Teacher Education in collaborative backgrounds. An ongoing research project

Ana Margarida Veiga Simão

amvsimao@fpce.ul.pt

Faculty of Psychology and Educational Sciences of the University of Lisbon

Maria Assunção Flores

aflores@iep.uminho.pt

Institute of Education and Psychology of the University of Minho

José Carlos Morgado

jmorgado@iep.uminho.pt

Institute of Education and Psychology of the University of Minho

Ana Maria Forte

anaxavierforte@gmail.com

Institute of Education and Psychology of the University of Minho (Doctoral student)

Teresa Fragoso de Almeida

teresafalmeida@sapo.pt

University of Lisbon (Doctoral student)

Abstract:

In this text we present the main structural guidelines and the magnitude of an ongoing research project being carried out by three universities: *Universidade de Lisboa*, *Universidade de Minho* and *Universidade Nova de Lisboa*. The project deals with teacher education in a collaborative background, as well as its framework and justification. We begin by briefly conceptualising the project based on the guiding ideas, discourses and challenges that arise with regard to teacher education today. We then present the presuppositions of the "teacher education in collaborative backgrounds" research project and we discuss the key underlying concepts. Finally, we describe how the process is undertaken and report some of the results which have been published elsewhere.

Keywords:

Ongoing teacher education, Professional development, Collaboration, Action research.

INTRODUCTION

At a time when the school, as an educational and training institution, is faced with abundant challenges and profound changes, education and training are attributed a renewed meaning with redoubled strategic value as crucial factors for innovation, progress, competitiveness, excellence and economic and social well--being. In this background, the question of the quality of the teaching and learning (and also the quality of the teachers) has been a recurrent key theme in political discourses and debates on Education.

As noted by Nóvoa (1992, p. 9), it is not possible to bring about "quality teaching, or educational reform, or pedagogical innovation, without proper teacher education". This principle has led to teacher education becoming an area of research and knowledge able to come up with solutions to some of the problems afflicting education systems (Marcelo, 1999). As such, it is understandable that both at national and international level teacher education continues to account for a large proportion of the debates on education and is a key element in educational policies, given its perceived influence on the quality of teachers' professional performance, and consequently on improving teaching-learning processes in schools.

It is precisely the contributions that teacher education can offer, both as regards the professional development of the teacher and as regards change and improvement in curricular practices in schools, that this text intends to dwell on, by describing and presenting an ongoing research project.

Based on the challenges that have recently arisen with regard to teacher education, we present a research project in the second part of the text. The research in question has been focussing on teacher education in collaborative backgrounds.

CHALLENGES IN TEACHER EDUCATION

As has happened in the field of economics, questions of a social and cultural nature have been gaining increasing attention from the European Commission, with successive calls to the different EU countries to introduce reforms in education and training and to achieve the strategic aims of the "*Education & Training for 2010*"[1] programme. The goal of these aims is to steer Europe down the road to a *knowledge-based economy* and transform it into a competitive region in the world, without damaging the level and quality of employment, social cohesion or environmental sustainability.

These goals are part of a broader regulatory movement that underpins the building of a *new educational world order* (Laval & Weber, 2002), whose authors, actors and actions are essentially geared towards the supranational domain and which, according to Antunes (2007, p. 14), have been the main driving forces behind the conceptual, institutional, axiological and relational changes that have come about in the educational field today.

Indeed, both at political and territorial level, the European Union has made obvious efforts to "amplify its capacity to act and influence" in order to define a *political framework* that guides the educational destinies of the various EU countries, and to conceive new entities that, not to be confused with the national education or training systems, "arise in a coded form under the guise of a *European Space* (of knowledge, higher education, education and training, life-long learning, research and innovation, etc)" (Antunes, 2007, pp. 17-18) and which aim to fulfil the stipulated goals for the development of a new social model in Europe[2].

In this enterprise, the quality of the teaching is a crucial factor, conferring a leading role to the education and training processes and added responsibility to teachers and trainers, given that the good or bad performance of the students is heavily dependent on the quality of the academic and professional training and the performance of the teachers and trainers.

The European Commission has also been acutely aware of this issue, creating mechanisms to consolidate the concept of a European dimension in teacher education[3] and developing EU programmes to encourage mobility and to support the development of teachers' skills[4]. In both cases, we are convinced that the idea is not to develop a single "type" of teacher, as the European education systems are different and "nobody can think of any kind of unification" (Freitas, 2007, p. 8). While it is true that the teaching profession is built on the basis of "common skills", which enable teachers from different countries to easily relate to their peers, the truth is that "differences exist that, although not sufficient to strip the profession of common characteristics, do not allow a true identity to be formed" (Freitas, 2007, p. 8). This leads to the need to find paths that point towards the development of a *paradigm of European teacher*, anchored on a body of knowledge and skills that is acknowledged as essential for teaching and which, as well as trying to harmonise different kinds of teacher education and stimulate exchange and cooperation among teachers from different countries, makes it easier to build a European educational space with several voices, without losing sight of the common principles and goals.

