

Excellence is not an island: team-based professional development in Higher Education

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Abstract: This paper describes and analyses teacher professional development actions and learning within the context of Higher Education in a Spanish public university. Seven teachers from different areas of knowledge and with different levels of teaching experience in the university participated in the study. Individual class journals were interpreted along with recordings of team sessions to investigate the teaching actions designed with regard to the teaching-learning process over the course of four academic years. Team-based teacher professional development was viewed as a collaborative rather than an individual process. Its impact was analysed following the model of domains developed by Clarke and Hollingsworth (2002): personal (conceptions of teaching), practical (actions carried out), external (resources and context), and consequences (learning outcomes for the students). The results signalled changes in the four domains derived from deliberate and regulated processes of action and reflection. On account of the decisive impact of professional development, there is evidence of: (1) mutual influence between faculty staff, students, and social organisations, which either fosters or inhibits professional improvement; (2) students' learning outcomes, emotions, and motivations. External conditions, particularly time constraints and institutional rigidity, on the contrary, acted as barriers to professional development.

Keywords: professional development; Higher Education; innovation; reflection; collaboration.

Introduction

Over the past two decades in Europe, we have witnessed some important changes in the context of Higher Education, triggered by the Bologna process. The consequences for university teachers have been many and wide-ranging: from an increase in bureaucratic, competitive and evaluation processes, in accordance with economic logics (Nóvoa and Amante 2015); to an increase in training processes to improve their teaching competencies (Thorpe and Garside 2017). In such cases, there is evidence that the figure

of the university lecturer or teacher is under review, involving these professionals in excellence and in the improvement of quality (Teräs 2016).

The literature on this subject has widely analysed programmes that foster teacher professional development (Gibbs *et al.* 2017, MacPhail *et al.* 2018). There is interest in analysing how teachers, as well as students, change their role when they become active builders of knowledge (Sancho *et al.* 2010). Furthermore, particular attention is being paid to the learning strategies of university lecturers or teachers (Brody and Hadar 2011, Callejas *et al.* 2013, Pedrosa-de-Jesús *et al.* 2016) through participatory and team-based processes (Teräs 2016, Liu *et al.* 2017, Spilker, Prinsen and Kalz 2020), not only in individual terms with regard to accumulating knowledge and getting on in the classroom with certain abilities.

This paper analyses the process of team-based teacher professional development in a group of 7 teachers at a public university. The research presented here was planned and designed as a result of a specific milestone: the awarding and implementation of a teaching innovation project as part of the annual research grants programme run by the university of which the team of teachers are members. The project was deemed to be innovative because it entailed a set of deliberate planned actions to enhance the quality of teaching/learning, by means of interactive exchange processes, constructed by all those involved (UNESCO, 2016). The teachers responsible for coordinating this innovation project, who also authored this paper, designed the research in parallel to the project, in order to ascertain how the execution of the project would impact teacher professional development over the course of four academic years. In this study, in accordance with the definition of McPhail *et al.* (2018), innovation occurs as an opportunity for research and to improve teaching practices. The research questions formulated were as follows: how does teamwork contribute to teacher professional

development? Does the project developed affect the professional identity of teachers and their behaviour in the classroom? How do interactions influence students? Does the institutional context provide an opportunity or does it hinder teamwork and, consequently, professional development?

The research shows that teacher professional development within the university occurs more favourably through the creation of teamworking cultures (Hadar and Brody 2010), reaching decisions about innovation and improvement processes (Sansom 2020) through teams so that excellence is not an island, something that pertains individually to teachers, but instead is generated through interaction, dialogue, and joint reflection among teachers.

Teacher professional development and Higher Education

The term professional development has been the subject of multiple interpretations, which can be grouped in terms of: (1) an individualist consideration, with clear influences from more academic and technical paradigms that root professional development in the acquisition of knowledge and personal training; and (2) a shared and collaborative vision of professional development (Hadar and Brody 2010), which emphasises the social dimension of learning and focuses attention on professional communities or collaborative teams.

According to the first vision, professional development is synonymous with traditional concepts such as continuing education, training, professional retraining or refresher courses (Villar 1990), or more recent interpretations that describe it as ‘activities that develop an individual’s skills, knowledge, expertise and other characteristics as a teacher’ (OECD 2009, p. 49). The most common professional development strategies found in this line usually take the form of courses or simulations, among others.

The second vision, which has increasingly come to the fore in recent years (Gast et al. 2017), understands professional development as a socially constructed process of dialogic learning, in which interactions and the context in which they take place become especially important. It is linked, therefore, to socio-constructivist and dialogic theories of learning (grounded in Vigostky's theory). From this perspective, activities can be classified as: (a) coaching or supervision; (b) collaboration within communities of practice; and (c) evaluation, in which teachers evaluate their peers (Thurlings and Brok 2017).

However, the literature about professional development also notes that the latter is influenced by professional and personal elements, as well as contextual and social elements (Caballero and Bolívar 2015). Three basic processes are identified: knowledge, identity, and the professional culture into which it is inserted (Fernández-Cruz 2006). Within the university sphere, the interaction between these processes is becoming particularly significant. In fact, in different international contexts, it is argued that research and not teaching is currently the central activity for university lecturers (MacPhail et al. 2018). Research underpins the acquisition of knowledge and the construction of professional identity among lecturers (Brownell and Tanner 2012).

Within the context of Spain, some authors refer to this imbalance between research and teaching to describe, particularly, the processes whereby young faculty members can access positions and secure promotions (Caballero and Bolívar 2015; Sancho et al. 2010).

In light of the inertia that characterises university culture today, the establishment of rigorous research processes based on collective reflection about teaching practice (or, as argued by Fernández-March (2020), "evidence-based practice"), epistemologies, and knowledge would seem to be the best path towards the

renovation and renewal of Higher Education (Nóvoa and Amante 2015, MacPhail et al. 2018). This approach invites us to move away from the initial individualistic vision of professional development, separate from the sphere of research, grounded in a balkanised professional culture and artificial collegiality (Hargreaves and Fullan 2012), towards the second vision that emphasises joint, systematic reflection based on the use of strategies such as dialogue.

Team-based professional development

When professional development is approached collectively, professional culture is viewed from an angle that is closer to what Stoll and Louis (2007) define as professional learning communities: a group of teachers who share and critically question their own activity in a reflexive and exclusive way that focuses on student learning. These communities are found in group spaces of investigation and reflection (Fernández-March 2020) on conceptions about teaching; pedagogical processes and teaching methods; university spaces and environments, how they are organised, and the transformations they require; the logics of assessment within a university degree; or the space held by teaching, among others (Nóvoa and Amante 2015).

From this perspective, professional communities offer a suitable strategy to promote innovation and, consequently, teacher professional development, since they contribute to the use of skills for reflection (Pedrosa-de-Jesus et al. 2016, Johnson *et al.* 2019). In these communities, changes are the result of interaction, contextualised non-standardised decisions, rooted in the generation of layered or iterative knowledge, in which tacit and explicit forms of knowledge are intertwined (Butler and Schnellert 2012). Knowledge is not situated externally to teachers; rather, knowledge about teaching is re-appropriated. Meaning is reconstructed through collective dialogue about professional activity.

