TEACHER EDUCATION, REFLEXIVITY AND CULTURAL DIVERSITY - THE POTENTIALITIES OF COLLABORATIVE ACTION RESEARCH

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ABSTRACT

This paper presents a study carried out in a Portuguese Secondary School, focused on an action research training process developed with 14 multidisciplinary teachers. The former signatory researcher played, simultaneously, the role of trainer. The formative process started from the diagnosis of difficulties felt by teachers in their daily work with culturally and linguistically diverse students and the needs of training recognised by the collaborating teachers in the scope of multi/intercultural education. The teachers with the researcher/trainer drew schemes of action research within their classes, aiming to integrate culturally relevant practices. The researcher accompanied the whole process, analysing and interpreting the changes within the practices and the conceptions of the teachers throughout the process, namely in their capacity of reflection on diversity and multi/intercultural education. The data analysis is supported by field notes, framed in a participatory observation process, content of teachers’ reflective portfolios and critical reports. The results of the analyses of the reflexivity’ levels of these teachers revealed that the majority of teachers incorporated the practical level of reflexivity (not owned in the beginning of the process), and some reached the critical or emancipatory level. In this paper, we will discuss these and other results of the study, highlighting the potentialities of in-service teacher education through collaborative action research, in order to prepare teachers on principles of cultural diversity, equity, equal opportunities and social justice.

Keywords: Teacher education; reflexivity; cultural diversity; collaborative action research.

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Introduction

Globalisation has risen to migratory movements in the last decades and the Portuguese society became more multicultural, multilingual and multi religious. Cultural diversity and inclusion have become controversial issues of debate and Public schools a confluence of cultures. These multiple and complex changes have brought challenges to Portuguese schools, in general, and implications for teacher education, in particular.

Despite these changes, most schools have continued to organise themselves to respond to a homogeneous public, neglecting diversity as a source of development and progress (Rodrigues, 2003; Ladson-Billings, 1995). Teacher education research has pointed out the lack of linkage between theory and practice and equated the need to encompass teacher education research within the contexts in which they have been carried out (Gay, 1986; Cochran-Smith, Davis & Fries, 2004; Zeichner, Payne & Brayko, 2015). Therefore, international studies (e.g. Zeichner, 2008; Payne & Brayko, 2015; Gay, 2010; Nieto, 2009; Banks, 2006, 2009; Banks & Banks, 2001) have emphasised the need to find organizational school alternatives, and teacher education, in the context of multi/intercultural education.

Since teachers are regarded as agents for social change, it is unquestionable, to ensure teacher education within culturally relevant pedagogies, enabling teachers to deal with diverse student populations, scoping inclusion, equity, equal opportunities and social justice (Banks, 2004).

Having in account these assumptions, the relevance of the topic, the scarcity of Portuguese teacher education studies on the matter, the trendy concerns towards education practice and the lack of researchers and practitioners’ professional support to work collaboratively with each other (Snow, 2016), this article is focused on a collaborative action research training process, carried out in a Portuguese secondary school, which started from the following research question: How can teacher education through action research contribute to change teachers’ reflection ability and pedagogical and didactic practices towards culturally relevant pedagogies?

Based on the definition of the problem under study, a main objective was set: To understand the impact of the teachers’ training process, through collaborative action research, on teachers’ professional development in contexts of cultural diversity. Thus, it is intended to understand what in this context really did change, teachers’ ability of reflection on their practices, their own practices, and their reflections on students' development.

Aiming to highlight the different potentialities of action research within teachers’ professional development and professionalism, concerning teacher education for diversity, a theoretical approach frame working the thematic is presented, as well as, the research strategy including the collaborative action research-training process scheme, a brief description of the collaborative action research process, and the results related to the changes in teacher
reflexivity, changes in teachers’ pedagogical practices, students’ development and school organisation are analysed and discussed.

1. Theoretical Approach

Since the mid-seventies of the 20th century and 21st century onwards, migration has been a major force of change, cross-cutting the Portuguese society and has led to a gradual increase of diversity and complexity in public schools and classrooms and has placed teacher education at the epicentre of a broad debate on changes and challenges to deal with culturally and linguistically diverse student.

