tsai, 2012). Extremely underachievers can hardly recognize and write 26 alphabets correctly after six-year's training; however, higher achievers can write logical and coherent English composition with few errors. The major reason for the bimodal distribution was that higher achievers may attend after-school English class for years. By contrast, underachievers only learned English in school's curriculum and their exposure to English learning is relatively little. Therefore, a learner-centered pedagogy is necessary to address the need of the students with a diverse level of EFL proficiencies.

A large body of studies indicated that storytelling is an imperative pathway to language learning because storytelling focuses on students by putting them at the center of the learning process (Benford, Bederson, Akesson, Bayon, Druin, Hansson, Hourcade, Ingram, O'Malley, Simsarian, Stanton, Sundblad, & Taxen, (2000). Storytelling makes teaching and learning more relevant to students' life experience (Tsou, Wang & Tzeng, 2006). Students' language use and literacy skills are improved during the process during which they are called upon to organize, communicate, evaluate and transform life experience in their own voices (Pesola, 1991; Wood & O'Malley, 1996; Wilson, 1997). Therefore, at an early stage of language acquisition, stories can offer a valuable way of contextualizing and introducing new language, making students develop sensitivity to the way language works (Isbell, Sobol, Lindauer, & Lowrance, 2004; Wright, 1995).

To facilitate EFL with storytelling activities in classrooms, this study implements a digital storytelling approach using a storytelling platform with iPads. Due to the intuitive painting and record-play manipulation interface, students can write, paint and record their English stories in the form of comic style. Students can thus be motivated to record English oral reading to add vivid voice narration to their picture stories. Students can also refine their English narration by deleting and re-recording for performance. In addition, in order to prevent students from focusing on painting stories, a rubric was shown to direct participants practically practice English. Furthermore, students are encouraged to write self-related stories and they are encouraged to apply the vocabulary and sentences that they just learned in class. The English storytelling activities may thus become friendly and comprehensible to students. It is anticipated therefore that this digital storytelling approach can foster and encourage playful English storytelling with digital elements and evaluation rubric in EFL context.

Since traditional teacher-centered and digital storytelling approaches provide different mechanisms to facilitate student's EFL learning, it is critical to examine that whether students' motivation and learning achievement are different. By providing a clear picture of what and how teachers and students use digital storytelling, much can be learned to facilitate meaningful integration of digital storytelling into language learning context. However, research which has empirically documented students' creating digital stories is scant (Baghdasaryan, 2012; Atta-Alla, 2012) and further study is needed. To this end, this study conducted a five-month empirical evaluation to examine how the two approaches can influence students' motivation, and learning achievement.

2. Digital Storytelling Platform

In order to support richer media with which participants can not only sketch their own stories but also record their English narration much easily, this study uses ipad as the main creation and performance engine of each participant's digital storytelling. In addition, a digital storytelling platform is designed in the form of a comic book to facilitate student's English acquisition by creating and narrating their own stories. After logging, participants are able to write, draw and record their picture book stories, shown as Fig. 1. The platform provides user-friendly painting functions which is similar to Microsoft Draw. However, draw and paint programs such as Microsoft Draw do not explicitly provide the means of using fingers to create stories, nor to share the resultant created product. The participants could use the platform to depict a scene, portray a character or present a daily event. Also, participants could devise a logical flow of events by adding episodes.



Figure 1. The interface of platform

In addition to drawing a four-column story, participants could use the record function to add vivid voice narration to their picture stories. Participants could refine their English oral reading by deleting and re-recording. Their artifacts were just like audio comic books, shown as figure 2. The text below the drawing is verbatim transcription of student's voice narration. The focus was that the audio comic books were totally created by participants themselves. In other words, participants were in charge of their stories and participants played both roles such as screenplay and director. To sum up, the storytelling platform is designed to foster and encourage playful narrative activity and help students enjoy the creation and telling of stories with digital elements.

1  B: Hello everybody, my name is Becky. I am a donut. This is my friend. H: Hello, my name is Happy. I am a watermelon. B: Happy, say hello. B&H: Hello.	2  B: Wow! Happy, you see. We are at the beach. H: Yes. I am like a beach. B: Were you at the beach last week? H: No, I wasn't. B: Where were you last week? H: I was by the sea. B: Oh.
3  H: Hi, Lucky (Becky), were you at the beach last week? B: No, I wasn't. H: Where were you last week? B: I was by the lake. H: Why? B: Because I can go fishing. H: Oh.	4  (narration) In the afternoon, Happy and Becky go home. B: It is nine o'clock pm. H: Oh yes. Becky good bye. B&H: Good bye.

