Veteran teachers and the challenges of curriculum innovation

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Abstract

The question that underlies this text is to think about the professional re-enchantment of veteran teachers in the context of a project that aimed to promote ICT as a vehicle for improving curriculum agency among these professionals, diminishing the intergenerational gap they face in their classrooms and in their schools. Rekindle+50 – Digital migrations and curricular innovation: giving new meaning to experience and rekindle teaching profession after 50, is a project that invested in an idea of training for professional development that aims to place teachers and their curricular decisions, assisted by ICT devices, at the heart of the training action. The chapter provides an overview concerning discourses about innovation, curriculum and technologies that challenge veteran teachers in Portugal, describes, briefly, the Rekindle+50 project in its attempt to study the conditions of professional re-enchantement of veteran teachers, and presents the preliminary results of the project.

Keywords: veteran teachers; curricular innovation; technology and digital devices

INTRODUCTION

Teaching is an aged profession in Portugal. According to the OECD 2019 report on teachers, Portugal is the 4th country with the highest average of teachers' age. This figure is higher than the average age of Portuguese citizens. Teachers' working time along their careers has increased by an average of 10 years in the past two decades. Contrary to what happened in other historical moments of consolidation and extension of compulsory schooling (after the 25th of April, 1974, or following the Basic Education Law, 1986) the most recent enlargement of schooling to 12 years (2009) didn't encompass a renewing of teaching staff. Demographic decrease and the increase of retirement age have caused less renew of the profession. Also the adverse times lived after the 2008 economic crisis along with the worsening of teachers' working conditions, the deterioration of their socio-economic status and the lack of career prospects, are the main issues that have threatened teachers (Flores, 2020). Furthermore, for them, the need to work for another 10 years was not foreseen by them until about 10 years ago, and this explains some increase of disenchantment recognized in the teachers' complaints. (Ramos, 2016; Matiz, 2013).

The consequences of this for the profession are associated with an increasing generational gap between students and teachers (Alves & Lopes, 2016).

Several studies conducted on such generational gap also related this phenomenon with the feeling of ineffectiveness of curricular work, as it is no longer motivating, (Day et al 2006; Cau-Bareille, 2014; Ramos, 2016) nor capable of providing training to deal with uncertainty. In Portugal this increase of generational gap was also related with educational reforms designed to face societal changes and requiring innovation (Ministério da Educação, 2017). The challenge this reform carries out to teachers and schools is the broad landscape that requires teachers' curriculum agency.

Priestley and his collaborators (2016) define the teachers' curriculum agency as their active contribution to shaping their work and conditions in favor of the general quality of education. The concept of curricular agency is particularly useful to us here as it mobilizes the capacity that the teacher has and exercises in recontextualizing policies, and translating them into his field of action. It is about exerting a double effort of interpretation of the purposes that the policies defined and of local action, which reconfigures and provokes the students' learning, opening meanings for what is different (cf. the cosmopolitan teacher argued by J. Morgado, 2016). However, when we problematize the possibilities that the veteran teacher has to be a curricular agent, we still need to study the specificity that the condition of veteran brings to the two tasks mentioned above of recontextualization and translation.

That is, it is about knowing how the previous experience serves as a facilitator or an obstacle in the effort to think the curriculum intergenerationally.

Meanwhile, school innovation has become a trend in discourses on educational improvement, coupled with the necessary change in practice to ensure such enhancement (European Commission, 2018; OECD, 2019). In this context, the desired new practices are seen as means to address the challenge of preparing students for an unpredictable future (Morgado, 2016). For some teachers, experience was no longer enough to give them resilience and know how to deal with new and sometimes bureaucratic requirements, causing inevitable complaints and confusion between the effects of aging and the effects of bureaucratization of profession (Alves & Lopes,2016).

The relationship between the concept of innovation and information technology is obvious and naturalized. It is not surprising, then, that veteran teachers (Cohen, 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. This supports the question that drives Rekindle+50 project that present chapter is telling about: can ICT be a vehicle for the power of curriculum agency and professional re-enchantment for veteran teachers?

