CASE STUDY 1 for PORTUGAL
POST-GRADUATION IN EDUCATION AT THE UNIVERSITY OF PORTO:
LINKING RESEARCH AND PRACTICE

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1.   Summary

This case-study focus on the post-graduation experience in Education at the University of Porto and is based on three assumptions:

(i)   the so-called Bologna process involved the explicit recognition of post-graduation (2nd and 3rd cycle) as qualifying for innovation in professional practice;

(ii)   the implementation of the "Bologna process" at the Faculty of Psychology and Education of the University of Porto from 2007 involved the re-organization of the post-graduation curriculum emphasising a strong articulation between research and practice;

(iii)   post-graduation became the rule, rather than the exception, for professionals who work in the field of education – and most post-graduation students in Education are professionals.

As this report notes, not only there is an obvious growth in the number of Master and Doctoral students, but also many of them chose to conduct their research in their own professional contexts – suggesting, therefore, that the dialogue between research and practice can be not only frequent but also very productive. However, no follow-up data exists on the effectiveness and maintenance on this dialogue once their academic work is completed. This is the next step for DIALOGUE.

2. Methodology

This report was prepared by Isabel Menezes and Pedro Teixeira from the University of Porto after a review of data on post-graduation in Education, including guidelines and curricular documents for Masters and PhD in Education, reports about students and their profiles, and the theses and dissertations completed since 2005. We also consulted the heads of post-graduation programmes in Education and the coordinator of the post-graduation office.

3. Facts and Figures

The institution of the Higher Education Area under the so-called Bologna process involved several important transformations in the organization of post-graduation courses. The definition of a common framework for qualifications across Europe (see Table 1) also implied a more open assumption of a LLL perspective, clearly recognising the role of post-graduation as involving applied research that aims to improve practice, promote professional knowledge and foster innovation in work contexts. One of the consequences is that post-graduation can be clearly conceived as a strategy to promote reflective practitioners who use research tools to improve practice.
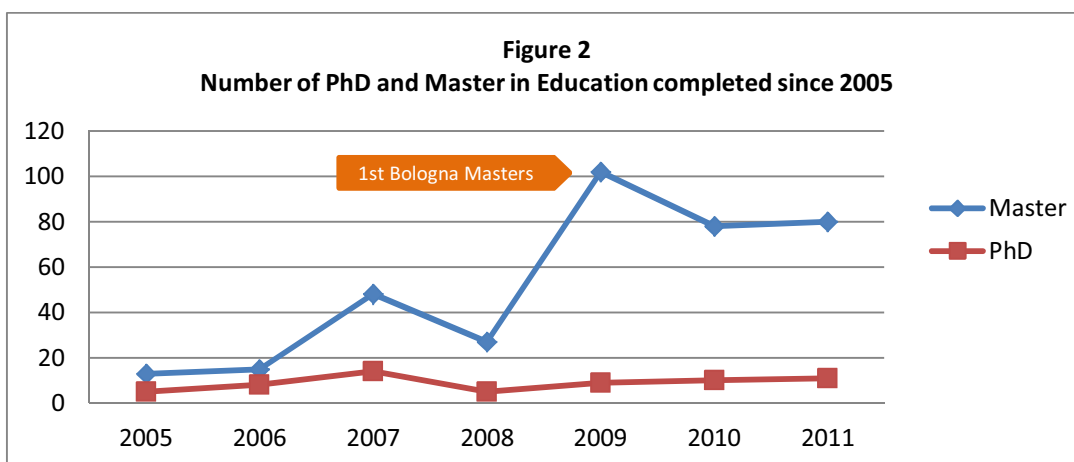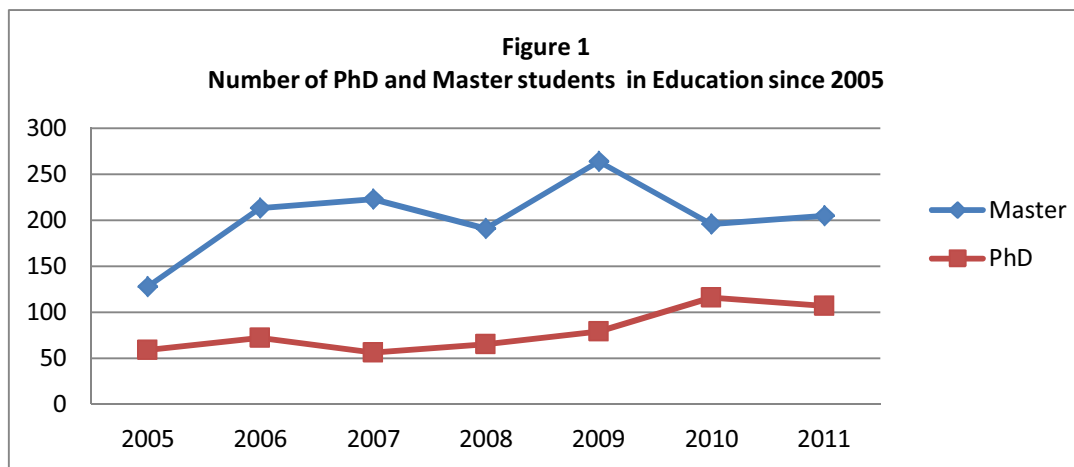
Table 1. Descriptors defining levels in the European Qualifications Framework

