A Tale ofOne Story in Two Modes: Digital Flash Stories vs. Printed Stories

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Abstract: While the art of storytelling has been around for thousands of years, the advent of Computer-Assisted Language learning (CALL) revived the ancient form of the story reading. This paper examines the effects of exposure to audio-visually enhanced flash stories on story retelling of EFL learners. Thirty two Iranian EFL English learners within an age range of 11-13 were randomly assigned to two groups to either read, listen and watch flash stories or just read the printed versions of the same stories. Then, both groups were asked to retell the story. Their oral reproductions were recorded and analyzed in terms of their Mean Length of Utterance (MLU). The findings reveal that exposure to digital stories significantly improved oral reproduction ability of the learners in the experimental group and their MLU. The paper finally calls for the integration of flash stories as highly motivating and involving medium of presenting stories in EFL/ESL settings.

Key words: digital stories, flash stories, oral reproduction, Mean Length of Utterance, MLU

INTRODUCTION

The need for students to communicate effectively and to be technologically literate remains strong. Meanwhile, language teachers as well as researchers charged with developing these skills are searching for ways to engage students in the speaking and listening processes and integrate technology into daily learning activities. Digital storytelling is one way to increase both students' engagement and commitment particularly students who do not respond to traditional academic reading assignments. It is also one educational technology tool used in the classroom. Storytelling is an effective pedagogical strategy that can be woven into instruction to increase students' competencies in all areas (Miller S, Pennycuff L, 2008). Storytelling makes interaction personal, engaging, and immediate (Aiex N.K, 1988). These characteristics capture the attention of the audience and enhance an understanding of the story by providing a social context for literacy. Students learn the social aspects of language through observation and participation in storytelling (Craig S, et al., 2001).

According to Hull G.A, Nelson M.E (2005) digital storytelling is a form of multimedia including images and segments of video with background music and a voice-over narrative. It also combines a script or an original story with different kinds of multimedia components, such as images, video, music and a narration, often an author's own voice.

The process of digital storytelling utilizes almost all of the skills students are expected to have in the 21st century (Jakes D, 2006). Information literacy, visual literacy, being creative and taking risks, and using the latest technology to communicate effectively can all be achieved when students actively participate in the creation process of digital storytelling (Jakes D.S, J. Brennan, 2005; Robin B 2008).

Review of the Related Literature:

Interest in second language reading research and practice has increased dramatically in the recent years. There are many reasons for this interest; part of it is due to the increasing recognition that reading abilities are critical for academic reading. The other part is due to the increasing recognition that we all live in a multi-lingual and multi-cultural world.

According to Barnett M.A (1989), reading has always held a crucial place in foreign and second language classes. She adds that reading is now seen in a different light, namely "as communication as a mental process, as the reader's active participation in the creation of meaning, as a manipulation of strategies, as a receptive rather than as a passive skill" (p. 2).

Stories, apart from being every young child’s bedtime friend, can become every young learner’s school time treasure. According to Belmonte I.A, Verdugo D.R (2007), at an early stage of language acquisition, stories can be a valuable way of contextualizing and introducing new language, they can also make new language meaningful and memorable to the learners. With stories children have an access to literature and culture that otherwise they would not get (Niemann H, 2003). An important aspect of using stories in teaching is that stories require a special way of listening (Sorrell J, 1999). “Listening to stories draws attention to the sounds of language and helps children develop (Tsou W, et al., 2004). Further Niemann (2003) a sensitivity to the way language works” adds that many stories that children work with include repetitive phrases, unique words, and...
Digital Storytelling:

According to Al-Seghayer K (2001), advances and increased availability of computers have altered and expanded the field of second/foreign language education. The concern has been narrowed to the investigation of the efficacy of presenting information using multiple modalities, such as text, audio, still picture, dynamic videos, and digital storytelling in the field of SLA (Robin B 2008; Belmonte I.A, Verdugo D.R 2007).

Digital storytelling is the modern expression of the ancient art of storytelling. It's a powerful bridge between Information Technology (IT) and Arts and Humanities courses. As a pedagogical tool, digital storytelling provides the students with a powerful means of communication and in turn forces a deeper learning experience (Kleckner M 2007). It is one educational technology tool used in the classroom.

Throughout history, storytelling has been used to share knowledge, wisdom, and values. Stories have taken many different forms. It is the power of new technology that is easy to learn and use. Stories have been adapted to each successive medium that has emerged, from the circle of the campfire to the silverscreen, and now the computer screen Engel S (1999).


Digital storytelling episode illustrates the possibilities for coaching children in early childhood settings in important foundational literacies including story comprehension, decoding of print-based texts, reading fluency, oral and written vocabulary, and writing process (p.28).

The process of digital storytelling uses almost all of the skills students are expected to have in the 21st century such as: Information literacy, visual literacy, being creative and taking risks, and using the latest technology to communicate effectively. All can be achieved when students actively participate in the creation process of digital storytelling (Jakes D.S, J. Brennan 2005; Robin B.R 2008).

