THE EFFECTIVENESS OF PHYSICAL EDUCATION

CONTINUING PROFESSIONAL DEVELOPMENT FOR

PRIMARY SCHOOL TEACHERS IN CYPRUS

By

ANASTASIA HADJIMATHEOU

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Abstract

The ever-growing value placed on quality education over recent decades has sparked the need for more effective policies to ensure better CPD, which entails understanding teachers' development and assessing their continuous needs as learners. In light of this, the current study aimed to explore the educational context in Cyprus and, more specifically, the gaps in existing PE-CPD provision in primary schools and between theory/ praxis, with the purpose of exploring how PE-CPD provision could better be designed and implemented to meet teachers' learning needs. Via an open-ended survey distributed to all public primary schools, interviews and focus groups with teachers and CPD providers, extensive qualitative data were collected. Purposive sampling was used to select fifteen teachers who teach PE to participate in semi-structured interviews, and snowball sampling was used to identify three CPD providers. Data were collected for the year 2012-2013. The study employed a constructivist approach to grounded theory and thematic analysis. The data revealed the crucial role of CPD providers, the importance the teachers attached to passion, a focus on co-learning, their views of themselves and their identities as teachers and learners. The increasing need for Cyprus' Ministry of Education to provide better CPD provision also emerged.

Dedication

To my parents, *Demetris* and *Androulla*,

my sister *Miranda* and brothers *Michalis* and *Andreas*

and my fiancé *Pieris*

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Completing a PhD is a learning curve full of knowledge, enthusiasm, challenges and many emotions. I am grateful for going through this process which helped in my further self-development as an individual, a teacher and a researcher.

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Chapter 1: INTRODUCTION

Educational reform movements worldwide have allocated considerable funding for - and placed much emphasis on - teachers' professional learning and growth. It has been argued that it is very important, therefore, to understand what constitutes effective Continuing Professional Development (CPD), with CPD for Physical Education (PE) teachers being no exception (Bechtel and O'Sullivan, 2006; Cordingley, 2015; Hargreaves and Fullan, 2012; Unesco, 2014). Yet, CPD provision for teachers remains an area of concern and it has been argued that CPD activities are not optimally effective in cultivating professional learning among teachers (Armour, Quennerstedt, Chambers and Makopoulou, 2015). More specifically, 'traditional' PE-CPD activities often fail to acknowledge and consider the previous experiences, interests and learning needs of teachers (Makopoulou and Armour, 2011a), are delivered off site, with no follow-up (Parker and Patton, 2017; Parker, Patton, and Tannehill, 2012) and with inadequate support (Armour and Makopoulou, 2012).

It has been argued that governments and CPD providers tend to choose ''quick fix' solutions' (Jess, Keay and Carse, 2016, p.1028) and focus on the products of CPD activities instead of the learning process, thereby neglecting the complexity of teachers' learning. In addition, in the context of Cypriot PE-CPD, where Cyprus is a highly centralized educational system, there are numerous limitations, such as the lack of teacher agency (Pashiardis, 2014), the absence of motivation (Tsangaridou and Yiallourides, 2008), and the inadequacy of in-service training (Karagiorgi and

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Nicolaidou, 2013), which means that the voices of teachers are not heard (Karagiorgi, 2012; Philippou, Kontovourki and Theodorou, 2014). As Jess, Keay and Carse, (2016, p.1029) pointed out, teachers' professional learning is often viewed as an 'isolated experience' which is disconnected to the other 'layers of the education system' and this reflects the existing evidence on CPD in Cyprus.

This doctoral study investigated PE-CPD provision for primary school teachers in Cyprus. More specifically, the study investigated the process of teachers' professional learning and how existing CPD structures support teachers to learn about PE during their careers from the perspectives of both teachers and CPD providers. The aim was to find out 'what works' from the perspectives of the key stakeholders, what is failing, and what should be changed.

This chapter is organized into six sections: my personal motivation for conducting this study, the rationale for the study, a short review of the context, the study's aim, and the research questions.

1.1. Personal motivation

The roots of this doctoral study can be found in my experience as a teacher in primary schools and, as a result, I have some understanding of the professional role and experiences of teachers in Cyprus. This study grew out of my personal interest and passion, as an individual and teacher, in the areas of sports/physical activity (former athlete), professional growth and teacher education. Putting together my areas of interest in a research study was intriguing for me and my personal interest helped me stay enthused and committed until the end of the study.

During my undergraduate degree in Education Sciences in primary schools, I observed that a lot of my colleagues felt uncomfortable in PE lectures and classes. This was highlighted in the fourth year, during the school placement, where we had to go to primary schools and teach PE in real settings. I then started wondering what was in my colleagues' minds and the reasons for their hesitance, self-conscious attitudes towards PE as a subject.

In 2008, I completed my bachelor degree in Education Sciences at the University of Cyprus. I remember my professors telling us that this is not the end of our education as teachers, in contrast it was only the beginning of our professional growth. They suggested that we, as teachers, should continue pursuing professional learning in order to be successful teachers and meet our students' needs. However, when I had to teach a class of students as a substitute teacher, I recognized that being able to continue increasing my knowledge and skills as a generalist teacher and especially as a teacher who teaches PE within the Cypriot context was not a straightforward task. On the contrary, it was a very complicated process since the difficulties and obstacles to effective CPD provision are numerous. My experiences as a teacher and a researcher taught me that professional development is a never ending journey and by continuously working toward my professional progress, assisted me to understand the complexities of learning.

I was then interested in understanding more about the professional development processes within the Cypriot educational context and specifically those structural settings that supported and hindered teachers' CPD provision. The particular concentration on Cyprus was significant due to the high value Cypriots place on education (Karagiorgi and Symeou, 2006a, b; Theodorou, 2008). In addition, since

the island joined European Union in 2004, educational reform has been undertaken without significant outcomes and developments (Hadjisoteriou and Angelides, 2014). These circumstances along with the lack of literature at a national level about teachers' CPD and particularly PE-CPD provision, solidified my decision to carry on with an in-depth interpretation of this issue. It was felt that a study focused on both teachers' and CPD providers' experiences and perspectives of existing CPD provision and settings, could give insights into the status of PE-CPD provision, fill a significant research gap in the Cypriot literature and add to the CPD and PE-CPD worldwide literature.

1.2. Rationale

There is increasing evidence to suggest that governments around the world are placing more emphasis on educational quality and in particular high quality teachers and the role they play in both social and economic development (Guerriero, 2017). CPD has been given increasing significance, and pertains to the updating of one's skills for advancement of professional skills (OECD, 2016). Researchers, educators and teachers have consistently made the case for more and better CPD funding as well as more systematic CPD research. Since, however, not all CPD activities have proven to be effective (Armour et al., 2015; Parker and Patton, 2017), robust research evidence has been sought about what works, where, when, for whom, and why.

CPD has been termed by some researchers as the continuation of education, professional training, development of staff or long-term learning, as well as education that is gained in-service and professional development (Chaves and Guapacha, 2016). As Avidov-Ungar (2016) points out, CPD is highly effective for teachers in

terms of coping with changes that may arise professionally and managerially. Yet, despite broad agreement about the importance of teachers, designing and delivering effective support for teachers' professional learning has proved to be a challenge (Hökkä and Eteläpelto 2014). The provision of high-quality CPD entails an 'understanding of how teachers develop' (Evans 2014, p.180), an assessment of the 'continuing needs of teachers as learners' (Dadds 2014, p.9) and encouragement and support for teachers to learn (Cordingley, Higgins, Greany, Buckler, Coles-Jordan, Crisp, Saunders and Coe, 2015).

Likewise, from a policy perspective, 'effective policies are usually far more easily designed than implemented' (OECD 2015b, p.14). As Harris (2010) points out, although there have been numerous educational reforms in many countries 'the anticipated results have not always followed' (p.197). Moreover, as the OECD (2015a) points out, governments seeking to improve the performance of their educational systems need to be mindful of the particular contextual features of their countries if reforms are to achieve the desired results.

Despite this recognition however, there are persistent concerns about the quality of CPD provision. In the context of PE, similar questions remain about the quality and effectiveness of CPD provision. Indeed, there is wealth of research evidence suggesting that primary school teachers are concerned about teaching PE, with a number of challenges (Armour and Harris, 2013; Cale, Harris and Chen, 2014; Harris, Cale and Musson, 2012; Jess, Keay and Carse, 2016; Jess and McEvilly, 2013). It is somewhat obvious to state that PE-CPD provision should meet teachers' learning needs, but various studies suggest that in many cases, it does not (Chaves and Guapacha, 2016; Hunzicker, 2011; Pazyura, 2015; Sorensen, 2016).

1.3. National context of the study

In line with Unesco recommendations (Forum, 2015) the Cypriot Ministry of Education and Culture (MoEC) is seeking to improve the national education system, but there is little evidence to suggest that teachers have been consulted (Karagiorgi and Symeou 2007). As with many 'top-down' educational reforms, there is a lack of understanding about how teachers – who are required to implement the reforms – should be supported in their learning needs. This study contributes to filling that gap both in the specific context of Cyprus and more widely where governments seek to deliver system-wide educational reforms.

The importance of CPD for teachers has been recognized and included in the Cypriot government agendas (MoEC, 2013). It is important to note, however, that throughout the conduct of this study, the Cypriot educational system was in a dynamic phase of reform and modernization, including a new emphasis on understanding 'the important role of PE and giving it the attention it deserves in terms of effective development and support of their staff' (MoEC, 2013, p.412). It is also important that the global financial crisis impacted very strongly on Cyprus during the research period and this important contextual factor is reflected in the data. Furthermore, although policy documents state the importance of PE, there is little existing evidence on the ways in which PE-CPD could be designed to meet teachers' learning needs. Also, PE in primary schools is taught by generalist teachers.

1.4. Research aim

The main purpose of this research is to investigate whether CPD provision in PE meets the career-long learning needs of primary school teachers in Cyprus, where the public education system is highly centralized and conservative (Tsangaridou,

2014; Koutselini and Koumi, 2013; Pashiardis, 2004). Although the present study has adopted elements of a situated understanding of learning as a theoretical framework (Zein, 2016), this particular study was not intended to examine the existing structures per se, but rather to explore how these PE teachers, as individual agents (Avidov-Ungar, 2016), experienced the existing PE-CPD system, engaged in professional learning (Zein, 2015), and understood the influence of the immediate (e.g. school) and wider (e.g. policies) context upon their capacity to learn and develop as professionals.

Situated theorists like Lave and Wenger (1991) locate learning in social practice, as people live and participate in the world. It was significant to consider the social context during the data collection and analysis. The social context in which learning occurs might inhibit or encourage learning. Situated approaches involve the examination of social systems that are recognized as much more comprehensive and complex. The aim of this study was not to mainly explore the social context of teachers' PE-CPD. More specifically and based on the theoretical framework, the study aimed to understand through social interaction (Vygotsky, 1978). The study's aim was to see how these teachers view their world, and particularly the world of PE-CPD. It was considered appropriate, based on the study's aim, to have a socio-cultural lens from which to make sense of the data. Constructivism focuses on ways in which 'learners construct or find meaning in their subjective experience' (Boghossian, 2006, p.714). As Ertmer and Newby (2013) argue, knowledge is 'linked to the context under study and to the experiences that the participants bring to the context' (p.57). The main focus of this study was on the ways in which these individuals participate in learning environments (Vygotsky, 1978).

The present study has reinforced the need to examine not only contextual influences upon teacher learning but also personal factors that affect, both positively and negatively, teachers' ability to learn.

In relation to CPD, and PE-CPD provision, for example, it has often been proven that one-day, off-site activities can be unproductive and ineffective for teachers (Armour and Yelling, 2007; Avalos, 2011; Di Paola and Hoy, 2014; Garet et al., 2001). In Cyprus, most activities take the form of this one-time type of training with very little follow up or evaluation (Unesco, 2014). CPD sessions are voluntary, and no credits are awarded to teachers that might, for example, help with promotion. In effect, there is a lack of teacher accountability and no 'agreed standards for professional development training programmes' exist; teachers do not need to meet any 'specific requirements for professional development in order to keep their jobs' (Koutselini and Koumi, 2013, p.78).

It is also worth pointing out that despite the economic difficulties, there has been a growing interest in teachers' CPD and a focus on teacher quality. Although policy documents state the importance of PE and teachers' PE-CPD (MoEC, 2013), there is little existing evidence about the most effective ways to design PE-CPD to meet teachers' complex learning needs. In this regard and many others, Cypriot PE-CPD is similar to provision elsewhere in the world. Thus the findings of this study will be of interest in other contexts beyond Cyprus.

Thus the objectives of this research include: an in-depth analysis of what can be learnt from the research literature about 'effective' and 'ineffective' models of CPD for professionals, teachers and PE teachers, what learning theories underpin

different models of CPD, what is the nature of CPD opportunities offered to PE teachers in Cyprus throughout their career, what evidence is there to suggest that the current model of CPD offered to PE teachers in Cyprus is either 'effective' or 'ineffective,' and what would an 'effective' model of CPD look like for PE teachers in Cyprus and how could it be implemented. The implications of this research for PE teachers' professional learning in Cyprus and in other comparable international contexts will also be investigated. These questions are important in shaping an enquiry into the wider dimensions of what constitutes effective CPD provision for teachers and the ways in which governments and policy-makers can implement more effective national strategies to ensure that teachers have adequate and sufficient support to continually enhance their knowledge, skills, and understanding.

1.5. Research questions

The main research question for this study was:

> Does PE-CPD meet the career-long learning needs of primary school teachers in Cyprus?

In particular, the study aimed to address the following research sub-questions:

i.   What can be learnt from the research literature about 'effective' and 'ineffective' models of CPD for professionals, teachers and PE teachers?

ii. What learning theories underpin different models of CPD?

iii. What is the nature of CPD opportunities offered to PE teachers in Cyprus throughout their careers?

iv. What evidence is there to suggest that the current model of CPD offered to PE teachers in Cyprus is either 'effective' or 'ineffective,' and why?

v.   What would an 'effective' model of CPD look like for PE teachers in Cyprus and how could it be implemented?

vi. What are the implications of this research for PE teachers in Cyprus and in other comparable international contexts? How can this research inform CPD policy?

1.6   Originality of the study

The originality of this thesis lies in its important finding of the significance teachers placed on the CPD provider, on his/her role during CPD provision, on his/her educational background, experiences and mentality, and the effect of his/her personal character traits in motivating (or demotivating) teachers during the learning process. The data serve to highlight the teachers' beliefs in the overriding importance of CPD providers' academic background when it comes to supporting teachers effectively. If CPD providers lack sufficient academic background and have not put their theories into practice, then this detracts from their credibility and does not help teachers in their own professional development.

Teachers felt that CPD providers were more helpful and supportive – and provided CPD provision more effectively – if they possessed certain characteristics. The characteristics that teachers identified frequently were being sensitive, close to the teachers, believing in team spirit and having positive energy (*see* section 4.2.1). Teachers also stressed that CPD providers should sympathise with them whereas others felt very strongly about the learning environment that is created by the relationship between the teachers and CPD providers (*see* Chapter 4).

The importance of identifying these characteristics of CPD providers cannot be stressed highly enough. It is important to identify such characteristics if more light is to be shed on what constitutes effective and ineffective CPD provision – in identifying, that is, what works and does not work for teachers when it comes to their learning and their continuous professional development. Not only does the work itself fill in gaps with respect to teachers' perceptions of CPD providers at a time of educational reform in Cyprus, it also enriches the international literature by suggesting that specific character traits of CPD providers can, via an extrapolation of the findings, enhance teachers' motivation and lead to more effective CPD provision.

1.7 Organizational structure of the thesis

In order to answer these research questions, following this introduction, the thesis is organized into five chapters.

Chapter 2 presents the central conceptual and empirical literature on teachers' CPD. This chapter has three sections. The first section provides a general overview of the international literature and studies focusing on teachers' CPD and PE-CPD provision. The second section presents a description and analysis of the Cypriot educational system and specifically the Cypriot contextual information relevant to CPD and PE-CPD provision. In the third section, relevant learning theories are examined in depth, as a base to ground the data and discussion.

Chapter 3 provides an overview of the methodological approach to addressing the research questions and achieving the research objectives. The chapter includes discussion on research methodology, design and methods, and also issues of sampling, data collection, and data analysis. Following this, ethical issues, quality of research and specifically validity, reliability and trustworthiness, are discussed.

Chapter 4 is comprised of two parts. The first part is a prelude which introduces the case-study teacher participants in order to provide context for the findings and their interpretation. In the second part, the ten themes which were constructed through the data analysis are reported and assembled into three main thematic groups so as to address the research questions of this study; a) *'Experiences from PE-CPD provision in Cyprus',* b) *'PE-CPD effectiveness and ineffectiveness',* c) *'Ideal model of PE-CPD'.*

Chapter 5 provides a detailed discussion of the key findings of the study while the final chapter includes the conclusions of the study, its strengths and limitations, contribution and implications, and recommendations for future PE-CPD provision in the Cypriot context. This chapter finishes with a discussion of how this research can be taken forward.

Chapter 2: LITERATURE REVIEW

This chapter analyses the international literature on the concept of CPD, which is the main topic of the present study. The information and the theoretical context are organized around the research questions and into three sections and their respective aims. The first aim is the provision of an overview of the literature related to CPD and PE-CPD. The second aim is the description of the Greek Cypriot educational system and, more specifically, the composition of the CPD system. The third and final aim of this chapter is to provide a theoretical framework that will form the backbone of the analysis as a strong 'foundation' for the examination and understanding of teacher participants' views and experiences regarding CPD provision and the CPD (PE-CPD) system in which they work and operate as professionals.

2.1. Continuing Professional Development for Teachers

This first section of the literature review aims to explicate the principal theoretical concepts relating to teachers' CPD and PE-CPD. In particular, this section is divided into four main sub-sections: a) CPD definition; b) CPD effectiveness; c) CPD ineffectiveness and, finally, d) PE-CPD.

The landscape of education is being transformed in response to 21st century demands for increased economic growth and higher levels of knowledge and skills (OECD, 2015a). Governmental expectations are high because the growth of economies and societies is strongly correlated to the competence of populations (Barro and Lee, 2015). It has been argued, therefore, that there is a need to reform

education to ensure it can contribute effectively to economic and social development (Harris, Graham, and Adkins, 2015).

A range of research has identified the key components of successful educational reforms (Donnell and Gettinger, 2015; Korthagen, 2017; Parker and Patton, 2017). The importance of focusing on teachers' CPD and learning is widely advocated (Caena, 2011; Darling-Hammond and McLaughlin, 2011; OECD, 2012) because teachers are situated at the forefront of educational reforms (Furlong, Cochran-Smith, and Brennan, 2013). Indeed, as Hargreaves and Fullan (2012) point out, 'teaching is at a crossroads at the top of the world' (xii). As a consequence, it has been argued that improvements or changes to teachers' professional development should be a priority in all governments' educational reform agendas (Hanushek, 2011). In line with Unesco recommendations (Forum, 2015), the Cypriot Ministry of Education is seeking to improve the national education system, but there is little evidence to suggest that teachers have been consulted (Karagiorgi and Symeou, 2007). As with many 'top-down' educational reforms, there appears to be a lack of understanding about how teachers – who are required to implement the reforms – should be supported in their learning needs.

Up until a few decades ago, initial teacher training was considered to be adequate for an individual's professional life (Wermke, 2012). This notion was later rejected and CPD is viewed as important - not only within the teaching profession but also in other professions. Even if initial training before induction to the teaching profession is at its highest level, it can never hope to fulfil all the criteria for supporting teachers throughout their career (Schleicher, 2012).

2.1.1. Defining CPD

CPD is a term which is defined differently, but there is also a core of agreement in related terms such as continuing education, training, staff development (de Vries, Jansen and van de Grift, 2013), lifelong learning, in-service education, professional development (McMillan, McConnell and O'Sullivan, 2016) and on-the-job learning (Muijs and Lindsay, 2008).

There is a wide range of ways in which CPD can be defined and interpreted (Desimone, 2009; Makopoulou and Armour, 2011a). A way to approach the definition of CPD is to explain and clarify each word of the CPD terminology in turn. If we disentangle the CPD term from the three constituents that define it, its significance as a term becomes clearer.

The first important constituent is "continuity", which reflects a need for teachers' constant professional development. Numerous academics have stressed the significance of upgrading and improving professional development (Armour et al., 2015; Armour and Makopoulou, 2012; Jess and McEvilly, 2013; Parker and Patton, 2017; Patton, Parker and Pratt, 2013; Petrie and McGee, 2012). Similarly, many academics have stated that the prevalent one-shot workshops or seminars are not the most effective way to support teachers' learning, progression and performance (Armour and Makopoulou, 2012; Parker, Patton and Tannehill, 2012). Continuity highlights the need for constant, on-going, lifelong professional growth and progression in a teacher's professional career, thereby conceptualizing teachers' professional development as an endless updating practice (Roesken-Winter, Hoyles and Blomeke, 2015).

