The Use of Digital Stories for Listening Comprehension among Primary Chinese Medium School Pupils: Some Preliminary Findings

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Abstract

This article reports on preliminary findings based on observations and comprehension exercises during an on-going study on the use of digital stories for listening comprehension among Primary Year 3 students in a Chinese medium school. The preliminary findings would inform the main study that looks at the effectiveness of digital stories for listening comprehension. 30 primary Year 3 students (aged 9) were involved in the listening/viewing of 8 animations of fairy tales over a period of 8 weeks. The findings based on the observations revealed that the students displayed high levels of interest, attention and motivation. The students also showed interest in fairy tales. The results from the comprehension exercises showed some level of improvement in their comprehension of the stories. Finally, it was also noted that pre-teaching vocabulary is essential to ensure the success of digital stories in improving students’ listening comprehension. The findings indicate the potential of digital stories in increasing the level of motivation, interest, and attention in ESL/EFL learning.

Keywords: ICT; digital story; listening comprehension; ESL

1.0 INTRODUCTION

Everyone loves stories and this is especially true for children. For language learning, stories have become prominent over the years as a good way to expose learners to new language. With the advent of technology and the integration of Information and Communication Technologies (ICT), new media tools have been incorporated for English Language Teaching (ELT). To this end, the traditional method of storytelling via narrative and texts have been given a new twist via ‘digital stories’, a modern way of presenting traditional forms of stories where learners are exposed to stories using digital technology such as the medium or method of expression, with visual materials, audio sounds, with varying effects such as graphic etc. This article reports on the preliminary findings, based on observations and listening comprehension exercise, during an ongoing study on the use of digital stories for listening comprehension among Primary Year 3 students in a Chinese medium school. These preliminary findings would inform the main study that looks at the impact of digital stories for listening comprehension.
The study extends upon research in the area of computer based technology for language learning (e.g. Salaberry, 2001); use of listening comprehension strategies (e.g. Graham, 2006; Hedge, 2006; Vandergrift, 2011); use of stories (e.g. Dickinson, 2001; Zevenbergen and Whitehurst, 2003; Whitehurst and Lonigan, 1998); and digital stories (Hoven, 1999; Ramirez and Alonso, 2007). While there have been many studies on new media tools and ICT in language learning (e.g. Salaberry, 2001), most of the studies focus on older students, i.e. high school and university level and there is a need to look at the use of new media tools among younger learners (Ramirez and Alonso, 2007). In the Malaysian context, very few researches have focused on ESL learners in Chinese medium schools. This study thus, focuses on the use of digital stories for listening comprehension for 9-year olds, in a Chinese medium school. The findings are based on observations made by the teacher/researcher on students’ attitude, behavior and motivation when exposed to digital stories and the results from listening comprehension exercises comprising multiple choice questions (MCQ’s).

2.0 LANGUAGE ACQUISITION AND LISTENING COMPREHENSION

This study focuses on listening comprehension as an essential element for language teaching and learning and especially so with young learners. It draws upon Krashen’s (1985) distinction that language acquisition takes place when learners are exposed to comprehensible input through listening and/or reading. Here, acquisition refers to the subconscious process when learners grasp a language through exposure to what they read or listen. Thus, learners should focus on meaning rather than language form, and comprehensible input is essential for successful acquisition. Listening, therefore, is one of the means for language acquisition. However, listening is a very difficult skill.

Listening involves a cognitive process (Goh and Taib, 2006), and this makes the very nature of listening invisible and complex (Meinardi, 2009), thus making it difficult to observe and describe. Wipf (1984) describes listening comprehension as a ‘complex problem-solving skill’ whereby listeners are required to discriminate between sounds, understand vocabulary and grammatical structures, consider stress and intonation, recognize intention and retain, and interpret all this within the immediate, as well as the larger socio-cultural context of the utterance. In conclusion, listening is a multifaceted, active process of interpretation where acquisition requires matching what is heard with what is already known.

