World Journal on Educational Technology: Current Issues

Volume 09, Issue 3, (2017) 139-143

www.wj-et.eu

Will education in the mother tongue contribute to the increase of digital literacies?

Guerra Joaquim* , FCHS – CECL – Universidade do Algarve, Campus de Gambelas, Faro 8005-139, Portugal

Suggested Citation

Joaquim, G. (2017). Will education in the mother tongue contribute to the increase of digital literacies? *World Journal on Educational Technology: Current Issues*. *9*(3), 139-143

Received February 27, 2017; revised May 10, 2017; accepted July 5, 2017.
Selection and peer review under responsibility of Assoc. Prof. Dr. Fezile Ozdamli, Near East University.

Abstract

We live undoubtedly in a digital era in which younger people have more technological knowledge and use technology more than older people who mostly must adapt their lives and practices, learning how, why, and when to use digital tools. In schools, this gap is visible if we compare the curricula for teaching the Portuguese mother tongue and teachers' practices. As we demonstrate, the references in syllabi are residual, and teachers use digital tools as they used other tools before. This paper aims to summarize and to intersect the results from previous studies on information and communication technologies (ICT), Portuguese mother tongue syllabi, and teachers' practices with ICT. It also points out some causes of the lack of aims for the increase of digital literacy in mother tongue education.

Keywords: ICT in education, educational technologies, mother tongue education, ICT practices, Portuguese language, web-based tools, computer-assisted language learning (CALL), digital literacy.

*ADDRESS FOR CORRESPONDENCE: **Guerra Joaquim,** FCHS – CECL – Universidade do Algarve, Campus de Gambelas, Faro 8005-139, Portugal
E-mail address: jguerra@ualg.pt / Tel no: Tel.: +351 289 800 914

1. Introduction

Over the past years, we have tried to characterize and understand the integration of information and communication technologies (ICT) in the context of mother tongue education.

In phase 1, we asked Portuguese language teachers from k7 to k12 (the first year of middle school to the last year of secondary school) for lesson plans that include tasks, projects, or activities that use ICT tools. We organized them also "into categories and in accordance with the competences they aim to develop;" and we analyzed the teacher discourse on lessons plans (from their description of the activities) to "detach the implicit background methodology" (Guerra, 2013). In phase 2, we explored the Portuguese national language syllabi for mother tongue education (Guerra, 2016) to provide a context for the lessons plans received and analyzed. In this stage, we looked for all the ICT references in the syllabi to determine what kind of uses they foment and under what kind of methodology (e.g. teacher, content, and/or learner centered).

Finally, we crossed the results of the two previous stages—ICT demands from the syllabi with the lessons plans of the teachers—to see if the integration of ICT tools in classes are formatted by what the syllabi recommends or by other contexts.

Since 2007 the Portuguese government has been working to modernize elementary and secondary schools, investing in technological infrastructures and connecting schools to the internet, and in in-service teacher training on the use of ICT tools for education. There also has been an increasing amount of research in computer-assisted language learning (CALL) subjects and publications with tutorials and explanations to help teachers integrate ICT in their classrooms. The web is full of resources to enhance students' language competences. Teachers can improve students' competences through free, efficient, and ubiquitous web tools (Guerra, 2013; 2014; Guerra & Olkhovych-Novosadyuk, 2014). Furthermore, most of these tools give students a personal and mobile learning environment, enabling them to access content and activities anywhere, anytime (Guerra, 2016).

2. Overview of the research: teachers and syllabi results

Demonstration and presentation/exposition are the most common ways teachers use ICT tools (Guerra, 2013). They privilege content-centered ICT activities, even if they resort to audio or video found on internet or in the complementary material provided with the teacher textbook. So, as found in other studies on Portuguese schools' contexts (Alves, Rodrigues, Abrantes & Dias, 2012*)*, teachers use ICT to reproduce in a different way the traditional forms of teaching. In other words, the teachers' practices do not follow in part the technological evolution. We can affirm that presentations are the same as with the use of overhead transparencies, audiotapes, or CDs but with the substitution of internet records, podcasts, and internet videos; they promote the same kind of activities and achieve the same goals.

In a certain way, ICT tools enable teachers to replicate practices but require them to bring less (heavy) material to the class. Even if teachers are more aware of a larger range of ICT tools, their willingness to use them and to implement a more collaborative and dynamic learning environment that promotes a personal learning environment for students does not follow their knowledge about ICT and web- based tools. Evans (2017) stated, "Beyond the physical differences we see in classrooms, the other changes we have seen are minimal – despite the opportunities technology presents to transform learning." Morris (2010) also acknowledged that "few teachers would appear to employ a wide range of ICT applications on their teaching, and the range is confined to only a few types" (p. 148). Furthermore, we presume that it is not because teachers integrate ICT that we can consider it an innovation in education and a change in educational institutions.