	Knowledge *In the EQF, knowledge is described as theoretical and/or factual.*	Skills *In the EQF, skills are described as cognitive (use of logical, intuitive and creative thinking) and practical (involving manual dexterity and the use of methods, materials, tools and instruments).*	Competence *In the EQF, competence is described in terms of responsibility and autonomy.*
Level 7 (2nd cycle)	highly specialised knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking critical awareness of knowledge issues in a field and at the interface between different fields	specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields	manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams
Level 8 (3rd cycle)	knowledge at the most advanced frontier of a field of work or study and at the interface between fields	the most advanced and specialised skills and techniques, including synthesis and evaluation, required to solve critical problems in research and/or innovation and to extend and redefine existing knowledge or professional practice	demonstrate substantial authority, innovation, autonomy, scholarly and professional integrity and sustained commitment to the development of new ideas or processes at the forefront of work or study contexts including research.

(source: http://ec.europa.eu/education/policies/educ/eqf/com_2006_0479_en.pdf)

At the University of Porto, pre and post-graduation in Education formally exist since 1987. From the beginning, both pre-graduation (4 years degree called "licenciatura") and post-graduation (2 years Master degree and 5 years Doctoral program) were particularly appealing to professionals already working in the field, as many had qualifications at post-secondary level or in higher education polytechnics, but not a university degree. From 1985 to 2006, the year before "Bologna courses" started at the University of Porto, more than 140 Masters and 30 PhDs were concluded– a sign, if we compare this figure with the 600 graduates during the same

period, that post-graduation was the exception rather than the rule for professionals working in the field of education. The implementation of the "Bologna process" from 2007 involved the re-organization of both pre- and post-graduation with the creation of a 1st cycle degree (180 ECTS) in Education Sciences, three 2nd cycle degrees (120 ECTS) in Education Sciences, in Adult Education and Training and in Visual Arts Education (a joint program with the Faculty of Arts), and one 3rd cycle (180 ECTS) in Education Sciences. One of the consequences of the framing of higher education within a LLL perspective is that post-graduation became the rule, rather than the exception, particularly for professionals who work in highly challenging areas, such as education (see Figure 1). On the whole, the impact of the Bologna process is already visible, especially for Master theses (Figure 2); in the case of PhDs, most students are part-time students (80%) who work as full time-education professionals – meaning that the impact of the increase in PhD dissertations will take more time.

Figure 1
Number of PhD and Master students in Education since 2005

Figure 2
Number of PhD and Master in Education completed since 2005

4. Links between research and practice

The guidelines and curricula for these post-graduation programmes clearly reinforce the link between research and practice. We will briefly consider the three Master degrees (2nd cycle) and the doctoral programme in Education (3rd cycle).

The Master in Education Sciences exists since 2007 and explicitly aims at promoting knowledge and skills in educational research and intervention but also at "preparing professionals in the areas of educational training, management, leadership, evaluation, and consultation" (http://sigarra.up.pt/fpceup/cursos_geral.FormView?P_CUR_SIGLA=MCED). Therefore, the curriculum not only emphasizes research and intervention methodologies, but also articulates the two areas in diverse courses that consider formal, non-formal and informal learning in a variety of social contexts. As a result it is not surprising that the programme is appealing to professionals already working in education (mostly teachers, but also other education professionals) that constitute approximately 70% of the total of students. The majority of these choose to develop academic Master theses that involve conducting applied research – a task that mostly involves their professional contexts, either because they focus on an educational topic with direct relevance to their work or because they even develop case-studies in their own work contexts. The challenges of collecting and analysing data from interviews, questionnaires, focus groups, etc. in the own work context are explicitly acknowledged and a common topic of discussion in research seminars.

