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Digital storytelling in Language learning

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Abstract

The evolution of digital technologies implies a paradigm shift in teaching methods. The national curriculum for Portuguese language teaching at Elementary School level highlights the role of technologies, considering that these new methods require mastery of multiple literacies. In this context, we attempt to provide through student developed multimodal digital narratives, the chance to access a multiplicity of textual environments, in particular digital and visual ones.

We set out a case study designed to answer the following research questions: how can multimodal texts contribute to development of the study of narrative? Which implications could the creation of digital narratives have in the improvement of writing skills? Would the use of digital resources inside the classroom interfere with the students' motivation and mutual collaboration?

In this article we provide: a brief theoretical contextualization of digital narratives in the context of mother language learning; the project carried out with 13 years old students; the research methodology underlying this project; the results obtained.

Keywords: Multiple Literacies, Digital Storytelling, Narrative, Language Learning.

INTRODUCTION

Globalization has given rise to an information and knowledge based society, a new period in civilization marked by a new world dominated by technology that incessantly penetrates our lives (Silva, 2001). The way we live our lives today is defined by the near universality of the personal computer and the ease of access to information (Costa, 2008).

In this context, in Portugal, schools have become a priority n the improvement of access conditions of access to Information and Communications Technologies (ICT) following the updating of computing equipment carried out by the Ministry of Education. The Technology Plan is an example of this, giving rise to the Education Technology Plan with its four axes: *technology*, *content*, *training* and *investment*. The objective of the *Internet at School* program was to equip educational institutions with computer equipment and internet connections. As its use expanded in our country, the information society gained visibility in our country and the ICTs emerged as a recurrent theme defining new social and economic policies (Silva, 2008), becoming central to the Information Society.

Faced with an environment of "accelerated change" (European Commission, 2007, p3) and faced with technological alterations within the information society, it is our view that schools cannot remain indifferent to the challenge facing the education system. As Papert observes (1997, p5), "the computer short-circuits the traditional mix in the school, made up of an artificial motivation and an imposed discipline which aims to "grab hold" of children to make them learn things they cannot use".

We are, in the opinion of Pretto (2008, p1) faced with "the same old school dressed up as modern". In effect, the school still presents itself as a traditional, technical-based institution in which the teacher takes on the prime responsibility for the transmission of knowledge to the pupil, whose role is passive (Baladeli&Altoé, 2008), privileging the traditional modes of communication and information based on the teacher and text books without recourse to technology (Costa, 2009).

As Moura and Cavalho claim (2006, p109), "any teacher who does not become part of the digital age will lose touch with this new generation of digital natives".

With technologies increasingly dominating work environments, it is important that teachers familiarize themselves with them in order to create school environments able to produce autonomous, individualized and significantly collaborative learning (Hargraves, 1998). This puts us on the same path as the expectation of the OECD (2006, p21), which hopes that teachers "stimulate students to take a more active role in their own education", making available situations and experiences in which this education can be constructed by the students themselves (Costa, 2004).

THEORETICAL CONTEXTUALIZATION

Theories of learning have been undergoing changes over time, with technologies becoming essential cognitive tools in the construction of areas of knowledge, in that they actively involve the students in the creation of knowledge from their understanding and conceptualization of information, allowing them to negotiate meanings in a collaborative way (Jonassen, 2007). Technologies develop to serve competencies, favoring the development of different styles amongst students, "multidimensional or multimodal styles, allowing them to deal with the complexity of an ever more demanding society" (Tavares, 1999, in Botelho, 2009, p63).

The concept of literacy has also undergone changes imposed by the new technologies. It has been suggested that the term should be read in the plural in order to underscore its diversity (Pinto, 2002; Papaioannou, 2011). Lankshear and Knobel call them "new literacies", which, in agreement with Leu et al (2007), include new skills, new strategies and new social practices, changing regularly as the technologies change, being multiple, multimodal and multifaceted.

The emergence of new scenarios for accessing information requires "the mastery of multiple literacies, namely digital and computer literacy (associated with the information and communications technologies) and visual literacy (reading images)" (PPEB, 2009, p63).

The multimodal text first appears in the Portuguese Program in the second and third cycles, with the 3rd cycle having as a performance descriptor "Interpreting processes and effects of the construction of meaning in multimodal texts" (idem, p123). As Unsworth notes (2001), all texts need to be read in a multimodal way. It is necessary to understand the way in which different modalities contribute separately and interactively to the different dimensions of the construction of meaning.

