

## GYMNASTICS DISPOSITIONS AND SKILLS: A CASE STUDY LISTENING TO THE VOICES OF TEACHERS

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### Abstract

*Faced with the problem of the gradual disappearance of gymnastics in the Spanish curriculum, the aim of this research is to analyse the thinking and experiences of a group of physical education teachers as regards the teaching of gymnastics skills. More specifically, this research investigates teachers' views on their initial physical education at the university, and their perceptions of difficulties they experienced at the beginning of their professional lives. The methodology employed is qualitative using Aquad 7 program to support the interpretative process. The findings show that the participants considered that their initial physical teacher education curriculum did not give them the procedural knowledge necessary to carry out their gymnastic teaching effectively. As regards the beginning of their careers as teachers, although a group of participants stated that they had implemented educational gymnastics satisfactorily, two groups put forward a negative vision. Of these, one group taught gymnastics but did not feel fully prepared to do so, which made them anxious and insecure, and the other group did not teach gymnastics at all because they lacked the necessary conditions and resources. The results suggest that initial teacher education should be receptive to the initial teacher's needs and constraints in the gymnastic field.*

**Keywords:** *initial physical teacher education, gymnastic, novice teachers, reflective professional practice.*

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### INTRODUCTION

The aim of initial teacher education, in all subjects, is to prepare students for their future professional lives. However, many authors have highlighted the gap between theoretical studies at university and their applicability in the professional world (Cochran-Smith & Lytle, 1999; Zeichner, 2010). Novice teachers have some problems in adapting to the constant changes and demands of the educational context that occur in a society in which knowledge is advancing at a vertiginous speed (Bauman,

2000). This may lead teachers to abandon the teaching of some important educational learning contents, as they do not feel fully prepared (Lloyd & Sullivan, 2012). Our study has focused on gymnastics as it forms part of the curriculum of physical education, which is not divorced from this reality.

Research carried out by Sloan (2007), in England, stresses that gymnastics is the subject in the physical education curriculum that is taught least and about which teachers appear most insecure. In Spain, gymnastics

has a very limited presence in secondary school curriculums (Decree-Law No. 112/2007 of 20 July, Valencian Community), no higher than 1.2%. At university studies, for example, there are 240 ECTS in the Sports and physical education curriculum but there is only 6 ECTS for learning gymnastics (2.5%) in the majority of universities. Throughout the Spanish education system, the marginalisation of gymnastics is well known by professionals in the field. For example, when our physical education students at university do the practice credits in schools they are reporting us in the practicum memoire that they never observe gymnastics being taught in schools, during the last decade at least. Additionally, Physical Education in Spanish schools has not the same consideration that Maths or Language, probably because is not a Pisa evaluation subject. The Physical Education curriculum, in Spain, is a quite open curriculum and this openness gave teachers liberty to choose learning contents and skills. Normally, teachers' dispositions influence election, the available resources, and also the students' predisposition, mainly in Secondary educations.

The benefits of learning gymnastics must be considered in order to assess the implications of its loss from National Educational Reform in 1970 (Law 14/1970) when new teachers have a university accreditation. Gymnastics has played an essential role in physical education for developing skills such as resistance, flexibility, agility, coordination and the kinaesthetic sense (Dowdell, 2013). It contributes to balanced physical skills with personal and social competences (Rikard & Banville, 2006). Dowdell and Holt (2005) suggest that teamwork, and planning skills, could be also encouraged by doing gymnastics, as well as dedication and constancy, and this can benefit pupils in diverse aspects of their life. The aforementioned educational values of gymnastics mean the convenience of include this learning alongside others

physical education subjects (Kovač & Novak, 2001).