The new knowledge generated through this interaction, the driver for professional development, becomes what Cochran-Smith and Lytle (2009) call knowledge in practice. These authors signal the existence of an erroneous contraposition between core knowledge for teaching (formal and theoretical) and knowledge of practice (in action, originating in teaching experience). In order to overcome this dilemma, they propose a hybrid conception that emerges when teachers know and understand the theoretical knowledge as a generator of questions. This understanding leads them to innovate and research into their practice, to theorise it within the heart of a specific community, and to connect it with more general issues (social, cultural, political, etc.).

Discussion, problematisation of knowledge, and practice are constantly present and interconnected. Teachers are not external to knowledge, but instead are part of it. During the process, they become aware of their initial situation, of what they are doing, why they do it, and what they can do better (Margalef 2011). In other words, it involves investigating their own practice through shared reflection or (joint) meta-reflection (Thorpe and Garside 2017). This potential leads Brody and Hadar (2011) and Butler and Schenellert (2012) to use the term professional development communities to refer directly to this process of collective reflection on teaching practice.

In spite of the benefits attributed to collective or team-based professional development strategies, their implementation is complex and dependent on elements such as (Margalef 2011): the way in which the strategy is designed and guided, the creation of contexts that allow teachers to learn from their own practice, and the ability of the group to create and use the knowledge generated to improve their performance. Gast et al. (2017) classify these influential factors into three levels: organisational (resources, supports, rewards, research focuses), team (composition and size of groups,

objectives, interactions, leadership), and individual (motivations, attitudes, willingness, commitments, or professional identity).

Pareja and Margalef (2013) describe interpersonal dilemmas (derived from the shift from personal autonomy to collective action) and intrapersonal dilemmas (caused by the move away from certainty towards uncertainty, an intrinsic part of change) arising as a result of this complexity. These dilemmas and tensions can become drivers for change and professional development, as shown by Hadar and Brody (2010), but they can also generate frustration.

Conceptual framework

Precisely because these team-based processes of professional development can trigger change within the personal sphere, in the knowledge, beliefs, attitudes, and identity of teachers, they help to shape a professional identity. This occurs within the sphere of teaching practices and also in relation to the conditions in which they develop, in other words, in the professional culture that frames them. Hadar and Brody (2010), in their analysis of the learning acquired within such communities, highlight the breakaway from teachers' initial isolation and the change in attitude following interaction.

Emphasis on the collective, on horizontal dialogue, and on the democratisation of knowledge endows these processes with the potential to achieve transformation beyond the individual level, even impacting on professional culture and modes of institutional organisation (Gibbs et al. 2017).

These multiple effects, as well as the interactions between them, call into question models that offer a linear explanation for professional development, showing that there is no simple causal relationship between changes within the personal sphere, in classroom practice, and contextual transformations (Marcelo and Vaillant 2009, Sansom 2020). Non-linear models, on the other hand, illustrate the variety of impacts

and factors involved in professional development processes in a more dynamic and complex way, such as the model of learning patterns devised by Vermunt and Endedijk (2011), the collaborative teams model of Lipscombe, Buckley-Walker and McNamara (2020), and the interconnected model of professional development proposed by Clarke and Hollingsworth (2002).

Given the dearth of research in this field (Gast et al. 2017), particularly long-term studies (MacPhail et al. 2018), the research presented here was conducted in order to examine in depth the effects of team-based professional development in Higher Education over the course of four years. Different levels and factors related with the success of the processes developed on the basis of the Clarke and Hollingsworth model (2002) were analysed. This model was chosen on account of its complexity, broad applicability (Boylan et al. 2017), and its emphasis on interactions, reflection, and processes of improvement in the activation of teacher professional development. However, this model is not the only option available to explain professional development, and it does not interest us as a predictive model, but instead as an analytical framework used to interpret the changes experienced by the teachers involved in the research.

Clarke and Hollingsworth (2002) establish four domains, which form an interconnected model of professional development:

- Personal domain: made up of changes in the sphere of teaching knowledge, in the beliefs and attitudes of teachers.
- Domain of practice: referring to professional experimentation.
- External domain: pertaining to aspects related with external information resources and stimuli.

- Domain of consequence: corresponding to the learning outcomes achieved with students.

The interconnections between the domains illustrate the different sequences of change and, with them, multiple pathways for professional development, which provide a certain level of complexity to this model with regard to other theoretical approaches. Within this model, we are particularly interested in two mechanisms that the authors posit will mediate the changes experienced in the different domains: reflection and enactment. The first of these seeks to establish reflexive connections between domains after experiencing changes in any of them. These reflexive connections activate change in other domains. Enactment, on the other hand, refers to the process of putting innovation into action. As noted by the authors of this model, it is not just about taking action but about putting into action a new idea, a new belief, or new practice.

Study context: the innovation process

The teaching innovation project that provided a context and opportunity for the development of this research was financed by the university over the course of 4 academic years (from 2014-15 to 2017-18) to improve teaching/learning processes within the Primary Education, Early Years Education, and Social Education degree courses taught at the University of Cordoba, Spain. These degree courses are worth a total of 240 credits through the European Credit Transfer System (ECTS) within the framework of the European Higher Education Area (EHEA).

The project was implemented as part of the subject “Coexistence within Schools and the Culture of Peace”, within the Primary Education and Early Years Education degree courses, and the subjects “Introduction to Sociology. Social Structure and Inequality” and “Sociology of Education” within the Social Education degree.

In the first case, these subjects are delivered over the course of one academic year and are part of the core training for teachers. The subjects in the Social Education degree are delivered consecutively in the first and second semester and are compulsory core subjects necessary in order to graduate. In both courses, the contents tackle issues related with the global world, inequalities, citizenship, diversity, equality, and education strategies.

Student numbers per year are 240 for the Primary Education degree, 180 in the Early Years Education degree, and 65 in Social Education.

In the innovation project, a Service-Learning (SL) methodology was designed because it is a critical pedagogical tool, developed through and for social transformation, which favours genuine participatory processes and relates academic learning with other more practical and experiential learning to offer a service to the community (Jacoby 2013, Deeley 2016). It empowers and challenges students, inviting them to cooperate and become directly involved and committed (Tande and Wang 2013). It also requires teachers to organise the content, classroom activities, and evaluation system differently.

The team of teachers planned classroom work in detail, by means of the following actions:

- (1) Contact with social and cultural organisations, associations, and collectives in the city, to inform the students and allow them to design their own working process.
- (2) Workshops on social research tools (interviews, observations, and document analysis), so that students could conduct research with the social collectives selected.

- (3) Working sessions with the students to design a service in light of the needs detected with the social collectives.
- (4) Design a handbook to guide students in the drafting of their final report
- (5) Planning and organisation of the final exhibition of student work at an open event in the Faculty of Education (hall, corridors, etc.).

To organise these actions, the teachers followed a dialogic process within a community of practice, in accordance with the model devised by Thurlings and Brok (2017), to investigate the impact of such an approach on teacher professional development.