Narrative is part of daily communication, whether oral or written, thus resulting in the impregnation of the "cloth of our existence", "everything that is recounted is narrative" (Seixo, 1976, p14). Considering the relationship between narrative and temporality, Ricoeur(1994) considers as temporal the world presented in any narrative. In this way Todorov (1972, in Seixo, 1976) defines narrative as "referential text with temporality represented" (p14), with sequence being its most important unity above the sentence level. Seixo (1976) adds that "the recounting of facts or events, a basic organizational element of literature over a long period of its history as well as of its fictional genres (romance, novel, short story), exists, after all, everywhere that someone narrates something" (p14). Telling stories is a natural mode of human communication.

With the rapid development of technology there emerges a new version of digital narrative. Various authors introduce this concept (McLean, 2007; Xu, Park &Baek, 2011; Robin, 2007, 2008; Ryan, 2001), which highlights the role of technologies in the development of skills related to narrative. Digital narrative gives expression to the art of telling a story, making use of multimedia components such as image, sound, music and others (Xu, Park &Baek, 2011).

The advantages of the use of digital narrative in the educational context are highlighted by

various authors as they calculate the development of skills in many areas. Robin (2007) considers digital narrative to be a powerful tool for educators and for allowing students to create their own stories, as the adoption of a point of view and the defining of a dramatic question awaken the interest, attention and motivation of students. In addition, it strengthens collaboration and develops various types of literacies, including information literacy, visual literacy, digital literacy and media literacy.

Xu, Park &Baek (2011) recognize that the process of writing in digital narrative takes on a great importancewith good editing is determinative of its success,allowing students to feel that the story is theirs, leading them to get more involved in its construction.

THE PROJECT

The study was run in a primary school in the district of Porto from December 2011 to February 2012 involving a class in the 7th year of schooling and was integrated into the Portuguese Language curriculum plan. The project was rolled out in three phases: study of narrative, writing narrative and construction of digital narrative, over twelve ninety-minute sessions.

Images from the textbook were used for pre-reading activities, and reading activities were conducted in the form of an active listening activity. After the content of the narrative had been addressed using the readstory as a starting point, the students moved on to production of the written text. The work passed through the phases of planning, textualization and revision/polishing. A word processing program was then used to rewrite the text that had been developed in the previous sessions. The tool used for constructing the digital narrative was Movie Maker, because of its easily usable ability to establish relationships between text, image, sound, spoken word and interactivity (Carvalho, 2008). After the presentation of the Movie Maker application, the students considered some examples of digital narratives and planned out the narrative. Some easily accessible online addresses were made available, from which the students were able to obtain resources for the work. The next step was the recording of the students' voices, thus completing the production of the digital narrative.

The students' final product consisted of two distinct works: the written product and the digital narrative. The written product, after being work shopped with the teacher, was simply made the object of a self-assessment of the process by the students. The assessment of the digital narratives was based on an analytical grid adapted from one proposed by Robin (2007), which included eight categories related to the elements of "Point of View", "Dramatic Question", "Choice of Content", "Clarity of Voice", "Pacing of the Narrative", "Quality of Images", "Economy of Story Detail", "Grammar and Language Usage", with a performance indicator having been created for each element and level respectively.

DESIGN OF THE STUDY

The central question for investigating the study to which this article refers consists in identifying, characterizing and interpreting the relationship between a multimodal approach, particularly through digital narrative, in the Portuguese Language classroom, and the didactization of narrative in the a formal learning context. To this end, it was understood that the most suitable form of investigation would be one that was integrated into the qualitative paradigm, particularly the case study, which is understood to be best adapted to the study of a concrete reality, in relation to daily pedagogical practice.

To study this question, we opted for the qualitative paradigm and more specifically the case study, as we considered this to be the best adapted to the study of a concrete reality related to our daily pedagogical practice. Cohen and Manion (1990, p164) state that "the case study researcher observes the characteristics of an individual unit, a child, a gang, a class, a school or a community"

with the aim of describing and analyzing in an intensive and detailed manner a well-defined entity: the "case" (Coutinho& Chaves, 2002, p223). In agreement with Yin (1994), case studies are one of the most challenging methodological designs in the social sciences, having become very common forms of research in many areas of scientific research, particularly Education Science. "A qualitative researcher emphasizes the meaningful episodes, the sequentiality of events in context, the totality of the individual." (Stake, 2007, p12).

This was our methodological direction for studying the effects of the use of multimodal texts in understanding narrative in a year 7 Elementary School class.