Figure 2 A student's English story.

Before conducting the digital storytelling, the teacher introduced the interface and operation of storytelling platform. Then the teacher introduced the process of how to create English. The process begins with topic selection and the narration process (Ohler, 2008).

Select topic: Participants are free to select the story topic that they want to share. In particular, participants are encouraged to create stories about their real life situations and experience. For participants who have no ideas of selecting a topic, they may use the similar topic of text book.

Write a Script: After selecting a topic, every participant needs to develop a story line and write out a script. Hence, when writing the script, they will have to bear in mind that they are writing a text to be read out loud. For participants who do not know how to develop the story line, they are allowed to copy and edit the lessons story that they just learned. In other words, they can modify the characters, dialogues and story line according to the lesson story. Besides, in order to enable participants to practice what they learned in the previous two weeks, participants are asked to implement at least four words and two sentence patterns from the lesson. Hence, participants can practically practice and apply their English competency they learned during the storytelling creation process. In addition to written script, participants have to add drawing and painting in their story. However, they are advised to focus on the how to give their meaning across with the oral narratives instead of drawing and painting.

Record: With ipad and platform, participants record their oral narratives with microphone.

Listen: Participants listen to their narrative, and redo either the script or the recording if necessary.

Review: Participants evaluate their created stories by themselves. If they are not satisfied with their stories, they need to revise their process to refine their stories. If yes, they can upload and share their artifacts on the website. The self-evaluation can be taken as a good opportunity to demand from participants a thorough review of spoken and written discourse features.

3. Evaluations

This study administrated an empirical experiment to investigate whether digital storytelling approach may enhance young EFL learners' ability of listening, oral reading, sentence writing and their perception toward storytelling. The participants in this study were 64 sixth graders with a mean age of 12 years, attending a suburban elementary school in Taiwan. All participants had started to learn English since they were first graders. The major reason of selecting sixth graders as participants was that they are anticipated to have basic communicative skills after five years' English learning. Two intact classes (N=32), led by the same English teacher, were randomly assigned as the storytelling group and traditional group. Each group was further divided into higher achievers and underachievers according to their school mid-term and final test scores, teacher's observation and class participation. The English proficiency level of two groups was similar according to their school test scores. In addition, both groups had basic computer literacy due to three year's computer training course. However, none reported prior experience of using ipads or storytelling platforms.

Table 1 showed the learning achievement result of the two groups in terms of listening, speaking, sentence reading/writing and overall performance. The result showed that storytelling group outperformed traditional group in overall performance ($t=2.42$, $p<.05$) which means participants used storytelling approach may have better learning achievement compared to traditional group. However, the result showed that there was no statistically significant different in terms of listening ($t=0.00$, $p>.05$) and sentence reading/writing ($t=1.39$, $p>.05$), implying that two groups' listening comprehension and sentence reading/writing ability was similar. The reason may be that the storytelling approach did not facilitate students to practice the abilities above. Instead, participants were encouraged to tell their stories in storytelling group. Hence, two group's listening comprehension and sentence reading/writing ability was not different.

By contrast, the result showed that statistically significant difference exists between the two groups in oral reading competency ($t=2.70$, $p<.01$), which indicated that storytelling approach may effectively enhance participants' oral reading competency compared to participants who did not use storytelling in class. This can be possibly because storytelling group need to practice reading out loud their own

narratives repeatedly before they record their own voice in the platform. Participants had opportunities to keep speaking English. In addition, every participant in storytelling group could listen to his or her own oral narratives and thus may realize what and where to improve in his or her recording. On the contrary, although traditional group also practiced reading English sentences, they did so was because they were under teacher's guidance and they may read English sentences passively. This finding indicated that the active storytelling approach in this study may enhance participants' oral reading competency by helping participants focus better on the oral reading with record function.

Table 1 Achievement test result

Competency	Group	N	M scores	(full SD	t	p
Listening	storytelling	32	4.38 (5)	1.45	.00	1.000
	traditional	32	4.38 (5)	1.52		
Oral reading	storytelling	32	4.13 (5)	1.54	2.70	<.01
	traditional	32	2.84 (5)	2.20		
Sentence reading / writing	storytelling	32	7.00 (10)	3.27	1.39	.170
	traditional	32	5.84 (10)	3.39		
Overall	storytelling	32	15.50 (20)	3.82	2.42	<.05
	traditional	32	13.06 (20)	4.23		