The second constituent is linked to the concern of teachers as professionals. Professionalization in teaching has been a problematic concept (Ingersoll, Miller and Stuckey, 2014) and some have expressed reluctance to label teaching as a 'full' profession and teachers as professionals (Day, 1999; Ingersoll, Merrill and Stuckey, 2014). The utilization of both the findings of Day's study (1999) and Ingersoll, Merrill and Stuckey's research (2014) leads to the conclusion that although the teaching occupation fits many of the professional requirements, it still requires or lacks full professional autonomy. From this viewpoint, therefore, teaching has been viewed by some as a semi-profession (Demirkasimoglu, 2010).

In contrast, teachers may not be recognized as professionals but their occupational behavior can be considered as professional since they are dedicated and committed to what they do, and their communication with students, colleagues and others is of a professional standard. A statement correlated to the above notion is Hargreaves' (1998b) expression that: 'good teachers are not just well oiled machines' (p.835). He continues by arguing that the teaching occupation has to do with feelings and not only with knowledge of a subject. Consistent with this notion, Hargreaves and Fullan (2012) remind us that 'teachers really matter' (p.xii) and it is important to value and improve the teaching profession. There is a clear conception resulting from all the above that since a teacher feels and behaves as a professional, they should unceasingly upgrade and renew their knowledge and abilities throughout all stages of their career (Armour and Makopoulou, 2012; Ingersoll, Merrill and Stuckey, 2014). By training and continuously developing themselves professionally, teachers can overcome their hesitations and fears of criticism, which will then motivate them to engage consciously in the diversification of teaching techniques, as well as the

acquisition of the necessary knowledge and skills required in their application (Santangelo and Tomlinson, 2012).

The last feature of CPD refers to "development". A dictionary definition of development describes it as state of growth, advancement or progress. The aim of professional development is to refine and modernize personal performance and enhance career progression, thus aiming to support teachers' professionalism (Day, 1999). Schleicher (2012) highlights the significance of the need for exceptional quality teachers. From this viewpoint, The Council of European Union (2009) indicated that teachers' CPD '…need[s] to be of high quality, relevant to needs and based on a well-balanced combination of solid academic research and extensive practical experience' (C302/7).

The research community has focused increasingly on CPD for teachers (Armour et al. 2015; de Vries, Jansen and van de Grift, 2013; van de Bergh, Ros and Beijaard, 2015). Despite these efforts, some ambiguity remains (Quennerstedt and Maivorsdotter, 2016). Like other academics (de Vries, Jansen and van de Grift, 2013; Janssen, Kreijns, Bastiaens, Stijnen and Vermeulen, 2012), Opfer and Pedder (2011) highlight the importance of teachers' professional development, constant learning and career advancement – all of which profoundly contribute to educational reform and enhancement. There is widespread agreement that the quality of teachers' performance is linked to the effectiveness and quality of education generally (Armour and Makopoulou, 2012; Garet, Porter, Desimone, Birman and Yoon, 2001; Hildebrandt and Eom, 2011) but there is less agreement on how to support teachers' learning. Nonetheless, many authors argue that CPD for teachers

impacts on students' learning outcomes and school improvement (Armour et al., 2015; Desimone, 2009; Patton, Parker and Pratt, 2013).

Teachers' professional development strongly revolves around the concept of teachers' *learning* (Avalos, 2011). Closely linked with the concept of teachers' learning is the vital axis of the lifelong element. Lifelong learning is the concept that has contributed to the alteration of the traditional CPD; from one-shot learning opportunity to the idea of learning throughout life (Richter, Kunter, Klusmann, Ludtke and Baument, 2011). Along similar lines, lifelong learning highlights the idea that short-term or temporary professional education is substituted for steady and permanent learning which takes place within various settings or locations, and via different tactics. Several academics have attempted to describe CPD within this framework, also indicating the format of the learning activities (e.g. formal, informal) through which teachers can increase their education and skills and achieve career progression (Chipchase, Johnston and Long, 2012).

Drawing attention to the broad range of types of learning activities, and through its efforts to develop and improve learning ("Lifelong Learning for All"), Schleicher (2012) underlined the importance of the concepts of formal, non-formal, and informal learning.

Via their own research, Smith and Clayton (2009, p.8) also provided definitions for three types of learning. Based on these definitional attempts, the three types of learning activities can be defined as follows:

Formal learning activities are organized and structured activities with learning purposes which usually lead to the obtaining of a qualification or award and are organized by the employer or educational institution.

Non-formal learning activities are the activities which are not provided by an institution, are not linked to the gain of a qualification or certification, but still have learning intentions through a structured course of training.

Informal learning activities are non-intentional activities that are not organized or provided by an educational institution, and the learning occurs from the experiences the learner has acquired either at work, at home, or in their free time.

Day (1999) harvested all these facets of CPD and summarized them in this comprehensive definitional paragraph:

> Professional development consists of all natural learning experiences and those conscious and planned activities which are intended to be of direct or indirect benefit to the individual, group or school and which contribute, through these, to the quality of education in the classroom. It is the process by which, alone and with others, teachers review, renew and extend their commitment as change agents to the moral purposes of teaching; and by which they acquire and develop critically the knowledge, skills and emotional intelligence essential to good professional thinking, planning and practice with children, young people and colleagues through each phase of their teaching lives
>
> (Day, 1999, p4).

This all-inclusive and helpful paragraph of Day (1999) has been used and cited by many academics in their efforts to describe and include each aspect of CPD in their studies (McMillan, McConnell and O'Sullivan, 2016; Roesken-Winter, Hoyles and Blomeke, 2015). From a similar perspective, Bubb and Earley (2007) and Kelchtermans (2004), respectively, explain that CPD is:

…an on-going process encompassing all formal and informal learning experiences that enable all staff in schools, individually and with others, to think about what they are doing, enhance their knowledge and skills and improve ways of working so that pupil learning and well-being is enhanced as a result. It should achieve a balance between individual, group, school and national needs; encourage a commitment to professional and personal growth; and increase resilience, self-confidence, job satisfaction and enthusiasm for working with children and colleagues (Bubb and Early, 2007, p.4).

a learning process resulting from meaningful interaction with the context (both in time and space) and eventually leading to changes in teachers' professional practice (actions) and in their thinking about practice (Kelchtermans, 2004, p.220).

Implicit in these definitions of teachers' professional development is the belief that teachers are considered as change agents, constructors of knowledge and transformers of society.

The definition adopted in the present study is the above detailed definition which Day (1999) proposed, since it has as its main focus teachers' learning. Because Day's definition emphasizes both teachers' individual professional development and planned and intentional CPD activities, it offers the appropriate conceptual framework within which to examine whether the CPD provision which is offered by the Ministry meets Cypriot primary school teachers' learning needs and if these teachers consider existing PE-CPD to be effective or not. In addition to this, this definition highlights the complexity of the learning process and PE-CPD. In this study, CPD alludes to all the formal learning activities provided by the MoEC, which occur after formal teacher initial training has ended. It is important to note that throughout the data collection period, the use of a specific definition of CPD

('επιμόρφωση' in Greek) was purposely avoided in conversations with teachers in order to capture how these teachers comprehend CPD and their CPD experiences within the Cypriot setting.

2.1.2. CPD Effectiveness

> 'Success is no longer mainly about what we know – Google knows everything – but about what we can do with what we know'. (Schleicher, 2015, p.12)

It is widely recognized that high quality teachers can have a positive impact on students' learning and achievements (Atencio, Jess and Dewar, 2012; Barrera-Pedemonte, 2016; Jayaram, Moffit and Scott, 2012; OECD, 2009; Whitworth and Chiu, 2015). In particular, 'effective' CPD is at the heart of what many governments worldwide are striving for; educational improvement and success. It is for this reason that 'billions of dollars and hours [are] invested globally' (Bowe and Gore, 2016, p.1) 'in renewing the capacity of their teaching force on a continuous basis and thereby improving schools' (Gemeda and Tynjala, 2015, p.15). In line with this, is the common belief that the future of a nation is contingent on the excellence of the education it delivers to the younger generation.

Numerous educational researchers (Avalos, 2011; Cordingley et al. 2015; De Naeghel, van Keer, Vansteenkiste, Haerens and Aelterman, 2016; Desimone and Garet, 2015; DiPaola and Hoy, 2014; Hill, Beisiegel and Jacob, 2013; Jess and McEvilly, 2013; Korthagen, 2017; Patton, Parker and Tannehill, 2015) have sought to identify the principles which will constitute the magic, ideal 'formula' for successful and effective CPD. Through these efforts, a plethora of lists of principles, features and approaches which contribute to CPD effectiveness have been formulated. For instance, Taylor (2010, p.34-35) concluded that CPD can be effective when:

- establishing a clarity of purpose at the outset in CPD activity

- specifying a focus and goal for CPD activity aligned to clear timescales

- including a focus on pupil outcomes in CPD activity

- ensuring participants' ownership of CPD activity

- including time for reflection and feedback

- ensuring collaborative approaches to CPD

- developing strategic leadership of CPD

- understanding how to evaluate the impact of CPD

Effective CPD 'creates new images of what, when, and how teachers learn' (Darling-Hammond and McLaughlin, 2011, p.82). According to Darling-Hammond and McLaughlin (2011, p.82) the 'new images' for effective CPD require specific elements. They must:

- engage teachers in concrete tasks of teaching, assessment, observation, and reflection that illuminate the processes of learning and development

- be grounded in inquiry, and experimentation that are participant-driven

- be collaborative, involving the sharing of knowledge among educators and focusing on teachers' communities of practice rather than on individual teachers

- be connected to and derived from teachers' work with their students

- be sustained, ongoing, intensive, and supported by modeling, coaching, and the collective solving of specific problems of practice, and, finally,

- be connected to other aspects of school change.

Similarly, after analyzing the characteristics of effective CPD, Guskey (2003, p.749) ascertained that in order for CPD to be effective, it needs to:

- enrich teachers' content and pedagogical knowledge

- provide sufficient time and other resources

- promote collegiality and collaborative exchange

- evaluate procedures

- be school- or site-based.

In agreement with all the characteristics of effective CPD provision, the OECD (2005) noted that:

> Effective professional development is on-going, includes training, practice and feedback, and provides adequate time and follow-up support. Successful programmes involve teachers in learning activities that are similar to ones they will use with their students, and encourage the development of teachers' learning communities. There is growing interest in developing schools as learning organisations, and in ways for teachers to share their expertise and experience more systematically (p.95).

This multiplicity and absence of a 'common language' (Kennedy, 2016, p.2) reflects the different purposes of CPD and the different ways of viewing CPD effectiveness, hence highlighting its 'intricate and multifaceted nature' (Patton, Parker and Neutzling, 2012, p.523).

The most frequently mentioned features for CPD to be effective and worthwhile are:

- **content knowledge focus** (Berry and Loughran, 2010; Desimone, 2009, 2011; Garet et al., 2001, 2008)

- **active learning** (Desimone and Garet, 2015; DiPaola and Hoy, 2014)

- **coherence** (Armour and Yelling, 2007; Darling-Hammond, 2006; Desimone, 2009; Guskey, 2000)

- **sustained over time** (Desimone, 2011; Feiman-Nemser, 2012; Guskey and Yoon, 2009)

- **collective participation** (Cordingley, Bell, Rundell and Evans, 2005; Yoon, Duncan, Lee, Scarloss and Shapley, 2007)

Shulman (1987) considered the issue from another perspective when he sought to identify the essential components of teachers' knowledge base:

> content knowledge; general pedagogical knowledge, with special reference to those broad principles and strategies of classroom management and organization that appear to transcend subject matter; curriculum knowledge, with particular grasp of the materials and programs that serve as "tools of trade" for teachers; pedagogical content knowledge, which is a special amalgam of content and pedagogy that is uniquely the province of teachers, their own special form of professional understanding; knowledge of learners and their characteristics; knowledge of educational contexts, ranging from the workings of the group or classroom, the governance and financing of school districts, to the character of communities and cultures; and knowledge of educational ends, purposes, and values, and their philosophical and historical grounds (p.8).

Thus, from Shulman's perspective, good teaching practice necessitates content knowledge, which relates to the subject matter to be taught, and pedagogical content knowledge which involves teachers who know how to teach the subject matter, understand students' common learning difficulties and assumptions, and deliver the material in a way which makes it understandable to students (Shulman, 1986,1987). As Feiman-Nemser (2012) put it, content knowledge emphasizes an understanding

of how perceptions and processes 'fit together' and involves 'knowledge about knowledge' (p.77). This growth in teachers' content knowledge and pedagogical content knowledge is not automatic and so it requires CPD to support the development of effective teachers.

There is agreement in the literature that teachers' content knowledge plays a central role in the enhancement of teachers' teaching and learning (Desimone, 2009; Shulman, 1986, 1987). Furthermore, there is evidence that pedagogical content knowledge is a significant determinant of students' learning results (Hattie, 2009; Kleickmann et al., 2013). Acknowledging the defects, gaps and weaknesses in teachers' initial training, which can potentially hinder teachers' progress and effectiveness, supports an emphasis on teachers' subject matter knowledge as part of CPD. High levels of content knowledge together with pedagogical content knowledge can improve and reinforce teachers' understanding of how students learn (Feiman-Nemser, 2012). In light of all this, content focus can be regarded as the most influential feature of CPD (Desimone, 2011; Weißenrieder, Roesken-Winter, Schueler, Binner, and Blömeke, 2015).

It has been widely argued that initial teacher training and teaching experience are inadequate for advancing teachers' knowledge base (Graham and Scott, 2016; Korhonen, Heikkinen, Kiviniemi and Tynjala, 2017; Tant and Watelain, 2016; Tsangaridou, 2016, 2017). There are several CPD elements and activities which can reinforce teachers' content knowledge and pedagogical content knowledge. For instance, allowing teachers time for reflection is highly valued as an important component for the enhancement of teachers' content knowledge (de Vries, Jansen and van de Grift, 2013). Participating in a variety of CPD activities, deep learning

discussions, active learning events, being part of collaborative work with teacher colleagues, peer teaching, and analyses of lessons which were video recorded have also been identified as essential for the development of teachers' content knowledge (Garet et al., 2001).

It is important that all the CPD activities which aim to advance teachers' knowledge base should correspond to teachers' needs, concerns and expectations. Another important component for CPD to be effective is to have frequent evaluation procedures regarding teachers' difficulties, strengths, knowledge, skills but also students' learning outcomes and difficulties. If CPD activities allow teachers to ask hard questions, to experiment, to investigate and to analyze different viewpoints, positive outcomes are more likely for teachers (Feiman-Nemser, 2012).

Several academics have noted that it is extremely important for teachers to be actively engaged in their own learning (Berry and Loughran, 2010; Desimone, 2011; Desimone and Garet, 2015; Garet et al., 2001). When CPD activities encourage teachers to participate in active learning procedures, they are treated as active learners and there is a more 'hands-on' approach (Penuel, Fishman, Yamaguchi and Gallagher, 2007, p.931), allowing teachers to feel more enthused and to become engaged in their professional learning (Heller, Daehler, Wong, Shinohara and Miratrix, 2012).

Opportunities for 'co-planning and co-teaching' (Caena, 2011, p.12); 'receiving feedback, analyzing student work' (Desimone and Garet, 2015, p.253); 'observing other teachers, practicing what has been learned and receiving feedback, leading and participating in discussions, applying their new knowledge to lesson plans or participating in activities as students' (Whitworth and Chiu, 2015, p.123) are at the

heart of active learning. All these active learning CPD opportunities echo Day's (1999, p.2) statement that: 'Teachers cannot be developed (passively). They develop (actively)'. A CPD activity which is in line with teachers' learning objectives and ambitions, with students' needs, adds to earlier CPD events, aligns with other activities and allows for discussions among teachers is more likely to be effective (Desimone and Garet, 2015; Whitworth and Chiu, 2015). For a CPD activity to be coherent and effective, it also needs to be linked with the relevant 'national, state, and local frameworks, standards and assessments' (Garet et al., 2001, p.927). A coherent set of learning activities facilitates professional dialogue between teachers, and thus strengthens teachers' understanding of how to make changes in their teaching and improve students' learning (Garet et al., 2001).

Numerous studies have focused on the duration and intensity of CPD activities and how these can have an impact on CPD effectiveness (Cordingley et al., 2015; Darling-Hammond and McLaughlin, 2011; Desimone, 2011; Garet et al., 2001; Kennedy, 2016). In order to accomplish educational reform, ongoing, intensive, sustained CPD activities are needed. Long-lasting CPD activities can create an environment which enables teachers to engage in 'in-depth discussion for content, student conceptions and misconceptions and pedagogical strategies' (Garet et al., 2001, p.922). Besides, the longer the time teachers have to think, comprehend, process, absorb, try, test and reflect on the new learning strategy or the new pedagogical theory, the more complete the outcome (teachers' learning, teaching, thus students' learning) will be.

Overall, extended and ongoing CPD activities seem to be more effective than activities of shorter temporal duration (Kennedy, 2016; Lipowsky and Rzejak, 2015;

Sachs, 2016). However, it is not only the temporal duration of the activity that is significant. Teachers' CPD can be effective when the time is 'well organized, carefully structured, purposefully directed, and focused on content or pedagogy or both' (Guskey and Yoon, 2009, p.499).

Research has distinctly highlighted the value of collaboration in teachers' CPD activities (Darling-Hammond and Richardson, 2009; McMillan, McConnell and O'Sullivan, 2016; Olivier and Huffman, 2016). On the other hand, the "isolated" culture within the teaching profession keeps teachers from meaningful interaction with peers, hindering the sharing of successful teaching practices and consequently decreasing the opportunities for increasing student achievement (Doolittle, Sudeck and Rattigan, 2008). For Hargreaves and Fullan (2012), uncertainty, isolation, and individualism are a toxic cocktail' (p.107). Several studies have showed that teachers' collaboration is related to students' success (Campbell, Lieberman and Yashkina, 2016; Ronfeldt, Farmer, Mcqueen and Grissom, 2015; Spencer, 2016), however the research remains inadequate (Hairon, Wee Pin Goh and Chua, 2015), since there are not many studies that involve an in-depth understanding of the activities that teachers are more engaged with, and the settings and context of these activities that allow meaningful interactions among the teachers.

Significantly, at the core of this collegiality is the focus on people and their relationships. Studies have found that it is necessary to give time to teachers during their work so that they can interact with their peers, share teaching practices, prepare lesson plans together, measure students' work together, and have peer lesson observations (Opfer and Pedder, 2011; Wenger, 1998). However, Mockler (2005) acknowledges that it is necessary for teachers to have the '…willingness to

be open to change and transformation in themselves. Such willingness comes only with a readiness to take risks in opening oneself up to others, in "being real"' (p.742). As Brookfield (1990) points out, if teachers and educators define themselves 'only as content or skill experts within some narrowly restricted domain,' they deprive themselves from the opportunity to act 'as change agents involved in helping students shape the world they inhabit' (p.17).

The concepts of Professional Learning Communities (PLC) and Communities of practice (CoP) have been at the crux of numerous studies on CPD (DuFour, DuFour, Eaker and Many, 2010; Olivier and Huffman, 2016; Watson, 2014) and endeavors concentrating on teachers' CPD improvement. For Schmoker (2006) and Lieberman and Miller (2014), PLCs are the 'best, most agreed-upon means by which to continuously improve instruction and student performance' (Schmoker, 2006, p.106), and should 'become the reform of this century with teachers as critical participants' (Lieberman and Miller, 2014, p.16). There is a range of definitions for teachers' PLCs but all definitions highlight that within PLCs 'teachers work collaboratively to reflect on their practice, examine evidence about the relationship between practice and student outcomes, and make changes that improve teaching and learning for the particular students in their classes' (McLaughlin and Talbert, 2006, p.4). PLCs combine various features such as: a shared vision, mission and values; a collaborative culture; engagement in inquiry; reflective practice and dialogue (DuFour et al., 2010; Lee and Lee, 2013; McConnell et al., 2013).

There are prerequisites of immense importance for creating collegial learning opportunities and building a collaborative culture, which will be effective and successful for teachers' CPD growth. These might include the development of trust

and respect among teachers, principals, CPD providers and anybody else who is involved in teachers' CPD; the avoidance of spontaneity and chance and the creation of thoughtful and well-designed provision and planning of structures and settings; a positive energy and atmosphere; and support mechanisms which are dynamic and foster a safe and caring environment (Hargreaves and Fullan, 2012; McConnell et al., 2013). To echo the words of Fullan (2001), 'it is actually the relationships that make the difference' (p.51). As Day (1999) put it: teaching 'is a synthesis of the head and the heart' (p.2). Hargreaves (1998a) argued that the 'emotional politics' (p.316) of teachers' professional learning should be acknowledged in educational reforms and in CPD design. Similarly, Day (1999) pointed that:

> …professional development must be concerned with teachers' whole selves since it is these which bring significance to the meaning of the teaching act and the learning which results (p.206).

2.1.3. CPD Ineffectiveness

As reviewed in the previous section, effective CPD includes activities which are methodical, continuous, and well organized, enabling teachers to reflect on their practice, to experiment, to collaborate with peers, to observe others' lessons, to co-teach, to have deep conversations with others about their professional learning, and so much more. All this is in contrast to the traditional forms of CPD which are frequently considered ineffective (Avalos, 2011; Armour and Yelling, 2007; Desimone, 2011; Hill, Beisiegel and Jacob, 2013; Pazyura, 2015).