Method

To achieve the research goal set, a qualitative study was designed, taking a descriptive and interpretative approach (Denzin and Lincoln 2005) to the information generated in three settings: the classroom, team sessions for the participating teachers, and the private domain through a teaching journal. These three domains promoted reflection, as understood by Thorpe and Garside (2017) [(co)meta reflection], dialogic processes aimed at improving teaching, understanding, and the results of practical activities in the university. It is, therefore, a teaching context in which teachers, through team work, repeatedly deliberate on their actions

Participants and research strategies

The teaching activity analysed was carried out by five female and two male teachers, all members of one of the groups in which the subjects were delivered (See Table 1).

Table 1. Profile of participating teachers

Gender	Years' teaching experience in the university	Academic years in the Innovation Project	Degree Course
Female	Between 15 and 20	From 2014-15 to 2017-18	Early Years Education
Female	Between 5 and 10		
Female	Between 5 and 10		Primary Education
Female	Between 5 and 10		
Female	Between 0 and 5	From 2015-16 to 2017-18	
Male	Between 0 and 5	2017/2018	Social Education
Male	Between 5 and 10		

The research strategies involved analysing the content of the team sessions held at the start and end of the subject each academic year (with the exception of 2015/2016 when only a final meeting was held) along with the journals kept by three of the teachers. These instruments have been used as narrative strategies (oral and written) with a view to constructing reality, giving meaning to events (Bolívar 2002), and interpreting the process of teaching development.

The team sessions lasted on average between sixty and ninety minutes. Audio recordings were made of all meetings and subsequently transcribed literally. The structure of the team sessions was different depending on when they were held (see Table 2) and in accordance with different analysis goals. They were always, systematically led by one of the teachers coordinating the project, with a view to guiding discourse in relation to the research questions. The aim was to guide the description of individual teaching experience and subject it to processes of interaction, highlighting the knowledge, beliefs, and attitudes of the teachers, decisions about the actions of all participants, resources, and external stimuli for student learning .

Table 2. Structure of the team sessions

Initial sessions	Final sessions
Expectations Problems presented and how to tackle them Initial potential of the proposed methodology and context Coordination with other subjects and within the team itself	General assessment of the year and methodology Elements to improve Difficulties detected Elements to keep working on/improving Learning outcomes recognised with students and teachers

For the class journals, no guidelines were established. They were free texts in which the teachers expressed their initial expectations, described specific classroom incidents, and interpreted student motivation, problems, or questions during the development of their classes, making connections between the individual and the collective: team sessions and individual work. In contrast to the group sessions, the journals provided a personal reconstruction of experience whereby, through a process of reflection, meaning could be assigned to events and experiences (Ricoeur 1995). Although the use of this instrument was planned as part of the research, only three of the teachers in the team actually kept a journal, alluding to the lack of time and continuity. This element is identified as a weakness of the study.

A total of eight hours and thirty-five minutes of recordings were compiled, transcribed over 163 pages. The journals analysed provided a total of 26 pages.

Data analysis

The analytical process involved: (1) the literal transcription of team sessions; (2) open and axial coding (Charmaz 2005) of both the transcriptions and the class journals. This procedure allowed us to create a list of 20 codes, define them, and set the context for their usage; and finally; (3) categorisation, which entailed grouping codes and establishing relationships between them, giving rise to interpretative and inferential analysis in accordance with the model developed by Clarke and Hollingsworth (2002) and the four domains of professional development: personal, practical, external, and consequences (see Table 3).

Table 3. Examples of open code, axial code, and category

Open code	Axial code	Definition	Category
Individual improvement (related with)	Expert recognition	When referring to other colleagues as triggers for professional learning because they have given them cause for reflection or provided them with information and knowledge.	Personal domain
	Dialogic strategy	When they allude to dialogue with students as a trigger for professional learning.	
Methodological strategy (generating)	Resistance	When teachers make criticisms about the demands of students regarding instructions that do not allow them to follow a creative and autonomous teaching/learning process.	Practical domain
	Teachers' uncertainties	When they express their doubts about the best strategy for presenting guides to improve student learning.	
Difficulties (including)	Institutional difficulties	When they allude to problems in the organisation of complementary activities or subject-specific activities, making reference to the impact they have on the motivation of teachers and students.	External domain
	Difficulties with associations	When they identify difficulties working with social associations, or the students identify these problems.	

Commitment (implying)	Teaching commitment	When teachers refer explicitly to their interest, motivation, and actions to improve teaching/learning processes.	Domain of consequences
	Social commitment	When teachers express their interest, motivation, and actions to work with social organisations as a consequence of their teaching work.	

Authors' own

Results

Personal domain

The team of teachers described their work in terms of the following characteristics: open, changing, active, and collective in nature. These characteristics appear repeatedly in the teachers' class journals and they are expressed as the opening premise at the start of the academic year: *the subject should not be static, but rather it should come to life each year, with each group and with each visit* (2017-18_Journal); *Each year it seems we get closer to having an established, satisfied team that believes in the approach taken in the subject* (2016-17_Journal). The way in which they understand teaching also has consequences with regard to practices, which shall be analysed later on.

The views held by teachers about teaching being an open, changing, and active process are linked to the high levels of emotional involvement they experience during their professional practice. These views are reflected in their class journals and in the team sessions. The work of students has a huge impact on their emotions and their evaluations of teaching development. In fact, they explain and allude to their students' motivations and expression of emotions when talking about their own mood, emotions,

and motivations. *We started out really enthusiastically, both the students and myself, but then there were difficulties, difficulties because.... I can't make contact* (2014-15_FinalSessionsTeam). The teachers recognise that there is a close link between how their work develops and how students react and take the initiative; for that reason, through the process of team-based dialogue and individual reflection, they identify the keys to their teacher development based on this interaction. However, this process of interaction involves dealing with high levels of uncertainty in the learning contexts associated with the objectives of understanding subject content, and also with the emotional bonds created between the different stakeholders involved. Hence, this process is influenced by interactions between teachers, students, the organisations with which they collaborate, and the different possibilities of communication between all these stakeholders. Let us examine two different examples, with different evidence and in different directions, which illustrate the influence of the teacher's personal sphere in relation to students' learning and emotions. The first corresponds to a class journal. The teacher expresses a certain despondency linked to the difficulties detected among students as the task is developed. In the second excerpt, taken from a team session, another teacher expresses her satisfaction linked precisely to the learning of her students.

I find it exhausting always having to give instructions like "all hands on deck", accompanied by large helpings of motivation, always trying to maintain a constant balance between "we want to do it" and "you must do it". I feel that my professional involvement is so personal that the slightest gesture of despondency, disinterest, or stress on the part of the students affects me in my own work. (2016-17_Journal)

There are many who have changed their way of thinking completely and realise that this subject is different, and that for me is very important because I believe that this is how they will truly learn and so I get a great deal of professional

satisfaction, a great deal of satisfaction that I have been able to create such rich learning environments for them, you know? (2016-17_FinalSessionsTeam)

This understanding of teaching is manifested as an alternative to others that see teaching as the linear, causal, or schematic transmission of knowledge. In the research conducted here, teachers recognise that they share protagonism with students within the act of education: *I love that students take centre stage, that they 'take over the faculty', that they appropriate spaces and make them their own* (2017-18_Journal). In this alternative search linked to the students' protagonism in learning, the development of innovative projects that move away from what has been done previously in the subject facilitates new ways of understanding teaching. In this research, we identify the link to the development of their commitment in two directions: professional commitment and social commitment, an aspect that emerges in dialogues between teachers when reaching decisions about how to proceed: *it's just like the students are never left feeling indifferent, you are also never left feeling indifferent, any year, you know? The subject never leaves you feeling indifferent* (2017-18_InitialSessionsTeam).