Rekindle+50 – Digital migrations and curricular innovation: giving new meaning to experience and rekindle teaching profession after 50, 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.

Chapter is organized in three main parts:

In the first one provides an overview concerning discourses about innovation, curriculum and technologies that challenge veteran teachers in Portugal.

The second part describes, briefly, the Rekindle+50 project in its attempt to study the conditions of professional re-enchantement of veteran teachers.

Third part presents the preliminary results of the project..

OVERVIEW CONCERNING DISCOURSES ABOUT INNOVATION, CURRICULUM AND TECHNOLOGIES THAT CHALLENGE VETERAN TEACHERS IN PORTUGAL

In this chapter it is followed the definition of innovation stated by the report from OECD as "… a new idea or a further development of an existing product, process or method that is applied in a specific context with the intention to create a value

added." (Vieluf et al., 2012, p. 39). This definition brings innovation to a daily basis and small environments where changing something to be more effective concerning educational aims is possible. Therefore, anyone could be agent of innovation, as it seems to be close to those who are in the field and experience problems that must be solved.

In Portugal, discourses about innovation in Education have been mainly related, in the last years, with schools' autonomy concerning curriculum decision and development (Mouraz & Cosme, forthcoming) and with ICT inclusion within teaching and learning practices (European Commission, 2018; OECD, 2016). Both dimensions have been understood as the key axes to accomplish a more equitable education system as well to develop cross curricular skills needed to a citizenship for the 21st century (Ministério da Educação, 2017).

However, these aims, to be accomplished, need schools' and teachers' work and willingness, as core actors in educational processes (OECD,2019).

Three main issues arise from such statement. The first one relates the lowest levels of innovation, identified by Portuguese teachers in TALIS survey (OECD, 2019), relying more heavily on the prescribed curriculum. If, traditionally, the Portuguese educational system is centralized, it is difficult and takes time to convince teachers to use the autonomy they really have (Cosme, 2018), namely those who had long careers.

The second issue associated with innovation concerns school contexts that are open to innovation. On a very different result from the average across the OECD, where 78% of teachers report that "most [colleagues] in [their] school provide practical support to each other for the application of new ideas", only 60% of Portuguese teachers agree with this. Nevertheless, and in an opposite perspective from the average of OECD countries, novice teachers from Portugal, teachers age 40 or less are more likely to report that their colleagues are open to change (OECD,2019). This is probably related with curricular reform and "reinforces the idea that innovation also has an organizational component that reflects the perceptions of a group's innovativeness that are shared by the teachers of the school" (Anderson and West, 1998). To stress the idea, one can read in such results from TALIS that curriculum innovation is something difficult to Portuguese teachers, mainly due to the traditionally centralized character of education, but, youngest in profession recognize that their colleagues in school are open to change. The importance of professional experience as a factor that supports innovation was also reported by Matiz (2013) results when she conclude that the more experienced teachers, although they were experimenting with some technological resources for the first time, demonstrated a greater capacity to conduct activities with students compared to less experienced ones and played an important supporting role for less experienced teachers .

Teachers, that current schools in Portugal need, should make full use of their curricular agency, and challenge their role as teachers. They should develop from an attitude closely in line with a certain curricular orthodoxy to a more cosmopolitan standing (Morgado, 2016). This means a better alignment with the line of thought reform and the breaking capacity with established routines (id, ibidem). Regarding teacher education, issues such as the theory-practice relationship, reflexive work, research informed practices, and interdisciplinary practices, appear as key variables in the training of teachers' skills to become lifelong learners (Lopes, 2009). For this reason, the continuous training component of the project is based on perspectives that highlight the inescapable possibilities of transforming the educational practice (personal and institutional) and the reconfiguration of professional identity (Pereira, 2011). Such reconfiguration is based on a training practice that highlights the relationship theory-practice, as well as individual and collaborative reflection on the educational action and on professionalism itself. (Korthagen, 2010) Furthermore, this concept of teachers' training requires the production of knowledge and the design of new systems of action and curriculum development, both at the classroom level and at the school as a whole (Pereira, 2011).

