Applying Computer Multimedia Storytelling Website in Foreign Language Learning

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Abstract

Storytelling is a practical and powerful teaching tool. However, teachers have not been zealous to integrate storytelling in the classroom. The reasons for not using storytelling include time and space in the curriculum. Language teachers in Taiwan have additional problems like lacking the skills of integrating storytelling into language teaching, finding appropriate stories and lacking the cultural and language abilities to handle storytelling in English. Therefore, a multimedia storytelling website was designed as a research tool. The website contains following feature modules: Accounts administration module, Multimedia story composing module, and Story re-playing module. To demonstrate the effectiveness of the website in significantly facilitating young children’s foreign language learning, the web was implemented in one elementary school to test its effectiveness in instruction and in resultant student learning. The results of the study support the significance and the education value of the multimedia storytelling website on foreign language teaching and learning.

1. Background of the study

Language development has become important to the education for all age levels. In order to provide successful language learning, Pesola (1991) [1] suggested that storytelling is “one of the most powerful tools for surrounding the young learner with language” (p. 340).

Indeed, storytelling is a practical and powerful teaching tool, especially for language learning. However, teachers have not been zealous to integrate storytelling in the classroom. According to the researcher’s informal survey, less than one fourth of the elementary EFL (English as a Foreign Language) teachers in Taiwan applied storytelling in their English classes. The reasons for not using storytelling included also time and space in the curriculum. Moreover, language teachers in Taiwan have additional problems like lacking the skills of integrating storytelling into language teaching, finding appropriate stories as well as lacking the cultural and language abilities to handle storytelling in the target language (English). Therefore, in order to apply the effective teaching tool, storytelling, in the foreign language classrooms in Taiwan, a device, which can facilitate EFL teaching and learning is in urgent need.

Because of the increasing availability and use of computers in classrooms. Utilizing computers in all subjects has been a primary goal for the Ministry of Education in Taiwan. Computer assisted learning is now available for most teachers and students. A well-designed computer assisted learning program is believed to efficiently facilitate both teaching and learning process. Therefore, the researchers would like to apply computer multimedia aided learning on EFL storytelling. Computer multimedia aided learning is reported to be beneficial in many disciplines, including foreign language learning (Miller, 1998 [2]; Trollip & Alessi, 1988 [3]). The researchers have designed the website by applying the theoretical guidelines and principles in many aspects. For example, the constructivist theory was used as a base for designing the online multimedia story composition tool, curriculum, teaching materials and methods of the study. Finally, with all the fruitful research results and precious experience, the researchers found the study targeted on EFL with assistance of web-based multimedia is sparse. Thus, there is a need for the study to be conducted.

2. The multimedia storytelling website

The website is intended to act as an integrating storytelling environment for teaching/learning EFL. Therefore, the website allows users to (1) compose online multimedia stories by an easy, intuitive, and quick manner, even for young students, (2) re-play and share the stories composed by others in schools or at home, (3) demonstrate or learn how storytelling can be integrated into classes, (4) access the website anytime and anywhere, and (5) use the functionalities provided by the website without installing any extra software.
The website contains following main feature modules.

a. Accounts Administration Module.

Students, teachers, and system administrators login to the (password protected) system with different levels of authorities and functions for using the system. For example, each student can login to his/her own account to compose his/her own stories. They can also continue their unfinished works. Teachers, on the other hand, not only can edit stories to be used in the classes; they can also have the authorities to view and evaluate what students have done.


In this main module of the system, users can compose a new story or modify an existed story via a web browser. In each page of the online storybooks, they can choose their favor characters, objects, and backgrounds, in the format of still images or animations. They can also choose their favor sound effects and music to make the stories even more vivid and lively. If prefer, furthermore, users can also write texts and add hyperlinks to their stories on each page. All of the contents can be completed by simply several mouse clicks and keystrokes.

c. Story Re-playing Module. (Fig. 3.)

After the online multimedia story has been accomplished, the story, along with all the old stories, can be replayed. Users can then tell a story by accompanying the demonstration of a story page by page either forward or backward. The chosen objects and texts will be demonstrated while animation and music will be played simultaneously. Furthermore, a nice feature of the system is that users can drag the objects on each page to move them around. This interactive function can add a lot of fun; and even more, users can tell different stories by using the same online multimedia storybook.

3. Empirical test of the website

The web was implemented in one elementary school in southern Taiwan for ten weeks to test its effectiveness in instruction and in resultant student learning. Two 5th grad classes (74 students) participated in this study. Three stories appropriate for the students’ cognitive and language level were created through the website by the instructor. Eighteen-hour training section about applying the storytelling website in EFL storytelling was provided to the instructor before the treatment. Students in the experimental groups received EFL storytelling and retelling with the website; while students in the control group had regular storytelling and retelling instead. After each story, students were checked for their comprehension and language complexity through story retelling. Student questionnaire and teacher interview were both administered at the end.

4. Results

Before the experiment, students in both classes were pre-tested for their ability in story comprehension and sentence complexity. There were no significant differences in both accounts between groups. However, after the ten-week experiment, the results of students’ comprehension check indicated a significant difference between groups. As shown in Table 1, students learning with the website, on average, did better in their story comprehension (p < .00) and sentence complexity (p < .05). These results indicated that with the multimedia storytelling website, students were easier to catch the idea in the story. Since students were more attentive in the process, they gain more words, phrases and sentences through the telling process. Thus, when retelling their own stories, they tended to copy or create more language from their listening and this resulted in better sentence complexity.

5. Conclusions

The above results support the significance and the education value of the multimedia storytelling website on foreign language teaching and learning. If the websites can be used in elementary English learning, both the teaching and learning quality should be improved and students should have greater enjoyment and success in language learning.

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### Table 1. Test results

<table>
<thead>
<tr>
<th>Groups</th>
<th>Comprehension Mean</th>
<th>Sentence Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiment (N= 38)</td>
<td>13.13</td>
<td>13.28</td>
</tr>
<tr>
<td>Control (N = 36)</td>
<td>9.66</td>
<td>11.83</td>
</tr>
<tr>
<td>t-test</td>
<td>-5.338***</td>
<td>-2.30*</td>
</tr>
</tbody>
</table>

\*p < .05. \**p < .01. \***p < .001.

Reference