Firstly, professional commitment is revealed when the teachers question the teaching process itself, its function, and the way they support students in the construction of academic learning. The results show how teachers subject the teaching process to constant reflection, questioning how they can guide and support students to trigger creative, contextualised, and reflexive learning. This approach leads to high levels of dedication and work in contrast with other more comfortable strategies for teachers, and even for students, which are seen to be more stable and predictable with regard to the assessable task. They insist on the need to examine their work every year, analysing the advantages and drawbacks, analysing experiences, never taking anything for granted, and accepting the difficulties this entails and the interacting elements from

the domain of practice, the external domain, and the domain of consequences. This issue is repeatedly brought up within team discussions, referring to the pains they take as part of their teaching commitment:

Teacher1: but you know what that is, it's that subconsciously you have a higher level of involvement than required by traditional methodologies

Teacher2: I think that the students know that and they appreciate it, because I remember that this came up in one of the final focus groups, saying that they could, they could just do a normal job, but they've got themselves involved in this, and some of them say that, you know? That you have to appreciate that, that not everyone could do it, just turn up and do something much more traditional, and just get on with the subject without making an effort, and I think that they do appreciate that.

Several: Yes, they do appreciate that. (2017-18_ FinalSessionsTeam)

Secondly, commitment is linked to the social sphere when they recognise several stakeholders in the act of education. This is the most evident case of how teachers see teaching as an open and active process insofar as they engage with the diversity of discourses and stakeholders, legitimising their role in the development of the subject: *the thing is that we must also be willing to accept other models* (2016-17_ FinalSessionsTeam). In this context, teachers recognise that this methodology fosters and demands greater involvement from and social commitment to the city's organisations. It also involves being receptive to diverse and contradictory positions and arguments raised by different social stakeholders. Therefore, not only are students asked to get involved and take a stance, but the teachers themselves also feel questioned about the social issues of their immediate surroundings.

What am I asking from social collectives and what can I do from my position as a university lecturer? (...) I must bear in mind that I am also involved with these social collectives, I become part of the interaction I am asking from my students in their academic tasks, and so in some way I must question my own

actions/reflect/act with regard to the learning we are constructing (within/outside).
(2015-16_Journal)

Finally, with regard to a collective understanding of teaching, the data show that these teachers recognise the knowledge and experience of their colleagues as providing expertise. They identify learning and appreciate improvements in their own teaching practice as a result of collective work and dialogue. These are essential elements for teacher professional development. They admit that they feel more confident when they innovate as part of a team, since the arguments that justify their actions are subject to scrutiny, and this allows them to reflect from an individual perspective in the journals. One of the teachers expressed it as follows in her class journal: *I love working with my colleagues, because I can clear up a lot of my concerns. They make work much easier, and I learn with and from them. The formal and informal meetings I have with them are important to me so that I can continue teaching this subject, it's exciting* (2015-16_Journal). This element is not only recognised individually or in private (in the journals) but is also expressed at the discussion sessions at which there is repeated reference made to the interest in creating a teaching team as one of the aspects that contributes the most to improving teaching knowledge and ability within the classroom:

But one of the expectations and at the same time one of the concerns is the team, the teaching team. For me it is... one of the most important issues, one of the pillars of the subject, is the creation of teaching teams. (2016-17_InitialSessionsTeam)

This illustrates how the development of teaching has effects in the personal domain on the basis of collective and committed work. The same is true in all cases: for new teachers because, by forming part of a team, they are not starting from scratch, but rather with the experience of other teachers; and also for more experienced teachers, who have the opportunity to present and discuss more established approaches. These

two aspects were clear from the interactions between team sessions and field journals. For example, new teachers express that teamwork allows them to overcome the insecurity they feel starting out in the teaching profession. One of the new teachers talks about her expectations, highlighting the support of fellow colleagues:

I am the teacher... but I am still feeling my way around the subject. I have to maintain a certain level of assurance... but I'm the first one to say, well let's see how this goes... I still don't know exactly...I'm a little bit lost. Thanks to them [referring to other teachers], they have given me materials, they have made things easier things for me, so I have a rough idea of what the first term will be like, and that gives me an overall picture of the subject. (2016-17_ InitialSessionsTeam)

In the case of more experienced teachers, teamwork is an opportunity for individual professional development, since they discuss changes in their approach:

The methodological approach to the subject requires the joint, collaborative, committed work of the teaching team for various reasons. One is pragmatic or strategic (...). But another of the reasons is academic, intellectual if you will, and putting together a team favours scientific debate, the importance of discussion and debate about different contents, texts for students, the goals pursued in each practice or activity presented to students, etc. Each time we do, we initiate a learning process as lecturers, as academics, as teachers. There are so few opportunities to practise that! (2016-17_Journal).

The domain of practice

Processes of shared innovation and reflection have brought about changes in the teachers' behaviour in terms of the way they teach, in other words, chiefly through methodological modifications in the classroom. The classroom has become a place for professional experimentation, in the words of Clarke and Hollingsworth (2002). This experimentation has taken shape through new approaches, strategies, and procedures, activated principally by dialogue and interaction (teacher-student, between students, and

also with other external stakeholders).

The changes effected are classified into the following elements: (1) learning is also planned with interaction outside of the university classroom; (2) learning tasks are proposed in the classroom that promote student participation; (3) decisions are made jointly; (4) learning in the classroom is diversified and enriched through the participation of other stakeholders; (5) assessment is understood as a process rather than a product.

With regard to the first element, teachers identify that the main methodological change originates in the practical part of the subject. They have moved from a traditional methodology, in which students carry out written tasks in the classroom, to a more active, experiential methodology, in which research processes are generated with social organisations around the city. This innovation is accompanied by a process of dialogue with the students about their perceptions of change and the difficulties they encounter. As a result of this dialogue, teachers see that, even though the students claim that they are not socially or politically active, they are motivated to engage in practical activities that connect knowledge with experience. Analysis of these issues allows such activities to consolidate through the SL methodology.

Following the latest focus group with year 2 C, I realised that they expected more: more contact with collectives, to be more directly, actively, and experientially involved in their daily tasks. Ultimately, they were asking to actually volunteer with the collectives. (2015-16_Journal)

Rooted in the transformations described in the domain of practice, the focus groups and journals provided evidence of the teachers' concerns about different aspects of methodological development. One of the most recurrent concerns, linked to the social commitment of teaching within the personal domain, present in all the years studied, refers to the types of social agents the students came into contact with, and the students'

autonomy to choose these social agents in their projects. The social issues they work with (immigration, gender violence, environmental conservation, disability, dependency, etc.) and their religious or lay nature made them the subject of multiple reflections and dilemmas.

