

## Integrating multiple literacies and digital storytelling in language learning: a case study

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### Abstract

*The evolution of digital technologies in all sectors of society, including education, implies a paradigm shift in teaching methods. In Portugal, the new 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, namely digital and computer literacies – associated with information and communications technologies – and visual literacy – reading images" [1] (p. 3).<sup>1</sup>*

*Lankshear and Nobel [2] admit that literacy takes a central position in educational policies, the development of curriculum and teaching practices. For these authors "literacy is now centre stage in education policy, curriculum development, and everyday thinking about educational practice" (p 7). However, the concept combines a multiplicity of texts and discourses requiring the incorporation of such forms of constructing meaning, other than the written form.*

*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 [3] designed to answer the following research question: how can multimodal texts contribute to development of the study of narrative? The study was carried out with a class of Year 7 students (12 year olds). The first author was the class Portuguese teacher.*

*Data was collected through participant observation, semi-structured interviews with students and analysis of student digital productions. Data analysis is based on the content analysis method.*

*The results make it possible to conclude that: the students developed linguistic, digital and visual skills which gave rise to the construction of meanings in multimodal texts; the use of digital narrative favoured the study of narrative in Portuguese; the use of technological tools contributed to student motivation and commitment.*

*In this article we provide: a) a brief theoretical contextualisation of digital narratives in the context of mother language learning; b) the project carried out with 13 year olds; c) the research methodology underlying this project; d) the results obtained.*

**Keywords:** *multiple literacies; digital storytelling; ICT for language learning*

### 1. Introduction

We are currently living in a context in which Information and Communication Technologies (ICT) have become more highly visible both socially and educationally [4]. 20<sup>th</sup> Century technological progress has further highlighted the importance of technology in ways of living, socializing and learning. The school, still being the most important formal context for learning, it is the teacher's role to provide creative and innovative learning environments to motivate and stimulate young people to construct areas of knowledge, to act constructively and to create spaces for action, reflection and creativity.

In the guidelines for the management of the Portuguese Basic Education Program it is stated that the expected outcomes are premised on organized and systematic work on speech, reading, writing and knowledge of language, "involving multiple literacies, as well as effective use of ICT" [1] (p. 109). In this context, we seek to provide, through the students' creation of digital narratives, the opportunity for access to a multiplicity of textual environments, which will lead to the interpretation of procedures and effects for constructing meaning in multimodal texts.

The Curriculum Project of the Grouping in which the first author taught during the school year in which the study was carried out integrates ICT into the work of the classroom. This study aims to deal with the integration of multimodal texts in the creation of digital narratives.

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<sup>1</sup> Our own translation from the original text "exigem o domínio de literacias múltiplas, nomeadamente a literacia digital e informacional - associada às tecnologias de informação e comunicação - e a literacia visual - leitura de imagens".

## 2. Theoretical contextualization

### 2.1 New literacies and multiple literacies

In the current environment of "accelerated change" [5] (p 3), schools cannot remain detached. In effect, new resources demand new paradigms, new methodologies and new strategies that put ICT into the framework of cognitive tools, "information tools adapted or developed to work as intellectual partners for the student, so as to stimulate and facilitate critical thinking" [6] (p 21).

UNESCO [7] points out that "students use ICT to engage in the sustained, collaborative process of building on current knowledge and cultural artefacts to create and share new contributions. As they do so, students develop the ability to use a range of technology tools to search for, organize, and analyze information; to communicate effectively in a variety of forms (...) to think critically, innovatively, and creatively" (p.218).

The concepts of "new literacy" and "multimodal literacy" appear very frequently today in connection with ICT. Leu *et al.* [8] assume that there is no precise definition of "new literacy" and assert that "the new literacies allow us to ... locate information, critically evaluate the usefulness of that information, synthesize information to answer those questions, and then communicate the answers to others" (n.p.), an idea very close to that of UNESCO 's in relation to ICT. For these authors, it is difficult to arrive at a precise definition of these new literacies, since whenever new technologies arise new literacies emerge. Nevertheless, they point to four characteristics of the new literacies which contribute to a theoretical definition: "a) the new literacies include new competencies, strategies and social practices required by information and communication technologies; b) the new literacies are at the center of civil, economic and personal participation in a global community; c) the new literacies are deictic: they change regularly as technologies change; d) the new literacies are multiple, multimodal and multifaceted" (n.p).

Normally the concept of literacy is associated with the activities of reading, writing and speaking. Yet an increasing number of authors and educators argue that only by increasing these competencies to include a wide variety of verbal texts, images and sounds, will literacy become a fully acquired competency in a society in rapid and permanent transformation, effectively demanding multiple literacies (multiliteracies) in the construction of knowledge.

Thus Tracey, Storey and Kazerounian [9] point out that the large variety of texts which dominate the modern world today, require mastery of new literary competencies: "more recently texts are electronic, digital, interactive, and changing (...). Thus to be literate in the modern digital world, one must develop familiarity with the scope, depth, structure, and organization of these new texts" (p.107).

As Unsworth relates [10], all texts must be read in a multimodal way. It is necessary to understand in what form the different modalities contribute separately and interactively to different dimensions of the construction of meaning.

In reality, the oral and written text, as well as verbal language itself, ceased to be the only fount of knowledge. The ways of creating and processing knowledge acquired new configurations, the world of digital multimedia transformed society, giving rise to a growth in multimodality which has shaped itself as an alternative way to the construction of meaning.

The existence of these new scenarios for accessing information "require mastery of multiple literacies, notably digital and information literacy (...) and visual literacy (reading images)" [1] (p.3). This is the paradigm towards which the New Portuguese Basic Education Program is oriented. Within this paradigm, the role of information technologies is reinforced and explicitly taken up. The technologies arise at the service of the competencies" [11] (p 63).

