Digital Storytelling and the 21st Century Classroom: a powerful tool in phraseological units learning

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Abstract. 21st Century society is characterised by an abundance of information due to the growing availability of emerging technologies.

This paper explores the impact that Digital Storytelling, regarded as a new multimedia learning tool, has in enhancing critical thinking and learning motivation in teaching a second language and culture.

The first part of the paper presents a theoretical framework for understanding the power of this instructional tool and how a technology-integrated learning environment could have a positive effect on student learning.

The second part of the paper shows the results of a study whose aim was to focus on the analysis of MWEs from a DST application for secondary school students, in order to demonstrate how DST could be an effective multimedia tool in teaching phraseological units in second language acquisition.

Keywords: Digital Storytelling, Technology-Integrated learning environment, Phraseological units.

1. Introduction

Current researches on effective educational practices[1] have shown that Digital Storytelling (DST) is a powerful instructional tool for both students and educators.

21st Century students are the first generation to use computers, smartphones, digital music players and other tools of the digital age which, along with e-mails and instant messaging, are integral parts of their life. Prensky defines them as *digital natives* because students today are all “native speakers’ of the digital language of computers, video games and the Internet”[15].

This research project aims to investigate the developments and the effects that the use of DST provides in the classroom in teaching and learning foreign languages and cultures.

At its core, DST combines the art of telling stories with a variety of digital multimedia, including computer-based graphics, recorded audio, text, video clips, and music, so that it can be played on a computer or uploaded on a website. In this way, DST allows computer users to become creative storytellers, developing interesting stories that are typically just a few minutes long (three-to-five min.), have a variety of uses

(from personal tales to historical events or teaching materials), revolve around a chosen theme and often contain a particular point of view.

According to Robin[16], integrating visual images with written text both enhances and accelerates student comprehension, and DST constitutes a meaningful approach for energizing instructors and motivating students. Thanks to the advanced, available, low-cost and user-friendly today's multimedia, students are able to no longer passively listen to lectures (as with PowerPoint slides or paper-based textbooks) but they are actively engaged in the learning process, experiencing feelings of ownership and taking responsibility for their learning.

As Ohler[14] suggests, the greatest potential of DST lies in the fact that it provides digital natives the opportunity to speak in their own language, because media is the environment in which they feel comfortable.

However, along with the development of content understanding, students also develop planning skills in a useful and meaningful manner: when creating their own stories, students are asked to research a topic, look for pictures, record their voice, choose a particular point of view, which force them to create storyboards, story maps, scripts and other planning materials. In this way, they find themselves involved in what Ohler calls "the media-production process"[14], a process that consists in creating, editing, and sharing original work.

Moreover, using their own viewpoints gives students a sense of ownership because the stories they tell are full of their personal feelings and ideas, that are also expressed in a personal manner, so it is clear that DST can help them to capture and expand their imagination and develop their communication skills.

In addition, when digital stories are shared on the Web, students have the opportunity to view the work of others, so that they learn cultural differences, expand their own knowledge and give value to their experience.

Growing developments in neuroscience and neuropsychology[5] are proving that stories have a biological basis[4]: sensory experience is mostly forgotten, moments after we hear, see, touch and taste it. However, researchers have demonstrated that to remember, we move sensory information from a slower part of our brain to the fast-working hippocampus[13], which participates a complex process of consolidation of our memory. This process seems to require reviewing the experience again and again in our minds. The Romans would say *repetita iuvant*.

Second language learning requires the management of four main skills: speaking, writing, listening and reading, which lead to effective communication.

Lexical acquisition is one of the most important parts of language learning and also one of the most discussed topics in second language pedagogy.

However, the way through which learners acquire lexicon and which is the best way for it to be taught is still a discussed matter.

In order to increase their language skills and be able to speak and write correctly in L2, students need to acquire lexicon through repeated exposure.

Laufer defines lexical acquisition as a 'cumulative process': "Each additional exposure to the same word may enrich and strengthen the learner's knowledge of it. The question to ask here is: how many exposures to a word are needed before the learner can recall or recognize the meaning of a word?"[10].

As the traditional formal teaching provides a monotonous and boring environment, using DST in second language teaching seems to be an interesting educational way suitable for enhancing the efficiency of learning and teaching.

In this study, the data collected refers to the English language acquisition by secondary school students in order to enrich their own lexicon and make them aware of the differences in the usage of the most frequent words.

Teaching lexicon by using multimedia tools seems to be the best way to encourage students learning a second language.

It's for this reason that this research project also aims to demonstrate that DST provides teachers a unique way to help students retain new information and comprehend difficult topics without taking a long time.