There is much research evidence on what constitutes ineffective CPD; and the key features have been identified as: 'short-sighted', 'fragmented', 'static', 'one-size-fits-

all' nature, following a 'traditional' and 'passive tactic', delivered through 'one-shot' workshops, with an 'antiquated' attitude and having little impact on teachers' learning and practices (Campbell, Lieberman and Yashkina, 2016; Darling-Hammond, 2016; Roesken-Winter, Hoyles and Blömeke, 2015). A serious impediment to teachers' improvement and effectiveness is the 'one-shot', 'short shrift' (DiPaola and Hoy, 2014, p.167) CPD programs and activities. Research has shown consistently that the time allocated for teachers' professional learning and training is insufficient (Caena, 2011; Garet et al., 2001; Opfer, 2016; Phasha, Bipath and Beckmann, 2016). The study by Postholm and Waege (2015) indicated that considerable time and long-term efforts are needed to effect change in teachers' education. Time constraints in teachers' CPD do not allow for a thorough understanding of the new knowledge or practice; trying it or testing in practice; reflective practice; getting feedback; critical dialogue and further discussion with peers. Limited time on teachers' CPD, together with stand-alone workshops or seminars and the absence of continuity and follow-up, mean that CPD of this type is likely to have little positive impact on teachers' behaviors (Guskey and Yoon, 2009).

Yoon et al. (2007) analyzed a wide range of studies on CPD and concluded that those activities 'that had greater than 14 hours of professional development showed a positive and significant effect on student achievement' (p.12). It is problematic, therefore, to find that most CPD activities do not even reach half of those designated 14 hours. Therefore, it can be stressed that it is important for teachers to have CPD activities of longer duration, and it is equally important for the development of follow-up programmes in the form of continuity, support and improvement. In short: 'teachers need time to learn, reflect and accumulate new knowledge (Opfer, 2016, p.7).

While recently a greater emphasis has been placed on the value of teachers' CPD, there remain concerns about its organization. For example, as Armour (2006) points out, teachers' CPD is usually 'delivered out of context' and 'cannot be transferred to their schools' (p.204). Significantly, 'the nature of learning depends on the uniqueness of the context, person and so on' (Opfer and Pedder, 2011, p.379). There can be a variety of learning contexts based on the individual teacher, the school and the activities in which teachers are engaged. Failure to consider teachers' workplace or learning context and a 'one-size fits all' approach to CPD provision can be unfavorable for achieving maximum impact of CPD activities on teachers' professional learning. A school-level learning context is created via the:

> multiple social interactions with colleagues, parents, principals; the shared and contested norms and values, habits and traditions that make up the "culture" of a particular school; the policy decisions and measures that constitute the political and structural framework schools have to operate in (Kelchtermans, 2004, p.221).

This is best described by Opfer and Pedder (2011), who point out that teachers' learning 'evolves as a nested system involving systems within the systems' (p.379). Given the uniqueness of a learning context, it seems apparent that CPD must be allied with the specific context of each teachers' school, since a set of CPD activities cannot have the same effect in two divergent contexts with divergent teachers. Accordingly, it is important that all CPD endeavors, approaches, programs and activities should be designed based on an 'in-depth understanding of both contexts and the individuals' (Makopoulou and Armour, 2011a, p.587) who act as participants.

The traditional version of CPD provision does not succeed in meeting teachers' different needs or cater to their affective side (Darling-Hammond and McLaughlin, 2011; Poekert, 2011). One reason for this failure is that CPD programmes and approaches do not usually include teachers in the process of 'identification of what they need to learn and in the development of the learning experiences in which they will be involved' (Gemeda and Tynjala, 2015, p.12). Nonetheless, governments and ministries demand teachers' presence at CPD programmes and activities. Opfer and Pedder (2010) pointed out that it is not adequate for CPD activities to follow the newest trend but it is important to have a 'purposeful plan for meeting differential needs' (p.467). Dewey (1938) expressed a similar belief over 70 years ago when he argued that we need a clear understanding of 'what is actually going on in the minds of those who are learning' (p.33).

In line with this, traditional forms of CPD provision can arguably be characterized as being insensitive to the consideration of teachers' learning needs, voices and perspectives on CPD activities' effectiveness or ineffectiveness. However, as Korthagen (2017) points out, 'if we wish to promote teacher learning, we will have to take their [teachers] thinking, feeling and wanting into account' (p.5).

Turning the approach of teachers' learning from top-down to bottom-up could be beneficial for both teachers and policymakers, CPD providers and the state. Indeed, teachers may be at the heart of this effort for improving their teaching and students' learning, but it takes more stakeholders (school leaders, principals and ministry providers) to bring about real change. All these people who are involved in the endeavor of CPD effectiveness have a crucial role to play, and several actions they need to take in order for change to take place.

Table 1. Action Guidelines (Hargreaves and Fullan, 2012, p.154, 163-164,174)

Teachers
• Become a true pro
• Start with yourself: examine your own experience
• Be a mindful teacher
• Build your human capital through social capital
• Push and pull your peers
• Invest in and accumulate your decisional capital
• Manage up: help your leaders be the best they can be
• Take the first step
• Surprise yourself
• Connect everything back to your students
School and District Leaders
• Promote professional capital vigorously and courageously
• Know your people: understand their culture
• Secure leadership stability and sustainability
• Beware of contrived collegiality (and other irritating associates)
• Reach out beyond your borders
• Be evidence-informed, not data-driven
State, National, and International Organizations
• Know where you're going
• Break your own mold
• Obey the law subsidiarity: push and partner, stimulate and steer
• Redesign the professional career
• Bring teachers back in
• Be the change
• Pay the people properly where they serve the greatest need
• Get out and about more

It is clearly not sufficient to offer more of the same education (Schleicher 2015, p.12).

Hargreaves and Fullan (2012) argued that teachers, school leaders and the state

need to 'reach [out] for partnership' (p.154). The authors also recommended separate action guidelines for teachers, school leaders and the state (*see* Table 1).

In the context of this study, it is important to note that within the Cypriot context partnerships between teachers, school leaders and state officials are lacking or tenuous at best. What is more, there is little evidence that the action guidelines outlined above are taken into consideration by the relevant stakeholders.

2.2. Physical Education (PE)-CPD

Recently, research has provided ample support for the assertion that the future of PE and students' learning progress through PE are fundamentally contingent on teachers' continuing growth and quality (Patton, Parker and Pratt, 2013). In this respect, consistent and methodical CPD opportunities are essential for the development of successful and high quality PE teachers (European Commission/EACEA/Eurydice, 2013; Unesco, 2013). The research findings on PE-CPD are very similar to those on teachers more widely (Armour et al., 2015; Braga et al., 2016; Duncombe, Cale and Harris, 2016) and some research on PE-CPD has already been reported as part of previous sections.

Until the 1980s, there was very little research into CPD for PE teachers (Armour and Yelling, 2004a; Tsangaridou, 2012), as the 'inquiry into PE-CPD is relatively new' (Parker and Patton, 2017, p.448). Many academics (Duncombe, Cale and Harris, 2016; Harris, Cale and Musson, 2012; Jess and McEvilly, 2013) argue that 'teachers' formal education experiences need to be studied in a more systematic way' (Tsangaridou, 2012, p.282), and it is important to continue searching for 'a better understanding of their perceptions and actions regarding continued professional

learning' (Pissanos and Allison, 1996, p.17). As Kirk (2010) indicated, 'research in physical education matters' and 'it needs to matter more, and to more people' (p.10). Likewise, in the case of Cyprus, the lack of research focusing on CPD and learning experiences of primary school teachers who teach PE is apparent (Tsangaridou, 2014), and this can undermine the quality of teachers and, consequently, the level and efficiency of the whole educational system.

There have been numerous studies focusing on PE-CPD and the most effective programmes, initiatives, models and practices (Armour et al., 2015). Yet, there is strong evidence that traditional forms of CPD are used extensively (Armour et al., 2015; Korthagen, 2017). Given the lack of critical attention paid to teachers' voices and learning needs, it has been found that much PE-CPD is characterized by a one-size-fits-all approach, with sporadic, off-site, and one-shot activities with usually no follow-up, limited opportunities for teachers working collaboratively, and a general lack of support for teachers (Jess and McEvilly, 2013; Makopoulou and Armour, 2014).

Various researchers (e.g. Makopoulou and Armour, 2014; Parker and Patton, 2017; Tinning, 2015) have tried to identify trends, activities and practices which are most likely to result in PE-CPD effectiveness, and their recommendations are similar to those from research on CPD in education more widely (*see* section 2.1.2). A recent attempt to characterize effective PE-CPD was that undertaken by Parker and Patton (2017) who analyzed the contemporary international PE-CPD literature. In particular, Parker and Patton (2017, p.456) identified that CPD is effective when it tends to:

- be ongoing and sustained

- address wider political and structural requirements of schools while recognizing teachers' needs and interests

- acknowledge teachers as learners in an active and social environment

- include collaborative learning opportunities within communities

- enhance teachers' pedagogical skills and content knowledge

- be facilitated with care

- be supported

- focus on changes in the quality of students' learning.

On the other hand, even though this is one of many attempts to identify the effectiveness and ineffectiveness of PE-CPD (Attard, 2017; Elliot and Campbell, 2015; Miller et al., 2016; Parker, Patton and O'Sullivan, 2016; Patton and Parker, 2014b; Tsangaridou, 2016), the question of what effective PE-CPD is, still persists. As Armour et al. (2015) asked:

> Where next for CPD policy, research and practice in the context of contemporary PE? (p.2)
>
> …how can we move away from the ineffective CPD that is routinely offered despite strong evidence that it is likely to be unsatisfactory for many teachers and, by default, their pupils? (p.7).

Armour et al. (2015) and Parker and Patton (2017) agree that there is a need for a new, fresh start in order to address teachers' PE-CPD effectiveness from a different approach.

There is some evidence about teachers' preferences for CPD. Firstly, there is evidence that where teachers feel supported, PE-CPD is more likely to be positive (Armour et al., 2015; Bechtel and O'Sullivan, 2007; Parker and Patton, 2017; Patton, Parker and Pratt, 2013). For instance, the data from Makopoulou

and Armour's (2011b) study revealed that teachers were frustrated due to 'inadequate and limited structured support' (p.417). It is clear that for these teachers – and probably many others who share key similarities – the lack of support has a negative impact upon their motivation and positivity for learning (Hord and Tobia, 2012).

According to Bechtel and O'Sullivan (2007), 'support from colleagues, principals, or students is influential for teachers to make and sustain change' (p.232). It is essential, therefore, not to marginalize support mechanisms which allow teachers to secure support from other teachers, principals and key stakeholders, create a human supportive environment, enable collaborative work to occur, and empower personal and professional relationships (Hord and Tobia, 2012; Parker and Patton, 2017).

Secondly, the results of some studies (Armour and Yelling, 2007; Parker, Patton and O'Sullivan, 2016; Tsangaridou, 2016) supported the growing recognition of the importance of viewing teachers as learners and not as 'the deliverers of knowledge created elsewhere' (Armour et al., 2015, p.4). A key implication for effective PE-CPD is that CPD which is meaningful to teachers must be structured in a manner that allows teachers' voices to be heard and used in order to engage teachers in continuous learning and allow them to have an active and dynamic role in PE-CPD procedures and decision-making. In other words, endeavors to advance teachers' CPD and PE-CPD will always fail if teachers are not considered as valued colleagues in any and all of the procedures undertaken.

2.3. Setting the context of the study

2.3.1. The Cypriot educational context

The educational system in Cyprus can be categorized into three main historical periods: a) the Turkish occupation (1571 – 1878), b) the British occupation (1878 – 1960) and c) the period of Independence (1960 – today). The third period is also intertwined with another historical landmark in 1974, when Turkish forces invaded and captured approximately 40% of the island in the northern territory, which is now *de facto* under the administration of the self-declared Turkish Republic of Northern Cyprus. Under international and EU law, the occupation is viewed as illegal and the Cypriot problem remains unresolved and is regarded an illegal occupation of EU territory since Cyprus became a member on 1 May, 2004. The Greek Cypriot government, which is recognized as the *de jure* government, controls the southern part of the island, which is the officially recognized state.

Since Greece and Cyprus have had close political and cultural ties for many centuries, the dogmas of the Church were promoted through a nationalist educational culture of Greek learning (Persianis, 1978; Koutselini, 1997; Koutselini and Persianis, 2000). For the last two centuries, Greek Cypriot education has aligned itself closely with the syllabi and curricula of Greek schools.

In Cyprus (and Greece) the educational system is mainly divided into four levels: the 6-year primary school, the 3-year gymnasium (lower secondary school), the 3-year lyceum (upper secondary school), and the university (4 years) or other institutions of higher education. Education is compulsory until the end of lower secondary school, and when students finish school in their third year of lyceum they are awarded an 'apolytirion' certificate. Figure 1 below represents the structure of the educational system in Cyprus in more detail.
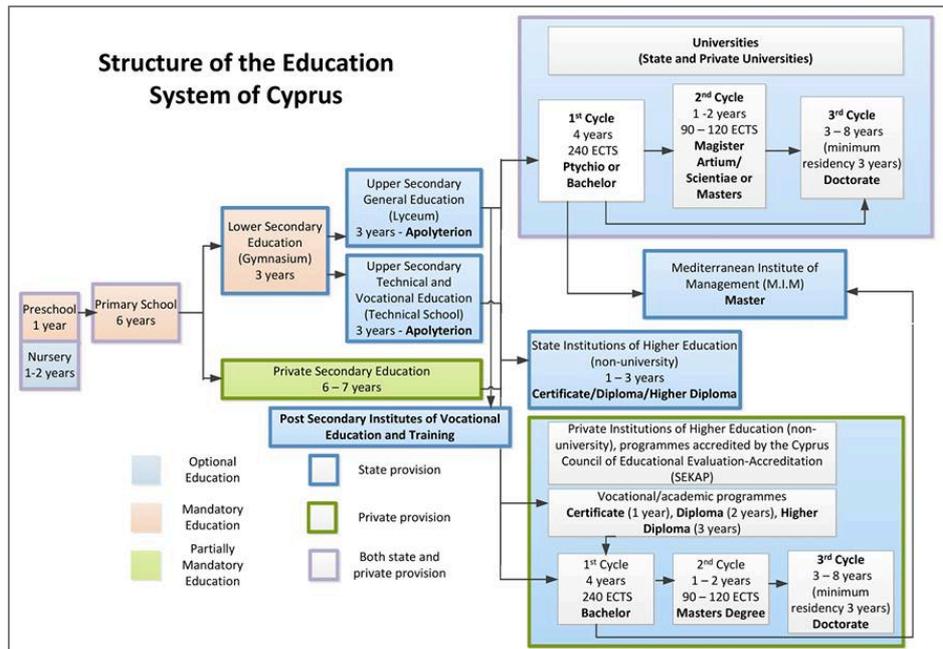
Figure 1. Structure of the Education System in Cyprus. (MoEC, 2016) [Accessed 25 March 2017]

The educational system is highly centralized and regulated by the MoEC. The Ministry 'has control over the national policy, curriculum and textbooks' (Hajisoteriou and Angelides, 2014, p.160). It organizes, manages and supervises the operation of schools and both teaching and supervisory personnel. The Educational Service Committee, which is an independent committee assigned by the government (Kyriakides and Tsangaridou, 2008), regulates teachers' appointments, promotions and transfers (Karagiorgi, 2012; Savvidou, 2012).

Although Cypriot schools are not completely autonomous and teachers are restricted in applying innovative or progressive approaches in their teaching practices, school head teachers do have some control and can take decisions regarding the school. However, since local school boards are funded by the MoEC, it has been argued that head teachers' roles are 'limited to the construction, maintenance and equipment of school buildings' (Hajisoteriou and Angelides, 2014, p.160).

Thus, educational reform and curriculum development have always been 'top-down procedures' (Karagiorgi and Symeou, 2006b, p.3). The inspectorate supervises the proper functioning of schools at the preprimary, primary and secondary level. With regard to public education, it is responsible for implementing the government's educational policies for curriculum development and for evaluating the teaching personnel (MoEC, 2001). In short, inspectors play a significant role since they are responsible for teachers' evaluation, professional development and supervision (Loizou, 2011; Karagiorgi and Symeou, 2006a, 2006b; Kyriakides, 1997). At preprimary and primary levels most inspectors are responsible for all subjects but some of them may be responsible for special areas (e.g. special education) or subjects such as art or PE. At secondary level they have responsibilities in specific areas of the curriculum (MoEC, 2001).

Despite the fact that the lingering contemporary economic crisis has resulted in highly educated individuals being unemployed or struggling to find work, education in Cyprus is still considered to be very valuable, since education has contributed in large measure to the country's development over the years. As stated in the most recent official documents of educational curricular syllabuses of 2010 (MoEC, 2010), the fundamental aim and duty of the educational system in Cyprus is to ensure the future of young people. Specifically, education in Cyprus aims towards the 'development of free and democratic citizens' that have 'a fully developed personality' and are:

> mentally and morally refined, healthy, active and creative citizens, who contribute generally with their work and their conscientious activity to the social, scientific, economic and cultural progress of our country and to the promotion of the cooperation, mutual understanding, respect and love

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among individuals and people for the prevalence of freedom, justice and
peace (MoEC, 2001, p.2).

Although teachers and head teachers may take responsibility for some initiatives, 'the prevailing teacher culture is not supportive of self-empowered forms of leadership' (Karagiorgi and Nicolaidou, 2010, p.63). Since teachers are promoted as a result of increasing age (Theophilides, 2004) rather than individual qualifications or achievements (Pashiardis and Orphanou, 1999), there is little incentive for continuous professional development. In-service training for teachers is provided mainly by the Cyprus Pedagogical Institute (CPI) and the Inspectorate, and participation is voluntary and informal (Koutselini and Koumi, 2013; Neophytou and Koumi, 2012; Karagiorgi and Symeou, 2006a). Additionally, the compulsory in-service training head teachers receive is generally considered to be insufficient (Georgiou, Papayianni, Savvides and Pashiardis, 2001), and they are not involved in leadership but perform mainly administerial or managerial duties.

Since the main unit of analysis in this study are the teachers who serve in primary schools, some additional contextual information is provided on the operation of primary education and its characteristics. The Ministry is cognizant of the fact that primary education can be defined as the foundation of education. The aim is to support all children to learn, regardless of age, gender, origin, social background and mental abilities. Furthermore, great emphasis is placed by the Primary Education Department of the MoEC on children's personality and the development of good manners in order to ensure they become responsible members of society. Skills in languages and mathematics, as well as health, environmental education and

creative and artistic expression, are some of the key areas which predominate as focal points in primary education (European Commission, 2009).

In its effort to accomplish its mission to ensure effective education and proper operation of the educational system, the MoEC relies heavily on its cooperation with public organizations, local authorities and other bodies. The MoEC delegates some functions and roles to these stakeholders. The CPI is one such organization which functions and operates as an auxiliary body for the MoEC and under its supervision in a tightly coupled system.

CPI was founded in 1972 (International Bureau of Education, 2010/11) and aims to provide mandatory and voluntary courses to teachers in order to meet their continuous development needs (Karagiorgi and Symeou, 2006a, 2006b). Its mission is to provide training to all educators, to inform them about modern trends in the educational sector, to support – both theoretically and practically – the educational policy of Cyprus, and to facilitate teachers in their efforts towards professional and personal growth (Pedagogical Institute of Cyprus, 2010). Seminars, conferences and workshops are provided (Neophytou and Koumi, 2012) throughout the whole school year. CPI coordinates and delivers in-service training for all subjects and cross-subject areas, educational technology, educational research and also school-based development and improvement.

The mandatory courses refer to newly promoted primary and secondary school head teachers, deputy head teachers of secondary education and early-career teachers of all levels and their mentors. There are also many optional courses designed for teachers of all grades and sometimes a specific group of teachers (Koutselini and Koumi, 2013; Neophytou and Koumi, 2012). Thus, CPD is delivered in the form of

optional courses (Karagiorgi and Symeou, 2006a, 2006b). These non-compulsory seminars are not delivered during school time, but mostly in the afternoons in training locations in each of the five provinces of Cyprus (Karagiorgi and Nicolaidou, 2013). The CPI also organizes specific seminars in schools following discussions with a school about specific needs. Before delivery of the training courses, there is the procedure whereby the seminars are submitted to interdepartmental committees for approval/feedback.

The CPI also collaborates with the Teachers' Union and coordinates seminars on particular subjects (Karagiorgi and Symeou, 2006a, 2006b). As previously mentioned, the compulsory courses provided by the Pedagogical Institute are only provided for teachers who are to be promoted to directorial positions. These seminars are for training purposes rather than being supportive and consultative.

Once teachers are qualified to work and to teach in primary education, they are offered mentoring. For their first two years in post, they are placed on probation and 'receive support from their supervisors and mentors' (Koutselini and Koumi, 2013, p.66). After they complete the probation stage, they become permanent members of school staff.