2.1 Using Multimedia Technologies for Language Learning.

Multimedia computers have been used extensively to teach target languages in non-target language speaking regions (Amaral and Meuris, 2011; Liaw, 2007; Lim and Shen, 2006). The use of multimedia has many advantages for learners, particularly in activities consisting of listening comprehension. It is more directed towards student-centred learning which allows students to be more collaborative and interactive in the classroom. The use of technology resources enhances learning and is viewed as one of the best approaches to help increase students’ competence in their learning process.

Teachers have always made efforts to raise students’ interest and attention by using pictures, realia and gestures to convey meaning to what is taught. In recent years, the computer, along with internet and hypermedia capabilities has become a powerful addition to second and foreign language teachers’ resources. Multimedia offers a variety of means to meet the needs of students with different learning styles and strategies. The use of computer-based multimedia leads to enhanced learning on criteria such as acquisition of content, development of skills, efficiency of learning and satisfaction with instruction (Falk and Carlson, 1991). The success of the use of multimedia for language learning is explained by Mayer’s (2001) Cognitive Theory of Multimedia Learning.

Mayer (2001) explains that multimedia learning involves two modes of matching representations of information which may be processed via two separate channels, namely, the auditory and visual channels. The two modes and the dual channels of auditory and visual involve three theoretical basis, such as dual channel, limited capacity and most importantly, active processing. Al-Sheri and Gitsaki (2010) state that active processing enables the individual to select the most relevant information as input during information processing, followed by the integration of that information with prior knowledge. Within the language learning context, this means that if L2 learners are challenged by the listening content they are exposed to, they may choose to attend to the available visual cues. In this way, the presented language becomes more easily understood, and more relevant. In this way, both the audio and visual stimuli enhance and enable the learning of the language.

Studies show second language learners have high levels of anxiety and thus face difficulties when it comes to listening comprehension (Graham, 2006; Hedge 2006). And one way of alleviating anxiety during listening is through the use of visual materials (e.g. Chung, 2002). This affirms that listening comprehension is enhanced when accompanied with visual cues especially via multimeida technology. As Ramirez and Alonso (2007), pointed out, multimedia applications provide a more realistic picture of the new language. To this end, digital stories are ideal for listening comprehension as they incorporate new technologies and are visually interesting, attractive, interactive and reiterative (Ramirez, Alonzo and Chung, 2002).

2.2 Using Digital Stories to Teach Listening Comprehension

A good way to introduce new language is through stories. Stories help present and contextualize new language especially to make it meaningful and memorable for younger learners (Wright, 2008). Wright (2008) affirms that stories help children become aware of the general feel and sound of the foreign language. Every feature of the language such as linguistic items, grammar, vocabulary, sentence construction, etc can be presented through stories (Koissawalia, 2005; Glazer and Burke, 1994). Others have also reported on the multitude of benefits of stories for language acquisition, especially for younger learners. Stories and tales help children develop listening comprehension and literacy (Dickinson, 2001). As stories engage the listeners through feelings, memories, values and perceptions, this enhances general comprehension (Ramirez & Alonso, 2007). While stories enhance listening comprehension and acquisition of the target language, methods that incorporate a combination of both auditory and visual elements, such as digital stories, have been affirmed as being more effective.

Digital stories are the new version of storytelling. The Digital Storytelling Association (2002) describes digital storytelling as giving new expression to old forms of storytelling in a modern way. In traditional storytelling, the storyteller controls the narration, movements, sound effects etc. and the story itself might differ in terms of length and originality depending on the memory of the story teller. In comparison, digital stories might include animation, moving pictures, graphic etc. that are combined with soundtrack, audio and images that bring the story alive. Digital storytelling, therefore, has the potential to facilitate
teaching and learning in the classroom. At the same time, it provides a creative and open-ended environment (Sadik, 2008). In relation to theoretical research, Barrett (2006) affirms that digital storytelling facilitates the union of four student-centered learning strategies: student engagement, reflection for deep learning, project-based learning, and the effective integration of technology into instruction. Additionally, Jonassen and Hernandez-Serrano (2002) illustrate three ways in which students can learn via digital stories. First, digital stories could be used as visual and conceptual examples of concepts/principles being taught via direct instruction. Second, they can be used as problem cases that need to be solved by students. Thirdly, stories can be used as personal advice for students in how they approach problem solving.