Laying out a theoretical research framework, a comprehensive agenda on multicultural education was incepted as starting point, especially the lines of research combining insights of teacher education for diversity (Zeichner, 1993), culturally relevant pedagogy (Ladson-Billings, 1995, 2014), culturally sustaining pedagogy (Paris, 2012), culturally responsive teaching (Gay, 2010, 2013), highly qualified teacher education for the new majority (Nieto, 2005); and teacher education for social justice (Zeichner, 2009; Gorski, 2009). Despite delineating different focus, these conceptual frames are highly intertwined and congruent, underlying interactive premises between culture, education, and pedagogy, translating multicultural knowledge into pedagogical practices, meeting the needs of culturally and ethnically diverse learners, and strongly embracing social justice.

Nevertheless, education research on these strands has brought to light that multiple teacher education programs haven’t been meeting the real needs teachers face in their increasingly diverse, complex and demanding professional daily life, nor responding to the interests and needs of students, nor acknowledging the diversity and complexity of schools contexts and communities (Cochran-Smith, 2005, 2016; Sleeter, 2012).

Attempting to overcome the continuing gap between multicultural theorists and practitioners and stating that knowledge plus practice is an imperative in teacher education, Gay (2000, 2010, 2013) asserts that instructional practices in teacher education for cultural diversity are shaped by the sociocultural characteristics of contexts in which they are held and the school populations for whom they are addressed to, establishing pedagogical connections between some general principles for teaching cultural diversity and the specific settings and/or circumstances.

Having in account the aforementioned assumptions, the idea that action research methodology is a powerful teacher education strategy is undergirded, because its cornerstones are built on teachers’ reflective practices of “reflection-in-action and reflection-on-action” (Schön, 1983), and underlies dynamic and interactive processes opened to adjustments resulting from the analysis of circumstances and phenomena.
The existence of diverse concepts of action research processes has risen to different action research representations or models. However, the models are similar both in structure and in process since they are all of Lewin’s inspiration and are developed in continuous action research spirals of planning, acting, observing and reflecting (Latorre, 2003; Coutinho, Sousa, Dias, Bessa, Ferreira, & Vieira, 2009). Action research implies commitment, reflection, and advocates the improvement of self-criticism, personal and social change. The intent is the transformation of attitudes, understanding the situation, introspective and collective questioning, combining research, action and training with a focus on natural situations (Caetano, 2004).

These research proceedings in which practice is the field of experiment and of research/reflection, the practitioners/researchers develop the ability to reflect on action, emerging new ways of thinking, understanding, acting and equating the problems of practice. One of the main objectives in teacher education programs is to prepare teachers for reflexivity, based on real problem situations they face in their professional practice (Schön, 1983). This author values the knowledge that comes from a reflective practice, in a constructivist perspective of knowledge. Then, a very important issue in teacher education is to know how you can implement training, grounded on the epistemology of practice and based upon the inherent and stemming reflection from action as practiced by effective professionals.

Teacher reflexivity comprises different orientations, objectives, levels, modes and strategies and can refer to different training philosophies and epistemologies (Habermas, 1982; Zeichner, 1993). For Habermas, these epistemologies are grounded in three forms of rationality: technical, practical and emancipatory. Technical rationality is based on instrumental purposes of cause/effect. The concern is focused on the effectiveness and efficiency of the pre-established and accepted means, while the action purposes remain unexamined. Instead, practical rationality comprises an expanded concept of action that transcends the boundaries of technical rationality and is focused on processes, contents and results of professional practice. Knowledge is seen as constructed, contextual and inter-subjective (about the individual him/herself and the others). The purposes and means of professional practice are opened for analysis and resolution of problems. Thus, when analysing professional performance, it identifies and modifies personal and professional assumptions, underlying the practice, looking for alternative answers and enhancing the understanding of professional practice. Emancipatory rationality is stated in the peculiar dynamic of more comprehensive, autonomous and critical self-reflection about the existing social, political and cultural forces that distort and constrain professional practice, and their implications and reciprocal consequences are reflected on practices. This type of rationality, as stated by Freire, Bahia, Estrela and Amaral (2013), "becomes liberating by an individual's questioning on ethical and political action consequences.
within a community governed by an ethic of communicative action, generating consensus and transforming reality” (p.152).