I have a few doubts, collectives that are not linked directly with education. How can I find a link with collectives such as the parents of children with rare diseases? (...) On the other hand, there are once again groups linked with the Church (Estrella Azahara and La Salle). Should we direct the type of collective they work with? (2015-16_Journal)

In contrast with the interest in maintaining a high level of autonomy among the students, the discourses reveal a second more technical concern, especially present in the first few years. In particular, in relation to the need to create and review guidelines and documents that would help students to complete their projects.

Perhaps, even if they do it independently, it would not be a bad idea to advise them with a reading list or a workshop in the practical classes about how to write reflexive essays, how to analyse the information compiled through interviews, what to include, how, in which terms, how to quote.... (2015-16_Journal)

These concerns, which were initially more technical, have gradually made way for broader-reaching concerns such as making the connection with theoretical contents, or linking to other subjects on the degree course. The aim has been for the students to understand the process from a more holistic perspective: *next year, we ought to make a greater effort to link it in with the theory (...), for me, this part, the curricular part, of tying it in with the curriculum... has been much more diluted* (2017-18_FinalSessionsTeam).

The second element of change detected pertains to student participation. The teachers talked about the use of methodological strategies that encourage students to be

more actively involved in the construction of knowledge. These strategies are focused by means of working groups, debates, or other dynamics that facilitate open dialogue. The means of participation incorporated, as stated in one of the journals, are highly motivating for the students: *they express their experiences, and the other students pay attention. I get the feeling that they need to learn from what their classmates are saying* (2015-16_Journal). However, difficulties for students and teachers alike are also noted. For students because they have to play a more active role in the construction of knowledge. For the teachers because the voice of the students is incorporated into the class dynamic, which, on occasion, leads to a questioning of their beliefs, a certain loss of control over what happens in the classroom, and a perceived lack of control over what is being learned.

This level of student participation is also reflected, coherently, in the shared decision-making about certain curricular and organisational issues, such as the weighting given in the final grade to the different evaluation instruments, the participation of social collectives in the classroom at the initiative of the students, or the modification of working guidelines in accordance with needs. This interaction gives shape to methodological questions that arise and adapt in accordance with student requirements and demands. This shows that shared decisions have practical repercussions on teaching-learning processes, modifying the behaviours and roles of students and teachers.

It's great that it's the students who are proposing that they should come to class because the groups are enthusiastic, and also I explain to them how to extend the invitation (...) and that part also gives rise to what we call independent learning, how to extend the invitation, you are always there supporting them and you agree the schedule with the students, when they come, so that it fits in, but that part is not surplus, I even tell them in class: you make the introduction, give a presentation. (2017-18_FinalSessionsTeam)

The presence within the university classroom of social organisations from the city was the fourth methodological change identified. The organisation of workshops delivered by associations has promoted less hierarchical educational processes. From this perspective, there is no appropriation of knowledge by the teacher; rather, the construction of knowledge is more horizontal, more flexible, and more open to the surrounding context. *It's a really positive thing that the subject is open, open to the world (...) we have finally achieved a connection, we are not a separate world, a whole other planet* (2016-17_FinalSessionsTeam). The collectives contributed different perspectives to the syllabus, diversifying sources of knowledge, and thereby multiplying the learning opportunities available to students. This openness also spread to other services and units within the University, such as the Cooperation Unit, as well as lecturers in other subjects or even within the same subject when it is taught by several people.

The last change refers to evaluation. The work carried out in the classroom through this innovation experience has allowed the teachers to identify a change in interest that places greater emphasis on the learning process than on the final evaluable product (presented in the form of written work). The process is recognised as part of the evaluation criteria, and the aim is to motivate students intrinsically. In line with this stance, a change is also observed in the dissemination of learning, moving away from a traditional presentation of contents toward putting on a kind of a fair with different stands and a more dynamic and celebratory format, in which each student group shares their achievements with the whole education community.

If they know that I'm also not that bothered about the final essay, because I understand how difficult it is, how are they going to enjoy the process? What is really interesting (...) is how to enjoy the interview, enjoy the contact, seeing that

there's something more than the damn essay they have to hand in at the end of the year. Because it's only worth two points. (2014-15_FinalSessionsTeam)

External domain

This area of professional development encompasses aspects related with changes in contextual resources. The discourses recorded highlight the generation of new relations with the University's surroundings: the first, linked to the community, through the participation of social organisations in the subjects; the second, focused on the relationship between the teachers and the university itself.

In the first case, the change in relations with social organisations shows positive aspects such as the enrichment of classroom learning and improved connections between the University and society. However, there are also difficulties, identified with a certain degree of uncertainty regarding the process and student learning. Particularly, these difficulties are related with differences between the expectations of teachers and organisations, the commitments they undertake in the relationship, as well as the procedure that enables and above all defines collaboration.

We made contact several times and had a face-to-face meeting before the summer. At the meeting we set out the conditions for participation and they seemed to be very motivated, giving lots of options for our students' community service. So much so, that it was strange and disheartening to see the end result (...). But these are the risks of opening up classrooms to the community. It's a shifting terrain where you can't control everything. (2017-18_Journal)

According to the teachers, collective reflection on teaching/learning processes has involved reaching agreements that require commitments from all parties concerned. In the case of the teachers, they perceive these commitments from an ethical perspective; the relationships they establish call to them, from the personal sphere, and they feel the need to respond to the demands of the organisations, even though they

question the limits thereof: *now they have asked us to collaborate with Mujeres en Zona de Conflicto, and now that I can I will get back to them (...), but I am very aware of what I should say; because otherwise, the commitment level just snowballs* (2014-15_FinalSessionsTeam).

For the associations, these commitments materialise through receiving groups of students to carry out their projects, and by taking part in the classroom at the University. The teachers feel that, in some cases, these commitments cannot be maintained on account of organisational obstacles, because their sources of funding are dependent on projects and bids, or because of staffing fluctuations.

This set of difficulties highlights the distance between the action dynamics and the culture of the social organisations and the University. In spite of this, the documents analysed show that coordinated work between collectives and the University has consolidated over the years, and what started out as a risk or difficulty, more recently has taken shape as a consolidated network or new opportunities, revealing transformations in the external domain.

It's lovely anyway, because this projection, to me anyway, I get the feeling that since we started working on it years ago, gradually more doors have opened, and every door is more interesting than the last. From the collectives themselves, who come and say to you, we have this proposal, this service, what do you think? We're going to share it with the students. (2017-18_FinalSessionsTeam)

The second area in which the teachers have noted changes has been in their own relationship with the university. In this case, the changes refer to issues that the teaching team requires from the institution in order to develop innovations. These are reflected almost exclusively in terms of difficulty. Discourse analysis shows how changes described in the personal domain and the domain of practice require significant coordination among the teachers who deliver a subject and the rest of the teachers on

the degree course, scheduling flexibility, and a different use of spaces and times. In other words, it also requires changes in this external domain. These requirements are incompatible with the fragmentation of knowledge into subjects, or its strict organisation into separate schedules and spaces:

P1: It's in contradiction with those of us who are in the University as faculty members, we are in a state of contradiction, because it's a requirement of coordination, transversality... but then everything is parcelled up, the number of credits, times, schedules, tasks,...