This teacher profile, as well as the scientific knowledge specific to the teacher's subject, should include a series of didactic and pedagogical skills inherent to the teaching function that enable not only the use of more constructive teaching and learning methods, more focussed on teamwork, but also the undertaking of actions that respond to the ethical problems and differences that still remain inside many classrooms. This range of skills should include competencies that allow teachers to exploit opportunities afforded by the new technologies, making use of them to devise more individualised forms of learning, as well as encouraging research as a means of updating and deepening knowledge, reflection on the work carried out, decision making, problem solving and continuous professional development.

It is this line of thinking that dictates that teacher education should be viewed as a structural aspect for change and improvement in curricular practice, and consequently in education and training systems. From the moment it was understood that the initial training represented only the step required to enter the profession, continuous training and the concept of ongoing professional development (Day, 2001) were attributed new meanings and were viewed as crucial elements, both as regards the construction of the professional teaching identity, and the conception and implementation of the teaching-learning processes.

In truth, while the initial training should endow future teachers with the acquisition of knowledge and the development of competencies inherent to the educational task, ongoing training, which should begin when the teacher starts working, is charged with the task of "matching thinking and action, reformulating and updating the preparation of teachers, questioning teaching practices, identifying problems and needs (…) and developing new ways of relating and new working methods" (Morgado, 2007, p. 48). Initial training and ongoing training are therefore core components of professional development and change or innovation in curricular practice.

However, success in teacher education, especially with regard to continuous training, depends on the ability of schools to involve themselves in the conception and collective development of training projects that meet the needs and enable answers to be found to day-to-day problems that arise. While not neglecting the importance of a broad training plan, as well as some external support (human,

financial and material resources), we are convinced that such projects hatched in the heart of each institution, or group of institutions that organise themselves for this purpose, will be more profitable and relevant, as they will better match the needs and interests of the schools and allow the teachers themselves to draw up their own training processes.

Indeed, the changes which are currently being undertaken in the field of teacher education in the higher education institutions, will only bring about the desired effects if, at the level of the schools, ongoing training is structured in a more contextualised background, i.e. if it is based on the constant identification of needs and problems so that, using these as the starting point, training projects can be drawn up as well as the (re)definition of pedagogical lines of action. Essentially, training that enables continuous learning in the course of exercising the profession itself (Campos, 2002), gives a leading role to research as a training strategy, allowing teachers to "become aware of themselves in the working situation" (Estrela & Estrela, 2001, p. 12) and encouraging them to think up and develop pedagogical practices that effectively respond to the professional demands they are faced with today.

Furthermore, ongoing training should also comply with two essential aspects. On the one hand it should, "be *informed by the research*", which implies an effort to prepare the teachers both to use the research produced in the education domain, and to act with an investigative spirit (Campos, 2002, p. 73). The challenges facing the teaching profession today demand this attitude, given that teaching based on routines has become obsolete, and the singularity of each educational context should be catered for, leading to the need for a constant (re) adaptation of the educational action.

On the other hand, ongoing training should encourage the development of collaborative practices in schools. The individualist performance of the teacher, typical of teaching split into subjects that prevailed for a long time, which goes against the need for teamwork, without which any attempt at flexible and differentiated curricular management, development of a more independent teaching attitude and the construction of a "new" teaching culture, is doomed to failure.

It was based on the aforementioned principles that we drew up the *research-training* project that we now present.

THE "TEACHER EDUCATION IN COLLABORATIVE BACKGROUNDS" PROJECT

Presuppositions and Justification

The project began in 2006[5] and is built on the idea of collaboration as the central pillar of teachers' work, their training and their professional development. It was carried out in a background of collaboration (in the instigation, implementation and assessment phases) which brought together three researchers from the *Universidade de Lisboa*, one from the *Universidade Nova de Lisboa* and two from the *Universidade do Minho*, nine teachers/PhD students in Education (five starting and another four finishing) and five collaborators in a research team that numbered a total of twenty members.

