

Reinventing The Curriculum and Innovate Educational Practices – An Approach To ICT Use By Veteran Teachers

Ana Mouraz (Universidade Aberta; CIE – Universidade do Porto - Portugal)

José Carlos Morgado (Universidade do Minho- Portugal)

rekindle+50





Summary

- The Rekindle+50 project
- Aims of the presentation
- Trends that frame landscape
- Methods
- Findings
- Outcomes uses.



rekindle+50

The logo features the word "rekindle" in a lowercase, orange, sans-serif font. The letter "i" is stylized with a vertical line through it. The "+" sign is a simple black plus. The number "50" is in a bold, black, sans-serif font. The entire logo is set against a light green background.



Context

- ▶ 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.



Focus

- ▶ In the REKINDLE+50 project, we start by the so called «digital gap» of veteran teachers,
 - ▶ and we challenge them to apply technology in class with pedagogical purposes.



Landscape



- ▶ **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.



Aims

- ▶ To identify trends that cross veteran teachers, ICT pedagogical uses and curricular innovation.
- ▶ To define a plan and principles to support veteran teachers to increase their sense of curricular agency.



Path of presentation

- ▶ For that, we have structured an extensive review of literature both on veteran teachers and the use of technology as a means to innovate.
- ▶ 1- 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).
- ▶ 2 - 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; Clair, 2008; Orlando, 2014).
- ▶ 3 - 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).



Method



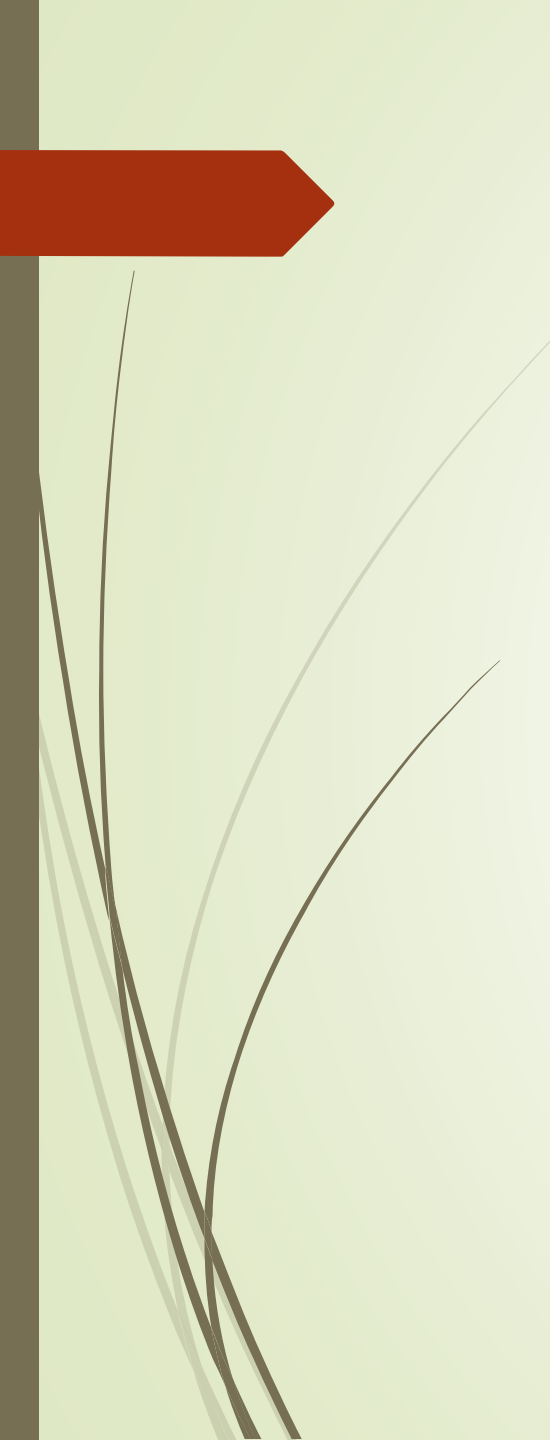
- ▶ To review literature focused on the integration of technology as a resource for curricular innovation.
- ▶ The review carried out focused on the concepts of «veteran teachers» and «technology»,
- ▶ The review covered all published articles available on EBSCO research database, without a temporal constraint.
- ▶ Papers were systematically organized in order to set a characterization that included year of publication, journal, nature of study and subjects of research.
- ▶ 1- 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.
- ▶ 2 -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.

The **meaning of innovation in education**

- ▶ 1-presenting a general characterization of it
 - ▶ innovation could be define as “the implementation of a new or significantly improved product (good or service) or process” (OECD, 2017), that changes in a noticeable way, the context, the persons, the institutions, the processes, or the mindset.
 - ▶ For what concerns social innovation it must be characterized as open, collaborative, free and inclusive for those who are involved (Hannon, 2009).
- ▶ 2 - Identifying the dilemmas concerning curricular innovation (Ferrari, Cachia, & Punie, 2009; Loveless, 2008; Thomas & Brown, 2011).
 - ▶ Innovation and risk to worst
 - ▶ Superficial shift instead innovation
 - ▶ Individual change and social innovation

The relationship between the concept of veteran teacher and technology

- ▶ factors influencing teachers' adoption and integration of ICT
 - ▶ **Trust** in their own abilities to use ICT.
 - ▶ **Positive believes** regarding the use of ICT.
 - ▶ **Friendly environment** to allow risk testing.
- ▶ and barriers of using ICT in teaching.
 - ▶ **Lack of time**, to plan and to accede to resources;
 - ▶ **lack of effective and supportive training** concerning ICT.
 - ▶ **Lack of access to ICT tools**, namely at home.
 - ▶ **Lack of technical support at classroom.** (Bingimlas, 2009).
- ▶ (Russell, Bebell, O'Dwyer, & O'Connor, 2003; Ertmer, 2005; Wozney, Venkatesh, & Abrami, 2006; Giordano, 2007; Wong & Li, 2008; Plair, 2008; Orlando, 2014).



