

## The ITCs and How to Develop Writing and Reading Skills in Students of Portuguese Primary School

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### Abstract

*The New London Group (1996) [1] introduces the concept multiliteracies and highlights two aspects of the increasing complexity of texts: (i) the proliferation of multimodal ways of making sense that written word is increasingly part member of the visual, audio and spatial patterns; (ii) the relevance of linguistic and cultural diversity is characterized by local and global connection. With the intent that all students benefit from the use of learning media and are involved in what to learn and how to learn.*

*The aim of this study is to explore the pedagogical potentials of the ITC in developing the writing and reading skills of children's in primary school. In particular this presentation wishes to illustrate and discuss a journey of learning reading and writing with students of 4th Year in Primary School, in a school housed in the Education Intervention Priority Territory (TEIP) in the suburbs of Lisbon. Through the use of various tools that we use the verbal and nonverbal, students take an active role in their learning. Educational attainment in the skills of reading and writing skills have improved, both in terms of processes and in terms of final products produced.*

### Introduction

The paper presented results from an action research project implemented in the 4th year in primary school, in Clustering Schools Aquilino Ribeiro, housed in a Territory of Priority Intervention (TEIP) in the suburbs of Lisbon, in the council of Oeiras. It is intended to illustrate a learning process of reading and writing by these students, through the use of various tools that we use the verbal and nonverbal. Using this methodology of work, students take an active role in their learning.

There is consensus that ICT are now making part and are through all the daily activities of citizens in the global society in which we operate and live in. Therefore, a good integration of ICT in the context of living contributes to the development of literacy not only linguistic but also of information literacy. Currently, the school should be seen as a social space where it coexists culture media and digital culture for the student to be able to interchangeably use the resources of one culture and another. It is essential that in the twenty-first century, students carried out various activities with all available means and technologies for society. Activities such as reading books, using encyclopedias and dictionaries, writing texts, watch videos, search the digital database, preparing multimedia files, create web sites, communicate via email and forums should help to train students as responsible citizens, critical, participative and prepared to live in the society of XXI century [2].

### Multiple Literacies: ICT, reading and writing



The way reading comprehension is seen has undergone changes over time. According to Giasson [3], this trend is visible in two major respects. First, reading comprehension is no longer "a sequential model based on lists of skills" to be "a more global-oriented integration of skills." Second, the sight of the reader as a passive recipient of the message was replaced by the interaction between text and reader. It is the reader who creates the meaning of the text, combining textual information with their own knowledge and with the intention of reading. Sim-Sim (2007: 9) [4] believes that the level of understanding results from the interaction of the reader with the text. According to the author, "is why, before the same text, two readers can get different levels of understanding and the same player before two different texts, can reach different levels of understanding."

The New London Group (1996), introduces for the first time the concept multiliteracy and highlights two aspects of texts of increasing complexity: (1) the proliferation of multimodal ways to make sense of the written word is increasingly part visual, audio, and spatial patterns, (2) the growing importance of linguistic and cultural diversity characterized by local and global connection. With the purpose that all students benefit from learning in different ways in which they are involved to learn and learn how to be. The concept of multiliteracy assumes that the student possesses the distinct skills and expertise to deal intelligently and competently with the information, being able to research it, select it, analyze it and reconstruct it through multiple symbolic forms and through different types of technology. The planning of literacy activities should be seen as an integrated and cross-task in curriculum development. The process of multiliteracy should not be planned as an independent action and the margin of curricular content and objectives that are developed in the classroom. The presence of digital media makes getting around the alphabet as a means of access to stories and information, but opens a new function to the ability alphabetical as a means of control. Actually, "tap on the keys makes things happen and so does the ability to read: the recognition of words that appear on the screen can become a decisive step towards an interactive search and be used to control a process that will lead to a desired end - into a web page or find the desired video story [5]. And even if some mistake happen, there's something in one way or another, and it always happens or takes advantage of it, or try again, as when one learns to speak first.