Despite being a highly centralized system there have been some attempts to decentralize it (Committee on Educational Reform, 2004; Karagiorgi and Nicoladou, 2010; Kasoulides, 2015; MoEC, 2008). Decentralization is a 'highly complex, unpredictable and non-linear' procedure 'because it is intensively political and linked to power relationships,' (Davies, Harber and Dzimadzi, 2003, p.146), and there has been 'strong resistance from teacher unions' regarding its implementation (Karagiorgi and Nicolaidou, 2010, p.64). Nevertheless, since one of the key priorities

was 'the pre-service and the in-service education and training of educators' (MoEC, 2005, p.6), a new curriculum was finally introduced in 2010 (Hajisoteriou, Neophytou, and Angelides 2015; Hajisoteriou and Angelides, 2014). The preparation and training of principals, head teachers and teachers through professional development seminars followed during the academic year 2010-2011 (Philippou, Kontovourki and Theodorou, 2014). At the time of writing, the Cypriot educational system is still in a dynamic reform phase, with new educational reforms being introduced to meet the European Union's strategic objectives.

Yet the challenges remain. Although the educational debate in Cyprus is actively seeking intercultural and social justice education (Hajisoteriou and Angelides, 2014), it seems that the MoEC and its Inspectorate 'seem to be amiss in implementing it' (p.168) due to the profound changes that this would entail 'in the traditional and rigid organizational arrangements of the Ministry of Education' (Hajisoteriou and Angelides, 2014, p.168). With only 380 primary schools and 120 secondary schools, Cyprus 'has the same administrative range as a large local educational authority in England' (Kyriakides and Tsangaridou, 2008, p.836). As Hajisoteriou and Angelides (2014) indicated through their study, a careful reconstruction of educational policy and settings should be undertaken in order to align with more contemporary trends in the wider educational field.

Centralization of the system has many obvious benefits such as uniformity and standardization in the quality, programmes and activities, equitable resource allocation that reduces regional financial disparities, as well as the easy diffusion of innovations (Karagiorgi and Nicolaidou, 2010). Additionally, during a difficult economic period for Cyprus and specifically for MoEC, decentralizing the system

'would be very demanding in terms of cost' (Tsangaridou, 2014, p.4). However, as Pashiardis (2004) put it, 'the bureaucratic and highly centralized structure of the Cyprus educational system is ineffective and must be abandoned' (p.666). Due to these highly centralized structural forms, feelings of 'dissonance' (Pashiardis, 2014, p.666) are created and teachers seem to lack of motivation and feel neglected and outsiders (Karagiorgi and Symeou, 2006a).

2.3.2. Initial teacher training in PE

Initial PE teacher training programs do not exist in the educational system of Cyprus. 'Traditional elementary teachers are obliged to undertake an extra course in PE in order to teach the subject themselves' (Christodoulou, 2010, p.113) whereas qualified PE teachers and PE specialists are forced to work as coaches or instructors or in non-sport related fields even though research has shown that they have more knowledge of specific motor skills and exhibit more effective teaching practices (McKenzie, 2003; Tsangaridou, 2008; Christodoulou, 2010). Students who wish to study and gain a certification of Physical Education at a Bachelor's or a Master's degree level have to be educated in other countries (Tsangaridou and Yiallourides, 2008).

Potential primary school teachers (generalist teachers) have to be certified with a Bachelor's degree in primary education in order to be qualified to teach in primary education. The basic training of primary school teachers is offered by the Pre-school Teachers Section of the Department of Education ("Τμήμα Επιστημών της Αγωγής"), part of the Faculty of Social Sciences and Education at the University of Cyprus.

Through the four-year program of teacher education, the University of Cyprus is responsible for the pedagogic proficiency and education of candidate teachers who

will constitute the personnel of primary schools. 'The courses are divided into compulsory, elective and general educational courses' (Tsangaridou, 2014). The teacher education curriculum includes one compulsory module in teaching PE ('PE in Primary School') and a specialization area in PE in the fourth year, with three modules which revolve around the content and pedagogy of PE in primary education. All prospective primary school teachers through their studies at the University of Cyprus undertake school experience, where they gain first hand experience into teaching in primary schools.

In total, students 'teach two different classes of pupils a total of 90, 40-minute lessons, of which 10 are physical education lessons' (Tsangaridou, 2014, p.5). At the same time, the students undertake weekly lectures and seminars at the University. The school experience modules are there to familiarize student-teachers with the events in progress in the school unit; with the planning and the conduct of teaching and the various roles undertaken by teachers. In effect, greater specialization in PE exposes these prospective primary teachers 'to more in-depth physical education experiences than most pre-service classroom teachers' (Tsangaridou, 2014, p.6).

2.3.3. The status of PE in Cyprus

The main focus of this study is PE teacher education and career-long professional development in primary schools in Cyprus. The national curriculum states that the aim of PE 'is to help students develop their physical, mental, social and emotional skills, according to social and hygienic standards, so that they might become efficient citizens in a democratic society' (MoEC, 1994). Thus the MoEC attempts to ensure

PE is valued by 'promoting the important role that physical education plays in the school' (MoEC 2013, p.412).

PE is a compulsory subject in all grades of public schooling, from the ages of three to eighteen. Primary school students have two compulsory 40-minute PE lessons per week (Tsangaridou, 2014; Tsangaridou and Yiallourides, 2008). According to Kyriakides and Tsangaridou (2008, p.815) there is a categorization between PE primary school teachers. There are three clusters of PE primary school teachers; the first are 'classroom teachers' (general teachers), who teach almost every subject to their students and also the PE subject; the second cluster encompasses the 'classroom teachers' who teach all subjects to their students, but also take responsibility for PE instruction to other classrooms too; the third group of teachers who teach PE to primary school students are the 'coordinators of PE' and they teach only PE. The third group also has duties encompassing the general administration of PE issues of more than one school, the management of the sport equipment of the school and the organization and direction of extra-curricular activities. None of these teachers is certified as a PE educator, but they are authorized by the MoEC, due to the possession of other proficiencies such as the completion of a CPD course or additional study at postgraduate level, to be responsible for PE as a subject and for PE issues in one or even two schools (Tsangaridou and Yiallourides, 2008). In short, generalist teachers are responsible for delivering PE to primary school students but some have an additional interest in the subject (Tsangaridou and Polemitou, 2015).

It is also worth pointing out that despite the economic difficulties, there has been a growing interest in teachers' CPD and a focus on teacher quality (MoEC, 2013; Tsangaridou, 2014). The unexpected financial crisis led the government to refocus

and adopt a new 'national strategy for research and economic and technological growth be set up as a first step towards converting Cyprus into a regional hub of knowledge and research and aligning its higher education policies with those of the EU' (Document of the World Bank, 2014b, p.14). At the same time, it has to be recognized that within the Cypriot educational system, there is very little teacher accountability and a lack of systematic assessment of teachers' practice, beliefs and learning needs (Karagiorgi and Nicolaidou, 2013). Furthermore, although policy documents state the importance of PE and teachers' PE-CPD (MoEC, 2013), there is little existing evidence about the most effective ways to design PE-CPD to meet teachers' complex learning needs. In this regard and many others, Cypriot PE-CPD is similar to provision elsewhere in the world.

The basic objective of PE set by the MoEC (2010) is for young children to acquire a cohesive and sufficient body of knowledge, values and attitudes that promote the growth of healthy, democratic and productive citizens and the cultivation of attributes, faculties, and dexterities that are necessary in the society of the 21st century. Generally, the philosophy of the new curricular PE syllabuses is the students' lifelong adoption of an active and healthy way of life. Additionally, as with all other aspects of the Greek Cypriot educational system, the MoEC has the responsibility for the composition of the PE curriculum. Seeking the continuous and qualitative improvement and upgrade of the subject of PE in primary education, the Ministry placed particular emphasis on the formation of a new curricular syllabus for PE during the school year 2009-2010.

University professors, inspectors, advisers and teachers collaborated in the creation of this new curricular syllabus. The new PE syllabus contains aims, objectives, the

objectives of courses per pupil age group as well as the thematic units which the teacher can use for planning lessons. The MoEC's next action in the school year 2010-2011 was teachers' training based on the new PE curricular syllabus and its practical application: 'In-service training and development of supplementary materials were [also] the two areas of action during the school year 2013-2014' in PE (MoEC, 2014, p.440).

In short, the MoEC continued with the interdepartmental training and preparation of primary teachers through seminars, personal visits of PE advisers, and printed material.

2.3.4. Current concerns about PE-CPD provision

Teachers feel less motivated or committed within the structures of the restraining educational system, which appears to set many boundaries regarding their professional autonomy. In relation to PE, the barriers for Cypriot primary teachers are compounded by inadequate resources (Kyriakides and Tsangaridou, 2008) and poor PE programmes, which lead to 'feelings of inadequacy, low levels of confidence and lack of time and interest' (Tsangaridou, 2014, p.2).

Another critical concern is the high supply of primary school teachers in relation to demand in the public sector (Christodoulou, 2010). General primary school teachers (and not PE teachers) have the responsibility of teaching, amongst other subjects, the subject of PE in primary education. All of them are registered on an official waiting list after they graduate and have to wait for many years until they are employed in public primary schools. Due to the oversupply, many primary school teachers have no teaching practice or they are perforce working in posts which are not relevant to teaching (Tsangaridou, 2014). This non-teaching period is likely to

have a negative impact on the currency of their practice, and lead to a negative impact on their teaching performance once they are asked to work in primary schools after a long period of absence from the educational scene. It is questionable whether they will be ready at that time to teach effectively or meet the students' learning needs.

Although qualified PE teachers have attempted to negotiate their employability in primary schools, the MoEC rejected their plea and confirmed the decision that only general primary teachers were authorized to teach PE in primary schools. Since primary school teachers' education and initial training in PE lasts only a few months, as opposed to qualified PE teachers' education which lasts three to four years, the quality of PE education offered to students at schools remains questionable at best (Christodoulou, 2010).

2.4. Learning theories

In the previous section, an overview of the context of both the Greek Cypriot educational system and CPD structures of provision was provided. CPD policies and the challenges of providing good CPD provision were also outlined. In this section, a summary of theoretical perspectives on learning is presented in order to provide a strong theoretical framework for exploring teachers' CPD experiences, and in order to understand data on teachers' reflections on learning.

There is no single definition of learning that is universally accepted by researchers, theorists, and practitioners (Shuell, 1986; Colley, Hodkinson and Malcom, 2003; Quennerstedt and Maivorsdotter, 2016). For some theorists, learning is an ongoing and relatively permanent change in behavior or in behavioral potentiality that derives

from experience and practice (see, for example, Kimble and Germazy, 1963; Skinner, 1987). For other theorists such as Crow and Crow (1973), learning is the acquisition of knowledge, habits, and attitudes, involving new ways of doing things and operating through an individual's efforts to overcome obstacles or to adjust to new situations.

Jarvis (2006) divided human learning into four categories: i) behaviorist ii) cognitive iii) emotive, and iv) experiential, whereas Ertmer and Newby (2013) divided it into three: i) behaviourist; ii) cognitivist and; iii) constructivist. In contrast, Sfard (1998) uses two metaphors, those of 'acquisition' and 'participation,' in order to categorize teachers' learning. The acquisition metaphor assumes that knowledge is something external that can be acquired, internalized, developed and changed, whereas the participation metaphor localizes knowledge and learning within the social context, drawing attention to the context or location where learning takes place (Hodkinson, Biesta and James, 2008) and focusing on social entities (Salomon and Perkins, 1998), complex social and interactive systems (Greeno, 1997), or communities of practice (Wenger, 1998). From this perspective, the fundamental argument is that the context and activity (or practice) in which learners engage have a significant influence on what and how individuals or groups of individuals learn and construct meaning. Thus, as Hodkinson, Biesta and James (2007, 2008) argue, to provide a fuller picture of what comprises learning, not only aspects of individuals and communities, but also cultures in which learners engage in, should be taken into account.

Apart from viewing learning as acquisition and/or participation, Hager (2005) also adds a third metaphor into the mix, that of 'learning as construction,' which

acknowledges the importance of the nature of learners' engagement in the actual learning process. Some theorists have argued that the distinction between the metaphors of 'acquisition,' 'participation,' and 'construction' is fundamentally ontological in relation to where learning, cognition and knowledge are located (e.g. Cobb, 1994).

In this section the metaphors themselves, along with the theories of learning that represent them, will be discussed in turn, and then the relationships between learning and culture will be examined. However, without wishing to downplay the importance of the other theories of learning, since all learning theories have the potential to provide important scientific knowledge and understanding, it should be noted from the outset that particular emphasis will be placed on social constructivism, as well as learning and culture.

A theory provides a general explanation for observation carried out over a period time as it also explains and predicts behavior. It is said that learning theories seldom have to be thrown out completely if they have been thoroughly tested. Of course a theory can be accepted for a long time and later disproved. Learning theories are attempts to describe how we learn. Thus, as Dorin, Demmin and Gabel (1990) point out, with a learning theory as a foundation, instruction can be structured around making learning more effective. Either way, the roots of contemporary theories of learning extend far into the past; many of the problems addressed and the questions asked by modern researchers nowadays are not new, and can be traced as far back as Ancient Greek philosophers such as Socrates.

This is because this thesis aims to explore what, how and when Cypriot primary school teachers learn, and it has been argued that constructivist and socio-cultural

approaches to learning can provide a powerful framework for understanding and studying teachers' professional learning and development (Borko, 2004; Putnam and Borko, 2000) and the importance of teachers actively constructing knowledge, solving problems, and thinking critically (Brooks and Brooks, 1993). Indeed, such approaches to learning appear to underpin not only current theorizing on effective CPD but also much of the empirical work in the international CPD literature.

2.4.1. Behaviorism

Behaviorism, as well as cognitivism, can be subsumed under the 'language as acquisition' metaphor. Behaviorism is based on stimulus-response pairs, and the reinforcement or discouragement of certain behavior (Greeno, 1997). It focuses on observable stimuli, conditions and behaviors. It is primarily associated with Pavlov's famous work with dogs that salivated when food (an unconditioned stimulus) was brought to them. When Pavlov rang a bell (a neutral stimulus) at the same time as he brought the food, the dogs associated the bell with the food. Thus they learned to associate an unconditioned stimulus that already brought about a particular response (i.e. a reflex) with a new (conditioned) stimulus, so that the new stimulus brought about the same response. This unintentional discovery of how animals changed their behavior as a response to external stimuli Pavlov called 'classical conditioning' (1927). Hence, from the behavioristic perspective, it is more likely for learning to occur when continuous repetition of behavior as a response to a particular stimulus is involved.

Skinner (1987) supported the stimulus-response model, but added the notion of 'reinforcement' after the desired behavior as a fundamental and central principle of learning. Reinforcement can 'shape' behavior and, ultimately, increase learning

(Cheetham and Chivers, 2001). Skinner (1938) coined the term 'operant conditioning' (p.46), which roughly means using reinforcement after the desired response to change behavior. In effect, behaviorism views learning as a change which is both observable and measurable, and sees learners as recipients of external stimulation (Kivinen and Ristela, 2003). It has been argued that this has led to a kind of individualistic and deductive pedagogy, in which the student is viewed as the recipient of knowledge, and the teacher as the transmitter of said knowledge (Nicholls, 1997).

Either way, it should be emphasized that behaviorist theories are not concerned with cognitive processes but with changes in observable behavior that can be measured. They consider that all behavior can be explained without the need to consider internal mental states or consciousness. Operating on the principle of 'stimulus-response' processes, they define all behavior as having been caused by external stimuli (operant conditioning). They refer to the mind as a self-contained 'black box' in the sense that it can be viewed in terms of its inputs and outputs, and the response to a stimulus can be measured quantitatively (Good and Brophy, 1990).

Thus this theory sees learning as a straightforward mechanism; it is the result of a behavioral response to some form of stimulus (Cheetham and Chivers, 2001). The strength of this theory lies in the fact that it assumes learners are focused on a clear goal and can respond automatically to the cues of that goal. However, an inherent weakness of such a theory is the situation where learners may find themselves unable to initiate the correct response to a particular stimulus. For example, a worker who has been conditioned to respond to a certain cue at work may stop production

when an anomaly occurs because he does not understand the system (Schuman and Kalton, 1985).

Understandably, the narrow focus of behaviourism has made it difficult for behaviourists to study understanding, reasoning, and thinking, ideas that are paramount to education (Collins, 1982). However, it remains as an attractive theory because of its simplicity and its ability to explain phenomena, as well as due to its contribution in controlled research. Until the 1960s, in fact, it was the dominant approach to learning.

2.4.2. Cognitivism

Unlike behaviourists, cognitive scientists endeavoured to open the 'black box' (the human mind) and to explore mental processes (e.g. perception, memory, attention, reasoning, language) in order to promote learning as a meaning-making process inside the head of individual learners (Palinscar, 1998). In particular, cognitive scientists examine the way people absorb information from their environment (sensory input), sort it mentally (how new information is processes and organized) and apply it in everyday activities (Cheetham and Chivers, 2001).

In classroom settings, the cognitive theory of learning can have strong purchase since it is often claimed that developing students' higher-order cognitive skills, including critical thinking skills, can help them improve their functioning in multiple circumstances both now and in the future (Tsui, 2002). Ford and Forman (2006) also point out that cognitive theories 'provide clear ways for teachers, curriculum designers, and testers to organize [and evaluate] their work around well-defined learning objectives' (p. 2), thus enabling consistency.

One of the major proponents of cognitivism was Vygotsky, who suggested that social interaction profoundly influences cognitive development. Central to Vygotsky's theory is his belief that cultural and biological development do not occur in isolation (Driscoll, 1994). Social learning leads to cognitive development. For Vygotsky (1978) there is a 'zone of proximal development,' which is defined as 'the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers' (p.86). He argues that learning occurring within the zone of proximal development bridges the gap between what can be known and what is known. In a classroom setting, his theory requires that teachers and learners play non-traditional roles as they collaborate with each other and create meaning in such ways that students can learn to make their own, so that learning can become a reciprocal experience both for teachers and students, eventually allowing the classroom to become a community of learning.

One of the criticisms of cognitive theories of learning is that they view learning as primarily concerned with putting 'stuff' into learners' minds, which are understood as being like empty vessels (Bereiter, 2002). Like behaviourism, cognitive perspectives assume that knowledge is something that exists 'somewhere out there,' independently of the knower (Sfard, 1998). Therefore, just like with behaviourism, cognitivism is primarily concerned with the *acquisition* of knowledge. Using an acquisition approach to learning 'positions teachers' learning as a process of learning how to become a provider of knowledge or a mediator of student learning' (Quennerstedt and Maivorsdotter, 2016, p.421).

A fundamental problem with this 'learning as acquisition' metaphor is that it separates out the learner, the process of learning and the product which is learned (Hodkinson et al., 2007). In addition, and as noted earlier, it assumes – in somewhat linear fashion – that the students and teachers are the recipients and transmitters of knowledge, respectively, and that knowledge can be transferred between different contexts. It has also been argued, however, that this theory is inadequate for considering learning cultures involving students and teachers because it ignores the social aspects of learning (Hager and Hodkinson, 2009). As a reaction to this kind of transmission model, cognitive and social constructivist theories of learning have emerged.

2.4.3. Constructivism

Both cognitive and social constructivism approaches view learning as an active process which involves the construction of meanings, is situated in specific contexts, and is influenced by prior knowledge and beliefs. From a constructivist perspective, learning is an active and continuous process in which learners reflect upon their current and past knowledge and experiences to generate new ideas and concepts (Harris, 2000).

This approach to learning assumes that reality is the by-product of reconstructed meanings or understandings about the social world around us. Knowledge and reality, in this sense, are not external or objective but 'intersubjectively constructed' (Sanger, 1996, p.14), and 'any notion of "truth" […] becomes a matter of shared meanings and consensus among a group of people, not correspondence with some supposedly objective reality' (Patton, 2015, p.121-22). As such, knowledge is constructed out of interaction 'between human beings and their world, and

developed and transmitted within an essentially social context' (Lincoln, Lynham and Guba, 2011, p.42). Thus meaning-making depends on both individual agency and subjective interactions.

Constructivist learning theory has had wide-ranging impact on learning theories and teaching methods in education (Koutselini, 2009). This is so because it is an attractive theory which sees learners as actively building systems of meaning through their experiences, and assimilating and accommodating new information into these systems, or schemas (Slavin, 1983). It is a psychological theory of knowledge (epistemology) which argues that humans construct knowledge and meaning from their experiences. In short, it is a theory which tries to explain how people know what they know. Problem solving is seen as being at the heart of thinking, learning, and development. Learners construct their knowledge and understanding as they build upon prior knowledge, solve problems and discover the consequences of their actions.

Although divergent thinking and action may potentially cause problems when we are faced with a situation where conformity is essential, constructivism is powerful as a theory because it allows learners (or students) to struggle and discover things by themselves, making them abler to deal with real life situations (Ertmer and Newby, 2013). Thus by employing a more constructivist approach to teaching, and allowing students to take control over their own learning through both individual and collaborative activities, it becomes possible to promote individual accountability, positive interdependence, social skills, promotive interaction and group processing (Johnson and Johnson, 1989).