Now that an open curriculum, offer the opportunity to include gymnastic learning in schools, the aim of the research was to identify teachers' skills and dispositions to gymnastics to find the causes behind the scarce presence. We have looked at the professional thinking and reflections of a sample of physical education teachers in the Valencian Community (Spain), to bring together their cognitive and emotional thinking (Deglau & O'Sullivan, 2006). The analysis is based on the biographies of the participants, their experiences as learners during their university studies, and on their initial experiences as newly qualified teachers. The identification of their problems and needs could contribute to a proposal for initial physical teacher education studies that give more attention to gymnastic learning.

### ***The development of gymnastics teaching skills: from theory to practice***

When developing teaching skills, two essential factors come together: learning acquired through initial teacher education at university and the practical experience of teaching in schools (Korthagen, Loughran, & Russell, 2006). Darling-Hammond and Bransford (2005), Feiman-Nemser (2001) and Hargreaves (2000) accentuate that novice teachers perceive frequently their initial studies to be inadequate when beginning their teaching career.

There is a long history of research into reflection processes as a key part of initial education of teachers (Tsangaridou, 2005). From Dewey (1933) and Schön (1987), authors as Calderhead (1996), Griffiths (2000), Cordingley (2009), and many others have argued that collaboration is often necessary in order that knowledge might be reinforced with the support of an expert teacher. This perspective of professional reflection, when is developed in a community of practice could facilitate change and innovation (Edwards & Nicoll, 2006); when professionals are capable of questioning and sharing experiences with

others, there is greater potential for the improvement of practices (Korthagen, 2010; Money, Kirby, Parry, Hesford, & Mooney, 2009). Additionally, and in line with research into teacher education carried out by Price and Valli (2005), Darling-Hammond (2010), Lieberman (2010) it is also necessary to view research on the teaching of gymnastics skills from a perspective of reflection that relate knowledge and practice (Dowdell, 2010).

The values of professional experience must be validated by shared reflections in school context (Glass & Rud, 2012) but also as Cochran-Smith and Lytle (2009) suggest knowledge generated by teachers in the classroom can be corroborated and revised – critically– with knowledge validated by research. The reflective model of professional development for physical education teachers had major potential (Money et al, 2009; Sinelnikov, 2009; Williams & Kentel, 2013).

This study is part of a research, in which also we inquired others questions (Ávalos, Martínez, & Merma, 2014). The teachers' reflection and vision will allow us to explore how academic education influences their initial professional dispositions and skills to teach gymnastic. This could allow us to address the initial education of future professionals of this discipline more effectively and rethink teachers' professional learning. The following research questions were posed:

1) How do participants believe that initial physical learning at university has prepared them for teaching gymnastics skills?

2) How do participants perceive their initial teaching of gymnastics at schools?

## METHOD

The qualitative focus used for this narrative research is adequate for analysing professional thinking and teachers' perceptions. Clandinin, Cave and Cave (2011) maintain that narrative research is a thinking process, which is carried out taking into account its contextual nature. The

interrelation between teachers and their educational context offers the possibility of attributing meaning to experiences (Andrews, Sclater, Squire, & Treacher, 2000; Latta & Kim, 2009). Consequently, narrative research is a very useful tool for investigating teaching practice (Coulter & Smith, 2009), and the results could allow the improvement of traditional practices, enriching knowledge and teaching action from the experiences of others (Cochran-Smith & Lytle, 2009; Stylianou, Kulinna, Cothran, & Kwon, 2013). In the field of physical education, narrative research has proved itself to be a useful methodological tool, which can provide a deeper interpretation of the educational context (Garrett, 2006).

The study was carried out with a sample of volunteers. The centre for In-service Teacher Education (CEFIRE) in Alicante (Spain) provided a list of physical education teachers that agreed to take part in the research.

The sample is representative, given that included teachers with extensive experience (20 teachers with more than 16 years in teaching and 15 teachers who have between 15 and 5 years' experience) and teachers with little experience (15 teachers with fewer than 4 years' experience). This difference in the number of years spent in teaching gives a multiple vision of physical teaching.

The research instrument employed was semi-structured interviews, which is frequently used for educational research (Coulter & Smith, 2009; Denzin & Lincoln, 2000).