It is further multissemiotic that with one of the characteristics of hypertext, in which language becomes not only alphabetically and can work simultaneously and seamlessly with verbal and nonverbal, allowing the reader-browser does not merely be passive and take an active role by creating your own course reader and / or co-author [6].

Currently, it is believed that new information technologies involve the child to learn to learn, develop skills readers [7]. To this end, stresses that the main reason for using a computer within the writing skills to present other forms of reading and writing, developing reading and writing, attenuating simultaneously the effects of inequalities [8].

Learning how to learn is a goal that meets the guidelines of the European life-long learning. In Portugal, is one example of the investment that began in the academic year 2008/2009, with the introduction of the Magellan computer in the classroom and the implementation of the Technological Plan in groupings of school. Also in the National Teaching Portuguese (PNEP-training teachers program which began to be implemented on the ground in the academic year 2007/2008, by the Ministry of Education) are covered thematic workshops in order to use the computer as a learning resource language through technological devices and communicative architecture of hypertext, the use of media and languages by children, exploitation of network resources and production of materials in electronic format.

With regard to the Portuguese language, the new Portuguese program of basic education explicitly provides that "the school of a cycle should be (...) as a context for literacy



development multiple, especially in reading, writing and in information and communication technologies [9].

The level of school, one of the goals of the Educational Project Group of Schools Aquilino Ribeiro is "to promote the integration of students in school, reducing failure and dropping out of school" to improve the performance of students in the English language. Another of the goals is "to promote the development of skills in the new technologies of information and communication", developing skills in the area of Information and Communication Technologies (ICT).

### **Empirical Study**

The action research project was implemented in two groups of four. Of the 4th year of Primary School, with an experimental group and a control group, located in the Group of Schools Aquilino Ribeiro, housed in a Territory Intervention Priority (TEIP) in suburbs of Lisbon, Oeiras. The study lasted for roughly the length of an academic year – September 2010 to June 2011. The intervention lasted for about eight months. At the end of the study was the dependent variable compared to the results obtained in the Portuguese language to the independent variable, experimental group / control group.

It was overall objective of this study to know how can the new technologies of information and communication technologies (ICT) to facilitate and improve the educational attainment level of the Portuguese Language in the 1st cycle of basic education, particularly in promoting and developing the skills of reading and writing of students.

### **Participants**

The project had the participation of two classes of 4 th grade and their teachers hold class in a total of 36 children, one of the schools first. Cycle belonging to the Group of Schools Aquilino Ribeiro (Grouping TEIP-Territory Education Priority Intervention), in Oeiras, Lisbon District.

In the class where the intervention took place, only 90% of students have access to a computer when they are in school as at home, do not have any kind of technology at your fingertips, except television.

According to the school population who usually frequent this educational establishment of the group, students are part of a socio-economic medium to low and very low, making the school part of the group of schools in the priority intervention group, included in a housing estate.

### **Intervention plan**

As a starting point for work, was created a blog that became the assumption that serve for the publication, dissemination and sharing of materials produced, as well as promote and encourage reading books and also promote books read by students in each session of work.

In the implementation of the Action Plan was a need of creating a blog-to-[www.crescendoaler.blogspot.com](http://www.crescendoaler.blogspot.com) sharing and dissemination of the work.

With the promotion of the blog and implementation of this project, the benefits to school are numerous, particularly in terms of: value of multicultural education, expansion of accessible information, promotion of communication between the elements of the educational community, sharing experiences and materials; the approach of the community pool and diversification of methodologies. For a work week was launched through the blog that had to be resolved - mainly the control was done by the google tool forms, which allowed the

completion of the task control and respect for the deadline, as also to promote cooperation ties with the family. Given that these tasks could be solved with the help of the family.

Most activities are proposed for computer use: brainstorming, research, writing, revision and improvement of text, illustration, compilation, among others, being seen and taken as a consolidation tool and motivation for students.