P2: So many contradictions. (2017-18_FinalSessionsTeam)

According to the discourses analysed, these contradictions increase when conditions are also not ideal: teachers do not always have job stability, student ratios are high, and class schedules make attendance difficult.

The Department does not always have teachers available at the start of the year, and the subject of Co-existence is usually one of the ones that is left without teachers. And I find this really exhausting, because I am aware of the difficulty of working collaboratively and the great effort it takes for the permanent teachers to convey our approach and working dynamic to new teachers, our colleagues, every year, to get their support, turn them into allies with regard to contents that require a strong approach and lots of work outside the classroom as well. (2016-17_Journal)

Among all the difficulties detected, time constraints receive the greatest attention (with the most mentions): time for teaching, for coordination, and especially learning time. For the teachers, the characteristics of independent, reflexive, meditated, team work requires flexible times, which adapt to the needs of each student and group; hence they are concerned, fearful, and worried about incorporating them into a rigid structure: *I would like to be able to dedicate more time to my own training about the subject contents. I have a lot to do and it stops me from reading... from thinking... and ordering my ideas in order to convey them to the students* (2015-16_Journal).

Domain of consequences

The work carried out by the teachers has consequences for the students, generating a circular process of to-ing and fro-ing that includes conceptions (personal domain) and practices mediated by the resources and the context (external domain) analysed thus far.

The research data show how the fact that the teachers view teaching in an open, dynamic, and changing way also has consequences for the students themselves, who must take on board new less rigid and more creative ways of learning. The teachers recognise high levels of motivation among their students, but also a great deal of uncertainty, owing fundamentally to the difficulties they have approaching their work autonomously: *I see that they find it difficult to understand something that is not completely set out for them, something where they have to be creative, responsible, and driven* (2015-16_Journal). The teachers attribute this to their lack of instrumental competences to respond to the academic activities:

However, the teachers also contextualise such student reactions and recognise that their difficulties are also above all rooted in their desire to respond to the requirements of each teacher; beyond acquiring different learning outcomes. Hence, in addition to the difficulties inherent to all academic work, teachers note that students are socialised in educational patterns and guidelines in which autonomy (manifested in the presentation of work with open, diverse, and creative formats) is not rewarded but rather penalised. Therefore, the first consequences are that students feel fearful or insecure in the absence of very clear-cut instructions.

Even though the students are highly motivated, the results show that there is no direct link between that motivation, the academic competences they have to respond to the task (which are generally scarce or non-existent), and their learning outcomes,

which are insufficient in terms of the acquisition of instrumental and conceptual competences. One teacher explains this uneven relationship:

(...) interestingly, this is the group that has done the worst work, or who I have given the lowest grade to. And the one that seemed to be the most highly motivated initially, they even asked me please if the association could come here. It was a great visit. But the end result was... often, the level of commitment is not on a par with the learning outcomes expressed through the written report. Perhaps another type of learning outcome would be... (2014-15_FinalSessionsTeam)

Taking these aspects into account, the teachers interpret that changes in the domain of practice and in the personal domain have also led to changes in the domain of consequences in two directions: firstly, they recognise the influence of their work by enabling the students to situate themselves with regard to social inequality from a position that is less distant and defined by otherness (us vs. them). This has allowed the students to develop processes of empathy, and on occasion they have expressed this by carrying out analyses that overcome past prejudices.

(...) one student raised her hand and described her personal experience with regard to the fieldwork they carry out in the subject of Coexistence. She explained how her contact with the association and the different visits they made to the neighbourhood (a highly marginalised context in the city) is allowing her to change her perception about the context. She told of how, in their first visits, the whole group was afraid of getting close, they parked their car far away in case something happened, they were fearful and they were really unsure what they might learn from that situation. As they visited the neighbourhood and learned about the pedagogical intervention taking place, their fears dissipated, discovering how they also had much to learn from the organisation and from the people they work with. (...). "Our fears were more to do with the unknown, and we didn't see it as a context where we could have learning experiences", the student confessed. (2015-16_Journal)

Secondly, the teachers have noted greater social and civic commitment among the students. With this subject, they have signed up as volunteers with the city's social associations, and in some case they have decided to continue, joining different projects.

With regard to both aspects, the most salient finding has been the satisfaction shown by the students about their learning process, and above all how they link academic learning with life experiences. This is certainly the perception of the teachers when they analyse the consequences of the teaching innovation process among their students: *they connect with their reality, and with the day to day, it really hooks them in* (2016-17_FinalSessionsTeam). These outcomes are important to the teachers, and at the team sessions they describe scenes that have occurred in the classroom. In particular they stop to tell their colleagues about the experiences and emotions their students have described with regard to the learning process:

One of the greatest potentialities I have seen is that, it's the emotional side, the affective aspect, I don't know... the fact that during the second week of work one student came to me and said: "This is a project I have even told my parents about. When I went there at the weekend I told my parents about what I am doing and before that I had never spoken to them about my degree". (...) It's personal, it moves them, and the realities they see in some cases. (2017-18_InitialSessionsTeam)

In this circular process between stakeholders, their conceptions, and the actions undertaken, the teachers identify that learning processes have been slower for the students. In spite of this, they acknowledge that these processes transcend the classroom, and for that reason they have an impact on their own professional development as teachers because they can leverage them in the process of reflection-action-change and improvement:

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Discussion

The results set out above show that the innovation process and the strategies of dialogue and reflection it entails have brought about transformations in the four domains of professional development noted by Clarke and Hollingsworth (2002). These changes originated, in the first instance, in the domain of practice through the awarding of the innovation project that gave rise to the research presented here. That milestone, interpreted as enactment to use the terminology of Clarke and Hollingsworth (2002), and the parallel collective reflection on their own practices have mobilised transformations in the other three domains, transcending the merely methodological plane or teaching practice. Therefore, it could be deduced that innovation and a team-based process of reflection have, in general, promoted the professional development of the teachers (Callejas *et al.* 2013). This finding puts teachers at the very centre of processes to improve Higher Education and corroborates the notion that their professional development is enhanced when analysis of practice is contextualised in deliberate self-regulated contexts of shared learning and knowledge generation (Butle and Schnellert 2012).

With regard to the specific transformations activated in the four domains analysed, the changes in the personal domain make reference to more open, flexible, active, and collective understandings of teaching, in contrast to notions based on a more linear, causal, and schematic transmission of knowledge. The teachers become emotionally involved, a reaction that is linked to the responses and progress of students, in line with the findings described by Clegg (2000). Along these same lines, we find that the satisfaction or dissatisfaction of teachers is largely associated with the domain of consequences through the success of their students, and that positive and negative emotions act as facilitators or inhibitors of action.

Changes in the conceptions of the teachers reflect intrapersonal or interpersonal dilemmas (Pareja and Margalef 2013) with latent commitments in two directions: professional (with regard to the difficulties caused by supporting students through a teaching and learning process that generates higher levels of uncertainty, involvement and time) and social-civic (through the recognition of other stakeholders in the educational act). These commitments reveal professional identities in which teaching occupies a significant place, even though their high levels of dedication receive little perceived external recognition (Sancho et al. 2010). Adopting this perspective entails a certain degree of resistance to external pressures of evaluation or accreditation, which require a greater focus on research, as the most academically, economically, and socially profitable area of work (Novoa and Amante 2015). In this respect, professional identity is not posited as a barrier to professional development, as noted by Brownell and Tanner (2013), but rather as an element of personal change that, in turn, has driven other transformations in areas such as the domain of practice or the external domain.