Instructors can also use digital story telling to present new material to the class. In this way, the use of visual and auditory cues is very attractive to the students, and the story attaches an experience to the concepts being conveyed, which aid in remembering them later (Kleckner M 2007).

Studies have found that utilizing digital storytelling not only helps to bridge the disconnection between the high-tech world outside of school and the traditionally low-tech school setting, but also provides a number of benefits to students that could not be achieved well through traditional storytelling (Ware W 2006).

Digital storytelling can be used in the classroom in different ways. Telling personal stories helps students learn both about voice in a narrative form and first person perspective. Since modern communication involves “writing” with pictures and music, having students create digital stories helps them build these skills (Engel S 1999). Later, Engle (ibid) adds top ten reasons for implementing storytelling in classroom: “1. Inspires dedication to work; 2. Encourages creativity; 3. Creates positive classroom climate; 4. Promotes problem-solving; 5. Captivates attention; 6. Raises interest in writing; 7. Fosteres group dynamics; 8. Addresses different learning styles; 9. Embraces diversity; 10. Incorporates the multiple intelligences” (Engel S 1999). Therefore, digital storytelling is becoming widely used in schools as a result of both affordability and the “contemporary agenda for today’s classroom” (Robin B. R 2008).

Morrow L.M (1996) states that “several experimental studies that have sought out the effects of storybook reading as an everyday classroom routine on child development found that children in the treatment groups produce higher scores in the areas of vocabulary, story comprehension, and decoding than do the children in the groups who are not read to”. Moreover, Baltova I (1994) (nd) indicated that visual cues found in videos were informative and enhanced comprehension of texts in general, but did not necessarily stimulate the understanding of a text. Overall, digital stories were reported by teachers as having positive effects on students’ 21st century skills.
Methodology:
This study investigated the effects that flash stories and traditional way of reading stories have on Mean Length of Utterance (MLU) of Iranian EFL learners’ oral reproduction of stories. According to Brown R (1973) "Mean Length of Utterance is an excellent simple index of grammatical development because almost every new kind of knowledge increases length". MLU is calculated in morphemes or in words by dividing the number of morphemes or words by the total number of utterances. A higher MLU is taken to indicate a higher level of language proficiency.

The purpose of this study was to investigate whether or not our EFL language learners could make progress in Mean Length of Utterance (or MLU) for a period of one term through flash (digital) stories and printed texts of the same stories through a quasi-experimental design. To this end, the following research question was investigated: Is there a significant difference in Mean Length of Utterance (MLU) of EFL learners’ oral reproduction of short stories based on flash stories and traditional way of reading stories?

Subjects:
The subjects of this study were 32 EFL female students; within the age range of 11-13 studying English at Zabansara Institute in Naghade. The subjects were given a Preliminary English Test (PET) and based on t-test results, their close homogeneity was confirmed. Then, they were randomly assigned into two groups: one control group and one experimental group, each consisting of 16 students. The experimental group received flash (digital) stories through computer. The control group received traditional treatment (printed texts of the same stories), that is, the reading passages were taught through reading silently and then answering the reading comprehension questions.

Instruments:
Several instruments were employed to obtain research data. The Preliminary English Test (PET) was used to assure the homogeneity of the groups in terms of their L2 proficiency. The participants' proficiency scores were entered into an independent samples t-test, the results of which confirmed groups' initial homogeneity. Later, story sessions were conducted. Each story session was between 30 and 35 minutes long.

Procedure:
After confirming participants close homogeneity, the treatment sessions started. Treatment consisted of a story time, which was conducted by the researcher with the students. Story time was offered to students twice per week for 8 weeks. The same teacher presented the printed and digital stories.

Story sessions were conducted in this way: Each story session was between 30 and 35 minutes long. At the beginning of each story session, every group was asked several questions by the researcher. These questions were intended to raise the students’ interest and engage critical thinking skills. Next, the story for the day was either read from the printed text or presented by the computer (depending on the group present). The students were then asked literal, inferential, and analytic follow up questions about the story they had read and heard. At the end of the treatment period, each participant retold a summary of the story. This retelling was recorded for later playback and calculating MLU of each group. Appendix 1 provides one sample story (The First Well by Emanuele Scanziani) used in this study.

The MLU was calculated through dividing the number of morphemes or words by the total number of utterances. For instance, for the following utterances, MLU was found to be 7.75.