2.4.3.1. Cognitive Constructivism

Cognitive constructivism is about how individual learners construct knowledge and meanings. Although a cognitive psychologist, Piaget is considered to be one of the founders of cognitive constructivism. Since the theories of learning overlap at times, Vygotsky too can be linked not only to cognitive, but also to social constructivist theories of learning. He described the way young learners developed cognitively and his work has influenced school education to a great extent. According to Piaget, the closer to the contents the learners are, the better their cognitive development will be. Focusing on infants and children, Piaget proposed that children go through various stages of cognitive development, building up more and more mental representations or 'schemas' as they get older as a result of environmental experience.

In effect, Piaget demonstrated that children's minds were not a *tabula rasa*, and that children actively engaged in processes of accommodation and assimilation when faced with new objects or situations (McLeod, 2009). He also argued that children first need to have an experience of the knowledge they are receiving in order to absorb and learn information (Duncombe and Armour, 2004). Piaget's theory has been criticised for being too reductionistic, focusing more on biological age and mental processes rather than the wider world (Jarvis, Holford and Griffin, 2003).

2.4.3.2. Social Constructivism

Social constructivism sees knowledge as being the product of social processes. In other words, it looks at how knowledge and understanding are constructed through social interaction. Learners learn by being actively engaged in learning contexts and thus constructing their own knowledge. As the construction metaphor indicates, the focus is on the various ways in which 'learners construct or find meaning in their

subjective experience' (Boghossian, 2006, p. 714). Learning is seen as a kind of dialogical and social process; meaning-making takes place through interactions between individuals, events and the physical settings around learners. Learning is not an individualistic event but almost always a socially mediated one (Salomon and Perkins, 1998).

According to Vygotsky, culture shapes and influences cognitive development. With the help of 'a facilitating agent' such as a teacher or peer, learners can construct knowledge and understanding (Salomon and Perkins, 1998). Vygotsky observed that children performed better when they were working in collaboration with an adult or another peer. The zone of proximal development, cited above in the cognitive theory section, is the 'distance' between developmental levels as determined by both 'independent problem solving' and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers' (Vygotsky,1978, p.86). As Raymond (2000) points out, it 'is the distance between what children can do by themselves and the next learning that they can be helped to achieve with competent assistance' (p.176).

Such theorizing clearly has important implications for teaching practice. If cognitive change occurs within the zone of proximal development, teaching instruction should be designed to reach a developmental level that is just above the student's current developmental level. By working on students' zone of proximal development, teachers can provide students with opportunities to extend their current knowledge and skills. To a large extent, educators must engage students' interest, simplify tasks and instructional goals to make them manageable, set challenging tasks in groups of diverse abilities, provide guidance and support when needed, and, most importantly,

motivate students to pursue the instructional goal.

One effective strategy to access the zone of proximal development is scaffolding. Scaffolding builds on already existing knowledge in order to allow students and learners to develop new concepts, skills and higher levels of understanding. It emphasizes various ways in order to utilize the available tools and resources within a given environment (Dewey, 1938), and it can be a combination of metacognitive or cognitive strategies. When using the scaffolding teaching strategy, the goal of the educator is for the students to become independent and self-regulating learners and also problem solvers (Hartman, 2002).

Scaffolding instruction guides students to improve their cognitive abilities and also equips them with independent and self-regulated competencies and skills. What is more, since learners spend more time on learning and discovering rather than searching for information (as the educator provides the initial source or stimulus), it also eliminates disappointment and uncertainty, provides clear directions to students, keeps students on task, points them to worthy sources, and creates momentum, efficiency and faster learning (McKenzie, 2000).

Learning is an active process and it is not the transmission of knowledge *per se* that supports individual learning, but rather the opportunity, with adequate support and guidance, to engage in active construction (Salomon and Perkins, 1998). This is called 'social scaffolding,' and the educator Bruner associates it with greater learner independence and autonomy. Quoting Vygotsky, he points to how tutors must scaffold the learning task 'to make it possible for the child, in Vygotsky's word, to internalize external knowledge and convert it into a tool for conscious control' (Bruner, 1985, p.24-25). From being spectators, learners can then become active participants in the

learning process. 'One sets the game, provides a scaffold to ensure that the child's ineptitudes can be rescued by appropriate intervention, and then removes the scaffold part by part as the reciprocal structure can stand on its own' (Bruner, 1983, p.60).

In its most literal sense, then, scaffolding is the active process of assisting learners to learn or do the required work, and then gradually pulling back as learners become more skilled and competent. That social interaction benefits both learners and teachers is often mentioned in the international literature. As Lave and Wenger (1991) and Wenger (1998) argue, learning should be understood as participation in a community of practice. Learning is not about acquiring or conveying existing knowledge, but a process of participation in a given context or a specific situation (Tam, 2015).

All the above schools of thought, whether they be cognitivist, behaviourist or constructivist, view learning as a process whereby the learner internalizes knowledge, whether that knowledge is discovered (constructivism), transmitted (behaviorism and cognitivism) or experienced in interaction with others (social constructivism). In contrast to this notion of learning as internalisation, Lave and Wenger (1991) propose a theory of learning as a social practice, where the primary emphasis is on the person. This has led to the emergence of situated learning theories.

2.4.4. Situated or Sociocultural Theories

Sociocultural and situated theoretical approaches provide an alternative perspective on how to conceptualise learning. Unlike conventional theories of learning which focus on individuals and their minds, as well as the acquisition and/or construction of

knowledge, sociocultural theories locate learning in social practice – 'learning as participation' in a social world. From this viewpoint, learning is seen not as an isolated event occurring at specific times and in given contexts, but as a process that is inherent in all human activities.

Lave and Wenger (1991) defined participation as follows:

> […] participation, at the core of our theory of learning, can be neither fully internalized as knowledge structures nor fully externalized as instrumental artifacts or overarching activity structures. Participation is always based on situated negotiation and renegotiation of meaning in the world. This implies that understanding and experience are in constant interaction – indeed, are mutually constitutive. The notion of participation thus dissolves dichotomies between cerebral and embodied activity, between contemplation and involvement, between abstraction and experience: persons, actions, and the world are implicated in all thought, speech, knowing and learning […] participation in social practice – subjective as well as objective – suggests a very explicit focus on the person, but as person-in-the-world, as member of a sociocultural community. This focus in turn promotes a view of knowing as activity by specific people in specific circumstances (p.51 - 52).

Thus participation bridges people, learning contexts and social communities. Meaning is created as we interact with each other and actively engage in a range of social practices within a sociocultural context (Wenger, 1998). What and how we learn is also determined by the nature and quality of the learning activities, the context within which these activities take place, the patterns of participation encouraged, and the individuals involved (Barab and Duffy, 2000). In other words, learning is a 'situated' event. As Lave and Wenger (1991) make clear, 'learning is not merely situated in practice – as if it were some independently reifiable process that

just happened to be located somewhere; learning is an integral part of generative social practice in the lived-in world' (p.35). It 'implies not only a relation to specific activities, but also a relation to social communities' (Lave and Wenger, 1991, p.53).

Thus for Lave and Wenger learning is situated in social and cultural settings. Haneda (2006) sums up Lave and Wenger's situated learning theory nicely:

> For Lave and Wenger, knowledge is not something that is incrementally stored in an individual's mind; it is to be understood relationally, that is to say, as located in the evolving relationships between people and the settings in which they conduct their activities. [Thus] people act as persons-in-the-world participating in the practices of a sociocultural community. Accordingly, learning is an intrinsic and inseparable aspect of any social practice… (p.807-808).

Thus, according to Lave and Wenger, learning is situated. From this perspective, knowledge is seen as being continually produced and reconstructed through the interactions and relationships between individuals, rather than as an object which is acquired, internalized, and owned (Lee, Fuller, Ashton, Butler, Felstead, Unwin, and Walters, 2004). To examine this new approach, Lave and Wenger also developed the concepts of 'legitimate peripheral participation' and 'communities of practice.' Legitimate peripheral participation is closely related to apprenticeship, describing how newcomers to a learning community are gradually able to move from the periphery into a central position within the community and thus interact with other members, gradually gaining wide access to a broad spectrum of activities within the community in order to perform new tasks and to develop new understandings (Guile and Young, 1998). 'Communities of Practice [CoPs] are groups of people who share a concern or a passion for something they do and who interact regularly to learn how to do it better' (Wenger, 1998).

Although Lave and Wenger's work originated in workplace and other non-educational settings, situated learning theory came to be used in professional and educational settings in recent decades as a response to the growing dissatisfaction by teachers and educators with schooling and established school practices, which view knowledge as something abstract and effectively decontextualized from the 'real world' outside the school setting (Lave, 1993). As Kirk and Kinchin (2003) have shown, such decontextualization of learning also occurs in the field of PE, to the great consternation of educators and researchers. Situated perspectives on learning are valuable since they attempt to situate cognition and learning in social and cultural settings rather than within the individual mind of learners.

Since situated learning theory interprets learning as a continuous process embedded in social practice, it can be used to glean insights into CPD (Armour, Makopoulou and Chambers, 2009). More recently professional learning communities in education have been defined as a group of individuals 'who support and work with each other' and look for 'ways, inside and outside their immediate community, to enquire on their practice and together learn new and better approaches that will enhance all pupils' learning (Stoll, Bolam, McMahon, Wallace and Thomas, 2006, p.5). As such, Wenger makes clear that a CoP is not a network or club of friends but a sustained social network of individuals sharing an overlapping and specialized knowledge base, set of values, experiences, competences, and ethics about what constitutes good practice (Stoll and Louis, 2007; Barab, Barnett and Squire, 2002; Wenger, 1998). Wenger, McDermott and Snyder (2002) suggest three features that can be helpful in identifying a CoP. A CoP has: a) an explicit field about which the community is focused; b) trust-filled relations; and c) a shared practice that develops

over time.

There is wide international consensus that professional learning communities 'shar[e] and critically interrogat[e] their practice in an ongoing, reflective, collaborative, inclusive, learning-oriented, growth-promoting way' (Stoll et al., 2006, p.223). Along similar lines, and within the context of educational research, Bolam, McMahon, Stoll, Thomas, Wallace, Greenwood, Hawkey, Ingram, Atkinson and Smithm (2005) found that effective professional learning communities in schools have 11 key characteristics:

> shared values and vision; collective responsibility for pupils' learning; collaboration focused on learning; individual and collective professional learning; reflective professional inquiry; openness, networks and partnerships, inclusive membership, including support staff; and mutual trust, respect and support. (p.18-19).

From the outset, then, it should be stressed that the members within a CoP do not interact simply to improve their own individual skills and competences. In order to effect real change, development and innovation, the members interact and learn from each other in order to improve their collective domain of interest. All the functions, tasks and activities within a CoP do not exist in individual isolation – they are part and parcel of the individual's participation in the CoP in which they have meaning (Lave and Wenger, 1991). Thus, a CoP 'defines itself in doing, as members are involved in a set of relationships over time and work around things that matter to them' (Lave and Wenger,1991, p.3). Such structures provide teachers with a safe environment to explore teaching, values about teaching, and teaching practices, as well as with opportunities to challenge long-held teaching and learning practices and learn new content pedagogies (Armour and Makopoulou, 2012, Goodyear and

Casey, 2015). According to Pyrko, Dorfler and Eden (2017), the procedure of 'thinking together' is considered an essential component of CoPs, guiding the members of CoPs in an indirect way to 'share tacit knowledge' (p.389). In addition to this, they argued that it is this specific procedure that 'essentially brings Communities of Practice to life' (Pyrko, Dorfler and Eden, 2017, p.389). Particularly, in the theory of situated learning and CoPs, this collaborative learning process is characterized by mutual engagement, sharing of repertoires and negotiation of joint enterprise (Lave and Wenger,1991; Wenger, 1998).

In essence, professional development should be something that is fully integrated into the ongoing learning processes of all within the school (Cocklin, Coombe and Retallick, 1996) in order to move the community forward. In short, communities are reproduced by individuals, just as much as individuals are reproduced by communities (Peressini, Borko, Romagnano, Knuth and Willis, 2004), and individuals can shape and transform both themselves and the social/interactional environments within which they work' via their learning (Lee et al., 2004). In this respect, a CoP is not just a temporary coming together of certain individuals in order to solve a problem. Learning can be seen as a form of enculturation into a community's way of thinking or belonging (Barab et al., 2002; Lave and Wenger, 1991).

The notion of learning as participation in CoPs has received considerable attention in current research literature; and it has been employed extensively in recent CPD and PE-CPD research to explain the ways in which teachers can learn in effective and sustained ways (e.g. Armour and Yelling, 2007; O'Sullivan, 2007; Borko, 2004). There is a growing body of evidence that collaborative types of professional development, such as teacher networks or mentoring programs, can improve

teacher performance (Dyson and Casey, 2012; Jackson and Bruegmann, 2009; Patton, Parker and Tannehil, 2015; Rockoff, 2008) and lead to a collaborative culture of empowerment. Professional development should be seen as a collegial and lifelong activity (Goodyear and Casey, 2015; Lieberman, 1995).

Evidence from the literature suggests that CoPs, as a form of CPD, can bring positive results in both teachers' CPD and teaching, and students' learning. A review of ten empirical studies by Vescio, Ross, and Adams (2008) showed that well-formed CoPs are linked to teachers' practices and students' learning outcomes. In particular, the positive outcomes from teachers' participation in CoPs involved more student-centered teachers and teaching practices and students' higher competence and scores in tests.

Engaging in a professional community that extends beyond classrooms and outside school has been identified as a powerful way for teachers to learn (Kilbane, 2009). In the field of PE, evidence from research undertaken in the USA suggests that 'when teachers collaborate in such communities they are more willing to take risks, reflect on their failures and share successful programmes and practices' (O'Sullivan, 2007, p.6). However, it is also acknowledged that there are a number of struggles in teachers' efforts to try to introduce, develop and sustain such communities (Makopoulou and Armour, 2014).

2.4.5. Learning and Culture

Several theorists have argued that the existing theories of learning fail to fully account for learning processes because they do not take into consideration wider factors such as policies or learning cultures (Hodkinson et al., 2007; Biesta, 2011).

To overcome these limitations, Hodkinson et al. (2007; 2008) proposed two dimensions of learning: the theory of learning culture and the cultural theory of learning. The former acknowledges the importance of incorporating the learning culture into the processes of understanding learning. The second acknowledges the individualistic dimension of learning.

Since cognitive learning theories tend to overlook the importance of social contexts and situations around learning, Hodkinson et al. (2008) suggested the importance of examining the learning culture, which here is seen as referring not only to the learning context or environment but also to the 'social practices through which people learn' (p.34). Learning cultures are interconnected and they influence the sites in which learning takes place. The theory draws on Bourdieu's (1985) concept of a field, which is a 'configuration of relations between positions objectively defined, in their existence and in the determinations they impose upon the occupants, agents or institutions' (Bourdieu, 1992/6, p.72-3). For Bourdieu, there are several types and levels of fields which constitute culture and society, and each field is interconnected. Therefore, a learning culture (such as a CoP, for example), as a unit of a field, is influenced by other learning cultures (the culture of schooling, for example, or the general educational system of the country). It behooves researchers and educators to take these other cultures into account when examining learning processes.

At the same time, the notion of learning culture is not enough to account for the learning process holistically. Hodkinson and Hodkinson (2003; 2004) also argue for a cultural dimension of learning which focuses on the individual learner dimension; a person's individual dispositions, beliefs and characteristics – in short, their biography – are also significant and should be taken into account in order to understand

learning, and even teaching. As Bloomer and Hodkinson (2000) point out, different learners have different dispositions and thus perceive and react to similar situations differently.

Thus, 'individuals influence and are part of learning cultures just as learning cultures influence and are part of individuals' (Hodkinson et al., 2008, p.37). Learning is both social and embodied, involving not only the human mind, but the human being in continuous interaction with its social environment (Dewey, 1957). In short, Hodkinson et al. (2007, 2008) take a holistic view of learning theory by unifying two dimensions of cultural learning. In order to examine learning processes in any learning site or location, it is essential to integrate the learner's biography or dispositions (individual), a CoP (community) and the learning culture (wider context). All factors are interconnected.

Interestingly enough, Biesta (2005) also proposes a different way to approach learning. Learning is relational and intersubjective and, rather than viewing it as something which we wish to acquire or possess, we can view it as 'a process of "coming into presence"' (Biesta, 2001; 2005, 62), which 'is about responding to what and who is other and different' and may cause a disturbance, discomfort or disintegration (p62). For Dewey (1997), who expressed his ideas about 'education as growth' as a continual process of becoming, feeling discomfort is part and parcel of the educative experience.

2.4.6. Theories of Learning as they underpin the current study
As has been illustrated, different learning theories conceptualise learning differently. There has been a tendency to categorize learning into cognitive and situative or socio-cultural theoretical positions. As Nicholls (1997) has argued, however, it is

behaviorism and cognitivism which have been dominant in defining education, as well as teacher education.

Making the link with the present study, this type of instruction, which considers teachers as passive recipients of knowledge which is transmitted to them by more sophisticated experts, can be found in the 'traditional' professional development opportunities available to teachers. These opportunities are mostly one-day, off-site activities designed by 'experts' which aim to transmit the latest knowledge (Armour and Yelling, 2004a).

In relation to CPD, and PE-CPD provision, it has been proven that such one-day, off-site activities can be highly unproductive and ineffective (Armour and Makopoulou, 2012; Snow, 2015). In Cyprus, most activities take the form of one-time trainings with very little follow up for evaluation (Document of the World Bank, 2014a). The constructivist perspective suggests that off-school CPD experiences need to be designed in ways that enable teachers to be active learners, bringing aspects of their professional lives into the CPD context, and allowing them to engage in (re)construction of meanings and practices so that they can develop effective learning experiences for their pupils.

In order for learning to be transformative, teachers should also be given time to reflect. Teacher reflection (Schon, 1983) emerges from constructivism and can support improvements in teaching. In describing the Cypriot context regarding the training of primary education teachers, Neophytou and Koumi (2012) point out that the implementation of teacher programmes designed to promote teachers' reflection on their practices results in better teaching. Such programmes should also aim to encourage teacher agency, 'interrupt habitual ways of thinking about schooling' and

'encourage an innovative and questioning mind set' (Priestley, Edwards, Priestley and Miller, 2012, p.5-6).

Since the 1990s social constructivism and situated perspectives of learning have prominently influenced PE research (Quennerstedt and Maivorsdotter, 2016). This thesis also employs social constructivist research as well as situated perspectives of learning because they offer a strong conceptual platform for analysing and understanding the process of learning as experienced by PE teachers. This is because from a constructivist perspective, learning is seen as an active, ongoing process where learners reflect upon their prior and current knowledge and experiences in order to generate new ideas and concepts (Windschitl, 2002; Harris, 2000). Situated learning theory allows for the constructed nature of knowledge and adds the dimension of 'situatedness,' locating learning within activity, context and culture.

Peressini et al. (2004) note that knowledge is inseparable from the situations in which it is embedded and 'grows more complex and becomes "useful" in a variety of contexts through the learner's participation in these different contexts' (p.73). This kind of learning – where there is interplay between different contexts – was evident in the case study teachers' accounts of how they felt they learn (*see* Prelude). As Quennerstedt and Maivorsdotter (2016, p. 423) commented: teachers are not only engaged 'in a constant process of learning to teach,' but also 'in a constant process of learning to learn'.

The key word here is constant. Dewey (1938) has argued for a 'continuity of experience' such that 'every experience enacted and undergone modifies the one who acts and undergoes,' as well as 'the quality of subsequent experiences' (p.26-

27). For Dewey, 'growth' is a continual process of reconstructing experiences in order to make sense of wider realms of experiences and to develop increasingly diverse and dynamic responses in dealing with the environment (Pekarsky, 1990). A Deweyan approach to learning and teaching suggests that a dynamic learning culture leads to more effective PE-CPD and that CPD providers can provide learning experiences which lead to beneficial and productive future growth. In the present study, the accounts of Cypriot teachers (*see* Prelude) resonate with Dewey's arguments about designing learning so that it can lead to more productive future experiences and Eraut's (2007, p.421) focus on both the personal and social aspects of learning in order to enrich teachers' professional learning, and improve 'retention, quality improvement and organizational performance'.

2.5. Chapter Summary

This chapter explored the notion of teacher CPD. It was important to examine what the existing international knowledge says about CPD for teachers, and particularly for teachers who teach PE. A comprehensive overview of CPD international literature focusing on what constitutes effective and ineffective CPD and PE-CPD was provided.

Following this, it was significant in this chapter to provide a description of the setting of this research study and the educational context of Cyprus, with a specific focus on the CPD and CPD for primary school teachers who teach PE. In seeking to interpret the research participants' perceptions and experiences, it is crucial to understand the complexity of the context in which these teachers live and work. Moreover, due to the highly centralized educational system which is under the control of the MoEC, teachers are still obliged to follow the instructions. Based on these settings, teachers'

voices and needs are usually ignored or overridden in order for the government to achieve political goals. Along with teachers' voices and needs, the complex nature of the learning process within a context that is changing due to radical educational reforms is also neglected by the MoEC and CPD providers. Therefore, the argument which is developed in this research study is that there is a necessity to gain a deeper insight into teachers' perceptions, views and experiences from PE-CPD activities in order to achieve effectiveness and high quality within the Cypriot educational system.