Digital storytelling have been commonly used in teaching history, arts, or humanities (Combs and Beach, 1994), in recent years, it has gained importance in the teaching of sciences and mathematics. For example, Schiro (2004) used digital storytelling to teach algorithms and problem solving, and found that the material skills which the students needed to learn could be presented within a more interesting and engaging context. This made the lesson more meaningful for the students. In a study designed to determine the effects of using digital stories across the entire curriculum, (Social Studies, Mathematics, Reading, Writing and Science) Sadik (2008) found that the digital program Photo Story made it easy for students to become involved and active participants, thus becoming autonomous learners who take responsibility for their own learning. The value of digital stories in education has been studied repeatedly with qualitative reports demonstrating a positive learning experience and an improved teaching process. Researchers have found that digital stories are a powerful tool in language education that improves the level of learning in all fours skills, i.e. reading, writing, speaking and listening (Tsou et al., 2006; Gregori-Signs, 2008).

Mello (2001) who exposed her subjects to bimonthly storytelling sessions over the course of a full nine month school year, based on the information provided by the students during the multitude of interviews conducted by the researcher found that in general, students found storytelling to be enjoyable, entertaining and interesting, they appeared to place more emphasis on how the story was told. Mello explains that the students were reacting on a much deeper level that revealed a more reflective and critical analysis of the information inherent in the story. Additionally, students began reacting on a much more emotional level by linking their emotional responses with their thinking or cognitive abilities. Mello’s study also found that students were able to connect with the visual imagery where they revealed immersion in the story itself. They also could link new information to previously learned knowledge. Mello reports that students displayed evidence of transformational connections as they learned more about themselves and others. In general, the students showed improved overall learning comprehension, listening skills and improved interactions with other classmates and adults (Mello, 2001).

Mello’s findings relate to the Reflective Learning through Storytelling Model presented by McDrury and Alterio (2003) that students progress from their initial reactions towards making deeper understandings and personal associations as they reflectively engage in critical analysis, this leads to change in behaviours or knowledge about themselves and others. Similarly, the brain-based learning theories support these findings that digital stories enable students to be more at ease in their classrooms (relaxed alertness), and the level of immersion in course content creates active visual imagery. Thus, the active processing of the stories by the students results in various levels of self-reflection, transformation. This leads to improved overall learning of the material being taught.

Both traditional storytelling and digital storytelling are important in teaching and learning. However, researches show that that it is digital stories that is more effective in improving listening comprehension when compared to the traditional method of storytelling.

### 3.0 METHODOLOGY

The study was designed to investigate the effectiveness of the use of digital stories for listening comprehension. It involves 30 Primary Year Three students (aged 9), chosen based on their previous exam results. They are categorized as ‘average’- of grade B (60-79 percent). This group of students was chosen due to availability and accessibility. One of the researchers is a teacher in this school and teaches English to this class, thus it is convenient to use this group of students. In addition, as the teacher is familiar with the students and knows their general attitude, motivation etc during her use of the traditional way of presenting stories used prior to this experiment, it would be possible to do a comparison of the ‘old way’ with the new media digital story method. For this reason, the study does not require a control group using the old method of storytelling.

Eight stories have been selected from YouTube to be played to the students during class (English Language lessons), over a period of eight weeks. The stories selected include animations of fairy tales namely, ‘The Story of Ma Ling’, ‘How the Tiger Got Its Stripes?’, ‘Mulan, The Ugly Duckling’, ‘Little Red Riding Hood’, ‘The Emperor’s New Clothes’, ‘Little Mermaid and the Kind Hen’. Each story lasts for about 10-12 minutes. The selection of stories is based on level of difficulty, interest (adequate for 9 year olds), length (not too long for a listening activity to be conducted within a 30-minute lesson) and the assumption that the students are familiar with the fairy tales.