The development of knowledge about the learning processes of adults clearly emphasises the importance of reflection and learning in context, reinforcing the need for articulation between the work processes and the training processes. With respect to teacher education, increasingly importance is being drawn to the need, in each school, for a coherent project between the educational practices of the pupils and the training processes of the teachers. If it is believed that the pupils can be the builder of their own knowledge, participating in collaboration processes with their peers, under the guidance of the teacher, what is holding back teachers likewise from developing their skills and professionalism in contact with their peers in the workplace? This perspective raises a set of questions that are linked not only to the training itself (the training policies and processes), but also aspects that are intermingled with the development of the schools, as places of work and learning for both pupils and teachers. Therefore, the questions that guided this research project were as follows:

· How do the collaboration/training processes impact on the quality of the teaching of a certain group of teachers and the development of the competencies of each one of them?

- How is the knowledge shared in collaboration processes in school transferred to the knowledge experienced by each teacher in their practice?
- How do the teachers view and assess the structured participation processes in which they collaborate, in order to respond to the specific problems of each school?
- How do the teachers conciliate the construction of their professional autonomy and the collaboration processes they take part in?
- To what extent do the professional development opportunities and collaboration processes have a lasting effect in the contexts in which they occur?

In the background of the new challenges and responsibilities that primary and secondary schools and teachers are faced with, we believe it is important to develop collaborative research projects, based on which one can get to know the different collaborative working processes better (from teamwork, to tutorials, to mentoring, among others), in order to bring about a more grounded intervention. The project hence intends to:

- Contribute to better knowledge of the training opportunities in the workplace for the teachers in the various schools;
- Understand the impact of participatory and collaborative training in the professional development of the teacher;
- Enable the teacher to develop autonomy in the heart of the collaborative participation/ training;
- Understand how training processes in a collaborative background are articulated with the educational practices of the teachers that take part in them.

Concepts that organise the project

Among the guiding ideas which traverse the different subprojects that integrate this research project (see below) are the concepts of collaboration and reflexivity, training in the workplace, professional development, action research and the impact on the pupils and on the school. We now delve into these concepts in more detail.

Collaborative contexts

The challenges today facing school and teachers give rise to permanent confrontations with the knowledge, and in the case of teacher education, constantly bring into question the issue of professionalism. The work background, as a place of construction of the teachers' professional knowledge, is especially important as it allows us to "go to and fro between theory and the practice that interprets it, to challenge, question, and therefore to foster and nurture development" (Formosinho and Machado, 2007, p. 77).

The emergence of this training concept implies, for the training of teachers, that they are mobilised in order that, through collaborative work, they face up to the tensions inherent to the educational function and together try to overcome them.

Glazer and Hannafin (2006, p. 180) argue that the learning carried out outside the work context "increases the individual repertoire of the teachers rather than influencing the professional community, thus limiting understanding and the collective impact".

Within the scope of this project we intend that the teachers, in collaboration, improve not only their own professional performances, but also that this improvement constitutes a benefit for the educational community. Towards this end, Day (2001, p. 16) argues that the teachers should have "opportunities to take part in a variety of formal and informal activities that induce processes of review, renewal and perfecting of their thinking and their action, and above all their professional commitment." Research has shown that the professional advancement of teachers increases when collaborative work is valued, in which there is a constant interaction that allows the sharing of successful experiences and learning from mistakes made by peers (Lave & Wenger, 1990; Gallagher & Ford, 2002; Boyd, 1992, cited by Glazer & Hannafin, 2006).

Likewise, a study by Lee and Judith Shulman (2004, cited by Roldão, 2007, p. 26), advocates that learning as a training process in the teacher's activity must be grounded "on collective reflection; on the analysis and joint observation of the specific situations of the teaching action; on the collaborative demand for more information, which generates new professional knowledge and on the undertaking of teaching actions in a shared format".

Therefore, the project described herein proposes collaboration as a professional learning factor, through the stimulation of reciprocal interactions between the teachers. In this background of collaboration, the articulation between the processes to improve the school and the training and professional development of the teachers becomes visible.

Action research

In this dynamic of collaborative training that we advocate, we think that the collaborative action research constitutes the most appropriate research methodology.

The expression action research has attained different uses and meanings, but in general it can be defined as a "vast array of strategies carried out to improve the educational and social system" (Latorre, 2004, p. 23). The existence of diverse conceptions about this research methodology has led to the appearance of different models, although all are inspired by the Kurt Lewin's conceptualisation (1980-1947). We believe the model advocated by Kemmis (1989, cited by Latorre, 2004) is the most suitable as it is the one that best fits education. This model is built around two bedrocks: one strategic (action and reflection) and another organisational (planning and observation). These bedrocks relate to each other in an interactive way, which allows the understanding and resolution of situations that arise in educational practice. The method defended by Kemmis and Carr (1988, cited by Latorre, 2004, p. 31), which we believe suitable for our aims, is the critical or emancipatory action research which is added to the other two methods that are discussed in the literature on this theme ("technique" and "practice"). These methods address the concerns, not only regarding "the transformation of the educational organisation and practice, but also the social organisation and practice".