Using free software, and without any charges, such as: PhotoStory3, Let's Write (provided by the site DGIDC) StoryBird, Vocaroo, YouTube, Slideshare, and Smilebox, GoogleDocs, among others, students have been actively involved in practice dynamics of collaborative writing, reading and publishing materials (for example Fig. 1).



Fig. 1 - Using the Software Let's write

By using the software, students, working both in pairs and in group work, the authors could be written productions (acronyms or stories), as illustrated by the proposed activities thus developing with willpower, commitment and dynamism.

The task of writing or reading, and formerly associated with monotonous drills, now reveal exciting and pleasurable, to the extent that actively involve students as constructors of meaning from the readers read.

Curious, has also been seen as the students have discovered that one learns by observing a careful and thorough layout, font size, cover and color in addition to the information brought by the letters of the book.

This combination of words and images is very related to how our children think, or in a multidimensional way.

With the use of PhotoStory can create an animated film in history, selecting sound and flat images, music or not added as a background, a process of transformation in which the student

### Direitos e Deveres das Crianças



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has and has a central and pivotal role.

And may complete the editing process to publish the movie and pass it on Youtube, for example, the entire community (Fig.2).

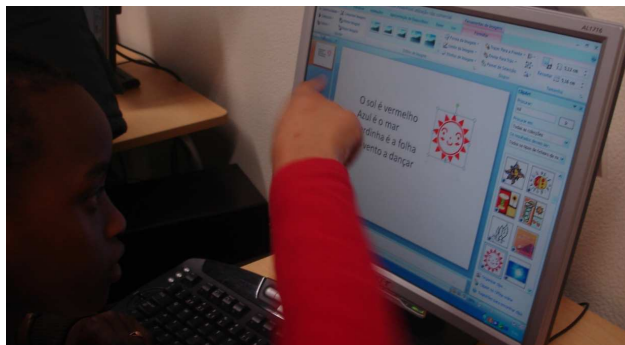


Fig. 2 - Power Point than to Youtube

Also been used to ebook tool that allows you to publish and disseminate real-books that allow you to even shuffling, for free. Some of these publications have already cybernautic followers of the community and one of the publications of the activity-camel-wise they received an award for having 500 visualizations.

Final results of the post-test showed that the skills of reading and writing in the experimental group were much more satisfactory than the control group. Thus, the results of calibration tests and were compared to the results of the school year and the previous study. As has been demonstrated:

Table 1: Results of the post-test in skills

	SCHOOL YEAR 2009/2010					SCHOOL YEAR 2010/2011									
	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
1	5%	11%	63%	21%	0	0	20%	53%	27%	0	0	54%	38%	8%	0
2	5%	5%	47%	37%	5%	7%	20%	47%	20%	7%	15%	54%	31%	0	0
3	16%	0	37%	26%	21%	27%	7%	27%	13%	27%	31%	8%	31%	31%	0
4	11%	47%	42%	0	0	0	13%	40%	47%	0	0	31%	38%	31%	0
Control Group											Experimental Group				

- 1 - Global Level
- 2 - Reading
- 3 - Explicit Knowledge of Language
- 4 - Writing

- A - Excelent
- B - Very Good
- C - Satisfactory
- D - Bad

However, it needs to continue working within the Explicit Knowledge of Language and Writing.

## Conclusion



Educational attainment in the skills of reading and writing have improved, both in terms of processes, both in terms of final products produced. The use of ICT independently and regulated is an important motivating factor in learning. We can conclude that the class group is a group experimental fairly homogenous and consistent in terms of results. Having improved comparing to the previous academic year.

The computer turns out to be a channel of communication and transmission of information, allowing children access to knowledge, when they need them and not because they are imposed by a closed curriculum and skill levels.

The introduction of ICT in the classroom, actively, also requires that the usual role of the manual is set apart, forcing a rethink of the writing and speaking skills, taking into account the devices that the technology put at our disposal to develop and foster these same skills.

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