DATA COLLECTION AND ANALYSIS

As data collection tools we chose participant observation, field notes, interviewing and the students' work. As Stake notes (2007, p.77), "observations lead the researcher to a greater understanding of the case," reminding us that, while observing, a researcher in a qualitative case study must make a good record of events to ensure that there will be no disputes.

Participant observation field notes were recorded on paper at the time of observation and transcribed later.

The interview acquired a fair amount of importance in the study, in that contact with the interviewees allowed for the adjustment of questions and the soliciting of additional information that was considered relevant. (Coutinho, 2011). Thus, we chose the model of a semi-structured interview, taking into account what it was that we were trying to ascertain. Since it is not always easy to record an interview using handwritten notes, we opted for recording using the Audacity application, with later verbatim transcription. The interviews were then subjected to a careful content analysis, "a set of very common methodological procedures in educational research work." (Esteves, 2006, p.106).

Having opted for categorical aggregation (Stake, 2007), the following categories supporting the interpretative framework were identified during the course of the research: Digital Narrative; New Literacies (digital and visual); Writing; Oral expression; Collaboration and Motivation.

PRESENTATION AND DISCUSSION OF RESULTS

The analysis was formalized some months after the completion of the fieldwork, a strategy considered indispensable for establishing the necessary distance for rigor in working with the data. However, since the beginning of the work we had begun thinking in a reflective and analytical way about what we were observing, in conversations with the students and in the development of their work during the course of the project.

To describe and interpret the identified categories, we used examples drawn from the results which we presented using the following codes: "A+number" (eg: A20) refers to the interview data with students from A1 to A24, given the group was made up of twenty-four students; "NC+date" the date, or the interval between dates, refers to the duration of a particular task (eg: NC, 19.01.2012, or NC 12.12.2011 05.12.2011); "TA" refers to the students' work. To maintain the anonymity of the participants in this study, when referring to a particular student we use only the initial letter of their name (eg: C.).

We set out below the results of our analysis.

With respect to the digital narrative category, and after having assessed each one of the digital narratives written by the students, we can state that the use of the digital narrative methodology set the students on the path of a skills development process leading to the construction of meanings in multimodal texts, particularly by combining the written word with sound and

images (PPEB, 2009, p.123), with each of these discourses having contributed in different ways to those meanings (Stein, 2010), as can be seen in these statements: "instead of only writing and paper, that white paper, in digital narrative we have images and narrative we can better clarify what we read "(A.4); "In digital narrative, we take a text, we read it and try to describe to people what is in the text." (A.22).

The use of digital narrative as multimodal discourse favored the didactization of the "levels and categories of narrative" content (PPEB, 2009, p.125) in the Portuguese Language classroom. The students barely managed to systematize the classification of characters, space and time, displayed "confusion between author and narrator" and were unaware of the "point of view of the narrator and the predominant verb tenses in the narrative" (NC 05.12.2011 to 12.12.2011).

It was noticed in the work of the students and the testimonies collected in the interviews, that the participants in this project understood the categories of narrative in constructing a digital narrative, applying what they had learned: "If we only worked on the text it was not the same thing because we might not have understood it very well. We had to choose one main character; we had to choose a narrator, the other secondary characters, the bit players. If we did not have to choose for ourselves, if we saw only a text and had to analyze it, maybe we would not have understood it so well. At the level of the narrative, we realized that there had to be an introduction, a development and conclusion "(A.2). We can then conclude that the students' participation in the project of creating digital narrative improved their skills in comprehending narrative structure (Robin, 2007).

Analysis of the date permitted us to infer that the process of creating the digital narrative contributed significantly to the development of literacies, particularly digital and visual literacies. The students stated: "We learned to work with the technologies", (A.2), an idea reinforced by other students who said "[we are used to using the computer] only for searching" (A.5); "At school what we use most are the search engines. This way we had to do the searches and the work in Movie Maker. We were not used to working with Movie Maker, we were used to using the computer only for doing searches and then some small pieces of work in Word "(A.1). The students became more proficient in the use of tools / digital applications they hardly knew or rarely used. That was the case with Movie Maker, Audacity and image editing applications.

"*To do the work in Movie Maker we needed to know how to use it*" (A.6); "*We learned how to import images into Movie Maker, how to write on the slides, how to order the images to keep time with our voices*" (A.20). The students showed that they had developed the ability to communicate through the image and to understand its value, stating that "*the images helped us to understand the text better*" (A14).