Morri was a little girl. =5
She had big brown eyes. =6
She lived next to a small blue lake. =9
Every morning she carried a big basket on her head. =11
TOTAL=31

There are, therefore, a total of 31 morphemes. In order to find the Mean Length of Utterance we take total number of morphemes (31) and divide it by total number of utterances (4). Hence, MLU is 31/4 = 7.75

Analysis and Results:
In the present study, 32 EFL learners participated who were chosen from among 50 EFL students based on their proficiency scores. Then, these 32 participants were randomly assigned to flash (digital) stories and printed texts of the same stories. In order to check their homogeneity, an independent sample t-test was run on their proficiency scores. Table 1 shows the descriptive data for the proficiency scores of these two groups. According to this table, for group 1, the mean was 13.00 with standard deviation of 3.57, and for group 2, the mean was 13.37 with standard deviation of 3.87. Thus, the results of the Independent Samples t-test in Table 1 indicate no significant difference between the two groups as far as their general proficiency was concerned (t (28) = - .233, p = .819).
Table 1: Descriptive Statistics and Independent Samples t-test for the Proficiency Test

<table>
<thead>
<tr>
<th>Groups</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>13.00</td>
<td>16</td>
<td>3.57</td>
<td>-2.33</td>
<td>15</td>
<td>.819</td>
</tr>
<tr>
<td>2</td>
<td>13.37</td>
<td>16</td>
<td>3.87</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The research question in this study addressed the difference in Mean Length of Utterance (MLU) based on flash stories and traditional way of reading stories. To answer this question, the researchers utilized descriptive statistics. As the descriptive data in Table 2 show, the mean value of the experimental group (i.e. 12.21) is higher than that of the control group which was found to be 9.74.

Table 2: Descriptive Data for the Comparison of the experimental and control groups

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>16</td>
<td>8.18</td>
<td>15.50</td>
<td>12.2188</td>
<td>2.20474</td>
<td>4.861</td>
</tr>
<tr>
<td>Valid N (List wise)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In order to see whether the difference between the control group and the experimental group was meaningful or not, the researchers utilized t-test. (Table 2)

Table 3: T-test for the Two Groups’ Scores

<table>
<thead>
<tr>
<th>Independent Samples Test</th>
<th>Levene's Test for Equality of Variance</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>t</td>
</tr>
<tr>
<td>SCOR: Equal variance assumed</td>
<td>1.677</td>
<td>.205</td>
<td>-2.613</td>
</tr>
<tr>
<td>Equal variance not assumed</td>
<td>-2.613</td>
<td>27.162</td>
<td>.014</td>
</tr>
</tbody>
</table>

As the results in Table 2 reveal, there was a significant difference between the control group and the experimental group (t (15) =-2.613, p = .205). It means that using digital storytelling had a positive effect on improving participants’ oral reproduction of short stories. Therefore, from the mean values of the two groups, it is evident that experimental group outperformed the control group. (See Figure 1)

Fig. 1: Mean Scores of two Groups
Discussion and Conclusion:
Storytelling as an effective strategy in language learning and teaching can incorporate the aesthetic ways of knowing into instruction (Miller S, Pennycuff L 2008). In digital storytelling, there is incorporation of the multimodalities Siegel M (2006) that expands children and adolescents' expression and exposition.

We can probably conclude that learners increased their MLU through digital storytelling, and to some extent, they made progress in grammatical development in a short time. Therefore, it is reasonable to conclude that digital storytelling through computer technology may contribute to their progress in speaking skill.

One important effect observed by researchers was increasing motivation and engagement levels in their students. According to Robin B.R (2008), digital storytelling effectively captivates and motivates students. Furthermore, the findings from this study, specifically the increase in students' motivation and engagement levels were expected results as they were also reported in the literature.

In sum, a story-based framework of teaching and learning can be very useful and powerful tool for both teachers and learners. A well-organized story session can encourage the learners and also help them to explore many features of the language Loukia N (2006).

The availability of technical and instructional support for teachers is considered as an essential requirement for the successful integration of technology into the classroom Loukia N (2006). "Support from the administration, both providing proper "access to technology" and the necessary "training" and "continuing technical support" should also include allowing teachers to have enough time to explore digital storytelling and its uses in the classroom" Engel S (1999).

Since digital storytelling is a relatively new educational technology tool, therefore, it would be necessary to have instruction on how to use digital storytelling in the classroom for teachers. Continuous technical or curriculum support for teachers on how to use digital stories effectively in the classroom would increase its usage in the classroom by both teachers and students.

Therefore, it would be valuable to explore the ways digital storytelling can come to support oral competence integrating with story-based tasks. A story-based framework of teaching and learning can become a very powerful tool in the hands of a teacher. A well-organized story session can motivate the students and make them want to explore many features of the language. We hope future research continues exploring the ways that Information and Communication technologies can be brought into language teaching and acquisition environment.

REFERENCES


Kleckner, M., 2007. A Picture is worth a thousand words: Using digital storytelling in the classroom.
The Reading Matrix, 6(1): 1-73.
Retrieved December 15, 2010 from: academic.research.microsoft.com/Paper/4941516
Retrieved March 15, 2010 from
Ware, W., 2006. From sharing time to show time! Valuing diverse venues for storytelling in technology-rich classrooms. Language Arts, 84(1): 45-54.