

Reinventing the curriculum to innovate educational practices – an approach to ICT use by veteran teachers

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School innovation has become a trend in discourses on educational improvement, coupled with the necessary change in practice to ensure such enhancement (e.g., OECD/CERI, 2010). In this context, the desired new practices are seen as a means to address the challenge of preparing students for an unpredictable future. The relationship between the concept of innovation and information technology is obvious and naturalized. It is not surprising, then, that veteran teachers (Cohen, 2009; Billie, 2009, Day & Gu, 2009; Orlando, 2014; Thorburn, 2014; Veldman *et al.*, 2016) are immediately associated to a greater difficulty in accessing information technology, a situation which makes the achievement of the necessary innovation harder. Students, on the other hand, are linked to an almost «innate» digital competence, considering their exposure to technology since very young age. In this communication, we focus on the problematization of the so called «digital gap» of veteran teachers, characterizing the identity of these professionals (Thorburn, 2014; Veldman *et al.*, 2016) and linking their exercise with the challenge of applying technology in class with pedagogical purposes (Niederhauser & Stoddart, 2001; Ertmer, 2005; Wozney, Venkatesh, & Abrami, 2006; Plair, 2008; Orlando, 2014). For that, we have structured an extensive review of literature both on veteran teachers and the use of technology as a means to innovate. In a first moment, we discuss the meaning of innovation in education, presenting a general characterization of it and the respective dilemmas (Ferrari, Cachia, & Punie, 2009; Loveless, 2008; Thomas & Brown, 2011). Then, we problematize the concept of veteran teacher and organize their relationship with technology (Russell, Bebell, O'Dwyer, & O'Connor, 2003; Ertmer, 2005; Wozney, Venkatesh, & Abrami, 2006; Giordano, 2007; Wong & Li, 2008; Plair, 2008; Orlando, 2014). Finally, we build an argument on how applying technology in educational setting can become meaningful through a process that implies teacher agency and educational innovation (Earle, 2002; Williams, 2003; OECD/SERI, 2010).

This communication derives from the development of a research project entitled Rekindle+50 – Digital migrations and curricular innovation: giving new meaning to experience and rekindle teaching profession after 50. It is a 31-month funded project, involving two universities in Portugal, with focus on supporting 50 years old or older teachers in developing strategies for curricular innovation through the use of mobile technologies. In this communication, we aim at discussing a broad review literature focused on the integration of technology as a resource for

curricular innovation. The review carried out by the project team focused on the concepts of «veteran teachers» and «technology», covering all published articles available on EBSCO research database, without a temporal constraint. Initially, these articles were systematically organized in order to set a characterization that included year of publication, journal, nature of study and subjects of research. The organization showed that most of the articles were of a qualitative nature, published in the last decade and related to the integration of technologies in the educational field. A second stage took place then, in which we carried out a content analysis (Ryan & Bernard, 2000) of all articles concerning veteran teachers and the use of technologies. In this communication, we address a summary of the main categories of our review of literature, such as, factors influencing teachers' adoption and integration of ICT and barriers and benefits of using ICT in teaching.

Reporting to a very initial part of our research project, the object of our communication works mainly as a lens to guide the next steps of our work, which includes training teachers over 50 years old in using and applying technology in their everyday practice. So far, the review of literature, as presented, allow us to comprehend that the integration of technology demands a sense of wholeness when it comes to education. The state of art suggests that there is a clear difference between applying technology in class and integrating it as a meaningful pedagogical tool. In this sense, if we want to support teachers' needs in terms of turning to ICT as pedagogical tools, we must firstly understand their values, capabilities and needs, because these elements interfere directly in the pedagogical practices. Only then, we might be able to ensure the integration of technology as a process of developing agency through curricular innovation.

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Keywords (3 to 5)

Curricular Innovation; Technology and digital literacy; Digital gap myths; Veteran teachers