The writing process thus assumed great importance in this project, because although the intention of the digital narrative is to tell a story, we recognize that the quality of the written product determines its success. The students feel that they own the story and this recognition motivates them to produce the text (Xu, Park and Baek, 2011). Only after learning to write can we transfer the acquired skills to writing on the computer or on conventional media. It is important to position writing at the center of any definition of digital literacy, with the learning of writing necessarily combined with multimodal construction (Merchant, 2007).

The recording phase of the stories for the digital narrative was a time of great anticipation. "The audio recording was one of the most interesting activities. The students were not used to recording / hearing their own voices. When reading they tried hard to be expressive and to read slowly in order to be better understood. We noticed some nervousness before the recordings "(CN 27.02.2012).

Many students referred to the voice as an important element in the recording of the stories.

"We have learned to control our voices better" (A.14); [we controlled] our breathing to read the paragraphs and commas "(A.15).

This work on non-verbal language, the audibility of oral statements, particularly the level of articulation and diction, is suggested in PPEB (2009) for the performance descriptor "Fluent and correct use of speech, using verbal and nonverbal resources with a degree of complexity appropriate to the circumstances in which the communication takes place."(p.121).

From the analyzed data, it is possible to say that the construction of the digital narrative allows for the realization of strategies for maintaining the interest of the audience (PPEB, 2009), combining the prosodic elements with components that are active in its construction. Through this work, students recognize that they have developed strategies for oral expression.

When analyzing the data collected, we confirmed Robin's idea (2007) in considering that digital narrative promotes collaboration when students are able to work in groups and gives value to the student experience through participation and personal achievement.

The students were sure that this experience favored group work: "It helped us to work in groups, we were able to help each other with the things we didn't know" (A.14), a methodology in which they see more advantages than in the individual work more frequent in the school context: "We did the work, one would take it home and bring the piece back done, another one did the same then they tweaked both at school. Here we are in class talking to each other to work out what we are going to do with the work"(A.22). Sharing also plays a part during the performance of tasks, such as the sharing of knowledge: "It became much easier, because since everyone knew something the others didn't it was much easier to work, because we shared our knowledge" (A. 16). We recognized that technology on its own involved the students in the work in the classroom. This is suggested by A1 in confessing that: "There are many fellow students in our class for whom a lesson is a sacrifice. If it was one of these lessons you could see that they were involved, they just wanted to do Portuguese, because they go for the computers "(A.11). C. adds, "I think the students are more captivated when we have to work with computers and programs" (A.6). At bottom, we must accept that "being the youth of the 21st century we have fun with technologies, and with using technologies in everyday life" (A.12).

Motivation was then experienced in the activity of writing, which they performed willingly once they became aware that what they produced would give rise to more work with the technologies and that the quality of that depended on the text they had produced. B confirms: "When we only have paper and pen and we need to just write, just the paper and we have nothing else that grabs our attention" (A.4). The combination of modes to achieve a final product makes them consider that "It's more active, because if we're just writing and analyzing the text becomes a bit uncomfortable, but if we're recording and choosing images on the Internet it starts to be more fun"(A.21).

CONCLUSION

The results show us the importance of digital narrative in the development of language skills, both at the level of writing and of oral expression.

The joining of the writing process to the digital narrative attributes a function to the writing which makes it decisive for the success of the product, a fact which, when coupled with the integration of writing into a project, allowed the students to give a purpose to its production, releasing a remarkable level of motivation and commitment.

This methodology favors literacies, not only digital literacies, through the noted increase in student proficiency in the use of technological tools, but also visual literacy through reading

images. At the level of meaning making, global meanings are achieved by the image, in interaction with other modes, since the students begin to assign their own meaning to the image, which, along with the other modes, mobilizes prior knowledge to interact in the construction of new knowledge.

Given this, we must note that we believe that multimodal texts "encourage learning because they make viable genuine communication situations, emerging, naturally. We recognize, however, that the use of technology should not take the place of pedagogy nor take the place of the knowledge of the teacher as pedagogue. Consequently, we consider that the degree of success of technology depends, without any doubt, on the teacher and the strategies he or she uses. (Botelho, 2009)

We end with the voice of the students whose words give strength to our own ideas, "it was a job well done and with a fantastic finish. All schools could do this "(A.10)

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Professional Experience

1981 to present - Working as a secondary Portuguese LanguageTeacher. 2001 to present – Professional and certificated trainer of teachers in: - Portuguese Language - Educational use of ICT – School Libraries - Drama 2001 to present – Developed and participated in seminars and projects related to curricular integration on ICT. 2002 to present – Participated in several projects with text books and related CD audiorecording.

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