Although, training intends to reach more complex levels of rationality and, depending on the level of development, it is observed the predominance of one of them, we underline, as the cited authors, that the three forms of rationality are necessary and must coexist (p. 163).

2. Research strategy

Taking into account these assumptions, an action research is presented as a model of teacher education, a tool for teachers’ professional development and a strategy for research on these processes and their results. Furthermore, the lack of Portuguese empirical studies concerning applied research with a pragmatic purpose contributed to the development of an action research case study on teacher education for cultural diversity.

Regarded as a comprehensive range of strategies to improve the educational and social system (Latorre, 2003), action research emerges as a potential teacher education strategy, in what concerns, skills and attitudes of continuous reflective questioning of practices and contexts in which these practices are carried out. The engagement of teachers in collaborative action research projects has potentialities in promoting learning school environments, developing their communities and contributing to the resolution of the problems posed to school and within school (e.g. Perez Serrano, 1990; Hindin, Morocco, Mott, & Aguilar, 2007).

The focus of this research was training along with teachers’ professional development for the inclusion of culturally and linguistically diverse immigrant students, as well as, the development of multi/intercultural education.

Therefore, a prior and opened collaborative action research training process was schematized to respond to the needs of the group of participants (Figure 1). The study comprised two stages. The first stage was of diagnosis and planning and supported the second of intervention, set in cyclic spirals of research, reflection and action with the desideratum to develop and empower teachers within new pedagogical practices and reflective attitudes, concerning cultural diversity. Thus, the action research training strategy intersected two plans of action: The former as training research and the latter as teachers' action research on their pedagogical practices with their students’ class groups. Hence, the methodology intimately intertwined dimensions of research, training and educational action, supporting and strengthening each other reciprocally (Pacheco 2015).

During the two action research stages, it was carried out participant observation, including formal and informal interviews, field notes and school organisational and pedagogical document analysis. Therefore, we proceeded to the analysis of information comprised in the
portfolios and the critical reflection reports of teachers/trainees, looking for features that provided evidence of change on their concepts and perspectives about education and their teaching practices.

Figura 1. Collaborative action-research-training-process scheme (Pacheco, 2015, adapted from Kemmis and McTaggart, 1988)

To attain the project stated aims, a collaborative action research methodology was grounded on Kemmis and McTaggart (1988) cyclic and self-reflective spiral of continuous planning, acting, observing and reflecting.

Cycle1
- Diagnostic of educational and training needs (analysis of situations in the collaborative group);
- Definition of action and planning strategies (unit/lesson/activity planning, addressed to the cultural diversity of students);
• Intervention (construction and application of pedagogical-didactic materials and application of new teaching and learning strategies, addressed to the diversity of students);
• Observation (field notes, self and hetero-observation among peers, classes video recording, to negotiate in/with the formation of group);
• Reflection (collective and individual reflection on action and evaluation of results).

Cycle 2
• Plan Revision (overhauling and beginning of a new cycle).

However, the overhauling of cycles was confined to the timing of formative training sessions, individual and collective rhythms.

With the research of these processes and results, it was intended to understand - How teachers’ involvement in a training process through collaborative action research enables changes in teachers’ conceptions on education and teaching, facing cultural diversity and teachers’ practicum? What reflections in teachers’ professional development, namely in their reflective practices?

To get answers to these questionings, we set the following research objectives: To equate how collaborative action research contributes to teachers’ professional development, helping them to diagnose and overcome difficulties and gaps they face in their practices with culturally and linguistically diverse students; To equate how collaborative action-research contributes to the development of changes on the conceptions of teaching and multi/intercultural education how these are reflected in teachers’ practices.

3. The collaborative action research process

The formative process emerges from a literature review on the matter and started from the diagnosis of the day-to-day difficulties felt by teachers in their work with culturally and linguistically diverse students and the needs of training recognised by the collaborating teachers in the scope of multicultural education and culturally relevant or responsive pedagogies (Pacheco, 2015).