Meetings with the participating teachers were organised by telephone and email. The interviews were carried out individually in the teachers' own school and the questions focused on teachers' university studies and their experiences teaching gymnastics skills at the beginning of their career.

After collecting the data, the corresponding analysis was carried out using the inductive method, based on the identification and categorization of the text

units extracted from the participants' narratives. The information was processed using the qualitative computer software AQUAD 7 (Huber, 2012), which allowed us to categorise and organise the information in codes and subcodes to interpret participants' critical thinking. The data were analysed following the model suggested by Miles and Huberman (1994).

The first step consisted in analysing the interviews in order to identify possible relationships between the research questions and the emergent concepts from the participants' narratives. Then, in order to validate the codes and categories, a process of triangulation was carried out. Three researchers from the Department of Education of the University of Alicante intervened in the discussion of codes. In this way the codification map was obtained from the emerging themes of the narratives.

The first theme, identify the participants' opinions on adequacy of physical university studies for the learning and teaching of gymnastics. The second deals with the participants' opinions on experiences in teaching gymnastics at the beginning of their careers as secondary education teachers.

## RESULTS

The results are presented in codes and subcodes related to the two emerging themes. The results are presented in tables shown the absolute frequencies (AF) and the percentage of absolute frequency (%AF), where AF is the total number of a code in the narratives, and the %AF is related to the total absolute frequency of the codes ( $AF \cdot 100 / \text{total AF}$ ).

### *Theme I: Perception of initial teacher learning in gymnastics skills*

Knowing teachers' opinions as regards their initial teacher training in gymnastics has allowed us to determine the different learning experiences of the participants. Positive, negative, and non-existent experiences in learning gymnastics emerge in this theme. As shown in Table 1, a significant number of participants affirmed that their initial teacher education in gymnastics was non-existent or unsatisfactory (58.60%), and other group said they had had positive learning experiences during their university studies (41.40%).

Table 1  
*Perceptions of initial physical learning in gymnastics skills.*

CODES	AF	%AF
1. Learning experience:		
1.1. Satisfactory experience	147	41.40%
1.2. No training and unsatisfactory experience	208	58.60%
Total	355	100%

Table 1.1  
*Unsatisfactory experiences in university education: causal factors.*

SUBCODES	AF	%AF
Negative personal disposition	61	29.32%
Inadequate teacher and methodology	116	55.76%
Insufficient means and resources	5	2.40%
No training	26	12.50%
Total	208	100%

Table 1.2

*Satisfaction with initial studies: causal factors.*

SUBCODES	AF	%FA
Positive personal disposition	52	35.37%
Adequate teacher and methodology	84	57.14%
Sufficient means and resources	11	7.48%
Total	147	100%

Table 2

*Teachers' perceptions of teaching gymnastics as beginning of teachers.*

CODES	AF	%FA
2. Experience in teaching gymnastics		
2.1. Satisfactory experience in teaching gymnastics	87	47.02%
2.2. Non-experience and unsatisfactory experience in teaching gymnastics	98	52.97%
Total	185	100%

Table 2.1

*Satisfactory experiences of teaching gymnastics as beginning of teachers.*

SUBCODES	AF	%AF
Favourable disposition to teach	35	40.22%
Favourable disposition of pupils	22	25.28%
Favourable working conditions and environment	30	34.48%
Total	87	100%

Table 2.2

*Unsatisfactory experiences and non-experiences of teaching gymnastics as beginning of teachers.*

SUBCODES	AF	%AF
Unsatisfactory experiences:		
Lack of disposition to teach	28	28.57%
Lack of disposition of pupils	14	14.28%
Non-experiences:		
Lack of academic training	11	11.22%
Inadequate conditions and lack of resources	45	45.91%
Total	98	100%

**1.1. Dissatisfaction with initial studies**

There are different reasons behind the dissatisfaction cited by the participants (Table 1.1.). The inadequate methodology

used by university teachers (55.76%) was the main reason for dissatisfaction. The participants claimed that the activities were complex and technically demanding, and

methods were not very appropriate for secondary schools. Participants expressed this view as follows:

We only did very complicate floor exercises such as back flips and things like that. I remember we had to keep a record for every class. I could say we had very few classes and they were not easy to apply in schools (Nov. 002).