The idea of this project is that DST can effectively represent a bridge between existing knowledge and new material.

1.1 The Study

The purpose of this study was to focus on the analysis of MWEs from a DST application for secondary school students, in order to demonstrate how DST could be an effective multimedia tool in teaching phraseological units in second language acquisition.

The data in this study is based on a digital storytelling language course called *Muzzy* developed by BBC.

The choice to analyse a single digital story lies in the fact that this project represents the first research conducted on the use of phraseology in the field of DST.

Setting. *Muzzy* is a language-learning program by which educators can teach secondary school students a second language through animated and funny stories.

Muzzy was chosen among different digital stories because it is one of the most used language teaching course in Italy for students between the ages of 11 and 14 years old.

In *Muzzy* each episode is designed to build on the previous episode through words and concepts students have just learned. The use of repetitions makes learning easy and funny.

The story has been analysed in the English language. It is divided into six parts and consists of 67 scenes both printed in a book and included in a DVD.

The corpus consists of 4622 tokens and it was analysed entirely. Each episode explains different particular linguistic phenomena related to level A2, according to CEFR reference levels.

Data collection and data analysis. The data was collected through the following procedures:

- The 67 scenes of the story have been organized into 6 parts corresponding to a corpus consisting of 6 different episodes.

- Each sentence of the entire story has been analysed to identify the use of MWEs in order to put forward hypothesis on how phraseology is employed in DST. Moreover, a list of the total number of verbs in the digital story has been compiled to specifically identify verbal MWEs by using PARSEME annotation guidelines.

1.2 Discussion and Conclusions

The results of this study show a significant usage of MWEs that includes both VMWEs and other types of MWEs.

The MWEs in this digital story were identified by following PARSEME criteria.

In order to identify VMWEs, the first step was to compile a list of the total number of verbs used in this digital story; the second step was to analyse each of them in order to categorize the VMWEs according to their peculiarities.

The total number of verbs used in this digital story is 73.

First of all, a great number of *Light-Verb constructions* was recorded, in particular in scenes 29 to 39 and 40 to 45: *have a shower, take a rest, have breakfast/lunch/dinner* are only some of the most used ones.

Also, numerous *idioms* can be pointed out, such as *I beg your pardon, be careful, well done, come on* – which are endlessly repeated throughout the entire story.

As for *phrasal verbs*, although only 18 of the total number of verbs were used as phrasal verbs, they were repeated 38 times. Among them, the most recurring ones are: *point at, ask for, come from, come back, go up and go in*.

The repetition of one phrasal verb in the same phrasal construction is about 2,1%.

The trickiest aspect of PV is that they can have multiple meanings and that these meanings can change depending on the particle.

As *Muzzy* is a digital story designed for secondary school students, it's mostly for this reason that the total number of phrasal verbs is low. Nevertheless, two episodes of this digital story (in particular, scenes 46 to 58 and 59 to 67) are mainly dedicated to PV, that are constantly repeated in the same phrasal constructions to make their assimilation and comprehension easier and clear. This allows VMWEs to be learned by implicit learning by unconsciously meeting multi-word sequences repeatedly in funny contexts.

Although different *collocations* can be identified (among the most repeated ones: *dirty job, roller-skate, lunch-time, dinner-time, sitting-room*), an overall analysis allows to affirm that the number of VMWEs is greater than MWEs containing only nouns and adjectives. In fact, they're in a ratio of 1:12.

As Lam[8] maintains, trying to remember a list of individual uses of a part of speech is hardly helpful and positive for learners as they mechanically repeat like they are singing a lullaby, without really understanding the meaning of a term and why it is used in a precise context.

Instead, the incessant recall of verbs, nouns, adjectives, prepositions mixed with a clear and pleasant animated story, music and sound effects make students learn lexicon and its functions easily.

Repetition aids familiarity: students get the hang of terms and expressions and start using them naturally.

Indeed, both the meaning and the amusing situations of the digital story also make lexicon easy for students to remember and this can stimulate their cognitive development encouraging them to practice L2 and persuading themselves that they are able to work out the meaning of the words they do not know.

As Kennedy affirms, “research in cognitive science has shown that frequency of occurrence and frequency of experience establishes words and collocations as units of learning, and becomes a determinant in their use”[7].

This paper is based on the idea that DST talks to students, gives voice to their experiences and is able to simplify even difficult topics, constructing a learning environment in which they can learn in an effective, creative and meaningful way. So, this study only represents a first analysis conducted on the use of phraseology in DST and needs to be enriched by a larger corpus whose creation will be the starting point to test the effective incidence of MWEs in the field of DST.

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