All of this is made possible through a collective teaching conception, reflected in teamwork and discussion, that provides a greater sense of security (Margalef 2011) and recognises the expertise of colleagues. The university culture, characterised by Hargreaves and Fullan (2012) as being balkanised, is questioned through an approach that shifts away from the individual and isolated towards the collective through interaction and recognition of others and their ideas as valid (Hadar and Brody 2010).

Coherent with the changes observed in the personal domain, transformations are also encountered in the domain of practice, which we interpret as the application of new methodological approaches. These imply investigation outside of the classroom, student participation, shared decision-making, the incorporation of other voices into classroom sessions, and the use of evaluation as a formative rather than a grading instrument.

These practices are underscored by the teachers' interest in making classroom learning meaningful through connection with the community and by fostering civic commitment among the students. This teaching concern is also described by Callejas et al. (2017) when they point to the teachers' desire to have a social impact, connecting their subjects to the wider community.

Among the changes mentioned, some of them entailed a major initial transformation but then remained unchanged throughout the remainder of the four academic years analysed. In other aspects, however, the changes have been constant, observing an evolution from a concern with the technical side of the innovation to a questioning of more profound issues (quality of learning, interdisciplinarity, etc.). This finding is coherent with other studies in which professional development has not followed a linear temporal pattern, and not all the different levels have undergone parallel evolution (Clarke and Hollingsworth 2002).

Whereas the personal and practical domains are interpreted in positive terms for professional development, in the external domain, changes have been the result, fundamentally, of overcoming contextual barriers. The new relationships established with the surrounding community through the innovation project have given rise to modifications through the incorporation of social organisations onto subjects and through the institutional limitations encountered. With regard to the first factor, these barriers pertain, among other issues, to the uncertainty of not having complete control over what happens in class sessions or the learning outcomes promoted. As highlighted by Pareja and Margalef (2013), this feeling of uncertainty is common in processes of innovation, although it can be difficult to cope with individually. In line with some of the participants in the research conducted by the aforementioned authors, the discourses

of the teachers in this study show that the risk they felt initially gradually became recognition and acceptance of uncertainty as a source of learning.

The second factor is situated at an institutional level. The participants describe constant difficulties linked to time, coordination, the university structure itself, and the parcelling of knowledge into subjects with inflexible spaces and timetables. Other studies also point to the lack of time and opportunity to meet up with colleagues (Brownell and Kimerly 2012, MacPhail et al. 2018, Lipscombe, Buckley-Walker and McNamara 2019) as barriers to learning from one another.

We have interpreted the last domain – consequences – in light of the teachers' discourses about student learning outcomes. The teachers perceive that the work they have done, inviting students to become involved with social collectives working on problems of social exclusion, has had consequences in two regards: firstly, it allows the students to position themselves with regard to inequality from a less distant perspective; and secondly, it has promoted social and civic commitment. The teachers have revealed both aspects to be significant, identifying them as substantial components of their teaching development. This finding expands on the success factors in the collaborative professional development strategies indicated by Gast et al. (2017). Their review yielded a compendium of factors ranging from attitudes, motivation, commitment, and professional identity at an individual level, to interactions, team composition, and institutional rewards at a more organisational level. Among all these factors, none of them refers to the impact on student learning. However, for the teachers taking part in this study, student learning is seen as the mirror in which the changes made in the three previous domains are reflected and evaluated, providing valuable feedback. Through their discourse, the teachers give meaning to their practice insofar as it has a positive

impact on student learning outcomes, making these a decisive factor in professional development.

Conclusions

Processes of team-based teacher professional development within the context of Higher Education are complex, dependent on multiple factors, and with effects in different domains. As identified by Clarke and Hollingsworth (2002), there are multiple pathways for learning and professional growth. This paper has shown how a collective process, in which enactment and reflection on teaching practice was carried out as a team, has been able to activate changes in the four domains of professional development described by these authors. Indeed, the very fact that the teachers conducted these processes collectively facilitated the changes documented. The effects of different interactions, based on dialogue and collective reflection on practice, overcoming the isolation of the classroom, highlight that contexts and professional culture impact the domains of professional development (Lipscombe, Buckley-Walker and McNamara 2020).

The conclusions reached in this study have implications at a professional and institutional level that are applicable in other international contexts. At a professional level, they describe a process that informs us about the construction of knowledge in practice (Cochran-Smith and Lytle 2009), which is deemed to be useful for professional development, since it has promoted transformations in the personal and methodological domains, activated through innovation, dialogue, and reflection. Furthermore, these modifications have also transcended the context (both university and in the community), producing new models of relating and collaborating, and the students themselves. This process, notwithstanding all the necessary provisions and contextualisation, could be useful when implementing team-based professional development proposals at other

universities. Proposals that promote participatory processes within communities of practice could foster a culture of innovation, change, and constant updating in university environments (MacPhail et al. 2018, Fernández-March, 2020).

The development of this research has been affected by two limitations: the absence of field journals from some of the participating teachers; and the difficulties in generalising the results because it describes a specific case studied using non-standardised research instruments. We believe that the first limitation did not produce any bias owing to the incorporation of team sessions in which the voices of all teachers was present. The second limitation, which is an inherent feature of qualitative studies, we believe does not diminish the value of the study, but instead allows us to understand reality from a more profound and interpretative prism, meaning that it could make interesting contributions when transferred to other contexts.

The aim of this article has not been to analyse the different trajectories of the teachers, to study how the innovation has influenced each participant, or how similar or disparate their professional development has been. Such research questions, which are undoubtedly interesting, are proposed as future areas of research that might, for example, offer greater insight into the connections between teacher profile, educational rationality, or the pedagogical paradigm from which they are positioned, their personal and professional trajectories, and the changes observed in the different domains of professional development.

References

- Bolívar, A., 2002. ¿De nobis ipsis silemus?: Epistemología de la investigación biográfico-narrativa en educación. *Revista Electrónica de Investigación Educativa*, 4 (1). <http://redie.uabc.mx/vol4no1/contenido-bolivar.html>
- Brody, D. and Hadar, L., 2011. "I speak prose and I now know it". Personal development trajectories among teacher educators in a professional development