In this perspective, the teachers involved, in a horizontal structure, share reflections, decisions and responsibilities, not only about themselves but also about the educational community, and "their responses will be in the form of transformed practice, transformed practices and scenarios where their practices occur transformed in a given time and given place" (Kemmis, 2006, p. 473).

Perez Serrano (1990) highlights the following aspects of action research concepts: presupposes change, transformation and improvement of the social reality; implies collaboration; developed according to a spiral of cycles; a systematic process of continuous learning; geared towards the creation of groups of self-critical reflection; participatory; methodologically conceived in a broad and flexible manner; proposes a new kind of researcher; practice-based; intends to have methodological rigour; begins by implementing small changes; enables registers to be kept of the improvements brought about.

Kemmis and McTaggart (1988, cited by Latorre, 2004, p. 27) consider the goals of action research to be "improvement and/or transformation of social and/or educational practice, instead of seeking a better understanding of this practice; articulation of the permanent method of research, action and training; getting closer to the reality, bringing about change and producing knowledge; making teachers the instigators of the research".

Therefore, collaborative action research induces the teachers to theorise about their practices, questioning, in their contexts, the action and its consequences and understanding the relationships between the circumstance, the actions and the consequences in their own lives. The collaborative work of action research presupposes joint work among researchers and practitioners, with the consequent implications for both. It presupposes a learning process focussed essentially on planning of the action and assessment of the results. Latorre (2004, p. 24) considers action research "as a practical questioning carried out by teachers in a collaborative manner, aimed at improving their educational practice through cycles of action and reflection."

The continuous movement, of a cyclical nature, between action and reflection, leads to a process of questioning between the evidence and the interpretation of the collaborative group, i.e. "a dialectic spiral between action and reflection, such that both moments are integrated with and complement each other" (Latorre, 2004, p. 24).

Training and Professional Development of Teachers

Teacher education has been placed by some authors (Estrela & Estrela, 2006; Nóvoa, 1992) at a "*crossroads*". Maria Teresa Estrela and Albano Estrela (2006, p. 73) argue that the "theoretical discourse of

training is not supported by empirical studies that back up whether it matches the reality". Moreover, they state, based on the literature they had access to, "a certain inability to innovate in the practices and renew the discourse".

But this fact did not lessen their opinion regarding the importance of continuous training. On the contrary, the authors believe it is relevant for several reasons: *i)* for the enrichment of the employee as consigned in labour legislation; *ii)* because of the thousands and thousands of hours spent by trainers and trainees on training; *iii)* because of the financial investments made by private and state bodies, at national and international level; *iv)* because of the knowledge generated by the need to ground, develop and assess the training practices and their effects.

Continuous training is a polysemous concept encompassing different visions, different ideological sensibilities and different epistemologies (Estrela & Estrela, 2006). Based on the analysis of the various definitions of continuous training, the authors pick out two consensual points: "it is training that follows on from the initial training" and "it supposes intentionality, geared towards certain aims" (p. 74).

However, as pointed out by Corcoran (1995, cited by Pacheco & Flores, 1999), often the concepts of professional development and ongoing training are used as synonyms. Maria Teresa Estrela and Albano Estrela (2006, p. 75) view ongoing training as "the set of activities institutionally organised which, following on from the initial training, aims to bring about the professional and personal perfecting of the teacher" while they describe professional development as the set of "processes of change in a person in relation to work, that occur throughout the career and are caused by a multitude of factors (…)".

As for Day (2001), he argues that the concept of professional development does not exclude the ongoing training of teachers in the form of courses, but places it in a broader learning context, insofar as it encourages the growth of individuals and the institutions, undertaken both inside and outside these same institutions. It is "a holistic vision of the ongoing professional development of the teachers" which encompasses the challenges and constraints that affect their professional endeavour and development of their skills, the meaning of which "depends on their personal and professional lives and the school policies and contexts in which they carry out their teaching activity" (p. 15). The same author also stresses (p. 18) that the concept of professional development includes "the eminently personal learning, without any kind of guidance, based on experience (…), the informal opportunities for professional development afforded by the school, and also the more formal 'accelerated'" learning opportunities. However, Day (2001) emphasises that to bring about and manage professional development effectively, it is more important to have a perspective centred on the learner than the instructor, drawing attention to the several factors that, in being interconnected, contribute to the quality of the professional learning and development. Therefore, "good teaching calls for teachers to (re)analyse and review the way they apply the principles of differentiation, coherence, progression, continuity and equilibrium on a regular basis, not only with regard to the 'what' and 'how' of teaching, but also the 'why', at the level of its basic 'moral' purposes" (Day, 2001, p. 25).