### 2.2 Multimodality in the New Portuguese Basic Education Program

The necessity to resort to ICT is made very clear in the new Portuguese Basic Education Program (PPEB). At the same time, in the orientation of management and curriculum development it is recommended that the "use of Information and Communications Technologies should be favored as a learning tool, as a documentary resource for access to information, in problem resolution or as an aid in the preparation of assignments." [1] (p. 52). Throughout, there is an underlying call for the development of multiliteracies and the digital from the start of formal education, with first school cycle (6-9 years) becoming a "favorable context for the development of multiple literacies" [1] (p. 66).

The multimodal text appears in the second and third cycles (9-11 and 12-14 years of age), being in the 3<sup>rd</sup> cycle a performance descriptor, "Interpret procedures and effects of the construction of meaning in multimodal texts" [1] (p 123).

It is now apparent that in Portuguese schools "symptoms of a new style of learning and reasoning" are starting to emerge, thus creating a perspective for a new pedagogy" [12] (p.140). We recognize that the teaching of Portuguese is beginning to open up to the plurality of texts, props and codes, multimodal texts, which call for multiple literacies.

### 3. Research Methodology

#### 3.1 Fieldwork: the project

The study was carried out with a class of Year 7 students (12 year olds) from December 2011 to February 2012. The first author was the class Portuguese teacher. The project included five phases, as set out by Jakes [13] in "The Digital Storytelling Process": write; develop script; storyboard; locate resources; create, and share (p. 5). This process required 12 sessions, each corresponding to a 90 minute class.

#### 3.2 Research Design

We chose a case study research strategy as being, according to Yin [14], the one best adapted to the objective of discovering the "how" and "why" of the phenomena being studied. The same author states: "a case study can be defined as any empirical investigation into a contemporaneous phenomenon within its real context" (p 23), in this case, the school.

#### 3.3 Data collection

Data was collected through participant observation, semi-structured interviews with students and analysis of student digital productions.

The principal researcher was also a class teacher, therefore naturally being involved in the group activities. This participating observation allowed for a deep understanding of the phenomena being studied. During the activities, the researcher recorded in the form of field notes her thoughts on the progress of the work. These records were completed immediately after the class as the progress of the activities almost always required an almost total involvement of the teacher/researcher.

In order to give the students a say, interviews were conducted with small groups of three students, being the same ones who had created the narratives in the classroom. As the authors quoted above state "children are more relaxed when they are with a friend than when they are alone with the adult." [12] (p 141). Questions to the students were framed in the third person in order to give some freedom of choice of expression to the interviewees.

In addition the product of the students' work, the digital narratives were analyzed in detail in accordance with an analytical grid adapted for the task from Robin [15]. It includes 8 categories and 4 levels of assessment.

#### 3.4 Data analysis

The field notes, originally recorded on paper, were subsequently transcribed to digital format and improved on during this process. The interviews were recorded using *Audacity* software and then fully transcribed. Data analysis of this data was based on the content analysis method.

### 4. Results

The analysis was finalized some months after the field work was completed, a strategy which turned out to be indispensable for achieving the distance necessary to undertake rigorous work with data analysis. From the beginning we adopted a reflective and analytical approach to what we were observing, to the development of the assignments throughout the project and when we were talking to students.

As can be seen in the student's work, the project contributed to the development of **competencies at the textual linguistic level**, particularly in the use of discursive markers and mechanisms of textual cohesion. Detailed analysis of the students' narratives, too extensive to include in this article, clearly shows this result.

As for **digital and visual literacies**, the students' evolution was evident from the beginning of the project. Although they all displayed at the start a reasonable level of instrumental mastery of ICT, the

manipulation of digital tools that they were not previously familiar with (Word, Movie Maker, Audacity, Paint) broadened their digital competencies.

In the interviews, the students showed that they had developed the ability to communicate through images and understand their value by affirming: "it's like when we are at the movies, the images help to understand the story".

The data analysis also shows that this project favored **collaborative work** promoting dynamic and collaborative participation by all in the activities, as can be seen from the field notes: "A C showed a desire to present the movie maker application to the others due to having previously done some work with it. The session was motivational because it was a colleague doing the presentation" (Fn, 19.01.2012); the students' words corroborate this result: "We also learned to accept other people's opinions and respect other people's ideas. If it had only been one, the work would not have been so worthwhile."

**The use of digital narrative favored the study of narrative.** In the students' work and in the testimonies collected during the interviews, it could be seen that the participants understood the narrative categories in constructing digital storytelling applying what they had learned: "We had to choose a main character; we had to choose a narrator, the other secondary characters, and the extras. If we hadn't had to make the choices ourselves, we probably would not have understood so well". Equally important was the **motivation and interest** shown by the students both in the strictly linguistic work as in the work that involved technologies. The field notes say: "there was a lot of enthusiasm in the planning phase [of the text]" (Fn, 23.01.2012), a time which is not normally enjoyed by the students. The student interviews also reveal this fact: "we get more engaged when we have to play around with computers".

## 5. Findings

The use of digital resources contributed to student motivation and commitment. Having used multimedia technologies in close connection with the contents involved in the digital narratives obliged the students to study the specific characteristics of each of these codes, integrating them into the multimodal discourse at the service of the creation of digital narratives. In this way, digital narrative, multimodality and new literacies were concepts studied, discussed and very effectively put into operation in the products that these students produced. We believe, based on the testimony of the students and our own experience in observing and analyzing, that the competencies developed will continue to evolve throughout their academic and personal lives.

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