It was intended to build up an educational process, developed in an ecological environment, enabling the questioning and reflection about the new school realities and having cultural diversity in the centre of the educational action and teachers’ professional development.

Therefore, the collaborative action research training project was held in a public diverse population secondary school on the outskirts of Lisbon. The group of participants consisted of
fourteen multidisciplinary area teachers of that school and the former signatory researcher of
this paper played, simultaneously, the role of trainer.

It sought to have as structuring axis the questioning and the experience of professional
practice and its contexts, combining the scientific and the pedagogical-didactic dimensions
within multicultural education, integrating professional knowledge, in order to encompass the
appropriation of all knowledge fields in a mobilizing form and in use of concrete teaching
situations.

The study comprised two lines of action. The former sought to develop teachers’ cultural
acceptance and conscientisation (Estrela, 1999) to deal with culturally diverse learners,
achieving broader cultural acknowledgment and understanding and getting rid of patterns,
predjudices and stereotypes. The latter, closely linked to the former, boosted culturally relevant
pedagogies and culturally responsive teaching, regarding the curriculum, adapting it to students’
diversity. On the one hand, a multicultural curricular and pedagogical approach was fostered,
promoting both in teachers and students respect and value for cultural diversity. On the other
hand, teaching methodologies, interlinking the world and the cultures of students with the
world of school and the classroom were adapted, integrating the students’ cultures in all
classroom activities and strategies, in order to make the teaching and learning processes more
interactive and effective in culturally diverse classes.

The training process was developed in two levels of action research: (1) The action
research that participating teachers developed with students in classes; (2) the action research
that the trainer/researcher developed with the participating teachers in the training group.

The whole training process was shared with teachers/trainees. From the objectives and
the changes to be achieved, to the typology, methodology, problem diagnosis and decision-
-making, as was organised as follows:

1st Session - Objectives and overview of the process

At the first session, the objectives of the training process and the collaborative action
research training strategy were shared with the teachers/trainees. Grounded on school reality
and focused on the potentialities of the epistemology of practice through reflection and
research, it aimed to produce changes in: (1) The development of new conceptions on
multicultural/intercultural education and the improvement of educational practices through
individual and collective reflection and of critical awareness; (2) The promotion of new
multicultural/intercultural methods and teaching and learning strategies to replace traditional
and/or monocultural methods; (3) The construction of educational resources, addressing to
students’ cultural background, their experiment and evaluation; (4) The development of
activities within the class-group and/or school, promoting the intercultural dialogue and the
socialisation among native students and those of other nationalities; (5) The encouragement
and empowerment of positive interpersonal attitudes in collaborative work contexts; (6) The
improvement of pedagogical practices and its reflection in achieving better school outcomes of culturally diverse students.

In this regard, the goals and the changes to be produced, would reciprocally support and complete each other. For teachers/trainees, there would be moments of action research, launched into a new adventure of researching their own practices through autoscopy on their action and heteroscopy on the action among all participants.

These processes would support a systematic and cyclical process of problem analysis, reflection, definition of new strategies of action and re-analysis of the results achieved, and developed collaboratively in the training group.

The set of all these processes and the data were analysed by the trainer/researcher, and constituted the level of research-training.

Supported by a theoretical approach on research and reflection and grounded on culturally relevant pedagogies, the methodology of the different training sessions was also shared with the teachers/trainees, allowing the continuous and active participation of all, the critical reflection on the educational practices and the sharing of experiences centred on school reality.

The training process ran throughout 90 hours (30h attendance sessions + 60h autonomous work) and was conducted very close to: 12 hours of theoretical-practical component integrated readings, analysis, reflection and debate on different matters related with the session issues; 18h hours of practical component occurred in collaborative contexts for developing and planning strategies, activities and teaching materials for diverse curriculum areas. Teachers worked in small groups and/or the enlarged group, having in account the contents in line with the School's Educational Project, the Class Curricular Project and the School Annual Activity Plan, and the cultural diversity of students. All procedures, activities and teaching materials were developed in a research and critical reflection path on practices sustained by the processes of action research teachers developed with their class-groups, individually or collaboratively, and it anchored the autonomous work component of the training process. Teachers organised an individual and/or collaborative digital portfolio containing critical perspectives of the whole formative process; 60 hours autonomous work occurred individually and/or collaboratively and was organised, in cyclic processes of action research. Processes and results were brought to the enlarged group and provided a shared critical reflection.