Outcomes uses and a path to support veteran teachers to increase their sense of curricular agency

- ▶ 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 understand 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 using 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.



Emerging Argument

applying technology in educational setting
can become meaningful to veteran
teachers

And it could be a step to reach the sense that someone is
making things differently,

And a facilitator of teacher agency in curriculum making

References

- Cohen, Rosetta Marantz (2009). What it takes to stick it out: two veteran inner-city teachers after 25 years. *Teachers and Teaching: theory and practice*, 15(4), 471-491. DOI: 10.1080/13540600903057252
- Day, Christopher, & Gu, Qing (2009). Veteran teachers: commitment, resilience and quality retention. *Teachers and Teaching: theory and practice*, 15(4), 441-457. DOI: 10.1080/13540600903057211
- Earle, R.S. (2002). The integration of instructional technology into public education: Promises and challenges. *ET Magazine*, 42(1), 5-13.
- Ertmer, P. A. (2005). "Teacher pedagogical beliefs: The final frontier in our quest for technology integration?". *Educational Technology Research and Development*, 53(4), 25-39.
- Giordano, V. (2007). A professional development model to promote internet integration into P-12 teachers' practice: A mixed method study. *Computers in the schools*, 24(3/4), 111-123.
- Niederhauser, D.S. & Stoddart, T. (2001). Teachers' instructional perspectives and use of educational software. *Teaching and teacher education*, 17, 15-31.
- Orlando, Joanne (2014). Veteran teachers and technology: change fatigue and knowledge insecurity influence practice. *Teachers and Teaching*, 20(4), 427-439. DOI: 10.1080/13540602.2014.881644
- Plair, Sandra Kay (2008). Revamping Professional Development for Technology Integration and Fluency. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 82(2), 70-74. DOI: 10.3200/TCHS.82.2.70-74
- Russell, M., Bebell, D., O'Dwyer, L. and O'Connor, K. (2003). Examining teacher technology use: Implications for preservice and inservice teacher preparation. *Journal of Teacher Education*, 54 (4), 297-310.
- Thorburn, Malcolm (2014). 'It was the best of times, it was the ...': subject aims and professional identity from the perspective of one veteran male teacher of physical education in Scotland. *Teachers and Teaching*, 20(4), 440-452. DOI: 10.1080/13540602.2014.881641
- Veldman, Ietje, Admiraal, Wilfried, Tartwijk, Jan van, Mainhard, Tim, & Wubbels, Theo (2016). Veteran teachers' job satisfaction as a function of personal demands and resources in the relationships with their students. *Teachers and Teaching*, 22(8), 913-926. DOI: 10.1080/13540602.2016.1200546
- Williams, M. D. (2003). Technology integration in education. In Tan, S.C. & Wong, F.L. (Eds.), *Teaching and Learning with Technology*, pp. 17-31: An Asia-pacific perspective. Singapore: Prentice Hall.
- Wong, E.M.L. & Li, S.C. (2008). Framing ICT implementation in a context of educational change: a multilevel analysis. *School effectiveness and school improvement*, 19(1), 99-120.

fpce.up.pt/rekindle50/project.html

Aplicações Portugal Teaching Cursos - Erasmus M... Turismo SCOPUS EU_USR 100 links para clicar... Italy_trip LESTE_eu RIO

rekindle+50

HOME PROJECT THE TEAM PUBLICATIONS UPDATES PORTUGUÊS

+

"Portugal has an aged teaching staff."

THE RESEARCH PROJECT

Why it is important?

Portugal has an aged teaching staff. In twenty years of the country's history, working time has increased in an average of 10 years. Portuguese teachers live in situations of instability, embarrassment and demotivation, that is, of disenchantment. Some of this disenchantment results from the generational difference between teachers and their students, accentuated by the digital familiarity that characterizes current students' the profile and by the distinguished interests, languages and reasoning of teachers and students. Consequently, there is a feeling of inefficiency in the developed curriculum, which triggers burnout processes, aggravated by the increase in the retirement age. Simultaneously, more and more tasks are required from school and education in general, more responsibilities are given to them and more quality of the educational action is expected.

What do we aim ?

This project was designed to respond to this mismatch, counteracting some of the effects of teacher aging, reversing the identified vicious circle and turning that aging into a potential for curricular innovation. Its purpose is to foster the relationship between teacher agency in curricular making and the educational action practices mediated by mobile technologies. The innovative nature of the project is its ability to

www.fpce.up.pt/rekindle50

FOR MORE
INFORMATION



me KIndle + 50

THANK YOU FOR YOUR ATTENTION!