The national syllabi for mother tongue education (Coelho, 2001; Reis, 2009) advocate (i) the importance of the role of the internet and web technologies for language teaching and learning and (ii) the development of multimodal literacies, like digital literacy (Guerra, 2016). The syllabi attribute more importance, however, to the development of "students' capacities to research, organize, process, and manage the information" (Guerra, 2016) and to the use of internet as a way to share students' written productions.

Even if the syllabi mention the use of web tools as digital portfolios of written or oral productions (e.g., students creating podcasts or short videos), there is no continuity from the learning outcomes (i.e., what students should know or do at the end of the educational cycle) to the performance descriptors, which allow development of the methodological approach, to the construction of assessment criteria. In fact, for the secondary level, the large range of learning sequences suggested by the syllabi authors are vague or focused on content (Coelho, 2001). Only two of the 13 sequences that mention ICT-based activities suggest the creation of personal or class web pages, the creation of class or school online newspapers (to promote students' activities), or the comparison and analysis of media from different countries through their web pages.

3. Cross view for ICT practices: conclusions

The syllabi mostly focus on using ICT to gather and manage information, contrary to teachers' practices in which presentations (created on presentation software or using videos) are privileged. The national curricula also include the use of ICT in the strategic competences that Portuguese classes must increase in the students. These cover not only the search and treatment of information but also the use of text processors, databases, email, and the production of audio and video records that often are not included in the lesson plans. As we saw, teachers utilize audio or video records already prepared and available on internet or in the complementary textbook material to focus on content (and not on developing communication skills), and they do not push the students to create records to cover some class work. Text processors are integrated in homework so students can present papers and the papers can be legible for everyone.

We found a large gap between the national orientations and willingness and the teachers' practices. We agree that the syllabi do not give instructions or contexts for the use of ICT unrelated to the collection of information, but as previously mentioned, teachers have a lot of information available to help them adapt their practices. They could attend in-service training, receive a free handbook with different tutorials (Carvalho, 2008; Tavares & Barbeiro, 2001; available on ITunes-U, for example), or participate in one of the projects offered by the Education and Science Ministry (cf. http://www.dge.mec.pt/recursos-e-tecnologias-educativas) working collaboratively and receiving information and training for the use of ICT in the classroom. We also observed a major gap among teacher practices, the syllabi recommendations, and students' uses of ICT tools. Younger people nowadays communicate, cooperate, and manage information and content through online settings or mobile applications, yet schools remain more paper centered. There certainly are good practices on Portuguese language classrooms, but they probably are residual.

In conclusion, we cannot defend the idea that Portuguese classrooms are contributing to the development of students' digital literacy.

4. New contexts (?)

Recently the Education and Science Ministry released new syllabi for mother tongue education (Buesco, Morais, Maia, Silva & Rocha, 2014; Buesco,Morais, Rocha & Magalhães, 2015) that are to be

implemented progressively in all levels from k7 to k12. An overview shows us that the references to ICT almost disappear, namely in secondary education.

The syllabi for middle education (from k7 to k9) includes for oral competences the capacity to search and treat information and the use of technological tools to present content or to support a specific genre presentation (Buesco, Morais, Rocha & Magalhães, 2015). The authors exclude ICT at the k7 level for reading and written competences. For the reading domain in the other two levels, ICT are viewed as a digital media where students can find, read, and interpret texts and to recognize the role of this media as a support to reading and as a way to disclose, organize, and receive the texts on internet.

The writing domain at k8 and k9 includes ICT as a way to translate text (drafting/writing text) and to review and to edit it. They say that students at the end of the school year should be able to use judiciously ICT (as a content) and to use thoughtfully the potential of ICTs in the production, revision, and editing of text[1] as a learning outcome (Buesco,Morais, Rocha & Magalhães, 2015). The k9 grade adds the use of ICT as an autonomous content in the writing domain (p. 36); the corresponding learning outcome says that students should be able to reformulate the text in an appropriate way, mobilizing the knowledge of revision of text already acquired.

The secondary level (k10 to k12) has the same references in the oral domain. They mention digital technologies as a way to support students' oral presentations (Buesco, Morais, Maia, Silva & Rocha, 2014). In the reading and writing domains, ICT references decrease (there are no references for reading on k12, for instance), and follow the ideas of the middle grades: ICT are viewed only as a digital support to find specific genres of texts, to understand the differences between these genres in different media (reading domain; pp. 13, 46, 50), and to write, revise and edit judiciously a text. We could make a lot of considerations concerning the syllabi authors' beliefs about how they mention the integration of digital technologies. In brief, we unfortunately cannot expect major changes in teachers' practices with these kinds of contents and learning outcomes. The authors might assume that students already are proficient in digital tools or that they can learn to use them in other contexts or school subjects.