Apart from this, fairy tales were used due to the multitude of benefits they have on young learners. Fairy tales provide an avenue for children to grapple with universal problems such as aging, death, sibling rivalry etc. which allows learners to interpret and adapt at a personal level (Bettelheim, 1976). To Bettelheim, the good versus evil duality that is present in fairy tales also provides opportunities to elicit moral resolutions, and the happy endings typical in fairy tales, provide a positive outlook on life. Fairy tales were used also because they are a great source of vocabulary, grammar structures and syntax, and are short enough to keep students interested till the end (Bagg, 1991).

In the main study, the students will view the eight selected stories, and answer 10 multiple choice questions (MCQ’s) based on the stories, in the form of worksheets provided by the teacher. The worksheet aims to test their level of comprehension of the stories. The questions are similar to the type and level of questions given in the exams for reading comprehension. They would also be interviewed after the eight week to know more about their perceptions, attitude towards use of digital stories for listening comprehension. For the purpose of this preliminary study, only two stories were used, namely ‘The Ugly Duckling’ and ‘Beauty and the Beast’. Table 1 gives the synopsis of the fairy tales and length of each story.
Table 1 Synopsis and duration of fairy tales

<table>
<thead>
<tr>
<th>Fairy Tale</th>
<th>Synopsis</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beauty and the Beast</td>
<td>It is a tale about prince who is cursed and turned into a Beast, and in order to break the spell, he has to win the love of the beautiful Belle who he imprisons in his enchanted castle.</td>
<td>12 minutes</td>
</tr>
<tr>
<td>The Ugly Duckling</td>
<td>The story of a ‘duckling’ born in a barnyard who suffers all kinds of abuse for being different from the other ducklings, and who later transforms into a beautiful swan.</td>
<td>11 minutes</td>
</tr>
</tbody>
</table>

The teacher also made some observation notes on students’ attitude, i.e. attention, interest, motivation etc, during the listening activity. In the following sections, some preliminary findings based on the observations and results from the MCQ’s (worksheet) for the two stories are discussed.

4.0 FINDINGS AND DISCUSSIONS

The findings in this section are based on initial observations by the researcher/teacher on the students’ attitude, behavior and motivation towards the use of the digital stories, i.e. the animated fairy tales. The results from the listening comprehension exercise (MCQ’s) are also discussed. It was found that students displayed high levels of interest, attention and motivation. There were some differences in focus between female and male students. The students also showed interest in fairy tales and to the type of animations used as main characters in the stories. It was also noted that pre-teaching vocabulary is essential for the effective use of digital stories. Finally, the results from the MCQ’s (worksheet) showed a slight improvement in their comprehension of the stories.

4.1 Student Behavior and Attitude Towards the Use of Digital Stories

As the students were listening/viewing the stories, the teacher/researcher made some notes based on observations of the students. The observations were unstructured in that there were no preconceived ideas or structure on what was to be observed or noted. Thus, the teacher/researcher noted any comments, change in attitude, etc that were observable. The following include the summaries of observations made.

Level of Interest and Motivation

In general, students showed a positive attitude towards the use of the digital stories. They were highly motivated, stayed attentive while listening and had better concentration for a longer period of time. Being attentive meant they were quiet while viewing, but also made notes for the purpose of answering the MCQ’s. In this sense, they seemed more active in their listening, despite the fact that the stories were not in their first language. Their attention level and span as well as motivation levels were much higher/longer in comparison to when fairy tales were presented using the traditional technique of storytelling via narration from texts. They were laughter, and some of the students even clapped at the end of the story. Some of the comments given by the students at the end of the lesson illustrate their positive attitude, e.g. ‘Teacher this lesson is the best’, ‘I like learning English like this’ (said in reference to the digital story method), ‘so interesting’, ‘so nice’, ‘it is fun’. This correlates with previous research that listening without visual cues makes listening difficult and students lack concentration, whereas when listening is accompanied by visual images or cues, the listeners become more active while listening for longer periods of time (Perry, 2001). The findings support previous research that students have a positive attitude towards the use of visuals in listening comprehension (Oman, 2001).

Another interesting finding of this study is the difference in the reaction of female and male students. This was observed during the viewing of both of the fairy tales. Female students seemed to have more interest in judging/talking about the characters from the stories while male students were more concerned with the MCQ’s in the worksheets. This finding would be further investigated during the main study.