*p<.05, ** p<.01

4. Conclusion

Storytelling is commonly used as a pedagogical tool to make some abstract ideas or concepts more concrete. However, traditional storytelling is constrained to express in oral narratives or text form. According to Piaget's stages of cognitive development, adults may fully understand the meaning and explanation by plain text because they have mature abstract logical thinking ability (Piaget, 1953). By contrast, those young EFL students aged between seven and twelve years old are in the Concrete Operations Stage which indicates that they are mature enough to use logical thought or operations, but can only apply logic to physical objects. To be more specific, young EFL students may not really understand the abstract concepts or ideas through the oral or written explanation of traditional storytelling (Liu et al., 2011). By contrast, photos, drawings and animations are commonly implemented in digital storytelling and these physical objects should facilitate young students can apply for logical thinking and better understanding. The results of this study support that digital storytelling involving drawing and voice narration may benefit EFL in students' oral reading proficiency. It is thus suggested that educators may apply the Tablet PCs to enact the storytelling activity to promote EFL in classroom settings.

References

- Anderson, R. E. (1992). Social impacts of computing: Codes of professional ethics. *Social Science Computing Review*, 10(2), 453-469.
- Atta-Alla, M. N. (2012). Integrating Language Skills through Storytelling. *English Language Teaching*, 5(12), 1-13.
- Baghdasaryan, K. (2012). The Impact of Digital Storytelling on EFL Learners' Speaking Skills. In L. Gómez Chova et al. (Eds.), *Proceedings of 4th International Conference on Education and New Learning Technologies* (pp. 6121-6130), Barcelona, Spain.
- Benford, S., Bederson, B., Akesson., K., Bayon, V., Druin, D., Hansson, P., Hourcade, J., Ingram, ale, H., O'Malley, C., Simsarian, K., Stanton, D., Sundblad, Y., & Taxen, G. (2000) Designing Storytelling Technologies to Encourage Collaboration Between Young Children. *Proceedings of ACM Conference on Human Factors in Computing Systems*, 556-563.
- Chan, T.-W., Roschelle, J., Hsi, S., Kinshuk, Sharples, M., Brown, T., et al. (2006). One-to-one technology-enhanced learning: An opportunity for global research collaboration. *Research and Practice in Technology-Enhanced Learning*, 1(1), 3-29.
- Chen, S. and Y. Tsai. (2012). Research on English teaching and learning: Taiwan (2004–2009).

- Chen-Chung Liu, Kuo-Ping Liu, Wei-Hong Chen, Chiu-Pin Lin, Gwo-Dong Chen (2011). Collaborative storytelling experiences in social media: Influence of peer-assistance mechanisms. *Computers & Education* 57(2).
- Conger, S., & Loch, K. D. (1995). Ethics and computer use. *Communications of the ACM*, 38(12), 30-32.
- Isbell, R., Sobol, J., Lindauer, L., & Lowrance, A. (2004). The effects of storytelling and story reading on the oral language complexity and story comprehension of young children. *Early Childhood Education Journal*, Vol. 32, No. 3.
- Jonassen, D. H., Peck, K. L., & Wilson, B. G. (1999). *Learning to Solve Problems with Technology: A Constructivist Perspective* (2nd Edition). Columbus, OH: Prentice Hall.
- Language Teaching* 45, no. 2: 180–201.
- Mackay, W. E. (1995). Ethics, lies and videotape. In I. R. Katz, R. Mark, L. Marks, M. B. Rosson, & J. Nielsen (Eds), *Proceedings of CHI'95* (pp. 138-145). Denver, Colorado: ACM Press.
- Ohler, J. (2008). *Digital storytelling in the classroom: New media pathways to literacy, learning, and creativity*. Thousand Oaks, CA: Corwin Press.
- Pesola, C. A. (1991). Culture in the elementary foreign language classroom. *Foreign Language Annals*, 24(4), 331–346.
- Piaget J (1953) *The Origins of Intelligence in Children*. Routledge and Kegan Paul, London, UK.
- Schwartz, M., & Task Force on Bias-Free Language of the Association of American University Press (1995). *Guidelines of Bias-Free Writing*. Bloomington, IN: Indiana University Press.
- Tsou, W. L., Wang, W. C., & Tzeng, Y. J. (2006). Applying a multimedia storytelling website in foreign language learning. *Computers & Education*, 47(1), 17-28. doi: 10.1016/j.compedu.2004.08.013.
- Wilson, J. A. (1997). *A program to develop the listening and speaking skills of children in a first grade classroom* (EDRS: ED 415 566).
- Wood, D. & O'Malley, C. (1996). Collaborative learning between peers: An overview. *Educational Psychology in Practice* 11(4), 4–9.
- Wright, A. (1995). *Storytelling with children*. Oxford: Oxford University Press.