Ongoing training, as has been sustained, intends to enhance the professional skills, but to do so the way it is organised and contracted is of enormous importance in order to make it suitable for the professional situations. Hence, in a world characterised by change, Day (2001) highlights time and opportunities as key factors in ongoing professional development, as well as the willingness and ability of the teachers to learn with others in the workplace and with other members of the schools.

All professional development involves some learning and necessarily some change. As such, development and change are inseparable. However, change only occurs if the teacher wants to change. As Day states (2001, p. 17), "teachers cannot be trained (passively). They train themselves (actively)." Several studies have shown that change requires the active cooperation of the teachers. However, there are several constraints that constitute obstacles to change, namely as regards the professional cultures. As such, McLaughlin and Talbert (2001, referenced by Day, 2004, p. 198) argue that "the learning communities of teachers constitute the best context for professional growth and for change".

Following on from this idea, Day (2004, p. 199) argues that "although by definition teachers are

accountable for the quality of their work in the classroom, the schools that adopt the *community* ideas and practices have a collective responsibility in relation to the conditions in which the teachers and pupils work." Sachs (2003, cited by Day, 2004, p. 202) states that the teachers play an essential role in defining the culture of the school, and should turn themselves into "professional activists." Although the construction of collaborative learning networks takes a long time, the literature suggests that it brings significant benefits, both for the teachers and the pupils. According to Day (2004, p. 207), collaboration tends to reduce the teachers' feeling of impotence and increase their collective and individual efficacy.

Maria Teresa Estrela and Albano Estrela (2006, pp. 78-79), reflect on the current continuous training situation with a "disenchanted eye" based on several studies on the topic. They believe that it is "an opportunity partially lost to renew the school and the culture of the teachers," because of the "big gap between the goals and the outcomes, between the rhetoric and the training standards and its actual implementation in real life." The authors argue that "going against its very presuppositions, the training does not take the teaching cultures and the school cultures into account and does not give a voice to the teachers so that based on their ideas they can bring about change" (p. 79). The same authors also advocate the reinforcement of empirical research and building on the results of the theoretical models to bring about change, which implies "listening to the voice of the teachers, involving them more in the research, and taking greater consideration of the teaching cultures, not to eternise them, but so that they change from the inside outwards, and not as has been attempted and despite all the discourses to the contrary from the outside inwards" (Estrela & Estrela, 2006, p. 79).

We also based our work on these premises and began the project which we now briefly describe.

Brief description of the methodological options

For the development of the research project (which includes several subprojects), we opted for a combination of quantitative and qualitative methods, albeit with greater emphasis on the latter. Questionnaires[6],

semi-structured interviews, observation and memory stimulation were used. In most subprojects, the collaborative action research (Kemmis, 2006), has been the most popular option because, as highlighted by Caetano (2004, p. 50), this strategy enables: "a systematic and continuous process of research and transformation, meaning that the knowledge is built on the action and for the action". The documentation of the whole process, through the productions carried out by the teachers and pupils at the stages of planning, implementation of intervention activities and assessment are the object of analysis.

It is also pointed out that the project is carried out (see figure 1) in line with a set of phases that took into account the transversal and concurrent aspects of the various subprojects, on the one hand, and their specificity, on the other. Therefore, in an initial phase, as well as setting up the research team based on a set of common interests, the following aspects were developed: collaborative construction of the project, discussion and clarification of the research methodologies and construction of common data collection tools (in line with the aforementioned structural concepts, but without losing sight of the specificity of each project). The reflection on the research and the intervention projects, as well as the dissemination of the research in congresses in Portugal and abroad, were also issues that occupied a large proportion of the work meetings and reflection get-togethers in the project.

A second phase, more geared towards the implementation of the various subprojects, included the following activities: intervention-training of the teachers in the different school contexts, of different lengths of time depending on the nature, scope and number of participants in the respective subprojects; collaborative construction of the project (in the intervention projects phase); discussion and conception of intervention-training methodologies, development, monitoring and review of the intervention-training; reflection on the training and the intervention; returning the data in the various school contexts and the research team meetings and dissemination of the intervention-training in the various contexts.