Both the Master in Visual Arts Education, created in 2008, and the Master in Adult Education and Training, created in 2009, are explicitly intended for education professionals, namely, teacher of visual arts in grades 7 to 12 and professionals in the field of adult education, respectively. Therefore, it is not surprising that almost 100% of students of both programmes are education professionals working in these fields.

However, the Master in Visual Arts Education is clearly a professional Master, integrating an internship, and qualifies for teaching Visual Arts in secondary schools. In this sense, the Master is more focused in mastering and innovating professional practice rather than in conducting applied research, but it can have significant

implications not only for the practice of the individual Master student but also for the school where s/he is doing her/his internship.

The Master in Adult Education and Training is an interesting case in itself, as it results from the recognition that the research on adult education and LLL at the Faculty of Psychology and Education was relevant for conceiving and reconfiguring practice, especially considering the New Opportunities Initiative included in the Lisbon Strategy (see National Report for Portugal) that involved both the recognition of prior learning devices and diverse types of education and training programmes for adults with low qualifications. The Master emerged from the experience of a post-graduation course for professionals working in New Opportunities Centres that the Faculty of Psychology and Education organised at the request of a governmental agency. The course involved a team of faculty members from two research centres in Education and Psychology that had worked in the fields of LLL, LL Career Guidance, Adult Education, VET and Community Development. The proposal of the Master in Adult Education is innovative not only because it directly results from the recognition that existing research was relevant for practice, but also because it is a joint programme in Education and Psychology. As a result, it is not surprising that there is a strong academic component in this Master, and that the links between research and practice are strongly emphasized, even if almost all the students are professionals. Similarly to the Master in Education Sciences, students' research is mostly either focusing in topics that are relevant to their professional exercise or even conducting case-studies in their own work contexts. For instance, one student tested an evaluation system in the New Opportunities Centre where she was working; the project resulted from a discussion within the Centre that she then presented to her supervisor – and was accepted as a focus of her Master thesis using a quasi-experimental research design. That is, there is an explicit recommendation that research projects should be aware of the different forms of research validity and their significance, including not only the more traditional internal and external validity or construct and face validity, but also ecological and catalytic validity (Barker & Pistrang, 2005; Kelly, 1986; Lather, 1986; Tebes, 2005; Trickett, 2009): ecological validity emphasizes the importance of a context-specific

design that takes situated knowledge into account; and catalytic validity recognizes the importance of research contributing to social transformation involving both "a recognition of the reality-altering impact of the research process itself, but also on the need to consciously channel this impact so that respondents gain self-understanding and, ideally, self-determination through research participation" (Lather, 1986, p. 67).

However, and up to now, there is no systematic analysis of the impact of these varieties of case-studies, internships and other research in changing actual practice. In fact, anecdotal evidence suggests that research can generate a more critical and reflective analysis of the Master students own practice, that might result in a more complex professionalism. However, professional practice does not result solely from individual qualification, and results from multifaceted social processes involving not only other professionals but also the organisational and contextual characteristics of the work context itself. Additionally, the extent of transformation in those work contexts as a result of research is ignored.

Finally, the students of the Doctoral Program in Education Sciences are also mainly, as we saw above, education professionals. The programme involves a curriculum with a strong focus on theoretical and methodological courses, which aims to foster scholarly, state of the art knowledge and competencies in educational research. But what happens once the research projects are concluded and the dissertations are presented? Again, there is no follow-up of the impact of research, even if most dissertations involve applied research, generally with a close relationship to the problems and challenges that emerge from practice.

5. Future directions

In the context of DIALOGUE it would be interesting to systematically explore the ecological and catalytic validity of the research developed in the context of post-graduation programmes in Education at the University of Porto. This could involve follow up interviews with former Master and doctoral students to identify the factors that promote and prevent more intensive links between research and practice.

6. References

Reports regarding training and research at the Faculty of Psychology and Education of the University of Porto available at www.fpce.up.pt

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