Thus, it was not only attempted to clarify the training model but also to dialogue on the principles on which it was based, stimulating the group towards active participation, collaboration and the development of reflexivity, and critical thinking.

2nd Session - Recognition of the training group
Despite the formative training took place at school and all teachers knew each other, some belonged to the school board over years, others for fewer years and there were still temporary teachers. Perceiving some silences, the activity “My Story” was implemented, promoted the interaction among participants and introduced a new dynamic and interaction within the training group. For this activity materials were adapted from Albuquerque (1996).

From the 3rd to the 12th Session - From theoretical-practical reflection to identification of problems & shared decision making

The theoretical-practical and practical sessions were held for motivating and launching the debate in the group of participants. In the former, the trainer/researcher either projected PowerPoint images and key sentences about updated controversial issues, or quotes on theoretical and empirical literature of various national and international authors, promoting the debate of ideas and perspectives. Other times, literature of several scholars and researchers was delivered, analysed in small groups and then presented and discussed in the enlarged group. In the latter teachers/trainees worked collaboratively in small groups, diagnosed problems, planned lessons (chose and selected materials) and reflected on practices.

In short, the sessions contributed to working questions as: How would action research projects be developed? Who would work with whom? Who were the teachers sharing the same class-groups? Who could work with different class-groups but the same school level, making use of the same or different materials according to the school subjects?

In this diverse range of situations, owing to the heterogeneous group of participants from different teaching areas and class-groups with common and/or different levels of schooling, there was a common goal, to reach decisions after reviewing a number of assumptions and reflect on possibilities and limitations.

And thus collaborative action research projects arose (e.g. Rice from Heaven - A multicultural and multidisciplinary approach; Saga of Sophia Mello Breyner Andresen and Hans’s diaspora; Identity/Diversity; Poetry, Gastronomy and Multiculturalism, Art and Multiculturalism; Multicultural Literacy; Multicultural Christmas Cribs). (Figure 2 and 3).
Figure 2 - Rice from Heaven - A multicultural and multidisciplinary approach (collaborative action research project) (Pacheco, 2015, p. 411).
During the whole process teachers/trainees researched, reflected, shared, discussed and debated ideas, opinions and concerns individually and collaboratively what promoted collaborative and/or individual engagements. In teachers’ classrooms, students worked mostly in groups, debating, and broadening their knowledge through research on topics of their and other cultures, and exchanged processes, promoting self and hetero-knowledge and mutual acceptance, emerging high quality works that students made a point to disseminate within the educational community and made them public.

From the 13th to the 15th Session – Presentation of the action research projects to the enlarged group

In the last two sessions, all action research projects were presented in PowerPoint to the enlarged group. Teachers/trainees explained both the subjects and the class-groups involved, the objectives and the project goals, and detailed how they had shared the planning activities, the construction of materials and its application, the receptivity of students, and the more or less relevant aspects of action research processes developed with their class-groups. During the presentations, the participating teachers/trainees were asking questions and discussing ideas with each other.

4. Results

After the brief description of the action research process, the results of the analysis of data collected throughout the process are presented, particularly the information contained in portfolios and critical reflections reports of the 14 participating teachers. As for the reflections
contained in the portfolios, the initial reflections were analysed comparatively with those made in the intermediate and in the final stage of the process.

We wanted to understand the reflections of the formative process in the professional development of this group of teachers. So, we proceeded to the analysis of information comprised in teachers/trainees’ portfolios and critical reflection reports, looking for features that provided evidence of change on their reflexivity levels and their teaching practices.

Nevertheless, as this paper is, mainly, focused on the potentialities of action research in what concerns teachers’ reflexivity. Firstly, it will be presented accurately and comprehensively, the changes operated in teachers capabilities of reflexivity. Secondly, it will be referred, briefly, other changes in pedagogical practices, students’ attitudes and school organisation.