FIGURE 1
DEVELOPMENT OF THE RESEARCH PROJECT

TEACHER EDUCATION IN COLLABORATIVE BACKGROUNDS		
Research team	Subprojects Research/Training in a working background Collaborative action research	
Training of Researchers ← →	Research ← →	Intervention/training of the teachers in the various contexts
Collaborative construction of the project Co-construction of the research tools Reflection on the research and the intervention-research — impact on the pupils, the teachers and the institution	Conception of research methodologies Gathering and analysis of data Returning of results Dissemination	Conception of the intervention-training Development of the intervention-training Monitoring of the intervention-training Review of intervention-training First results/research ideas

STRUCTURAL BEDROCKS OF THE VARIOUS SUBPROJECTS

The research project that we describe in this article includes, as we have said, a set of several subprojects/intervention projects/training in various school contexts. To sum up, the different subprojects are split into school groups and individual schools in the North and Centre of the country and include:

· A group of Mother Tongue Secondary School teachers
· A team of teachers from a class of pupils at risk from dropping out of Primary School
· A group of teachers from a 1st-Cycle Primary Private School
· A group of teachers from the 2nd and 3rd Cycles that teach in multicultural contexts
· Teachers who carry out management roles in a school group
· A group of teachers from several departments of a Primary School
· A training workshop with Primary School teachers
· Circle of studies with Primary School teachers
· Two Children's Educators

FINAL REFLECTIONS

Some preliminary results of this project have been disclosed in several national and international congresses (Flores *et al.*, 2007a, 2007b; Forte & Flores, 2007, 2008; Freire & Santos, 2007; Santos, 2007a; 2007b; Veiga Simão, Flores, Forte & Cadório, 2007, among others), deriving above all from three subprojects.

In general, a look at the data analysed up until now suggests that the collaborative contexts and processes lead to the development of the teachers' technical-professional skills, at the same time as the representations regarding the work contexts, themselves and others also undergo changes. On the one hand, these changes seem to translate into greater awareness of the professional opportunities available and greater confidence to face up to new situations. The participants recognise and value the importance and potential of the collaboration, but also point out the need for this aspect of their work to be valued, especially as regards the conditions and resources dedicated to it, namely the time spent on it, also including training and professional development opportunities in collaboration. Some data suggest somewhat basic conceptions of teaching collaboration, linked to the difficulty in defining the concept. Collaborative work is related to planning and other activities that are afforded little time. Personal difficulties and lack of relevant training

and professional development opportunities, allied to organisational and contextual factors, are cited as the main constraints to collaborative work. The importance of leadership, the chance to share experience, motivation and professional satisfaction are central aspects in the promotion and effects of the collaboration.

These results back up, among others, Veiga Simão, Flores and Ferreira (2007), when they highlight the importance of leadership for the creation and maintenance of cultures geared towards learning and professional development of the teachers, making teacher motivation the driving force behind their learning and professional development, linked to the fostering of a meaning behind their work and greater attention to the conditions and learning opportunities in the workplace.

The data also call for a discussion by the teachers of professional matters, given that the problems at this level are not linked to the teachers, but to the lack of time and space. Although they express that relations are easy, they also highlight the formal processes, namely the meetings, which is also corroborated by the nature of some projects they are involved in (projects organised by the Central Authorities or projects started by the governing bodies). They also point out some constraints at the school level, namely the conditions surrounding their professional development. Although in general a positive view comes to the fore, a measure of ambiguity is shown in relation to some aspects, namely in relation to collaboration and professional culture, an aspect which will be tackled directly in the 2nd phase of the project.

Within the scope of the various subprojects the goal now is to seek to what extent the impact of the training opportunities that the collaborative work provides last over time, and whether these teachers (participants in the intervention projects) implement their teamwork practices in other contexts.

1. Cf. http://ec.europa.eu/education/policies/2010.

2. Some authors, such as Readings (2003), believe that the changes in education reflect the loss of the State's capacity to steer the educational destinies, giving way to the market forces, with the mercantile consequences this may lead to for the public school. In an identical line of thinking, Laval and Weber (2002) stress that education is no longer a common good and is turning into a *decisive factor of production*, in a utilitarian logic that reduces it to a service, a marketable "product".

3. We refer to ENTEP (European Network on Teacher Education Policies), created in 2000 (Cf. http://entep.bildung.hessen.de/) and which has the aims to analyse and discuss the educational policies at national and European level, and the *Common European Principles for Teachers' and Trainers' Skills and Qualifications* (http://www.eu2007.min-edu. pt/np4/27.html), produced with the aim of defining the common benchmarks and principles in teachers' qualifications and skills, so as to improve the quality of their performance.