At university, my training was obsolete, insufficient, and poor. It wasn't adapted to the real world I later found in schools. Furthermore, the teacher didn't know how to teach and had many doubts...the truth is I learnt very little (Ava.005).

Others participants express that negative personal disposition towards the subject (29.32%), was due to past experiences or to a lack of affinity for gymnastics:

I hadn't had very good experiences during my previous training. So I didn't have the confidence. In addition I wasn't very good at gymnastics and so my only aim was to pass the subject (Nov.009).

Also, a small group of participants claimed they have never had any specific training in gymnastics (12.50%) and this is the cause of their dissatisfaction.

When I did my degree, gymnastics was not included in the subjects of team sports and individual sports (Nov. 012).

I remember studying all types of sports, but I don't remember studying gymnastics skills (Exp. 006).

A lack of means and resources does not appear to be an important reason for dissatisfaction (2.40%).

### **1.2. Satisfaction with initial studies**

On the other hand, from the satisfactory narratives a 57.14% value the adequate teacher and/or teaching methodology (Table 1.2):

The teacher educator gave a theoretical introduction and then we moved on to the practical part. Sometimes we worked in groups, some of us were observers and had to make notes so we could realise what mistakes we had made. I value this

methodology very positively as it enriched my learning (Exp.019).

The quality of the resources (7.48%) is the reasons for satisfaction with the least presence.

### **Theme II: Perceptions of teaching gymnastics as beginning teachers**

In this theme, we look at the initial professional experiences of physical education teachers when teach gymnastics and the reasons behind the experiences they describe. A significant number of participants perceived that their initial teaching in gymnastics was unsatisfactory (52.97%). We include here the group dissatisfied because were not able to teach gymnastics:

I have never taught gymnastics skills in Secondary School because I don't like them. In addition, I didn't know how to teach them, I think they are dangerous. And I haven't been trained how to teach the skills in a way which is more fun for pupils (Ava. 011).

Another problem is pupils who are very frightened. They arrive with a note from their parents saying they mustn't take part in gymnastics classes. These parents are unconsciously preventing their children from experimenting with and learning gymnastics skills (Exp. 020).

In contrast, a 47.02% of narratives express positive teaching experiences. These positive or negative opinions can be explained by personal attitude, working conditions and environment, and the disposition of pupils to learn gymnastics skills.

### **2.1. Satisfactory perceptions**

Table 2.1 shows that the teaching of gymnastics skills at the beginning of the participants' careers was satisfactory. This indicates that these teachers wanted to teach gymnastics (40.22%).

When I began work, I immediately started teaching these skills because I enjoyed it. I gave my classes in the way I was taught to at university (Exp.003).

Some participants (34.48%) affirm that their work conditions are ideal, as they have the possibility of sharing experiences and knowledge about this area with colleagues, and they enjoy suitable facilities, resources and timetables.

During the first two years, I didn't do anything. Then in 2003 I began teaching and started doing acro-gymnastics sessions. A colleague with more experience in teaching, and who also taught this type of gymnastics a lot, gave me the information necessary. Thanks to him, I was able to teach this and it went pretty well (Nov.007).

Finally, a 25.28% reflects a good pupil acceptance of gymnastics learning.

## 2.2. *Unsatisfactory perceptions*

Table 2.2 shows the reasons for teachers' unsatisfactory experiences of teaching gymnastics that we have presented in Table 2 (52.97%). These feelings of dissatisfaction arise from their negative personal dispositions to teach these skills (28.57%), due to lack of self-confidence, no feeling of affinity towards gymnastics, or fear that pupils might injure themselves.