Changes in teachers’ reflexivity

Although the task was difficult and complex, it was tried to analyse the levels of reflexivity of the fourteen teachers/trainees through the existing records included in teachers’ portfolios and critical reflection reports, based on the theoretical framework of Habermas (1982) and Zeichner (1993).

From the reflective texts, an analysis grid with codes per teacher/trainee was built, using the three levels of reflexivity (technical, practical and emancipatory) and considering the moments of reflection (initial reflections, intermediate reflections and final reflections) (Table 1). It aimed to emphasise, in a diachronic perspective, changes in teachers’ reflexivity levels.

![Table 1. Analysis of the teachers/trainees discourse considering the reflexivity levels (Pacheco, 2015, p. 440).](image)
The beginning of the formative process was characterised by reflections of technical level, although some teachers combined them with reflections of practical level and one of them reveals only the latter.

In fact, it can be observed in table 2, that eleven of the twelve teachers who did initial reflections (IR) showed evidence of technical rationality, planning activities, having as concern the curricular adaptations and fulfilled the guidelines of the subject’s official curriculum. However, T2, T4 and T8 already, in the initial reflections, evidenced the first two levels of reflexivity (technical and practical). T14, in this initial stage of the process, demonstrated to have a practical level of reflexivity, which maintained in the intermediate (ITR) and final (FR) phases. In this last phase, this teacher has also shown to have reached the emancipatory level.

Let us take as examples the cases of T2 and T8 in order to illustrate the different levels of reflexivity they revealed, with fragments of their speeches.

In an initial reflection moment (IR), T2 was concerned, above all, to frame the curricular adjustments within the 12th grade Portuguese language curriculum's (“Both the teacher and students should plan, prepare and schedule activities throughout the school year, so that everyone can know that oral competence will be assessed” and “The creation of a website (https://sites.google.com/site/literaciamulticultural/apresentacao/projecto ) will allow to present all the work developed with the students, with some effectiveness, dynamism and in a pleasant way”). However, as we mentioned above, this teacher, in the initial reflections (IR), had already shown she was also at the practical level of reflexivity, as this fragment of her discourse attests: (“It is a class in which interpersonal relationships are conflicting, precisely because some students have difficulty accepting the differences of others.”). In the final reflections (FR) T2 maintained the practical level of reflexivity and reached the emancipatory one (“In an humanistic perspective, I try to follow in all domains, I consider that diversity, whatever its nature, is a source of cultural and human enrichment ”).

T8 also emphasised in the IR her concerns with the planning and management of pedagogical activities and their justification in the framework of an intercultural pedagogy (“The planning of the unit presupposed the prior reading and knowledge of the tale Saga of Sophia de Mello Breyner. This tale was chosen precisely because it reflects the situation of someone who leaves his homeland and settles in a foreign country, contacting all the domains of this new reality ”). In the ITR, she moved her reflections to a practical level, she maintained in FR, in which she projected reflections that can be framed at the emancipatory level (“When we think of dealing with diversity through differentiation, teachers should not ignore this differentiation must be always positive and inclusive for that one that is different or because he/she comes from a foreign country, with other uses and customs, or because he/she belongs to a different race or ethnicity. This is the only way to teach our students living within diversity and relating them with difference ”).
In the case of trainees T1 and T3, becomes evident that they moved from technical level to practical level and emancipatory level. This evolution is clearly evidenced in the three reflection phases included in T3's portfolio. In the initial phase of training (IR), the reflections were exclusively of technical level ("This project was discussed and planned collaboratively by the class council in the biweekly meetings"). In the intermediate phase (ITR) practical reflections emerged ("The task not only served the defined objectives but also provided us with more data that allowed us to know students’ life contexts to interact better with them"). In the final reflections (FR), much of this teacher's discourse fits the level of emancipatory reflexivity, as this fragment illustrates: “School must be flexible to attend to diversity. The implications of this premise require curricula to move away of standardisation, as it usually occurs, when emphasis is solely placed on content, thus seeking to address cultural, social, ethnic and other differences in classrooms as a way of ensuring equality at the end of a cycle of students' trajectory.")