4. Examples of this are the "Socrates" and "Leonardo da Vinci" programmes and the new *life-long Learning Programme* (2007-2013), designed to improve and develop the skills of teachers (Cf. COM (2007) 392 final, de 3.8.2007).

5. For a description in greater depth about some aspects that were at the basis of this project, see Veiga Simão, Caetano & Freire (2007); Flores, Rajala, Veiga Simão, Tornberg, Petrovic & Jerkovic (2007), Veiga Simão, Flores & Ferreira (2007).

6. An adapted version of the Teachers' Professional Development questionnaire, written by Flores and Veiga Simão, as part of an international study (Portugal, Finland and Serbia and Montenegro).

Bibliographical references

ANTUNES, F. (2007). Das políticas europeias às políticas nacionais: educação e professores em transição – dúvidas, incógnitas e princípios comuns. *In* J. C. MORGADO & I. REIS (orgs.), *Formação e Desenvolvimento Profissional Docente: Perspectivas Europeias*. Braga: CIEd, Universidade do Minho, pp. 13-27.

CAETANO, A. P. (2004). *A Complexidade dos Processos de Formação e a Mudança dos Professores — Um Estudo Comparativo entre Situações de Formação pela Investigação-Acção*. Porto: Porto Editora.

CAMPOS, B. (2002). *Políticas de Formação de Profissionais de Ensino em Escolas Autónomas*. Porto: Edições Afrontamento.

CONSELHO DA UNIÃO EUROPEIA (2004). *Educação e Formação para 2010. A urgência das reformas necessárias para o sucesso da estratégia de Lisboa*. Projecto de relatório intercalar conjunto do Conselho e da Comissão. Retrieved October 2007 from http://ec.europa.eu/education/policies/ 2010/doc/jir_council_pt.pdf

DAY, C. (2001). *Desenvolvimento Profissional de Professores. Os desafios da aprendizagem permanente*. Porto: Porto Editora.

DAY, C. (2004). *A paixão pelo ensino*. Porto: Porto Editora.

ENTEP (2007). Conference *Partnership and Research in Teacher Education for Innovation and Creativity*, in University of Ljubljana. Retrieved October 2007 from http://entep.bildung.hessen.de/

ESTRELA, M. T. & ESTRELA, A. (2001). Introdução. *In* M. T. ESTRELA & A. ESTRELA (orgs.), *IRA — Investigação, Reflexão, Acção e Formação de Professores*. Porto: Porto Editora, pp. 9-12.

ESTRELA, M. T. & ESTRELA, A. (2006). A formação contínua de professores numa encruzilhada. *In* R. BIZARRO & F. BRAGA (orgs.), *Formação de Professores de Línguas Estrangeiras: Reflexões, Estudos e Experiências*. Porto: Porto Editora, pp. 73-79.

FLORES, M.; VEIGA SIMÃO, A. M.; FORTE, A. & CADÓRIO, M. (2007a). Teacher Professional Development and Collaboration: Opportunities and Limitations in Two School Settings. Paper presented at ISATT, *Changing Roles of Teachers and Teaching*, Canada (http://www.ed.brocku.ca/issatt2007).

FLORES, M.; VEIGA SIMÃO, A. M.; FORTE, A. & CADÓRIO, M. (2007b). Reflecting on Two Teacher Professional Development Experiences: Implications for In-Service Teacher Education and Teacher Collaboration. Paper presented at the *52nd World Assembly of the International Council on Education for Teaching* (ICET), University of San Diego, San Diego, California, USA.

Flores, M. A.; Rajala, R.; Veiga Simão, A. M.; Tornberg, A.; Petrovic, V. & Jerkovic, I. (2007). Learning at work Potential and Limits for Professional Development. *In* J. Butcher & L. McDonald (eds.), *Addressing Challenges and Making a Difference. Making a Difference: Challenges for Teachers, Teaching, and Teacher Education*. Rotterdam: Sense Publishers, pp. 141-156.

Formosinho, J. & Machado, J. (2007). Nova profissionalidade e diferenciação docente. *In* M. A. Flores & I. C. Viana (orgs.), *Profissionalismo docente em transição: as identidades dos professores em tempos de mudança*. Braga: CIEd, Universidade do Minho, pp. 71-91.

