



## Digital Reading: Practices and Challenges

**Paulo Faria, Ádila Faria, Altina Ramos**

Universidade do Minho

Braga, Portugal

[pauloprofe@gmail.com](mailto:pauloprofe@gmail.com), [adifaria@gmail.com](mailto:adifaria@gmail.com), [altina@ie.uminho.pt](mailto:altina@ie.uminho.pt)

### Abstract

*Today it is widely recognized that there is a profound change, caused by the digital revolution, in the way we read, in the means of access and in the reproduction of network information. The multiplication of screens and mobile learning allows the construction of innovative teaching models and represents an opportunity and a challenge for the promotion of reading and the development of reading competence of the students.*

*The existence of this new types of access to reading requires the development of new strategies so that the students can experience the new dimensions of digital reading. We consider that one of the important things in school is the training of readers. That is why teachers and educators must respond to the challenge of this new reality by integrating e-readers in the classroom but also in informal learning environments, such as family, clubs and individual contexts in order to build networks of readers. However, the school still has (in our view) an irreplaceable role.*

*In this article: i) we present the theoretical framing of the problem of reading in digital form; ii) we describe reading practices with digital form in kindergarten and secondary education; iii) we conclude about the role of mobile technologies in the development of reading.*

### 1. Theoretical Framework

Training for reading emerges as one of the most important roles of schools [1]. Currently, as great scientific and technological advances rise, it is a challenge for teachers to adopt new methods of digital reading that may contribute to the development of kindergarten students' reading skills [2, 3].

Reading in mobile digital media is widespread believed to have a great potential, opening up new opportunities within the learning environment [4, 5]. A number of researchers [6], indicate advantages regarding its portability, using e-readers anywhere and anytime. However, it is to underline the great significance of a pedagogical framework that clearly identifies goals and objectives to be achieved [7].

Actually, training readers is beyond issues concerning technology access [8]. Its easy access and children's natural skills to interact with technologies do not mean they know how to take full advantage of their benefits. To better understand the great potential of digital technologies in learning environments, teachers and educators have to reflect upon the risks, opportunities and challenges risen by the authentic *digital revolution*, which incorporates us all [9-17].

Effectively, in a technocentric society learning occurs across multiple contexts, using mobile digital devices through social and content interactions [18]. Exploring their huge potential to support young children's learning should be taken into account. For this reason, children should be involved in designed, planned and discussed activities with technologies that help them build their own identity and global developmental processes.

### 2. Methodology

In this paper we briefly present integrated activities in two PHD studies. While the kindergarten work was developed as a case study, the E-reader was part of a larger project of a *research-action* exploratory study. For this paper we only consider data collected through participant observation, informal conversations and field notes. These three instruments have enabled the common goal of establishing a strong link between the researcher and the reality in order to be able to actively study the research-delimited phenomena [19, 20].

Both projects have settled on content analysis [21] as the main technique of data analysis.

### 3. Results

As noted before, the results of two projects related to the development of digital reading in the kindergarten and in the secondary school, will be briefly discussed.



### 3.1 Reading in kindergarten

Integrated into the National Reading Plan, the kindergarten project *Reading coming and going* is taking place in Portugal. Its main objective is both to motivate children to read stories and promote a more creative and motivating learning. It is still intended to encourage family reading, to share stories, to promote collaborative work among children and parents, to disseminate information and create a participation space, to develop speaking skills, improving communication and expression, and to transfer and apply the knowledge conveyed in different life contexts. As it may be shared on the Web, it also expands the exchange of experiences between educators and children, and allows the sharing of information and knowledge that can foster autonomous, collaborative and critical learning.

In this context, mobile devices play an important role, as reported by an informal contact (IC) established with the mother (EE) of five-year-old C. The strategy used to help memorize a poem was indeed surprising. The mother spontaneously shared with the Educator:

"You know teacher, C was always around me, hoping I would read the poem. But as I was making dinner, and the poem was too long, I recorded it on my mobile phone and there she was listening as much often as she needed to learn it by heart "[CIEE, March 25, 2011]. This experience, fitting *m-learning*, supports Moura and Carvalho [22] claims "[b]eing mobility one of the characteristics of mobile technologies, it is necessary to equate learning that occurs outside the classroom, mediated by mobile devices."

A new space is unfolded to share with other children, parents and the community in any part of the world.

In our perspective, this practice is considered to be of great educational value for children. Since it may be accessible anywhere and anytime, eventually involving the community, and particularly the family in school activities, it comes to be more authentic and therefore more meaningful.

### 3.2 E-readers in secondary school and in the library

This project is made up of two components: the first focussing on the promotion of reading taken under the teaching of Portuguese language, which aims students to achieve new reading experiences using multiple screens, including the adoption of e-readers at school and in all the libraries belonging to the group of schools in the county; the latter, oriented to teachers and librarians' technical and pedagogical training, aims at promoting new reading contexts and simultaneously providing new reading and textual analysis tools so that they might integrate the knowledge gained into their practices of e-readers and later develop students' reading skills.

Particularly, it is intended to diversify reading strategies, to locate, select, evaluate and organize information and properly use technological devices to ensure greater efficiency in communication. So far e-readers are used in Portuguese Language lessons, in parallel with other reading devices, providing new opportunities for textual exploration, be it in the classroom or as independent reading.

As soon as the first experiments were carried out, teachers claimed that their use helped to increase **students'** attention span. "When we started training and I picked up a Kobo for the first time, I thought to myself: this will be more of the same. After all, I realized that the Kobo is different" [CPBVT]; The Kobo has the power to avoid the risk of getting dispersed with other uses of mobile devices, which also come up as a motive to promote initial reading" [CPBP].

The Kobo Touch e-reader, allowing to access Portuguese or foreign language dictionaries, encourages the development of students' vocabulary, enriches the lexical field, and expands an area of diverse educational proposals, eventually in a more enjoyable way. "The integrated dictionary is a powerful tool, because it allows the diversification of tasks to be developed in the classroom. The query is immediate and you can do word games and competitions" [QPBB].

The use of the e-reader facilitated the "activation of various reading strategies: global, selective, analytical; reading from different information devices" [23]. "There are reading activities that can only be operated in short excerpts. The e-reader allows to easily navigate through the whole book, from the end to the beginning, and the beginning to the end" [CPVE].

**Reading habits** are fostered over time, and need to be strengthened throughout schooling. Setting up a framework and strategies that support them is fundamental. [...] "Eventually, they will serve the purpose to facilitate reading (for its portability and accessibility), consolidating and "addicting" more readers" [QPBP].

Reading **motivation** can be activated through a countless number of procedures and strategies. Making use of digital devices to expand the educational value of reading is one of e-readers' inherent capacities. In this case, the ease of use is a big plus as well.



#### 4. Conclusions

The brief theoretical framework presented earlier acknowledges both that reading on e-readers is increasing exponentially and the widespread circulation of e-books proves they continue to conquer a space for readers of all ages [24].

Using new digital media for speaking, writing and reading may bring innovation and obvious advantages to the pedagogical practice of early childhood educators and teachers, implying learning not only at technological and methodological levels, but also at a relational level. Teachers are required a rediscovery of younger generation lifestyles, deeply influenced by continuous connection to mobile devices with no restricting space or time [25, 26].

Education is not about speculating on dilemmas and fears for replacement of paper books. Chartier [27] uses the term *third revolution of the book* metaphorically to describe the major changes we are faced with today. According to the author, these are the most profound transformations ever seen as implications are noticeable not only in the physical media, but also in what concerns access, circulation and sharing of new books.

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