The last section of this chapter provided an overview of theoretical perspectives on learning with specific attention on constructivist and socio-cultural approaches to learning. The overview of learning theories was important, since it formed a strong theoretical foundation to investigate research participants' PE-CPD experiences and interpret their perceptions about PE-CPD effectiveness.

Chapter 3: METHODOLOGY

The previous chapter presented a number of theoretical issues relevant to this study, thereby providing the theoretical framework for the research. In this chapter, the research methodology is explained and analysed. Firstly, a detailed overview of the central research paradigms is provided, followed by information on the research design including the main aim and research questions, and a detailed description of the rationale for the selection of the specific methods. This is followed by an account of the processes of data collection and data analysis, and also the procedures of piloting the research instruments. Ethical and practical issues are also addressed.

As pointed out by Bell, 'We all learn how to research by actually doing it, but a great deal of time can be wasted and goodwill dissipated by inadequate preparation' (2005, p.1). It is a commonly held idea that planning and organising research in advance is essential to successfully fulfilling a specific task. When one starts a piece of research it is necessary to identify the research area, define the research question and plan the implementation of the project. As Clough and Nutbrown (2012) state, methodology is a "research diary" which presents the whole process of the research, the difficulties which were faced, and the ethical and practical considerations that had to be dealt with.

According to Campbell, McNamara and Gilroy (2004), one of the most essential decisions that one has to make concerns choosing the most appropriate research methods. Cohen, Manion and Morrison (2011) state that methods are the various approaches which are used in order to collect information and data, and these are essential for forming and understanding conclusions. Thomas (2013) states that the

approach relates to the nature of the issue which will be studied. Robson and McCartan (2016) agree by highlighting the importance of choosing the correct approach for the research, pointing out that it needs to be appropriate in regards to the questions that need to be answered.

3.1. Research Paradigms

'…every piece of research is unique and calls for a unique methodology.'
(Crotty, 1998, p.13-14)

In all research, it is important to explain the underpinning theory and philosophy (Koro-Ljungberg, Yendol-Hoppey, Smith and Hayes, 2009; Scott and Usher, 2011; Staller, 2013). This first part of the chapter defines the theoretical framework for this inquiry by focusing on ontology and epistemology, and making clear the presumptions of the research, the researcher and the research questions.

Several academics (Guba, 1990; Koro-Ljungberg et al., 2009; Staller, 2013) have recognised that there is no single definition of a theoretical framework. This concept has been the cause of some controversy (Crotty, 1998; Thomas, 2013). From the paradigm's appearance by Kuhn (1962), the 'Big Daddy of paradigms,' as Thomas (2013, p.106) distinguishes him, its designation has been expanded (Thomas, 2013). In spite of this, Thomas (2013) argues that, eventually, a 'Eureka' (p.114) moment will occur, since multiple approaches can all lead to a satisfactory outcome.

Guba (1990) suggests that a 'paradigm' refers to 'a basic set of beliefs that guides action' (p.17). Similarly, Mertens (1998) indicates that a paradigm 'is composed of certain philosophical assumptions that guide and direct thinking and action' (p.6). As an alternative to paradigm, Creswell (2014) and Patton (2015) define it as 'a worldview,' that is, 'a way of thinking about and making sense of the complexities of

the real world' (Patton, p.89). Crotty (1998) selects the 'theoretical perspective' and clarifies it as 'the philosophical stance informing the methodology' (p.3).

In his effort to provide a clear explanation for the research philosophy issue, Hughes (2001) employed an allegory. He compared a paradigm to 'a picture frame' (p.31), pointing out that the type of picture frame has a direct impact on the manner in which we perceive the picture. Likewise, the 'framing' of the research study influences the way we see the research.

A research paradigm provides the researcher with a "lens" through which to observe and interpret the social world. However, there are a variety of lenses through which a situation or a phenomenon can be viewed. Hence, since different combinations of the philosophical issues lead to the occurrence of several paradigms (Thomas, 2013), the researcher needs an understanding of the different research paradigms and their strengths and limitations, in order to be able to evaluate them and select the most fitting one for the research study to be conducted (Denzin and Lincoln, 2011; Edwards and Skinner, 2009).

It is necessary for a researcher to be fully cognisant of the research paradigms and philosophical assumptions underpinning research, so as to avoid the risk of incoherence, lack of rigor and an absence of rationale in the inquiry (Denzin and Lincoln, 2011). Furthermore, Grix (2010) identifies three reasons why the consideration of ontological and epistemological assumptions is of major significance to any researcher: it enables researchers to: a) be aware of the 'key components of research' (p.57), b) be transparent respecting the 'theoretical debates and approaches to social phenomena' (p.58), and c) have the skill to distinguish 'others' positions' (p.58) in relation to a project.

According to Hammond and Wellington (2013), in relation to underlying philosophical assumptions there is a '… hierarchy of considerations when carrying out research' (p.109). The researcher prioritizes the epistemological and ontological suppositions in combination with the questions which the study aims to answer while conducting the research. The subsequent and also integral consideration is associated with the methodology, which presents the framework within which a research study is conducted. Last but not least are the research methods, which can be understood as the vehicle that will lead to the achievement of the research's main goal.

3.2.   The philosophical orientation of the study

Ontology and epistemology are directly linked (Crotty, 1998; Hammond and Wellington, 2013). The one assumption completes the other and both are regarded as cornerstones when formulating the research plan (Hammond and Wellington, 2013), since together they generate a paradigm (Mack, 2010). These philosophical assumptions have the tendency to overlap; nonetheless, they are not indistinguishable (Bryandt, 2010).

3.2.1. Epistemological orientation

Epistemology exemplifies a specific interpretation of what counts as knowledge within a field of study (Bryman, 2012). According to Thomas (2013) and other scholars (Cohen, Manion and Morrison, 2011; Hammond and Wellington, 2013), when it comes to epistemology, there is the intentional tendency to find answers to questions about how we know what we know and how we discover actual and warranted knowledge. Researchers consider epistemology in order to attain a clear, logical and coherent position for their research that will eventually guide them towards embracing the most appropriate methods (Hammond and Wellington, 2013) in order to deliver 'reliable social scientific knowledge' (Blaikie, 2004, p.309). There

are two dominant notions within the epistemological philosophy of social research: positivism and interpretivism (Bahari, 2010; Hammond and Wellington, 2013).

In 1970 August Comte identified the perception of positivism in the context of the social sciences (Blaikie, 2007). The concept of positivism encompasses a scientific model based on the belief that 'the social world can be studied in the same way as the natural world' (Mertens, 1998, p.7). Additionally, the positivistic view describes a notion as 'real' within an objectivist understanding (Hammond and Wellington, 2013; Thomas, 2013). This approach is supported by researchers who identify objectivity as the main approach in a research inquiry, since it is clearly attached with 'empirical science as closely as ever' (Crotty, 1998, p.27). In effect, for positivists 'only verifiable claims based directly on experience could be considered genuine knowledge' (Patton, 2015, p.105). Thus positivists give knowledge an objective meaning, discounting any need to take into consideration humans' abilities to interpret their own experiences (Thomas, 2013). They also identify with the position of dualism; i.e. that there should be no link between the researcher and the participants, and that the use of strict, regular techniques means that bias can be prevented (Ponterotto, 2005).

An interpretive perception contrasts sharply with the positivistic approach. Interpretive research has as its objective the multifarious understandings of individuals, formed as they are through their interactions in the social world (McKenna, Richardson and Manroop, 2011; Petty, Thomson and Graham, 2012; Stahl, 2013; Thomas, 2013). Indeed, acknowledging the 'value-laden nature of fact and the interactive nature of inquiry' is essential in social science research (Denzin and Lincoln, 2011, p.92). One of the dominant points of the interpretive paradigm is

the significance of the researchers' role in the process of the interpretation of research participants' understandings.

Researchers who investigate and operate within an interpretive context need to have close interaction with participants. It is a requirement to draw upon their own positions and presuppositions in order to shed light on the perspectives of the research participants by decoding their behaviours, attitude, manners, expressions and comments (Klenke, 2008; Thomas, 2013), and even their visual and non-verbal cues (Robson and McCartan, 2016).

In light of this, it can be argued that the interpretive researcher acts like another research participant, since both the researcher and the researched individuals collaborate in the inquiry procedures. Through this process the interpretive researcher will be in a position to explore and examine the research participants' standpoints (Klenke, 2008; Pope, 2006). Thus the involvement of researchers – including their bias and background – is often regarded as inevitable.

The consequence of such a relation between the researcher and research participant is recognition of subjective identity in the interpretation of the research participants' meanings. McKenna et al. (2011, p.150) indicate that a research study's subjective identity provides 'integrity' to the operation of the research fieldwork. Within this interpretive framework, other issues to be considered are: hermeneutics, naturalism, constructivism, the case study, phenomenology, and ethnography (Pope, 2006; Stowell and Welch, 2012).

Hermeneutics has its origin in the interpretive paradigm's principles and theories with regard to the multifaceted nature of understanding (Crotty, 2003; Pope, 2006).

'Hermeneutics' stems from the Greek verb *hermeneuein* ('ερμηνεύειν'), which means 'to interpret', and its background is based on Ancient Greek mythology and, more specifically, on the Olympian God Hermes (characterised as 'messenger'), who had the responsibility of transmitting the gods' wishes and commands to people (Crotty, 2003; Neuman, 2014).

This approach is at the core of the process of understanding meaning. Hermeneutics' intention is the decryption and explanation of different meanings by means of language, text and discussions (Crotty, 2003; Pope, 2006; Stahl, 2013). Considering this, interpretive researchers employing the hermeneutical approach focus on understanding, with the aim of revealing research participants' perceptions that lie behind their words and actions (Pope, 2006).

Having reviewed various paradigms, it is clear that research conducted in a positivistic paradigm would not be appropriate to answer this study's research questions. The main purpose of inquiry from a positivist approach is to make predictions through exploring and investigating the principles of phenomena and such research often uses an empirical experimental frame (Lincoln, Lynham and Guba, 2011; Maxwell, 2013).

3.2.2. Ontological orientation

Ontology is about 'what you are looking at – the kind of events that exist in the social world' (Thomas, 2013, p.119). Moreover, ontology defines the nature of reality within which humans live and act, alone or towards others (Blanche and Durrheim, 2006; Edwards and Skinner, 2009; Hammond and Wellington, 2013). Ontology is the starting point upon which a researcher focuses when starting to think about the research aim and how the inquiry will operate (Hammond and Wellington, 2013). As

a philosophical assumption, ontology is divided into two beliefs – objectivism and relativism (Cohen, Manion and Morrison, 2011; Hammond and Wellington, 2013).

According to Bryman (2012), objectivism supports the position that 'social phenomena and their meanings have an existence that is independent of social actors' (p.33). Objectivism embraces the belief that reality has meaning that can be understood aside from human interpretations, perception, background or consciousness (Graue and Karabon, 2013). Such a belief consequently affirms that 'all gain the same understanding' (Jonassen, 1991, p.9).

In marked contrast, relativism is in oppostition to the objectivist orientation because it adopts the alternative position that reality is 'humanly constructed and shaped in ways that make it fluid and multifaceted' (Sparkes and Smith, 2014, p.11). Hence, from a relativist approach, reality is not only one entity and it cannot be interpreted beyond the bounds of social settings and peoples' experiences (Guba and Lincoln, 1994).

Although positivism has held a dominant position in much research (Crotty, 1998), it has been argued that it does not have the capacity to recognize people's lived experiences (Schwandt, 1994). Hence, constructivism arose from the challenge to interpret and define human and social reality or truth (Crotty, 1998). Guba and Lincoln identified a constructivist research approach as 'naturalistic inquiry' (Guba and Lincoln, 1989, p.19). One significant difference between positivism and constructivism is that the latter takes the standpoint that 'all meaningful reality is socially constructed' (Illing, 2007, p.11).

One of the most central beliefs of constructivism is that:

'realities are social constructions, selected, built, and embellished by social actors (individuals) from among the situations, stimuli, and events of their experience'

(Lincoln and Guba, 2003, p.227).

Likewise, Gergen (1985) states that 'the process of understanding is not automatically driven by the forces of nature, but is the result of an active, cooperative enterprise of persons in relationship' (p.267). One can argue that every individual is able to create meaning out of the environment as he/she experiences it. In view of this, the same phenomenon can be experienced in different ways by different individuals. This feature of multiplicity underpins the belief that knowledge is constructed and not simply 'discovered' (Illing, 2007; Vrasidas, 2000). Crotty (1998) adds that with constructivism, interpretation is constructed by humans as they engage with the world they are interpreting.

Numerous schools of thought have been identified within constructivism, leading to claims that it is a confusing term with a heterogeneous composition (Lee, 2012; Lincoln et al., 2011). Subsets within constructivism include radical constructivism (Von Glaserfield, 1989) or 'personal constructivism' (Vrasidas, 2000, p.345), social constructivism (Guba and Lincoln, 1994) and social constructionism (Schwandt, 2003).

The two most recognized perspectives within the constructivist paradigm are constructivism and constructionism (social constructionism). These two terms are strongly associated (Hammond and Wellington, 2013), and they are at times used interchangeably (Gergen, 2012; Gergen, 2014). Many academics have attempted Illing, 2007; Lee, 2012; Schwandt, 1994; 2003) to separate the two terms and clarify the focus of each one. Crotty (1998) indicates that unlike constructivism, for

constructionism the 'social dimension of meaning is at center stage' (p.57). Crotty's position is echoed by Gergen (2014), who supported that constructivists focus on the meaning-making processes 'within the mind of [the] individual person' (p.1772), whereas constructionists focus on the social construction of meaning.

Construstionism is well established within qualitative research but ontological questions remain (Lee, 2012; Pernecky, 2012). Pernecky (2012) argues that the differences between interpretivism, hermeneutism and constructivism identified by Denzin and Lincoln (2011) remain unclear, leading to an even more challenging task for clarification. Attempting to position constructionism as a clear paradigm can be problematic given its overlap with other viewpoints.

The paradigm of constructionism, according to Denzin and Lincoln (2011), adopts 'relativist ontology, a subjectivist epistemology, and a naturalistic set of methodological procedures' (p.13). Crotty (1998) states that at times the term subjectivism 'appears to be what people are actually describing when they claim to be talking about constructionism' (p.9), while Lee (2012) points out that the term 'subjectivist epistemology' (p.409) does not provide clarity for constructionism.

In this respect, the links between objectivism, subjectivism, realism and constructionism need further clarification. At first, it appears from constructionism that the association as regards the object and the subject is imperative (Gergen, 1994; Schwandt, 2003). On the other hand, the difference with subjectivism is that from this perspective, there is no link between the subject and the object within the meaning-making procedures (Crotty, 1998).

According to Crotty (1998), constructionism involves a balance between 'objectivity and subjectivity' (p.44), particularly a balance between the evidence we can assemble from objects in the world and the meaning we can construct from this evidence. In consideration of this, Lee (2012, p.409) proposes 'constructionist epistemology' as a more fitting term and as a substitute to 'subjectivist epistemology.' Barkin (2010) adds that the distinction between ontology and epistemology plays a major role in the classification of constructivism.

According to Barkin (2010) and Crotty (1998, p.63), to further reveal the complications of constructionism's definition, within epistemology constructionism can be considered 'compatible' with realism within the ontology context. However, Pernecky (2012) argues that realism should not be mixed up with objectivism. Objectivism argues that consciousness has no association with the meaning which inheres in objects and is thus rejected by constructionism, which holds the belief that 'actual meaning emerges only when consciousness engages with them' (Crotty,1998, p.43). Consequently, it seems clear that realism cannot be considered as part of the paradigm of constructionism (Pernecky, 2012) as indicated by Lincoln, Guba and Denzin (Lee, 2012).

As noted earlier, the constructionist paradigm was originally labeled by Lincoln and Guba as 'naturalistic inquiry' (Guba and Lincoln, 1994, p.105). They have now identified it as 'social constructivism,' using the term constructivism in place of constructionism (Guba and Lincoln, 1989; Lee, 2012, p.406). In light of the term's origin, the use of the adjective 'social' mirrors the social foundation and 'generation' (Crotty, 1998, p.55) of meaning. From a constructivist research perception, according to Schwandt (1998), the researcher and the research participants are

powerfully interconnected within the procedures of 'inquiring into constructions' (243). Lincoln and Guba (1985) describe this as a process whereby 'knower and the known are inseparable' (p.37); thus, the outcomes are 'literally created as the investigation proceeds' (Guba and Lincoln, 1998, p.207).

This viewpoint implies that the purpose within a constructivist research approach is the interpretation and continuous regeneration of multiple realities as the research participants conceive them (Guba and Lincoln, 1998). This also leads to outcomes that result from joint development of a reality representing the researcher's and the research participants' interpretations (Schwandt, 1998). All these perceptions reflect Gergen's (1994) conception of 'meaning in relationship' (p.262), highlighting that it is 'human interaction' which brings the power of meaning to 'language' (p.263-264). Language can be deemed as the expression of how we perceive the world (Crotty, 1998). From this viewpoint, human beings are actually constructed by language (Schwandt, 2003).

Given the purpose of this study and the focus on the processes of teachers' professional learning, a constructivist – more specifically a social constructivist – paradigm has been chosen. In this paradigm, meaning and the processes of meaning making depend on the role of subjective interactions and individual agency. In this sense, this paradigm has 'pluralistic, interpretive, open-ended, and contextualized (e.g., sensitive to place and situation) perspectives toward reality' (Creswell and Miller, 2000, p.125-126). Thus meaning-making occurs through interactions between individuals, events and physical settings around learners. Since learning in the constructivist paradigm is not concerned with the acquisition or conveyance of existing knowledge, but focuses, rather, on individuals' own

constructions through reciprocal actions, it is considered to be the most appropriate paradigm for this study.
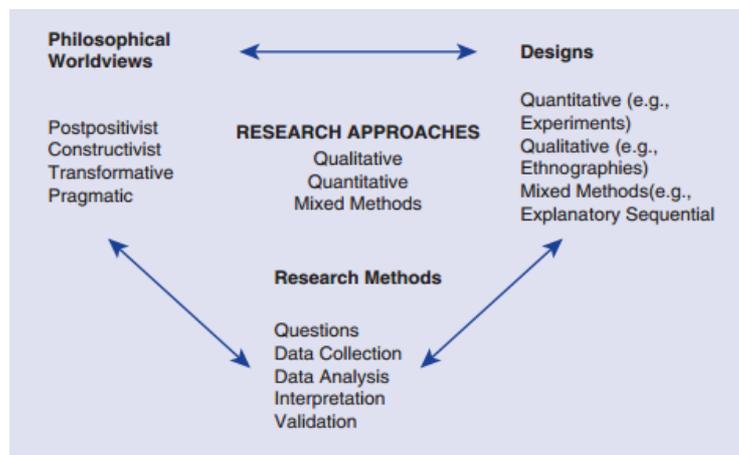
Figure 2. Framework for Research. In Creswell (2014, p.5)

3.3. Methodological Research Approaches

One of the most fundamental decisions a researcher must make is the selection of a suitable approach for the research project, including identifying philosophical assumptions, the research design and the specific methods for collecting, analyzing and understanding the data (Creswell, 2014). As seen in Figure 2, Creswell (2014, p.5) attempts to demonstrate the interconnection of all these aspects of a research framework.

In contrast to Creswell's use of the term 'research approaches' (2014, p.3), Teddlie and Tashakkori (2009) prefer to understand these as 'methodological movements' (p.4). Creswell (2014) and Thomas (2013) agree that in relation to the research approach there are many factors which can guide the researcher's decision, such as the research question, the researcher's background and the audience for the research. The only factor which should not drive a researcher's research approach is familiarity with a specific – and limited - range of methods. Instead, the key focus should be on how best to answer the research questions (Thomas, 2013).

The three main research approaches suggested in the methods literature are quantitative, qualitative and mixed methods (Bryman, 2012; Cohen, Manion and Morrison, 2011). These research approaches are mechanisms that enable researchers to answer research questions, interpret a phenomenon or find a solution to a problematic case within their research project. It is important for a researcher to not only identify the research approach, design and methods employed, but also to rationalize their 'particular research decisions, from the outset to the conclusion of their enquiry' (Clough and Nutbrown, 2012, p.21). Aside from research approach decisions, decisions also have to be made regarding the 'practices' (Denzin and Lincoln, 2011, p.4) or 'designs' (Creswell, 2014, p.12) of the research. Research designs are the means through which researchers can obtain a clear route to follow in order to accomplish their research aims. Each research approach contains its own range of designs.

As its name implies, quantitative research is related to quantities (Bryman, 2012; Thomas, 2013). Research of this type attempts to explicate a phenomenon based on numbers and measurements that test the theories through a deductive approach (Bahari, 2010; Bryman, 2012; Creswell, 2014; Newby, 2013; O'Leary, 2014; Yilmaz, 2013). The quantitative approach is situated within the orientation of positivism and views social reality objectively (Grix, 2010; Lichtman, 2013; Thomas, 2013).