The third issue concerns the core of innovative practices put in place by teachers, namely those which are ICT informed.

As previous stated, a set of studies worldwide published in the second decade of the 21 century, reported a resistance from older teachers regarding the use of digital technologies in classroom. (Orlando, 2014; Thorburn, 2014; Veldman et al., 2016). The generational difference between teachers and their students, increases when associated with the digital familiarity that characterize current students and the opposite interests, languages and reasoning from teachers and students. While young people naturally experience technology, these older teachers seem to be afraid of it (Orlando, 2014). Teachers, pressured to make use of their digital literacy skills in the curriculum are reluctant for their lack of pedagogical experience and training with ICT. Mainly, one can state that resistances are closely related with familiarity with ICT, and a lack of a pedagogical sense in using these devices.

In addition, access and proficient use of mobile learning in education are no longer limited to the use of some technologies in substitution of traditional resources without changing the essentials of what is a class (Monteiro, Moreira & Lencastre, 2015). We see in Europe the rethinking of new learning spaces (Byers & Imms, 2016) with initiatives such as Future Classroom Lab, which make school more appealing. UNESCO (2014) emphasizes the need to train teachers to advance learning through mobile technologies and to provide support and training to teachers through mobile technologies. The training of teachers in digital literacy skills

promotes curricular innovation and the change of teaching practices, new ways of learning and of students' interaction with knowledge (id). What is expected is that teachers have the ability to structure and manage learning environments in non-traditional ways, to merge technology with pedagogical assumptions and knowledge to develop socially active classrooms, and spaces of knowledge building and sharing (Monteiro, Moreira & Lencastre, 2015). However, as states Almeida " digital technologies play an instrumental role and serve teaching and the teacher's work, rather than learning and the student, and that those do not bring a reconfiguration of the educational process, where, despite the new technologies, traditional methods prevail" (2018, p. 19). The study presents the contradictions and complexities of the ways in which the use of technologies is understood and implemented by teachers. The results indicate that teachers believe in the potential of using technologies to improve students' learning processes, however, such beliefs do not always materialize in the practices of these teachers. Therefore, innovative practices recurring to ICT need a large reflection on the changing nature they give to pedagogical approaches and its sustainability. Also, this effort is a necessary path to improve curriculum agency among teachers. Again, this effort needs time and training to be worth able and effective.

THE REKINDLE+50 PROJECT

Rekindle+50 project, fully entitled "Digital migrations and curricular innovation: giving new meaning to experience and rekindle teaching profession after 50" is an attempt to study the conditions of professional re-enchantement of veteran teachers.

The project focuses on teachers over 50 years' old and on renewing their commitment to teaching and curricular innovation, mediated through the use of mobile technologies. Putting the project aims in other words, it intended to promote ICT as a vehicle for improving curriculum agency among veteran teachers, diminishing the intergenerational gap they face in their classrooms and in their schools, and contributing to professional re-enchantment for veteran teachers.

ReKINDLE+50 aimed at this development on the teachers' role in curriculum decision-making to sustain the above mentioned curricular innovation. At the same time, since the school year of 2017/18, a curricular reform is running, entitled "Curricular Autonomy and Flexibility Project", which was proposed to schools that wanted it in the first phase, in order for them to make by their own the curricular decisions that they considered relevant to ensure the educational success of their students (Cosme, 2018). This means that is required in such project to deal with an

innovative perspective about curriculum. The three axes upon which the project's dynamic, research and intervention, was built are.