Forte, A. & Flores, M. (2007). Desenvolvimento Profissional de Professores e Oportunidades de Aprendizagem no Local de Trabalho: Alguns Resultados de um Estudo em Curso. *In Actas do IX Congresso Internacional Galaico-português de Psicopedagogia*. A Coruña: Universidade da Coruña, pp. 1933-1944.

Forte, A. & Flores, M. A. (2008). Perspectives and Strategies on Teacher Development in the Workplace. Paper presented at the *53rd World Assembly of the International Council on Education for Teaching (ICET)*. Braga: Universidade do Minho.

Freire, I. & Santos, M. V. (2007). Liderança e práticas colaborativas em contexto escolar — um estudo de caso. Paper presented at the *IX Congresso da Sociedade Portuguesa de Ciências da Educação, sob a temática Formação de Educadores e Professores*. Universidade da Madeira.

Freitas, C. V. (2007). Novos desafios europeus sobre formação de professores. *In* J. C. Morgado & I. Reis (orgs.), *Formação e Desenvolvimento Profissional Docente: Perspectivas Europeias*. Braga: CIEd, Universidade do Minho, pp. 7-11.

Glazer, E. M. & Hannafin, M. J. (2006). The collaborative apprenticeship model: situated professional development within school settings. *Teaching and Teacher Education*, 22, 2, pp. 179-193.

Kemmis, S. (2006). Participatory action research and the public sphere. *Educational Action Research*, 14, 4 (December), pp. 459-476.

Latorre, A. (2004). *La investigación-acción. Conocer y cambiar la practica educativa*. Barcelona: Graó.

Laval, C. & Weber, L. (2002). *Le Nouvel Ordre Éducatif Mondial. OMC, Banque Mondial, OCDE, Commission Européenne*. Paris: Nouveaux Regards/Syllepse.

Marcelo, C. (1999). *Formação de Professores — Para uma mudança educativa*. Porto: Porto Editora.

Ministério da Educação (2007). *Desenvolvimento profissional de professores para a qualidade e para a equidade da Aprendizagem ao longo da Vida*. Conferência promovida no âmbito da Presidência Portuguesa do Conselho da União Europeia. Retrieved October 2007 from http://www.eu2007. min-edu.pt/np4/27.html

Morgado, J. C. (2007). Formação e Desenvolvimento Profissional Docente: desafios contemporâneos. *In* J. C. Morgado & I. Reis (orgs.), *Formação e Desenvolvimento Profissional Docente: Perspectivas Europeias*. Braga: CIEd, Universidade do Minho, pp. 41-57.

Nóvoa, A. (1992). Formação de professores e profissão docente. *In* A. Nóvoa (coord.), *Os professores e a sua formação*. Lisboa: Publicações Dom Quixote, pp. 13-33.

Pacheco, J. & Flores, A. (1999). *Formação e Avaliação de Professores*. Porto: Porto Editora.

Perez Serrano, M. G. (1990). *Investigación—acción. Aplicaciones al campo social y educativo*. Madrid: Dykinson.

Readings, B. (2003). *A universidade em ruínas*. Coimbra: Editora Angelus Novus.

Roldão, M. C. (2007). Questões de qualidade e eficácia no trabalho de Professores. *Noesis*, 71 (Out./Dez.).

Santos, M. V. (2007a). Um processo colaborativo de Formação Contínua em contexto escolar. Paper presented at the *XV Colóquio da AFIRSE*, sob a temática Formação de Professores. Universidade de Lisboa.

Santos, M. V. (2007b). Um processo colaborativo de formação em contexto escolar — um estudo de caso. Paper presented at the *IX Congreso Internacional Galego-Português de Psicopedagoxía* sob a temática modelos e dispositivos de formação. Universidade da Corunha.

Veiga Simão, A. M.; Caetano, A. P. & Freire, I. (2007). Uma formação para o Desenvolvimento Profissional em Contexto Laboral. *In* J. C. Morgado & I. Reis (orgs.), *Formação e*

Desenvolvimento Profissional Docente: Perspectivas Europeias. Braga: CIEd, pp. 41-72.

Veiga Simão, A. M.; Flores, M. A. & Ferreira, A. (2007). Oportunidades de aprendizagem e de desenvolvimento profissional no local de trabalho: uma proposta de questionário. *Arquipélago — Ciências da Educação*, 8, pp. 59-116.

Veiga Simão, A. M.; Flores, M. A.; Forte, A. M. & Cadório, L. (2007). Desenvolvimento Profissional de Professores e Práticas de Colaboração: Resultados de dois Estudos de Caso. Paper presented at the *IX Congresso da SPCE, sob a temática Formação de Educadores e Professores*. Universidade da Madeira.

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