I eliminated exercises that could be dangerous for my pupils for fear they might injure themselves: for example the backward summersault which could cause neck injuries, or vaulting over the horse. Either of these can cause problems with parents, school authorities...I try to avoid conflicts and include other activities (Nov. 002).

When I began to give classes, I worked with a colleague who did teach these skills. As the sessions progressed, things became more complicated and I was a little frightened. I didn't feel confident. I even injured myself (Ava.009).

In second place, to a lesser extent, the participants state that some pupils are unwilling to do gymnastics (14.28%) due to their lack of ability or previous negative experiences.

In the beginning, in a Secondary School, I produced a didactic unit around gymnastics skills. We did very basic things: forward and backward somersaults,

cartwheels, and some handstands. From the start, there were some girls and boys who had problems doing these exercises. So I had to give them much more simple exercises. And they couldn't do them either (Ava.010).

When I wanted to include these exercises in class, there were pupils who were terrified of the vault, plinth and trampoline because they had fallen or hurt themselves...when they were younger (Exp. 004).

Others reasons given by the participants for not teaching gymnastics skills at the beginning of their careers are fundamentally inadequate working conditions (45.91%), mainly lack of resources or infrastructures; also, a lack of teacher training in this field (11.22%). Thus, they did not feel capable of teaching these skills at the beginning of their career.

Inadequate working conditions and resources, and a lack of academic training are reflected in the following narrative:

Another problem is the lack of adequate resources and infrastructure, which is an obstacle for the carrying out of these types of activities (Nov.012).

When I began work, my school didn't have a gym, and so I couldn't teach gymnastics (Exp. 010).

The truth is that I haven't worked with jumps and "those kinds of things", with plinths... This is because I haven't been trained well enough (Exp. 011).

In summary, the perception of satisfaction at the beginning of teachers' careers is mainly due to the personal affinity teachers have towards gymnastics skills, and also the existence of favourable working conditions. In addition, as regards unsatisfactory experiences or the absence of experience in teaching gymnastics, the results reveal that lack of training and the subsequent insecurity contributed to difficult beginnings. Furthermore, the results confirm the findings of previous research, such as that carried out by Dunkin (1990), and Hodkinson and Taylor (2002), which also determined problems experienced during this initial stage, as

these related to the pupils themselves and the resources available.

## DISCUSSION

Duran, McCarthy, Graesser and McNamara (2007), and Hughes, Pennington and Makris (2012) have made important contributions to the interpretation of evidence taken from narratives, focusing on the credibility of findings. These authors maintain that the illustration of conclusions with examples, relevant counter-examples, alternative interpretations of the evidence or reference to the limitations and conflictive evidence give greater credibility to research. Likewise, a detailed description of the results permits readers to evaluate if their experience is consistent with the study. After analysing the information, the results have allowed us to answer the research questions with the conviction that we can make a valid contribution to research in this field.

### *First research question*

Analysis of the first emerging theme reveals that more than half of the participants do not value their initial preparation very highly, including in these results the percentage of narratives that affirm dissatisfaction because they haven't received gymnastics learning at all. These findings coincide with the results of studies (Cochran-Smith, 2005; Korthagen, 2010) that reveal the limited influence of initial teacher education on teaching, principally at the beginning of teaching life. The participants' criticism of their university studies is based on the inadequate methodology used for teaching how to teach gymnastics skills, their university teachers' lack of preparation, and their own negative disposition towards this specific area. These criticisms could mean that the methodological focus of gymnastics does not correspond with the secondary education classrooms, and furthermore the new and last modalities of gymnastics as acrobatic gymnastics, aerobic gymnastics, trampoline gymnastics and gymnastics for

all aren't learned at university. Due to these, some participants that would teach gymnastic express that were not able to apply academic knowledge in their professional practice. This leads them to discredit the initial learning. For example, there is only one narrative, which underlines the importance of a reference model in the university stage:

I worked in a way that was very similar to what I had seen during my teacher placement period (Exp.010).