Rekindle+50 aimed to reduce some of the negative effects of teacher aging by reversing the identified vicious circle and turn aging into a potential for curricular innovation. Its purpose was to foster the relationship between the essential aspects of curricular agency assumed by teachers and the practices of educational action mediated by mobile technologies. Within this intervention and research features, the project aimed to:

(A1) – Characterize:
  … professional motivation factors of teachers over 50 years' old.
  … digital literacy skills of teachers over 50 years' old.
  … efficient communication strategies developed by teachers with and without digital literacy skills.
  … curricular innovation scenarios fostered by new learning environments.
(A2) – Design and implement
  … a teacher training programme to promote their ability to proficiently use mobile technologies in the educational relationship in curricular innovation scenarios.
  … curricular innovation scenarios with the use of mobile technologies.
(A3) – Develop the participant teachers' abilities to the pedagogical and communicational use of mobile technologies.
(A4) – Evaluate:
  … the effectiveness of curricular action in schools with scenarios of curricular innovation.
  … curricular innovation scenarios fostered by new learning spaces.
  … the relationship between the effectiveness of curricular action in schools and factors of teachers' professional motivation.
  … the relationship between the effectiveness of curricular action in schools and effective communication strategies developed by teachers with and without digital literacy skills.

Methodologically, this was a project that associated research, intervention and training of primary and secondary school teachers. It convened two Teachers' Training Centres that have been actively involved in the "Future Classrooms" project.

Therefore, ReKINDLE+50 has three core dimensions: training, intervention and research.

The research design involved the implementation of a training program with teachers aged +50 from Portuguese basic and secondary schools and a larger research

about aging and digital migration opportunities to improve teacher curriculum innovative practices. The research aspect has been accomplished through following the teachers that participate in the training program and their changes on teaching practices and curriculum innovations induced by training. It also included a further discussion on teachers' digital literacies and on how to sustain the teachers' training program to re-enchant their relation with profession.

The teachers' training program was developed by research team members and delivered by some of them, jointly with the Teachers´ Training Centres. The program presented and promoted opportunities to develop curriculum in new learning spaces with collaborative support.

The teachers, participants of training and intervention programme (N = 38+34= 72), were invited and selected among those that worked in two different regions of Portugal (North and Centre regions of country). They were all aged fifty or more and teach different levels (from kindergarten to K12) and different subject matters.

Team collected a large amount of data, namely concerning its nature and variety. Data collected were: testimonials from teachers +50 (videos, audios, videoconferences); Training products (texts; lessons plans; lessons descriptions); Interviews with headmasters of teachers involved in the project; Teachers' psychological data collected before and after training; data coming from teachers' monitoring process, collected during and after training: questionnaires; individual interviews; focus group; job shadowing; class observation reports.

Collected data have been analysed, mainly, in a qualitative way. Quantitative analysis was performed regarding psychological data and questionnaires. Nevertheless, the preliminary results presented in this chapter rely in qualitative analysis and sum up other texts already produced by the team. Its main purpose was to identify episodes, experiences on the relationship between professional (re) enchantment, curricular innovation and the use of ICT in the classroom or in learning situations. Preliminary results have been presented and discussed, periodically in local meetings, with the teachers involved in the training program.

PRELIMINARY RESULTS OF THE PROJECT

Having in mind the purpose of present chapter, is time to shed light and summarize the preliminary results obtained by Rekindle+50, as it has been working with veteran teachers on promoting ICT as a vehicle for improving curriculum agency among them and diminishing the intergenerational gap they face in their classrooms and in their schools.

Preliminary results of the project could be organized in two main axes: to identify changes in teachers' conceptions regarding fears and myths related to the use of ICT, and to map strategies and factors that could explain professional re-enchantment and resilience, mainly in the context of a curricular reform, like the one is on-going in Portugal.

Project did start by facing a set of discourses on change and improvement in education that have contributed to overestimating the role of Information Technologies and naturalized the relationship between technologies and innovation (European Commission, 2018).

Other starting recurrent discourse associated the generational difference between students and teachers, to a generalized feeling that there was a widespread technological inefficiency among veteran teachers, when compared with their younger colleagues, with impact on the level of their practices (Monteiro et al, forthcoming; Orlando, 2014). Another common idea was the conservative perspectives regarding pedagogical practices of veteran teachers.

Concerning these changes, we invalidated the idea that veteran teachers are more disenchanted than their younger colleagues. Also it was possible to contradict the thesis that veteran teachers are more info-excluded than their young students (Monteiro et al, forthcoming). In fact, it was possible to check, during the class observations and from the lessons description, that students had a rather close connection and familiarity with some procedures, like these concerning surfing on web, installation apps and using games. However, students seemed not think about the innovative curricular use that such devices could carry out for their learning. The teachers involved in project were very critical regarding the ICT devices and apps, as they were always discussing the pedagogical uses of such technologies (Freires et al., 2020).