5. Final remarks

We can assume that the gap between syllabi and teacher practices and the students' awareness about ICT and web tools will continue. Teachers always explain that they have large number of students per class, and we agree that it is not easy to promote dynamic activities with digital tools when you have 25 or 30 students. The unfinished measures of the Technological Plan for Education (TPE; Ministry of Education, 2008) also explain some of the difficulties with using more ICTs in class. It is not easy to book a digital classroom when they are few and serve all school subjects, and the number of computers per class most of the time is insufficient.

The recommendations on syllabi and all the contents and learning outcomes that students must achieve each year also are some of the teachers' reasons for not using more digital tools; they say they always take too long to implement and provide more distraction factors for students. On the other hand, teachers need to understand the difference between teaching with technology and learning from and with technology to ensure a shift in practices. So, we also must assume that, in a certain way, there was a possible ineffectiveness of the (in-service) teacher training on the use of ICT in language classroom. Costa (2016) pointed out: "As several national and international studies seem to indicate, even in wealthier countries with a long history of teacher training, there remains a big deficit in how teachers are prepared to exercise their profession, especially from the methodological point of view […]" (p. 445).

Finally, we must note that academic research is more focused on the use of ICT in teaching and learning foreign languages contexts than in those involving the mother tongue.

References

Alves, N. A., Rodrigues, C., Abrantes, P., & Dias, P. (2012). Learning and teaching with ICT in secondary schools: The Portuguese context. In L. Gómez Chova, A. López Martínez, & I. Candel Torres (Eds.), *Proceedings of INTED2012 Conference* (pp. 1802–1808). Barcelona: IATED.

Buesco, H. C., Morais, J., Maia, L. C., Silva, M. G. & Rocha, M. R. (2014). *Programa e metas curriculares de Português – Ensino Secundário*. Lisbon: MEC.

Buesco, H. C., Morais, J., Rocha, M. R. & Magalhães, V. F (2015). Programas e m*etas curriculares de Português – Ensino Básico (1º, 2º e 3º ciclos)*. Lisbon: MEC.

Carvalho, A. A. (Ed.) (2008). Manual de ferramentas da web 2.0 para professores. Lisbon: ME/DGIDC Retrieved from http://www.erte.dgidc.min-edu.pt/publico/web20/manual_web20-professores.pdf

Coelho, M. C. (Coord.). (2001). *Programa de português (10º, 11º, 12º). Cursos Científico-Humanísticos e Cursos Tecnológicos*. Lisbon: ME/DES.

Costa, F. (2016). Curricular development and ICT: From technological deficit to methodological deficit. In A. M. Teixeira, A. Szues, & I. Mázár, Re-imaging learning environments. *Proceedings of the European Distance and E-learning network 2016 annual conference* (pp. 435–447). Budapest: EDEN.

Evans, J. (2017). Teachers' readiness and willingness to adopt digital tools for learning [Blog post]. Retrieved from; http://blog.tomorrow.org/index.php/2017/05/08/teachers-readiness-and-willingness-to-adopt-digital-tools-for-learning/

Guerra, J. (2013). Web based language class activities: Contexts of uses and background methodologies. In Huseyin Uzunboylu & Fezile Ozdamli (Eds), *Procedia – social and behavioral sciences. 2nd World Conference on Educational Technology Research – 2012* (83, pp. 117–124). London: Elsevier.

Guerra, J. (2014). Outils du web 2.0 gratuits, efficients et ubiquistes pour l'enseignement et l'apprentissage des langues. In A. C. Santos, A. R. Gonçalves, P. Sequeira, & T. S. Sousa, *Intercompreensão, plurilinguismo & didática das línguas: uma viagem entre culturas. Homenagem a Clara Ferrão Tavares* (pp. 261–268). Lisbon: Edições Cosmos.

Guerra, J. (2016). What about ICT on Portuguese language national syllabi for mother tongue education. *Bulletin of Karanganda University. Pedagogical series, 1*(81), 63–79. Retrieved from; http://vestnik.ksu.kz/files_vestnik/Pedagogika/Pedagogics_1_81_2016.pdf

Guerra, J., & Olkhovych-Novosadyuk, M. (2014). Multimedia as an efficient web-based tool for the development of communicative competence of students studying English for specific purposes. *World Journal on Educational Technology, 6*(3), 273–277.

Morris, D. (2010). E-confidence or incompetence: Are teachers ready to teach in the 21st century? *World Journal on Educational Technology, 2*(2), 141–154. Retrieved May 17, 2012, from; http://www.world-education-center.org/index.php/wjet/article/view/180

Reis, C. (Coord.) (2009). *Programas de Português do ensino básico*. Lisbon: MEC.

Tavares, C. F., & Barbeiro, L. F. (2011). As implicações das TIC no ensino de línguas. Lisbon: ME/DGIDC.

Ministry of Education. (2008). *Technological plan for education*. Retrieved March 30, 2012, from; http://www.pte.gov.pt/pte/EN/OPTE/index.html