### *Second research question*

The second theme shows that although many participants had a positive disposition towards teaching gymnastics at the beginning of their career, others show a resistance and have never included these practices in their teaching. In addition, a third group, who did gymnastics in their teaching, were dissatisfied with the experience.

The participants motivated to teach gymnastics at the beginning of their career stated that their personal disposition was good, that the context conditions were positive and that pupils responded satisfactorily to gymnastics. We should also highlight that in some cases, but not many, in which teachers pointed out the influence of shared experiences with their colleagues.

In my second or third year I worked with three teachers and we taught gymnastics skills. We produced a joint sequenced programme. I think we did it quite well (Exp.014).

In the past, I gave classes with a colleague who is a mini trampoline expert, and he gave me the confidence I needed (Exp.013).

In the category in which initial teaching education is not valued, participants attribute their difficulties to two causes: dissatisfaction with their initial teaching of these skills, that don't help them to overcome their lack of confidence and a negative view of their own aptitudes for teaching this discipline. The strong sense of insecurity teachers experienced was especially due to their fear of the injuries



that could be incurred while doing gymnastics.

I think these skills are very useful, but as "I'm so clumsy!"... It wasn't difficult for me to give the classes because what we did was very basic, but I didn't try to do complicated gymnastics activities, and so I left it there. Now it would be impossible for me to teach this (Exp.013).

I've been giving classes in Secondary Schools for many years. I don't teach gymnastics because I don't trust the pupils. They aren't very responsible, are immature and do stupid things (Exp.015).

Another problem is the youngsters' rejection of these activities, as they know they can't do them well (Nov.001).

In some narratives, this negative self-concept was attributed to the inadequacy of their specific university training:

My university training, as well as being obsolete, I would describe it as inadequate and poor as it was not adapted to the real world which I later found myself in. So, I had no alternative but to teach myself through experience and trial and error (Ava.006).

Teachers blame also the sometime negative disposition of pupils. They claim that pupils displayed a clear resistance to learning these skills, together with a lack of the necessary basic motor skills, often caused by early negative experiences.

It is very difficult as there are pupils in class who have refused to do gymnastics in class ever since they were small because they hurt themselves once and became frightened of gymnastics. These pupils don't want to do anything in class (Ava.005).

Pupils sometimes go to secondary education affected by experiences that made them feel ridiculous, frightened or frustrated. As Nunomura, Okade and Carrara (2012) affirm, "many pupils are naturally highly motivated when they begin but this feeling can be quashed by negative sports experiences" (p. 33). A more collaborative model may reduce pupils' fears of ridicule, failure and frustration that a competitive one. Participants confess that during their beginnings they did not know

how to respond to this situation effectively.

Finally, another category has emerged, teachers who did not dare implement the teaching of gymnastics skills. These teachers relate similar reasons to those mentioned by teachers who had a negative experience of gymnastics teaching at the beginning of their career, which totally annulled their teaching capacity. A lot of narratives coincide with Lasky's affirmations (2005) that a lack of good working conditions and resources and the inability to produce a good curriculum design interfere with teachers' capacity to obtain good practices:

At the beginning of my teaching career, in the schools where I worked, there were no facilities, until 93-94 when I did have a gymnasium and could teach gymnastics skills (Exp.009).

The truth is that when I began, I didn't teach gymnastics skills because my university training in this area was not very good (Exp. 015).

Darling-Hammond (2010) argues that the countries recognized as having the best education systems –Finland, Korea and Singapore– are known to invest a great deal in teacher education. From results, we can conclude that resources and working conditions in gymnastics must be improved, given that participants clearly found that sport facilities, and prevention and safety measures in Spain does not meet their needs.