Use of Animated Fairy Tales

In this study, animated fairy tales from YouTube were used for the listening comprehension. The initial observations showed that the students had a positive attitude towards the use of the digital stories, in that they were more attentive, showed enjoyment of the listening, participated more actively, and stayed focused on the story from start to the end. However it could also be affirmed that the use of fairy tales in itself, had a positive impact on them as they were very receptive towards the stories. They exhibited high levels of interest, motivation and attention span when viewing/listening to the fairy tales. Research have shown that fairy tales increase interest and involvement in young learners (Collie and Slater, 1987) as they typically prefer stories about animals, folk tales and fairy tales (Verhoeven and Snow, 2008).

Another interesting finding which the study would pursue further is that the students were more receptive towards the fairy tales with animals as their main characters. The fairy tales used in this study could be generally categorised as fairy tales with humans or animals as the main characters of the stories. The use of animals instead of humans in animated stories is known as ‘anthropomorphism’, which refers to ‘the attribution of human form or other human characteristics to any nonhuman object’ (Encyclopaedia Britannica, 2008). The story of Beauty and the Beast has a combination of characters both human and animals, but the main characters are still human forms. On the other hand, in The Ugly Duckling, animals are the main characters. Although Verhoeven and Snow (2008) have indicated that young learners generally prefer stories about animals, they also have verified the preference for folk tales and fairy tales. Thus, in the main study, there would be further investigation to consider if these learners do prefer fairy tales with animal characters over human forms, or if there may be other factors as well that have contributed to their preference.

Importance of Pre-teaching Key Vocabulary

It was observed that the students’ greatest difficulty when listening to/viewing the stories which could prevent their listening comprehension was with vocabulary. For example, from ‘Beauty and the Beast’ they were unfamiliar with words such as ‘palace’ and ‘merchant’. In this research, students watched and listen to the digital story, thus the input refers to language that learners are exposed to via the digital stories. Krashen (1981), states that comprehensible input is the input that can be understood by the learner. Input can be made comprehensible in various ways, for instance by simplification, with the help of context, or by negotiating non-understanding and misunderstanding. Researchers
such as Krashen considers comprehensible input a necessary condition for L2 learning. This suggests that for successful use of digital stories, teachers should pre-teach relevant vocabulary especially with ESL/EFL students of average and below average levels, a point that would be taken into consideration for the main study. This is to ensure that the stories are comprehensible to the learners. It is widely accepted that pre-listening activities aid comprehension as they help learners have prior knowledge (Vandergrift, 1997). Although pre-teaching of vocabulary per se has been frowned upon as this does not correlate with how learners acquire words from texts in the real world. Fields (2002) suggests that teachers could present crucial words if not knowing these words could impede understanding of the text, and this could be done in as little as five minutes so as to not reduce the main listening activity time.

4.2 Student Performance Based on MCQ’s for Listening Comprehension

Besides the observation notes, the results from the listening comprehension exercises also show some positive results. One of the reasons for the focus on listening comprehension in this study is due to students’ poor results in comprehension exercises. Whether in the exams or classroom exercises, the highest marks obtained by this group of students, rarely exceeded 50 percent. In fact a majority of the students obtained less than 30 percent. Thus comprehension questions are a big challenge for the students. Table 3 shows the results from the two listening comprehension exercises that consisted of ten multiple choice questions each. The results from the two exercises have been added and converted to an average of 100%. The purpose of the exercises was to test the students’ listening comprehension of the two stories, namely ‘Beauty and the Beast’ and ‘The Ugly Duckling’.