T12 also ran through an evolutionary process of differentiation of reflexivity levels. In the initial reflections, she was at technical level. In the intermediate reflections, at practical level, and in the final reflections, kept the practical level and ascended to the emancipatory level. In turn, T14 started from the practical level of reflexivity (IR), maintained it in the ITR and in the FR reached the emancipatory level.

Although changes were registered among other trainees (T5, T6, T7, T9 and T10), they occurred from the technical to the practical level, without reaching the emancipatory level. T5, T6, T7, T9 and T10 evolved from technical (IR) to practical rationality in intermediate (ITR) and final reflection (FR) moments, relapsing their concern on the activities carried out, introducing some information about students’ receptiveness and/or what should have been reworked and developed, in order to overcome the problems and dilemmas, they faced. Trainee T10's initial reflections were at technical and practical levels and were kept on intermediate reflections (she did not do final reflections). Trainees T5 and T6, in initial reflections, were at technical level, in the intermediate reflections at the practical, and held the latter in the final reflections. Trainee T7 was set at the technical and practical level, in the initial reflections, a level that kept in the intermediate and final reflections.

The participating teachers (T11 and T13) show clear evidence of very low reflexivity levels. They presented only a scarce and minor moment in final reflection (FR) at practical level.

It is noteworthy that six teachers (T1, T2, T3, T4, T8 and T12) were the ones who benefited most from the training process. The initial reflections (IR) revealed the predominance of technical rationality. In the intermediate (ITR) and final reflections (FR) emerged practical rationality with more prominence and some showed evidence of emancipatory rationality in the final reflections (FR). Their reflections evidenced not only awareness on the purposes of multi/intercultural education, but also the constraints that educational reforms brought to their
freedom and effectiveness of action and the socio-cultural and economic conditions of students, as well.

In short, there were significant changes in the capacity of reflection, since most teachers/trainees, throughout the process reached higher reflexivity levels, ten of which reached the emancipatory level, at the end. The practical level seemed to be the one that touched teachers in this process, since, in the intermediate reflections, they all mirrored the concern of contextualising their practices in order to respond to the specific needs of students and some of them reflected such concerns in their final reflections.

Strange is the fact that in any final thoughts trainee has reflected at the technical level. However, this can be explained, in part, by the characteristics of each stage of the training process. In fact, in the initial phase, although the trainer appealed to different levels of reflexivity, the group was in a phase of great investment in the planning and construction of didactic resources while in the final phase, as it is natural in any formative process, the emphasis was set in a more deeply reflection on the process and the principles that underlie it, that is, on a more complex view of education. However, as the data evidence, not all trainees achieved this level of reflexivity, although the majority has got it.

Changes in teachers’ pedagogical practices, students’ attitudes and behaviours and school organisation

As mentioned, previously, the collaborative action research process aimed also to endow teachers of culturally responsive knowledge and its transference to pedagogical-didactic practices in the classroom through research processes, action and reflection.

The information analysis included in teachers/trainees’ portfolios and critical reports evidenced changes in teachers’ pedagogical practices. The training process challenged to the development of multi/intercultural pedagogical and didactic practices. Thus, teachers pointed out that they started to include cultural diversity, in planning activities, to adapt curricular contents, strategies and teaching materials to the cultural diversity of students (Pacheco, 2015).

Concerning students’ development, teachers/trainees considered that their culturally relevant pedagogies and responsive teaching had significant impacts on students’ attitudes and behaviours, increasing cultural and intercultural awareness, ability to communicate with others, responsibility and solidarity. Teachers did still mention to students’ greater participation, motivation and involvement in classroom activities (Pacheco, 2015).

The organisational school changes were evidenced in the new School’s Educational Project when compared with the previous one. Its guiding principles were grounded on a learning community, a collaborative, reflective, participatory and mobilizing organisational school culture. It also started to include a collaborative work time within all teachers' schedules. It might be affirmed the action research training process leveraged these changes, when we are
acquainted that teacher/trainee T2 was involved and responsible for carrying out the new School’s Educational Project (Pacheco, 2015)

5. Final Considerations

The collaborative action research process fostered synergies of change and transformation and contributed to teachers’ professional development and school development, as well. The training process enabled teachers/trainees moments of reflection, considered fundamental for the construction and understanding of their professional knowledge. The diachronic analysis of reflexivity levels has shown very significant changes in the reflections of this group of teachers. It revealed that most of the participating teachers became aware of the importance of cultural and social contexts in pedagogical and didactic practices, valuing students’ cultures in the class groups, integrating strategies and activities promoting the interaction among them, reflection and inquiry. Some teachers expressed also they raised their thoughts to a critical plateau of commitment to social, political and pedagogical transformation.