In short, teachers are aware of aspects which have restricted their teaching of gymnastics skills: a lack of specific knowledge resulting in limitations at the beginning of their teaching career. Adequate university education could be the key to overcoming these limitations (Hadar & Brody, 2012; Vescio, Roos, & Adams, 2008). Change towards less individualistic and more collaborative learning could favour more innovative and creative pedagogic practice in the future (Armour, Makopoulou, & Chambers, 2012; O'Sullivan & Deglau, 2006) and in addition could reinforce shared knowledge. Furthermore, teaching difficulties and

insecurities at the beginning of teachers' careers could be solved more easily in schools which function as communities of practice and are spaces of participative reflection (Zeichner, 1994). Teachers' sharing of their insecurities would facilitate the finding of alternatives and solutions, especially where there are novice teachers and teachers with extensive work experience in the same centre. Shared professional knowledge, as stressed by Whitcomb, Borko and Liston (2009), could bring about a great change in gymnastics education, especially if teachers are capable of employing a reflective approach.

## CONCLUSIONS

### *The relevance of initial teacher education for initial professional action in schools*

It is evident from this study that the participants gave little relevance to their university gymnastic program and school conditions for teaching. The findings force us to reflect on the real value of initial learning or school environment when teachers simply remember having to overcome the obstacles of. For many researchers, authentic professional induction occurs through practical experience (Borko, 2004; Hargreaves, 2000) and in the relationships between new and expert teachers. Teachers learn by breaking the silence that currently exists and communicating with each other.

Korthagen (2010), amongst other authors, has argued that university studies in education are often swept away by real work environment. There have been many studies, such as those of Feiman-Nemser (2001), Korthagen (2010) and Zeichner (2012), into the phenomenon of the shock of teaching when novice teachers arrive in the classroom and, in general, researchers conclude that the impact of initial teacher education on teaching in practice tends to be minimum (Cochran-Smith, 2005). Immersion in the real world of teaching is the clue. Teaching always takes place in a particular context, and thus theoretical knowledge must take into account different

experiences in diverse contexts. Korthagen (2010) suggests using experiences is a challenge and oblige us to reconstruct our theories (Whitcomb, Borko, & Liston, 2009). In addition, given the nature of distributed knowledge, learning with colleagues allows an active dialogue to take place within the educational community. Other studies, like those by Price and Valli (2005), underline the need for teacher trainees to be immersed in practical experiences in changing contexts. In this way, they will be better able to understand the complexities of learning how to teach. Lieberman and Miller (2007), and Lieberman (2010) also agree that teacher training should be based on teaching practice in schools and on authentic classroom problems. Likewise, Macdonald and McCuaig (2012), Lampert et al. (2013), and McDonald, Kazemi and Schneider (2013) propose new pedagogies based on appropriate practices.

### *The relevance of reflection, shared experiences and support of expert teachers*

Glass and Rud (2012), in particular, synthesize the concept of reflection as a construction of meaning. As a counterpoint to routine experience, reflection involves linking personal experience with thought inspired by other experts; it deepens personal experience and relates it to other experiences and knowledge (Cordingley, 2009). Here it is understood to be a rigorous form of thinking, a systematic and disciplined procedure (Capel, Hayes, Katene, & Velija, 2011) which involves a considerable degree of curiosity. Clearly, our results don't showed great focus on reflexion. Then, something must be done in initial teacher education.

Could be reflection, as the attempt to connect individual experience and necessities with the community of practice, has to be an instrument of learning (Greenwood and Levin, 2003). In the teaching of gymnastics, we believe that the concept of reflection put forward by Glass and Rud (2012) is of particular interest. They claim reflection is both an individual

and collaborative process. From this perspective, in both initial and professional development for gymnastics teachers shared reflective practice is of great relevance as Money et al. (2009) suggested.

For Flores and Day (2006), becoming a good teacher is a complex task, and this process takes place in a specific context and requires the interaction between a variety of perspectives and practices of the different members of the educational community. Thus, they conclude that in teachers' personal and professional histories, there is a strong interrelation between their thinking and the characteristics of their place of work and its limitations. In summary, could be initial teacher education have little repercussion due to the fact that they do not take into account specific contexts and offer few opportunities to reflect on a range of different cultural contexts.

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