Since the emphasis within quantitative research is on specific variables and hypotheses, the designs and practices that are mostly employed are experiments and surveys with closed-ended questions (Creswell, 2014) that aim to test the hypotheses in order to ascertain the theory (Creswell and Plano Clark, 2007). The

researcher's position is one of objectivity and establishing clear strategies in order to avoid bias that could influence the research outcomes (Grix, 2010; Newby, 2013).

This approach cannot simply be described as being the opposite of a qualitative approach. Various terms (such as naturalistic, interpretive, subjective) have been used to identify qualitative research. These approaches are not identical but they are based on similar assumptions. In accordance with the multiplicity that characterizes qualitative research terminology, Yilmaz (2013) gives a comprehensive description of the characteristics and elements of this approach. Specifically, he states that

> 'it is an emergent, inductive, interpretive and naturalistic approach to the study of people, cases, phenomena, social situations and processes in their natural settings in order to reveal in descriptive terms the meanings that people attach to their experiences of the world' (p.312).

Qualitative research is grounded in the position that reality is socially constructed; thus it fits well within constructivism (Lichtman, 2013; Yilmaz, 2013). Qualitative researchers also focus primarily (although not exclusively) on collecting verbal or narrative forms of data (Bahari, 2010; Bryman, 2012), in contrast to quantitative numerical data. Generally, a qualitative researcher's main purpose is rich description and in-depth investigation and interpretation of a phenomenon from the viewpoint of the research participants (Creswell and Plano Clark, 2007). According to Lichtman (2013), much emphasis is placed on the 'interactions, processes, lived experiences, and belief systems that are a part of individuals' (p.130).

Different designs can be selected to undertake qualitative research depending on the research aim and questions. Common designs include narrative research, phenomenological research, grounded theory, ethnography and case studies

(Creswell, 2014). Likewise, there is a wide range of methods used and these are often combined within one project (Corbin and Strauss, 2008). According to Denzin and Lincoln (2011), key methods are 'field notes, interviews […], observational, historical, interactional and visual texts' (p.3, 4).

In qualitative research, researchers focus on participants' personal experiences and views in order to try and understand how meanings are constructed within society and to attempt to discover rich and multidimensional interpretations (Corbin and Strauss, 2008). It is important to note that traditional (quantitative) notions of generalizability are not appropriate for qualitative research (Grix, 2010).

The qualitative researcher tends to operate as a 'key instrument' in the research process (Creswell, 2013, p.44), working within the 'natural settings' of participants (Denzin and Lincoln, 2011), employing 'multiple sources of information' (Creswell and Plano Clark, 2007, p.31), and aiming to get 'open-ended responses' (Yilmaz, 2013, 313). The aim is not to be 'detached from the object of study' (Grix, 2010, 121), but 'to connect with [participants] at a human level' (Corbin and Strauss, 2008, 13).

Additional characteristics required for qualitative researchers are to: 1) be flexible throughout the research process, 2) reflective about their background and their decisions, 3) be able to create the right atmosphere to enable people to feel free to express their personal experiences and notions, and 4) use subsequent probing questions such as *why*, *how* or *in what way*, thus aiming to get rich responses (Bryman, 2012; Creswell, 2013; Green and Thorogood, 2014).

Quantitative and qualitative approaches are rooted in opposing views as regards their 'epistemological, theoretical and methodological underpinnings' (Yilmaz, 2013, 312). Notwithstanding, they have similarities as well, and they can 'complement each other' (Thomas, 2013, p.116). In recent years, there has been more of a tendency to see complementarity in the two approaches (Walsh, 2012, p.10).

The combination of both quantitative and qualitative approaches can be considered as one response to the intense debates about the benefits and/or weaknesses of both main approaches (Bryman, 2012; Teddlie and Tashakkori, 2009). Therefore, the 'third methodological movement' (Teddlie and Tashakkori, 2009, p.4) is identified as mixed methods research or a multi-method, multi-strategy and mixed methodology (Bryman, 2006). The mixed methods approach employs practices from both quantitative (numeric) and qualitative (narrative) research orientations, aiming to answer 'confirmatory and exploratory' questions based on 'deductive and inductive logic' (Da Costa and Remedios, 2014; Teddlie and Tashakkori, 2009, p.26).

Pragmatism is the philosophical assumption which is connected with this research approach (Teddlie and Tashakkori, 2009). The integration of elements of quantitative and qualitative research approaches is a key feature of the mixed methods researcher throughout all the research phases (Tashakkori and Creswell, 2007). Two examples of mixed methods research designs are the 'parallel mixed design' and the 'sequential mixed design' (Creswell, 2014, p.15; Teddlie and Tashakkori, 2009, p.26). Within the mixed methods research approach, the element of triangulation is key (Teddlie and Tashakkori, 2009). It is also important to note that some researchers question whether qualitative and quantitative research can in fact be

'mixed' easily, given their very different philosophical foundations. According to criticisms by many theorists (e.g. Creswell, 2014; Teddie and Tashakkori, 2009), there is the potential for a mixed methods approach to place a reduced emphasis on qualitative aspects of research. At the same time, since both methods have specific validity requirements it is claimed that 'legitimation' would be a more appropriate term to use instead of validity when integrating more than one method. The mixed methods approach should take into account the fact that each method has its own 'canons of validity' (Cohen, Manion and Morrison, 2011, p.198) and that the quantitative data approach will usually use larger samples than qualitative research.

3.4. Situating this study

In this and subsequent sections the researcher will position this study in relation to its theoretical framework, epistemology, ontology, and its methodology-research approach. The focus will not be on trying to determine which paradigm is the best, but which one is the most suitable (Patton, 2015). The researcher's 'ontology' – his or her held views, ideas, assumptions or beliefs about the nature of reality – will provide the framework for raising questions (epistemology) and then examining them in specific ways (methodology, analysis) (Denzin and Lincoln, 2005). For this research, the social constructivist paradigm has been deemed to be the most appropriate because social constructivists are interested in individuals' learning processes. This is because the main aim of this study was to examine how primary school teachers learn, and to analyze the effectiveness of CPD, and more specifically PE-CPD provision in primary schools in Cyprus. Additionally, the study also lies within the interpretative tradition of qualitative research, since it attempts to

understand and represent the views of those researched as understood at the time of the research engagement.

3.5. Qualitative Research

Qualitative research aims to gain an in-depth understanding of what is being studied and it can be used to study the experiences of people, including people's opinions (Punch, 2014). The present study aims to explore the views and experiences of primary school teachers regarding the provision of PE-CPD. According to Robson and McCartan (2016), the qualitative method is appropriate for exploratory work of this nature. The researcher's intention in this study was to collect a variety of views and in this way try to gauge and convey teachers' notions, feelings and experiences on the research topic.

Although qualitative research has been deemed to be the most appropriate method for analysing the data in this research project, it too has its setbacks and limitations. Apart from the fact that the volume of data collection makes analysing and interpreting the data time-consuming, the quality of the research itself is heavily reliant on the researchers' individual skills and his or her personal biases. Indeed, the researcher's inevitable presence during the gathering of data may affect participants' responses. Additionally, there may be ethical considerations, and issues of confidentiality and anonymity may pose a problem if they are not dealt with sensitively and appropriately.

One productive way of dealing with the question of the researcher's bias, according to Harry, Sturges and Klinger (2005), is to remain open and develop 'truly reflective research habits' in qualitative research instead of being hindered by the 'dichotomy between neutrality and value-laden perspectives' (p.11). The use of constructivist

grounded theory allows us to do this, since it endeavours to maximise the application of qualitative findings by 'encouraging participants to reflect upon their experiences […] in fruitful ways for advancing theory construction' (Charmaz, 2014, p.95). A constructivist researcher will study how the participants use language to create meaning, and 'emphasize eliciting the participant's definitions of terms, situations, and events' in an attempt to 'tap' into their 'assumptions, implicit meanings, and tacit rules' (Charmaz, 2014, p.95).

Another way of dealing with the researcher's bias is by utilizing the interpretive method, which seeks 'to understand the subjective world of human experience' (Cohen, Manion and Morrison, 2011, p.17). Such an interpretive approach takes into consideration 'emergent, multiple realities,' contingencies and 'indeterminacy,' and views 'facts and values as inextricably linked; truth as provisional; and social life as processual' (Charmaz, 2014, p.231). In this interpretive method, both the researcher and the participants interpret each other's actions and meanings. The researcher does not attempt to impose any external structures or forms, since these would reflect 'the viewpoint of the observer as opposed to that of the actor directly involved' (Cohen, Manion and Morrison, 2011, p.17).

The present study adopts an interpretive, social constructivist and qualitative approach to research. This is because the aim is to understand Cypriot primary school teachers' experiences of teaching and CPD provision, and what for them constitutes effective provision. Within this perspective, it is only grounded and interpretative theory which will allow the researcher to actively investigate participants' personal experiences, views, and meanings (Cohen, Manion and Morrison, 2011). Qualitative and interpretative researchers 'share the goal of

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understanding the complex world of lived experience from the point of view of those who live it' (Schwandt, 2000, p.118). Qualitative research involves the sustained interaction of the researcher with the participants, who are social actors, in order to understand and make meaning out of their experiences, and it can draw upon a range of methods such as focus groups, interviews, conversations and field notes (Denzin and Lincoln, 2005).

Since the researcher's aim was to 'understand the meaning people involved in education make of their experience,' and the nature of Cypriot PE teachers' engagement in professional learning in various contexts, the use of interviews, for example, seemed quite apt (Seidman, 2015, p.10). Interviews are more flexible than other qualitative methods (Bryman, 2016) and can allow the researcher-interviewer 'to unravel the complexity of other people's worlds' (Rubin and Rubin, 2012, p.134). This is particularly significant in the field of CPD, and PE-CPD in particular, where teachers' views and experiences have received relatively little attention in the international research literature (Armour, 2006; Armour and Yelling, 2004a, b).

3.6. Research Design
'Research design' can be defined as the researcher's plan (Thomas, 2015). By following a design, researchers aim to get the maximum benefit from the rational management and organization of a study's procedures and tasks, and the achievement of robust outcomes (Miller and Brewer, 2003). Hence a research design assists the researcher in carrying out a research project in as rigorous and coherent a way as possible. The study was designed and conducted within a social constructivist (Guba and Lincoln 1994) and interpretive paradigm.

The main aim was to explore and interpret teachers' and CPD providers' perceptions and experiences of existing PE-CPD provision. In this research, therefore, participants are positioned as active, dynamic and collaborative learners, and the researcher's interpretive stance is an attempt – as far as is possible – to 'get inside the person and to understand from within' (Cohen, Manion and Morrison, 2011, p.17). At the very least, the researcher has made every effort to understand the participants' views and experiences as shared by them, and reflect them as accurately as possible in the reporting.

The study was carried out in three overlapping phases. An open-ended survey was distributed to all 'PE Coordinators'/ 'PE Specialists', followed by individual interviews with fifteen case study teachers and a joint teacher-CPD providers focus group. The case study was selected because it enabled the researcher to comprehend complex processes within real life contexts and to 'make the case understandable' (Stake 1995, p.85). According to Hodkinson and Hodkinson (2001), within a case study framework unforeseen issues can be revealed and this was a key aspiration for the research.

3.6.1. Aim and research questions
According to Armour and McDonald (2012), research questions provide explicit investigation lines for the effective implementation of the research. This study's main aim, research questions and philosophical perspective have guided the research paradigm underpinning the study. The main aim of this study was to analyse the nature and effectiveness of CPD provision for teachers who teach PE in Cypriot primary schools, and to make evidence-based suggestions for future provision.

The main research question is:

Does PE-CPD in Cyprus meet the career-long learning needs of primary school teachers?

This main question was broken down into a series of sub-questions:

a) What can be learnt from the international research literature about 'effective' and 'ineffective' models of CPD for professionals, teachers and PE teachers?

b) What learning theories underpin different models of CPD?

c) What is the nature of CPD opportunities offered to PE teachers in Cyprus throughout their careers?

d) What evidence is there to suggest that the current model of CPD offered to PE teachers in Cyprus is either 'effective' or 'ineffective', and why?

e) What would an 'effective' model of CPD look like for PE teachers in Cyprus and how could it be implemented?

f) What are the implications of this research for PE teachers in Cyprus and in other comparable international contexts and how can this research inform CPD policy?

3.6.2. Research Participants

Three hundred and forty teachers who teach PE from all primary schools (n=340) in Cyprus were invited to complete a survey that contained both open-ended and closed questions. Each primary school in Cyprus has one generalist teacher who also has the responsibility for coordinating PE. The one hundred and eighty-three PE teachers (53.8%) who responded to the survey included male and female teachers that were in different career stages, with a variety of experience, from all five provinces of the country, and from both rural and urban schools. The respondents were, therefore, a reasonable reflection of the wider population of teachers. It is

acknowledged, however, that the respondents self-selected to complete the survey, which differentiates them from the non-responders, and may be indicative of a stronger interest in the research topic.

In order to gain deeper insights into the Cypriot PE-CPD context, fifteen teachers who teach PE participated in a series of in-depth, face-to-face semi-structured interview sessions. These teachers were considered as individual case studies to enable the researcher to 'understand as a whole' (De Vaus, 2001, p.220) and to look in depth at their issues and perspectives (Thomas, 2015). A purposive sampling strategy (Creswell, 2013; Yin, 2013) was used to select the teachers for the case studies from those who had earlier responded to the survey.

The selected case study PE teachers included both males and females, from rural and urban schools, and five were 'early-career' teachers, five were 'intermediate' teachers and five were 'experienced' teachers. 'Early-career' teachers are the teachers who secure permanent employment in public schools after being on a temporary 'service' contract for many years within schools.

The aim was to include teachers from all the major groups to ensure optimal learning from the cases, although no claim is made that these teachers are 'representative' of all teachers in these categories. All fifteen teachers consented to contribute to the study by sharing their notions, experiences, feelings and concerns in relation to CPD provision in PE.

Three key CPD providers were interviewed in order to gain an understanding of the Cypriot CPD system and to compare the perspectives of CPD providers and teachers. Snowball sampling (Thomas, 2013) was used in order to identify these

CPD providers. The CPD providers' responsibilities include the leadership, organisation and evaluation of PE across Cyprus, as well as encouraging teachers to engage actively in the PE-CPD provision that they organise and provide.

3.7. Data Collection

Data sources encompassed: a) an open-ended survey, b) a series of three semi-structured interviews with fifteen teacher case studies, semi-structured interviews with three CPD providers and, d) a focus group with three CPD providers and three teachers. The data collection period ran for the year 2012-2013.

Table 2. Data Collection Procedure

Phases	Participants/Sampling/Process
Phase 1: Survey	PE specialist teachers (n=340) • Whole population • Survey delivered to one PE specialist teacher per school
Phase 2: Case Studies	Teacher case studies (n=15) • Purposive sampling • 3 interview sessions with each teacher CPD providers' case studies (n=3) • Snowball sampling • 1 interview session with each CPD provider
Phase 3: Focus group	Teachers (n=3) CPD providers (n=3) • Purposive sampling • 1 group interview session

3.8. Phase 1: Survey

The survey is a widely used research instrument which aims to gain information for the description and analysis of the 'previous, current or future behavior, attitudes and opinions of a specified population' (Brandl-Bredenbeck and Kampfe, 2012, p.174). Bell (2005) also highlights the intention of the survey as being to obtain the ideas, positions and activities of a group of a population. Thomas (2015) explicates that the survey is a type of questioning in a written arrangement and that it can be either open-ended or closed-ended.

Surveys are defined as a research technique which contributes to efficient data gathering within the applied social sciences. This research instrument was used for the present study since it satisfied the needs for answering the main research purpose: collecting data relating to PE primary school teachers' CPD background and experiences; their views and attitudes on the effectiveness of the existing PE-CPD provision; and how their experiences from the PE-CPD activities they attended influenced them, and whether they had an impact upon their teaching practice and performance. Simultaneously, through the survey a lot of information was obtained concerning the career-long professional learning needs of the PE primary school teachers, and also their notions and recommendations for the improvement of the CPD system.

In terms of the population for survey participation, all the teachers (usually one PE primary school teacher from each school- PE Specialist) who had the main responsibility regarding the subject of PE from every school across the whole of Cyprus were included. Since the total number of primary schools in Cyprus was 340 at the time the current research study was undertaken, the total number of the recipients was also 340. Since the recipients were all the primary school teachers

who were responsible for PE in each school (PE Specialists), the sample was identified as nationally representative for this specific population and not for the whole population of general primary school teachers.

According to Bell (2005), it is more effective to use a sample which is representative, even if the research is on a small-scale. However, the intention was to gain a satisfactory number of responses from PE primary school teachers and qualitative, in-depth and explicit information concerning their attitudes, views and experiences about PE-CPD provision in order to clearly depict the current status of PE-CPD rather than draw conclusions via generalizations.

In order to generate the most suitable type of questions, survey language and writing, and the form of the design, many relevant issues were considered, and several attempts, drafts and reorganizations were carried out. Similarly, the appearance and the layout of the survey were also considered. According to Bell (2005), respondents are more willing to answer a survey which is tidy and well organised. Therefore, the questionnaire that was used in the present study was constructed taking into account a wide range of views (Bell, 2005; Brandl-Bredenbeck and Kampfe, 2012; Campbell, McNamara and Gilroy, 2004), and these are explored in the sections that follow.

With reference to the purpose and theoretical and epistemological framework of the present study, the survey was designed with the aim of collecting detailed and in-depth qualitative information from the recipients, and it was decided that this could be best achieved through open-ended questions. The design of an open-ended survey was considered to be appropriate, as it gave the respondents the chance to express their notions and beliefs without all the constraints of a closed ended survey,

although it is recognised that no research instrument is without limits. This idea is also supported by various academics (Bell, 2005; Campbell, McNamara and Gilroy, 2004) who indicate that it is through open-ended questions that broad and detailed responses can be elicited.

The survey consisted of three sections. The first section sought personal information regarding gender and years of teaching experience. The second section involved questions regarding the CPD and PE-CPD activities the PE primary school teachers attended, together with their perceived effectiveness or ineffectiveness. The third section was concerned with their views and attitudes towards the existing PE- CPD system and provision and its effectiveness. This section was designed with the intention of gaining detailed responses; hence it included open-ended questions relating to the subject of the research study.

An essential part of the survey is the introductory letter presenting detailed and key information relevant to the study and its purpose, as well as guiding instructions for the recipients to easily complete all the sections (Bell, 2005). The survey of the present study included a covering letter that explained everything the participants needed to know (*see* Appendix E). Closely linked with the concept of the response to the survey is the way the survey will be delivered to recipients, what will be attached with the survey and the explicit details which will be provided regarding the communication between the recipients and the researcher.

As Bell (2005) recommends, the survey should be accompanied with a written committee approval for the employment of a research study, a paragraph presenting the participants' rights, the researcher's details and contact information, and also a return date to enable easy and fast responses. The survey of the present research

study was included in an envelope with all the aforementioned documents and was sent by post to every primary school in Cyprus.

A three-part survey was developed to thoroughly explore the key PE-CPD notions and experiences of teachers who teach PE in primary schools. This survey was based on previous PE-CPD studies developed by Armour and Yelling (2004a) and Pedder, Storey, and Opfer (2008).

The survey had a 53,8% return rate. Even though it was acknowledged that with an open-ended survey it would be hard to attain a high response rate (Robson and McCartan, 2016; Ary, Jacobs, Sorensen and Walker, 2014), it was believed that allowing teachers to reflect on their careers and experiences would enable the full grasp of 'authenticity, richness, depth of response, honesty and candour' within their answers (Cohen, Manion and Morrison 2011, p.393). To ensure a high return rate and full completion of the surveys, the researcher drove to each primary school to administer and collect the survey (which, of course, is only feasible in a small country). It was anonymous and teachers could choose whether or not to give the name of their school and province.

Since the study involved Greek-speaking Cypriot teachers, the survey needed to be carefully translated into Greek without changing the meaning of the questions. Finally, the survey was piloted with ten Cypriot teachers who specialized in other subjects and were not involved in the research. The teachers were asked to comment on the meaning, wording, layout and length of the survey. Following the pilot test, minor alterations in the terminology and presentation of the survey were made. Participants helped shape the format of the questions with their comments. This led to greater specificity. One example is when the researcher was led to

change the terms of learning and training in the survey to professional development as advised by the participants in the research study.

3.9. Phase 2: Case Study

3.9.1. Definition of Case Study Approach

Case study design has been widely discussed, and much debate and argument have focused on its definition and features. Case studies have been a subject of criticism by some academics for lacking rigour and reliability, and for not offering generalizability (Thomas, 2015). Nevertheless, many authors agree that case study design has its advantages, especially when the aim of the study is to gain deep insights and a holistic view of a phenomenon (Thomas, 2015). A case can be literally anything, according to many authors such as De Vaus (2001) and Thomas (2015). It can be an individual person, or a group of people, an incident or an event. In the current study, Cypriot primary school teachers are the main case of the research.