- community. *Teaching and Teacher Education*, 27, 1223-1234. doi:
10.1016/j.tate.2011.07.002
- Brownell, S.E. and Tanner, K.D., 2012. Barriers to Faculty Pedagogical Change: Lack of Training, Time, Incentives, and... .Tensions with Professional Identity?. *CBE-Life Sciences Education*, 11, 339–346.
- Boylan, M., Coldwell, M., Maxwell, B. and Jordan, J., 2017. Rethinking models of professional learning as tools: a conceptual analysis to inform research and practice. *Professional Development in Education*, 44 (1), 120-139. doi:
10.1080/19415257.2017.1306789
- Butler, L.D. and Schnellert, L., 2012. Collaborative inquiry in teacher professional development. *Teaching and Teacher Education*, 28, 1206-1220.
- Caballero, K. and Bolívar, A., 2015. El profesorado universitario como docente: hacia una identidad profesional que integre docencia e investigación. *Revista de Docencia Universitaria*, 13 (1), 57-77.
- Callejas, M.M., et al., 2013. La reflexión sobre los estilos pedagógicos y la innovación curricular en la universidad. *Praxis & Saber*, 4 (8), 41-61.
- Charmaz, K., 2005. Grounded theory in the 21st Century. In N. Denzin and Y.S. Lincoln eds. *The sage handbook of qualitative research*. London: Sage Publication, 507-537.
- Clarke, D. and Hollingsworth, H., 2002. Elaborating a model of teacher professional growth. *Teaching and Teacher Education*, 18, 947–967
- Cochran-Smith, M. and Lytle, S.L., 2009. *Inquiry as Stance: Practitioner Research for the Next Generation*. *Practitioners Inquiry*. New York (US): Teachers College.
- Deeley, S.J., 2016. *El Aprendizaje-Servicio en educación superior. Teoría, práctica y perspectiva crítica*. Madrid (Spain): Narcea.
- Denzin, N.K. and Lincoln, Y.S. eds., 2005. *The SAGE handbook of qualitative research*. London (UK): Sage Publication
- Fernández-Cruz, M., 2006. *Desarrollo profesional docente*. Granada (Spain): Grupo Editorial Universitario.
- Fernández-March, A., 2020. Entornos de aprendizaje para el desarrollo profesional docente. *Revista de docencia universitaria*, 18 (1), 169-191.
<https://doi.org/10.4995/redu.2020.13145>

- Gast, I., Schildkamp, K., and Van der Veen, J.T., 2017. Team-Based Professional Development Interventions in Higher Education: A Systematic Review. *Review of Educational Research*, 87 (4), 736–767. DOI: 10.3102/0034654317704306
- Gibbs, P., Carteney, P., Wilkinson, K., Parkinson, J., Cunningham, S., James-Cunningham, C., and Pitt, A., 2017. Literature review on the use of action research in higher education. *Educational Action Research*, 25 (1), 3-22. doi.org/10.1080/09650792.2015.1124046
- Clegg, S., 2000. Knowing through reflective practice in higher education, *Educational Action Research*, 8 (3), 451-469, DOI: 10.1080/09650790000200128
- Hargreaves, A. and Fullan, M., 2012. *Professional Capital: Transforming Teaching in Every School*. New York (US): Teachers College Press.
- Jacoby, B., 2013. Democratic dilemmas of teaching service-learning: Curricular strategies for success. *Journal of College Student Development*, 54 (3), 336-338.
- Johnson, C.S., Sdunzik, J. Bynum, C., Kong, N. and Qin, X., 2019. Learning about culture together: enhancing educators cultural competence through collaborative teacher study groups. *Professional Development in Education*. doi: 10.1080/19415257.2019.1696873
- Lipscombe, K., Buckley-Walker K. and McNamara, P., 2020. Understanding collaborative teacher teams as open systems for professional development. *Professional Development in Education*, 46 (3), 373-390. doi: 10.1080/19415257.2019.1613256
- Liu, K., Miller, R., and Eun Jahng, K., 2016. Participatory media for teacher professional development: toward a self-sustainable and democratic community of practice. *Educational Review*, 68 (4), 420-443. doi:http://dx.doi.org/10.1080/00131911.2015.1121862
- MacPhail, A., Ulvik, M., Guberman, A., Czerniawski, G., Oolbekkink-Marchand, H., and Bain, Y., 2018. The professional development of higher education based teacher educators: needs and realities. *Professional Development in Education*, 45 (5), 848-861. doi: 10.1080/19415257.2018.1529610
- Marcelo, C., and Vaillant, D., 2009. *Desarrollo profesional docente. ¿Cómo se aprende a enseñar?* Madrid (Spain): Narcea.
- Margalef, L., 2011. Encouraging Teachers' and Students' Innovation with the Support of Teacher Learning Communities. *Center for Educational Policy Studies Journal*, 1 (1), 137-156.

- Nóvoa, A. and Amante, L., 2015. Em busca da liberdade: a pedagogia universitária do nosso tempo. *REDU - Revista de Docencia Universitaria*, 13 (1), 21-34.
- OECD, 2009. *Creating Effective Teaching and Learning Environments. First Results From Talis*. OECD Publishing.
- Pedrosa-de-Jesus, H., Guerra, C., and Watts, M., 2016. University teachers' self-reflection on their academic growth. *Professional Development in Education*, 43 (3), 454-473. doi: 10.1080/19415257.2016.1194877
- Ricoeur, P., 1995. *Tiempo y narración. Configuración del tiempo en el relato histórico Vol. I*. Buenos Aires (Argentina): Siglo XXI
- Sansom, D.W., 2020. Investigating processes of change in beliefs and practice following professional development: multiple change models among in-service teachers in China. *Professional Development in Education*, 46 (3), 467-481. doi: 10.1080/19415257.2019.1634625
- Sancho, J.M., Creus, A., and Padilla, P., 2010. Docencia, investigación y gestión en la Universidad: una profesión tres mundos. *Praxis Educativa*, 14 (14), 17-34.
- Spilker M., Fleur Prinsen, F. and Kalz, M., 2020. Valuing technology-enhanced academic conferences for continuing professional development. A systematic literature review. *Professional Development in Education*, 46 (3), 482-499. doi: 10.1080/19415257.2019.1629614
- Stoll, L. and Louis, K.S., 2007. *Professional learning communities: Divergence, depth and dilemmas*. Maidenhead (UK): McGraw-Hill Education.
- Teräs, H., 2016. Collaborative online professional development for teachers in higher education. *Professional Development in Education*, 42 (2), 258-275. doi: 10.1080/19415257.2014.961094
- Thorpe, A. and Garside, D., 2017. (Co)meta-reflection as a method for the professional development of academic middle leaders in higher education. *Management in Education*, 31 (3), 11-117. doi: 10.1177/0892020617711195
- Thurlings, M. and Brok, P., 2017. Learning outcomes of teacher professional development activities: a meta-study. *Educational Review*, 69 (5), 554-576. doi:10.1080/00131911.2017.1281226
- Tande, D.L. and Wang, D.J., 2013. Development an effective service learning program: Student perceptions of their experience. *Journal of Nutrition Education and Behaviour*, 45 (4), 377-379.

- UNESCO, 2016. *Innovación Educativa. Serie: Herramientas de apoyo para el trabajo docente. Texto 3: Metodología de Sistematización de Experiencias Educativas Innovadoras*. Lima (Peru). Retrieved:
<http://unesdoc.unesco.org/images/0024/002470/247007s.pdf>.
- Vermunt, J., and Endedijk, M.D., 2011. Patterns in teacher learning in different phases of the professional career. *Learning and Individual Differences*, 21, 294-302.
doi: 10.1016/j.lindif.2010.11.019
- Villar, L.M., 1990. *El profesor como profesional: formación y desarrollo personal*. Granada (Spain): Grupo Editorial Universitario.

Table 1. Profile of participating teachers

Table 2. Structure of the team sessions

Table 3. Examples of open code, axial code, and category