\[
\begin{array}{|c|c|c|c|c|c|}
\hline
\text{Total Marks} & \text{Number of students} & \text{Gred with percentage} & \text{Marks} & \text{Number of students} & \text{Gred with percentage} \\
\hline
10 & 0 & E (3.3\%) & 10 & 0 & E (3.3\%) \\
20 & 1 & & 20 & 1 & \\
30 & 1 & D (20\%) & 30 & 0 & D (16.6\%) \\
40 & 5 & & 40 & 5 & \\
50 & 4 & C (33.3\%) & 50 & 1 & C (20\%) \\
60 & 6 & & 60 & 5 & \\
70 & 4 & B (20\%) & 70 & 5 & B (20\%) \\
80 & 6 & & 80 & 5 & \\
90 & 3 & A (10\%) & 90 & 6 & A (26.6\%) \\
100 & 0 & & 100 & 2 & \\
\hline
\end{array}
\]

Gred A= 80-100 Gred B= 60-79 Gred C= 40-59 Gred D= 20-39 Gred E= 0-19

The results show that out of 30 students, 23 (63%) obtained 50 percent and more. Out of this, 10 students managed to obtain a B, followed by 3 students who obtained an A. While the findings here are only from two comprehension exercises, the improvement is obvious as in the past the students could hardly get more than 5 correct answers out of 10. While it is too early in the research to say that students have obtained better results due to the effectiveness of digital stories for listening comprehension, basing on the results from just two attempts, one could say, that the findings does hold some truth and seems promising, which would be investigated further in the main study.

5.0 CHALLENGES TO USING DIGITAL STORIES IN LANGUAGE TEACHING

The use of digital stories for language learning and specifically listening comprehension comes supported with evidence from studies and scholars. However, despite this, the biggest challenge remains with convincing teachers to use technology in the classrooms. At the most basic levels are the ‘concerns with technology’ which could be frustrating for teachers, e.g. burnt-out bulb on a projector, to failure to connect to internet. Jacobsen reports that teachers may have negative perceptions only in the early use of this approach in language learning. Some of the teachers are unable to adopt technology for teaching and learning tasks in schools for many reasons, namely teachers themselves do not comprehend the advantages of technology learning, and find using technology time consuming and tedious (Jacobsen, 2001). The teachers also feel that they need to have training sessions on the use of the technology, and more time would be spent on explanations on the use of the technology and its tasks to students (Sheingold and Hadley, 1990).

In a similar vein, Dogan and Robin’s (2008) study on how teachers apply the technology in the classroom discovered that after being trained in a digital storytelling workshop, more than half of the participants (teachers) indicated that they did not use digital storytelling in the classroom, despite attending a semester of training using digital storytelling, for the following reasons: access to technology and time issues. Under access to technology, some of the reasons included students not having access to computers, outdated computers, or not having operating systems, etc. As for the ‘time issues’, they could not manage the time to integrate digital storytelling into their teaching. Hofer and Swan (2006) also listed time factor as a pedagogical challenge, and copyright issues on using online media as a technology challenge in using digital stories in the classroom. Griffin suggests that through proper planning, such challenges could be overcome. Teachers should always check the technology (hardware and software) conditions first before
teaching, when using technology in class (Griffin, 2005). Sadik (2008), however views the teachers' concerns as a result of a lack of vision in teachers in utilizing technology in order to improve teaching and learning.

6.0 CONCLUSIONS

This article reported on the preliminary findings based on observations and results from comprehension exercises on listening comprehension among Primary 3 students in a Chinese medium school. Although, the findings are based on just two attempts of using digital stories and some observations by the teacher/researcher, it does hold some truth. The observations revealed that students showed a positive attitude towards digital stories. The findings also highlighted the importance of pre-teaching of key vocabulary for the success of using digital stories to improve listening comprehension. The comprehension results based on MCQ's also showed some positive results. The findings would inform the main study that involves a larger collection of stories to investigate the effectiveness of digital stories for listening comprehension.

Within the Malaysian ESL context, it is also questionable if teachers would make digital storytelling a regular part of their listening comprehension practice. The many challenges for teachers include the overemphasis on exams and drilling with exam based workshops, which makes examinations and tests the Malaysian teachers' prime focus (Chandran, 2003; Sandaran and Mohan Das, 2013), the main factor impeding their use of digital story could be the lack of time. Despite such concerns, it is still hoped that this study would help to raise teachers’ awareness that digital storytelling offers great potential for increasing student motivation, interest and not forgetting, their listening comprehension.

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