The second dimension of results concerns mapping of professional re-enchantment and resilience factors, mainly in the context of a curricular reform, like it is on-going within Portuguese educational system.

Concerning these issues, it was possible to validate the importance of collaborative work among peers who rediscover themselves and one to each other as a factor of re-silience, perhaps re-enchantment. On the opposite of an established idea that teaching is a solitary profession (Correia & Matos, 2000), veteran teachers with whom we worked, seemed to be very much aware of teamwork relevance and did found curricular innovations, carried by ICT, a good opportunity to nurture close relations with peers. In fact, received recognition, by students and peers, of the quality of the pedagogical work developed, seemed to be a key factor of professional re-enchantement.

Also, it was possible to validate the importance of support coming from school leaders, as well pedagogical and technical support delivery by Training Centers, to

the introduction of innovations in professional practices of veteran teachers. These were also highlighted as two factors of increasing commitment to the profession. From school leaders, namely headmasters, veteran teachers appreciated recognizing words concerning innovative effort, as well small rewarding things, like better schedules… From trainers, veteran teachers appraised   the availability to answer small doubts, as well the opportunity to present and discuss some practices they were planning or putting in place.

We found that veteran teachers who mastered the most proficient technologies, took more risks in the use of other technologies / devices that they did not know. Putting this in other words, as much as teachers felt themselves comfortable using technologies in classroom, as much they were available to test other devices and confessed their mistakes. Also, they assumed this lack of knowledge with students and let students experience these (or other) technologies. As said by some of these veteran teachers, such practice was simultaneously well appreciated by students and was a factor of diminishing the intergerational gap as much as increasing authority of teacher within class. Some of them also report a reduction of students' indiscipline behaviors in class.

This assumption seems to be correlated with agency power of these veteran teachers that were, also, those who were more aware of what were the educational aims of curricular reform, or had a deep understanding of the importance of their subject matters to transversal competences to be achieved by students.

Finally, we found a strong relationship between professional enchantment and teachers' participation in national and international projects. Not surprisingly, those veteran teachers that were still enchanted with profession did developed their careers by investing in crossed dimensions related with education, such as participating in research and intervention projects, exchanging and mobility international programs. Such opportunities to contact with other people interested in educational issues (at various levels and countries), did enlarge teachers' knowledge and perspectives and promoted new meanings and evidenced new feasible challenges for them to face. Those teachers were also the ones that seemed to have more resilience to face daily professional problems, namely those related with intergerational gap.

CONCLUDING REMARKS

The question that underlies this text is to think about the professional re-enchantment of veteran teachers in the context of a project that aimed to promote ICT as a vehicle for improving curriculum agency among these professionals, diminishing the intergenerational gap they face in their classrooms and in their schools. In other

words, it is important to know whether veteran teachers are available and able to use ICT to take over the curricular agency that current reform requires.

The preliminary results obtained allowed us to conclude that school leadership, collaborative work and mobile technologies are essential elements in changing and innovating practices, deepening resilience and reenchanting the teaching profession itself. Also we found out that veteran teachers that were more effective in using ICT in the classroom are also the same that took more risks concerning innovative practices and those able to diminish the intergenerational gap, between them and their students. It is possible to say that those teachers did understood and put in practice the agency power that they reach effectively.

The REKINDLE + 50 project has invested in an idea of training for professional development that aims to place teachers and their curricular decisions, assisted by ICT devices, at the heart of the training action. It has also intended to identify dimensions and factors that contribute to the assumed exercise of the curricular agency of these professionals.

The bet on a collaborative training that uses the integration of technologies and innovative educational environments as a vehicle for reconfiguring the agency exercise is just one way (the one chosen by the REKINDLE + 50 project) to explore the becoming of whoever has chosen make teaching her/his professional identity.

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