With this in mind, the methodology of action research becomes crucial as a strategy in teacher education in general and for cultural diversity in particular. However, it is clear that teacher training for cultural diversity presents itself as a complex and delicate field.

The questioning that arises is how teacher education programs can prepare teachers for new conceptions about school? How can reinforce the need for valuing diversity, promoting the principle of equal opportunities and social justice to ensure the quality of learning for all students? The answer is difficult and complex by the assumptions underlying it.

However, the potentialities of action research to influence reflection, take to a critical stance that allows, articulating dialectically the awareness of the macro-structural determinants with the reading of the phenomena in their medio and micro structural context, bridging between the analysis of educational policies and the setting of pedagogical practices (Stoer, 2008).

Accordingly, we think that teacher training in school contexts through collaborative action research develops teachers and students essential skills to change conceptions and pedagogical practices. For a start, research action promotes the development of collective experiences in which teachers and students collaborate in order to respond to real problems faced in schools. Also, the experience of these processes and their cyclical assessment creates conditions for constant reflection and provides the development of new and more complex forms of rationality. The promotion of practical and critical rationality drives teachers to overcome a vision and a still dominant monocultural teaching practice, raising them awareness for cultural diversity in their classrooms, searching a multi/intercultural education vision and pledging to the principles of equity and social justice.
Therefore, it is urgent that teacher education prioritises a deep critical questioning about new social, local and global (Hollin & Guzman, 2005) through action research, linking scientific knowledge with reflective and investigative professional action to promote the professional development of teachers and schools (Zeichner & Hoeft, 1996; Zeichner, 2007).

Concluding, teacher education demands both the development of educational policies and teacher education programs for cultural diversity, equity and social justice (macro structural system), questionings and answers in the school organization (medium structural system), promoting a critical view of society, as well as, a far-sighted, grounded and reflective educational action (micro structural system) (Pacheco, 2015).

Referências


RESUMO

Neste artigo é apresentada uma pesquisa, realizada numa escola secundária portuguesa, cujo foco foi um processo de formação através da investigação-ação, no qual participaram catorze professores de diversas áreas disciplinares. A primeira autora desempenhou simultaneamente os papéis de investigadora e de formadora. O processo formativo partiu do diagnóstico das dificuldades sentidas pelos professores participantes no seu trabalho quotidiano com a diversidade cultural e linguística dos alunos e as necessidades de formação por eles reconhecidas no âmbito da educação multi/intercultural. Os professores e a investigadora/formadora conceberam e desenvolveram dispositivos de investigação-ação colaborativa, com vista a integrar, no seu quotidiano profissional, práticas pedagógicas culturalmente relevantes.

As investigadoras, autoras do presente artigo, acompanharam todo o processo através de um dispositivo de investigação com vista a analisar e interpretar as mudanças nas práticas e nas conceções dos professores, nomeadamente na sua capacidade de reflexão sobre a diversidade e a educação multi/intercultural, aspeto que é tratado com mais detalhe neste artigo. Este processo de pesquisa foi enquadrado num processo de observação participativa, com múltiplas notas de campo, que foram sujeitas a análise de conteúdo, assim como os portefólios e relatórios críticos produzidos pelos professores participantes. Os resultados da
análise dos níveis de reflexividade destes professores revelou que a maior parte
atingiu o nível prático de reflexividade (que não tinham no início do processo) e
alguns atingiram o nível crítico ou emancipatório. Estes e outros resultados serão
discutidos destacando as potencialidades da investigação-ação colaborativa, para o
desenvolvimento profissional dos professores no sentido do respeito pelos
princípios da diversidade, equidade, igualdade de oportunidades e justiça social.

**Key-words:** Formação de professores; reflexividade; diversidade cultural;
investigação-ação-colaborativa.