The most widely used definition of a case study is that by Yin (2013), who defined it as 'an empirical inquiry that investigates a contemporary phenomenon within its real life context' (p.18). Some key features of case study research have been agreed upon by researchers; for example, Creswell (2013) argued that a case study offers an 'in-depth understanding' of a situation (p.98); while others point to the features of concentrating on an issue and attempting to investigate it extensively (Bell, 2005; Yin, 2013a; Thomas, 2015). According to Gulsecen and Kubat (2006), a case study approach plays a key role when the research focus is education. Furthermore, the case study approach seems to be particularly suitable for answering 'why' or 'how' research questions (Thomas, 2015).

The intention of this research is to explore the current provision of PE-CPD in Cyprus; to develop an extensive understanding of views and experiences of teachers in connection with their professional learning; and finally, to examine the features of PE-CPD effectiveness. By using a case study design, all the above can be investigated in the research, since throughout the literature it is stated that case study design can potentially be a very effective tool in gaining deep insight into contexts, experiences or situations. Yet, a case study can also be an umbrella for a range of methods to ensure that the complexity of a social situation is better understood (Robson and McCartan, 2016). Thus, multiple methods are employed in this study in order to achieve an in-depth understanding of the views of the research participants.

3.9.2. Types of Case Study

There are different types of case study reflecting the multiple purposes and focal points of this method. The type of case study, therefore, is directly associated to the main aim of the research. Yin (2009, p.19-20) indicated that case study design has the ability to 'explain, to describe, illustrate and enlighten'; hence case studies can be exploratory, descriptive or explanatory. According to Yin (2013a), a descriptive case study offers a full account, or in other words, an illustration of an event in a specific situation.

In relation to this, it is clear that the main research question of the current study can be characterised as descriptive, since the study attempts to gain a holistic understanding of primary school teachers' experiences of PE-CPD provision in Cyprus. Another widely used typology of case studies is Stake's (2005) identification of intrinsic, instrumental and collective types of case study. The present study clearly

belongs to the collective type of case study, since it investigates more than one case of Cypriot primary school teachers regarding the issue of Cypriot PE-CPD provision (15 case studies).

An additional distinction of major importance is the number of cases to be explored Yin (2013a; De Vaus 2001); i.e. single case study or multiple case studies. The present study can be characterized as an instance of a multiple case study since it explores the case of more than one primary school teacher in the three stages of the data collection phase.

3.9.3. Case Selection Criteria and Case Study Planning (CPD Providers and Primary School Teachers)

The sampling process used in phase two of the data collection can be identified as deliberate (Thomas, 2015). The primary school teachers (15) and CPD providers (3) who were involved in the semi-structured individual interview sessions had to fulfill certain criteria in order to be selected as contributors to this study. As claimed by Punch (2016), when conducting a research study, it is important that the details of the sample selection procedures are clearly reported. Participants involved in the semi-structured interviews are divided into two groups – the primary school teachers and the CPD providers. The main participants in this study are primary school teachers in Cyprus, but CPD providers were also involved in the case studies (interviews) in order to offer further insights into the research topic.

The aim was not to select a 'representative' sample in the traditional sense, but to ensure that a wide range of experiences was reflected in the data. The three types of teachers can be defined as heterogeneous, since their background and qualifications differ, and they experienced PE-CPD under different circumstances within the

educational system's structures (*see* Table 3). Hence, the decision to include teachers who were at different career stages, from different areas and with dissimilar experiences in primary schools was made in order to gain a wide range of notions about PE-CPD in the Cypriot educational system. It was expected that primary school teachers' perceptions on the effectiveness of the current PE-CPD system and its provision would vary depending on whether they were 'early-career teachers,' 'intermediate teachers,' or 'experienced teachers' near the end of their career.

Table 3 Characteristics of teachers case studies

Teacher	Gender	Years of Service	Years of teaching PE	Province of their school
Experienced Teachers (20-30 years)				
Andria	F	20	10	Larnaca
Michalis	M	27	6	Larnaca
Mary	F	24	12	Larnaca
Nicos	M	22	7	Nicosia
Georgia	F	21	5	Paphos
Intermediate Teachers (10-20 years)				
Kiriacos	M	18	13	Larnaca
Anna	F	18	10	Larnaca
Tasos	M	14	8	Nicosia
Helena	F	13	3	Paphos
Zoe	F	16	8	Famagusta
Early-career Teachers (1-10 years)				
Pavlos	M	9	9	Famagusta
Maria	F	7	5	Larnaca
Christos	M	6	6	Famagusta

| Katerina | F | 7 | 5 | Limassol |
| Marios | M | 6 | 2 | Limassol |

It is important to distinguish the difference between the newly-appointed teachers and early-career teachers. Newly appointed teachers in Cypriot primary schools are on a probation stage in the first two years, where they have assistance and help from mentors and the school (Koutselini and Koumi, 2013). Early-career teachers are those teachers that are working on the first step (up until ten years) of their career ladder (Koutselini and Koumi, 2013).

The requirement that the fifteen primary school teachers should be a mixture of female and male, at different stages of their career and from different provinces, dictated that a purposive sampling strategy should be employed when selecting the case studies (*see* Table 3). From its designation, the specific type of sample is selected for a determined and specified reason and purpose (Cohen, Manion and Morrison, 2011). One of the main intentions of purposive sampling is to enable the researcher to emphasize and concentrate on a specific issue or specific population and gain in-depth information (Cohen, Manion and Morrison, 2011).

The representativeness of a sample to a wider population is not a primary reason when choosing the cases for a purposive sample of a research study, since there is no intention to form a statistical generalization (Cohen, Manion and Morrison, 2011). The present study selected a sample that could contribute to the accomplishment of the research study's aim, which is to gain a holistic and detailed picture of the current status and effectiveness of PE-CPD delivery to primary school teachers. The sample and its size is not linked to generalization as such but can contribute to it by giving

the researchers various opinions and experiences which can be used to develop and strengthen the theory (Yin, 2009).

The primary school teachers were interviewed three times within a six-month time period, in order to give them the opportunity on the second and third sessions to revise their statements or to alter any opinion they expressed. For practical reasons, the primary school teachers that were selected to participate had had previous contact with the researcher, either through the university, or because they had been recommended by mutual friends.

The other participating group were the three CPD providers who were closely associated with the CPD sector and had key responsibilities for PE-CPD provision and the organization of CPD activities. The participation of the CPD providers aimed to provide a comprehensive picture of the CPD system. The CPD providers were interviewed in one session that was implemented at the second phase of the data collection phase.

3.9.4. Generalizability in Case Study Approach

For many years, there has been controversy over the nature of the case study approach, with questions being raised about generalizability (Armour and Griffiths, 2012). However, Thomas (2015) indicates that generalization is not always the aim of a research study, and that case studies can offer a detailed, in-depth and complete comprehension of the subject that is being studied (Thomas, 2015). When theorists connect their theories in a case study with the existent literature and detect weaknesses or gaps within the said literature, such an approach could be said to generate what Yin defines as 'cumulative knowledge' (2013a, p.327). By way of analytic generalization, where less emphasis is placed on a representative or

numerical sample, and more emphasis is placed on logically interpreting the case study on its own merits, an extrapolation can be made and the case study can assist in generalizing to a broader theory. This allows researchers to understand other similar cases, situations, or phenomena. This is achieved by creating a 'conceptual generalization', that is, by showing how the findings inform relationships relating to a set of particular theoretical concepts (Yin, 2012).

On the other hand, when the purpose of the study is to generalize a conclusion to a larger sample of the population, then the study needs to involve multiple case studies rather than just one, and the basis of the data should also be coherent and explicit (Cohen, Manion and Morrison, 2011; Hodge and Sharp, 2016). Additionally, a case study approach can deliver strength and development to a theory and this can be attained by presenting the data and processes as reasonably as possible (Cohen, Manion and Morrison, 2011).

Since the main aim of the current study is to explore in detail how the structures of the PE-CPD system and provision support primary school teachers in Cyprus, and to gain deep insights into teachers' experiences regarding said provision, the perception of Thomas (2015) mentioned in this section corresponds to the requirements of this research.

3.9.5. Validity in Case Study Approach

Like other forms of research, case studies must abide by certain principles of reliability and validity. Although the case study approach has been criticized for its generalizability (e.g. Yin, 2009, p.15), and for lacking 'validity' and 'objectivity,' it has been argued that the researcher can demonstrate external validity by generalizing

and extrapolating to relevant theory from even a small number of case studies that represent complex issues (Verschuren, 2003). External validity refers to 'clarifying the contexts, theory and domain to which generalization can be made' (Cohen, Manion and Morisson, 2011, p.295).

In addition to this, triangulation can be a means to strengthen validity (Burke, 2016; Yin, 2013b). According to Yin (2013b) there are four types of triangulation: a) data source triangulation, b) analyst triangulation, c) theory/perspective triangulation, and d) methods triangulation (p.323-324). In this study, different methods were selected to collect data and to analyse the data.

What is more, by ensuring that all causal explanations are supported by evidence, internal validity is also guaranteed. 'Internal validity seeks to demonstrate that the explanation of a particular event, issue or set of data which a piece of research provides can actually be sustained by the data' (Cohen, Manion and Morisson, 2011, p.183). At the same time, the data is reliable in the sense that it can be replicated and contains internal consistency. Finally, the researcher's bias can be obviated and addressed through 'reflexivity, respondent checks or checks by external reviewers of the data and inferences/conclusions drawn' (Cohen, Manion and Morisson, 2011, p.295). This research project strongly resonates with the view that any researcher must acknowledge the strengths and limitations of the approach taken, and seek to ensure that the research is both transparent and rigorous.

3.10. The Primary Data Collection Instrument: Interviews
An interview can be described as a conversation between two people about a specific subject. Through conversations people can learn and understand more

about the life, experiences, emotions and opinions of other people. It is the communication and interaction between two people which leads to the gaining of knowledge. Kvale (1996) argues that conversation is 'an ancient form of obtaining knowledge' (p.8). Similarly, the qualitative research interview can be defined as a constructed conversation with a specific purpose (Cohen, Manion and Morisson, 2011), as well as a means for the formulation of knowledge. Therefore, in this sense, the research interview is a discussion with the interviewee, and aims to gain information about the interviewee's world and to explore and comprehend the meanings of the given insights (Bell, 2005; Ennis and Chen, 2012; Kvale, 1996; Thomas, 2013).

Cohen (1976) compared the research interview to fishing by attempting to illustrate that like the fisherman, the interviewer has to be well-prepared, patient and practiced before interviewing the interviewee, if a beneficial interview with effective data collection is to be achieved. Therefore, in regard to the interviewing, much emphasis is given to the operative and functional role of the interviewer. Cohen, Manion and Morrison (2011) argue that social researchers must consider the impact of their behavior and the activities involved in the research on participants and preserve their dignity as human beings. Therefore, the importance of the interviewer/researcher's role is stressed once again.

For the present research study, since the central and focal unit of analysis is primary school teachers, the collective case studies were selected as being the appropriate approach to be used in order to answer the study's research questions. After careful consideration of the purpose, the research questions and the epistemological framework on which the present study was based, interviewing was selected to be

the most appropriate, primary and core instrument of the data collection phase. Interviews were employed for both primary school teachers and CPD providers' case studies. Interviews are a useful instrument for gaining in-depth insights since through them it is possible to explore perceptions, feelings and behaviours, thus leading to deeper knowledge of a subject. It could be argued that the data collection principal instrument that was selected meets the requirements of the current research study's targets.

3.11. Interviewing

Gubrium, Holstein, Marvasti and McKinney (2012) point out that the interview has been seen as a distinctive strategy/technique and that it has been used generally in surveys, case studies and life stories. Denscombe (2007) adds that interviews are something more than a conversation, because interviews have to do with understandings and beliefs about a case/subject. The interviews must be scheduled and formal arrangements made to ensure the research questions can be answered.

According to Campbell, McNamara and Gilroy (2004, p.99), 'interviews should aim to be exploratory and facilitate the giving of information or opinions and be discursive in nature.' The exploratory interview has more to do with developing ideas rather than collecting facts and statistics. It is about understanding what people feel and think about the topic. A common interview typology distinguishes between degree of structure (Robson and McCartan, 2016) so that interviews are classified into three types: structured, semi-structured and unstructured (Robson and McCartan, 2016; Thomas, 2013, 2015).

As pointed out by Cohen, Manion and Morrison (2011), the selection of the interview type for a research study is based on the purpose of the research study. The first

type of interview research is the fully structured interview with a prearranged set of questions and answers in a standardized session. The second type is the semi-structured interview, which is helpful when the interviewer wants control of the discussion and to adapt the method when necessary. The third type is the unstructured interview, which is completely informal (Robson and McCartan, 2016; Thomas, 2015).

The most common type used in research is the semi-structured type of interview (Thomas, 2013). Semi-structured interviews, as Thomas (2013) states, offer some useful benefits that are important for this research; particularly its flexibility and the freedom offered to the interviewees to express their views relating to the specific subject of the research study. This results in the enrichment of the interview and, therefore, in effective data gathering (Thomas, 2013). For the aforementioned reasons, and in order to obtain deep and detailed information from interviewees' replies, semi-structured interviews were selected as providing the best method of attaining high-quality information.

Furthermore, during the face-to-face interviews, the researcher has the benefit of visual contact with the respondent. Certain behaviors and non-verbal cues may assist the researcher's understanding of the participant's opinions. As Robson and McCartan (2016) state, interviews allow for interaction between the researcher and the interviewee; therefore, the interviewer is able to examine motives and feelings. Tone of voice, facial expression and hesitation can all provide information that would be missing from a written response (Bell, 2005). This kind of information enhances clarity and comprehensiveness; moreover, the participants' answers are mostly

unprompted and the interviewer can get a sense of when the participants are being honest – or at least open – in their responses, though this can never be fully known.

Thus the interview method can be a powerful tool for researchers to gain a special insight into subjectivity and lived experience (Rapley, 2004; Fontana and Frey, 2005) and they provide privileged access to participants' thoughts, perceptions, values, feelings, and perspectives (Holstein and Gubrium, 1995; Gillham, 2000). With regards to PE and PE-CPD, it is also believed that interviewing teachers and gleaning insights from them has the potential to contribute to the broadening of the knowledge base on PE and PE-CPD (Armour, 2006).

Like any other method, however, interviews have disadvantages. One of the main problems that the interview presents is lack of standardization, which increases concerns about reliability. Robson and McCartan (2016) say that the best way to deal with this problem is through professionalism, but this is not easy. Moreover, interviews are time-consuming. Some interviews can be extensive and require much time for preparation, data collection and analysis (Thomas, 2013). It is widely accepted that some interviewees tend to feel that they have to give the answer that will please the interviewer, and this might mean that they don't share what they really think.

The choice to employ interviews for the present study was based on the advantages of interviews as a data collection method. Semi-structured face-to-face interviews seemed to cater for the needs of the current research study. Hence, in order to get better results from the procedure of interviews from both case studies (primary school teachers and CPD providers), an interview schedule was devised (Thomas, 2013).

3.12. Interview Schedule

According to Thomas (2013), an interview schedule is an important component of a semi-structured interview. The interview schedule is a list of issues which should be considered while interviewing. In other words, it can be described as a guide map having as its destination the collection of as much thorough and deep information from the interviewees' responses as possible (*see* Appendix C).

One of the most difficult things which the researcher must do is 'to put the interviewee at ease before the interview' and to establish some kind of rapport (Thomas, 2013, p.161). Skilled interviewers will attempt to build trust and show their interviewees that they are not there to pass judgment but to listen to their responses in a sensitive manner, also allowing them to 'guide the course of the interview' and to disclose information at their own pace (Corbin and Strauss, 2015, p.40).

At the same time, the researcher must make every effort to reduce bias and to carefully formulate questions 'so that the meaning is crystal clear' (Cohen, Manion and Morrison, 2011, p.205). Open-ended questions usually lead to more fruitful discussions. Leading questions which 'put words into the interviewees' mouths' must be avoided, although Kvale (1996) has powerfully argued that they may be essential when interviewers suspect that interviewees are withholding information. In effect, leading questions 'may be used for reliability checks with what the interviewee has already said, or may be deliberately used to elicit particular non-verbal behaviours that give an indication of the sensitivity of the interviewee's remarks' (Cohen, Manion and Morrison, 2011, p.205).

The researcher must be prepared for awkward pauses and silences. Some teachers may not be certain about how much information to disclose, and they may even

'weigh' their answers carefully in order to provide responses which they consider more socially and professionally appropriate or acceptable (Fontana and Frey, 2005), and which they feel the researcher will anticipate or expect, rather than their own personal experiences.

Thus it is incumbent upon the researcher to adopt a more flexible and open-ended approach and to build trust and rapport with each and every one of the research participants. This may mean 'tweaking' or altering questions for different teachers, according to different circumstances and as the need arises. This will allow the researcher to capture the complexity of teachers' varied experiences in different contexts and to generate situated knowledge.

In terms of ethical considerations, confidentiality and anonymity should also be assured to the participants in all cases (Ennis and Chen, 2012; Silverman, 2015). Additionally, some discussion at the beginning can make people feel more comfortable and reduce tension. Talking 'about the weather, about your journey, about anything inconsequential that will break the ice' (Thomas, 2013, p.161) is a useful strategy, as it establishes rapport and proves that you are human.

After conducting the interviews, the researcher is then called upon to conduct a thematic analysis which involves reflecting on the data and interpreting the interviews by highlighting the most important information, labelling it, and then putting it into a particular category (Seidman, 2015). It is incumbent upon the researcher to select the most salient and poignant quotes from participants that are representative of the research findings.

According to Thomas (2013), the case study approach offers 'a rich picture with many kinds of insights coming from different angles, from different kinds of information' (p.21). However, as Stake (2005, p.443) points out, a case study is not only 'a methodological choice but a choice of what is to be studied.' The schedule for the interview questions was designed to offer as much space as possible for teachers to offer insights into their experiences from their perspectives (Charmaz 2014). The interview questions were developed by drawing upon previous research (Armour and Yelling, 2004a; Makopoulou and Armour 2011a; Pedder, Storey, and Opfer, 2008).

The questions were again translated into Greek. The interview protocol was also pilot tested with six teachers who specialized in other subjects (2 early-career qualified teachers, 2 intermediate teachers, 2 experienced teachers from all the provinces) in order to identify any misconceptions and test the flow of the questions. After the pilot interview session teachers were asked to judge the wording used, the behaviour of the interviewer and if they felt at ease to express their perceptions freely. Hence, the interview protocol was finalized.

The interviews ranged between sixty and ninety minutes in length and were conducted at a place and time convenient to the teachers. The interview sessions were conducted in places and at times that made research participants feel comfortable and at ease in expressing their perceptions about PE-CPD provision. The most common places were cafes for an informal, casual chat and research participants' homes outside work hours, since they could not fit in the interview sessions in their school programme. Each of the three interviews had a clear rationale. The aim of the first interview was twofold: to get to know each teacher,

make them feel comfortable, record more details about their qualifications, initial training, PE teaching practices, roles and responsibilities, and their views on the status of PE as a subject in schools. In the second interview, the questions focused on teachers' experiences of PE-CPD activities, and their understandings of the wider concepts and purposes of CPD and PE-CPD. Additionally, within this session, significant emphasis was given to the exploration of the nature, quality and effectiveness of PE-CPD provision, and its impact on teachers' teaching practice and learning. The third interview focused on teachers' views about the ways in which CPD could be improved to better meet their learning needs.

All interview sessions were recorded on a digital voice recorder and were immediately transcribed. After the transcription and initial analysis processes were completed, a member checking process was carried out (Creswell 2012; Hallet 2013). During the interviews, the first author kept field notes, while afterwards memos and a brief summary were created regarding the attitude of the participants (*see* Prelude) and the main points of the session. In order to attain a more comprehensive understanding of the perceptions and experiences of these teachers, the researcher kept a reflective diary and wrote memos for each interview session (Charmaz, 2014).

In line with the ethos of social constructivist research, the reflective diary enabled the researcher to recognise where and how her decisions and actions exerted influence on the co-co-construction of the data. Recognition of this process can add to the credibility and trustworthiness of the data (Berger, 2015; Roulston and Shelton, 2015) as long as there is transparency in both the reporting and analysis.

Interviews with three CPD providers followed. The aim of these interviews was to illuminate the different roles, responsibilities, background and opinions of CPD provides in order to gain insights into a range of perspectives. To facilitate an understanding of the links between teachers' and CPD providers' views, the interview protocol had the same structure, although these respondents were only able to offer one interview. Likewise, the interviews were recorded, immediately transcribed word for word, and memos were created for each interview.

3.13. Phase 3: Focus Group

The terms 'group interview' and 'focus group discussion' are often used interchangeably (Thomas, 2015; Barbour, 2007). A focus group is defined as an interview with a group of participants, with a focus on a specific subject, where through the interaction of the participants, data and information emerge (Ennis and Chen, 2012, 219).

The participants, who constitute the group, are chosen depending on the aim of the research questions and the purpose of the research study. As Barbour (2007) points out, whereas one-to-one interviews are more appropriate when it comes 'to eliciting detailed contextualized histories,' focus groups are well-suited and more likely to generate fruitful discussion when 'the focus of the research is on how people construct and reconstruct their stories' (p.42). Additionally, in focus groups, participants who are otherwise reluctant to express their thoughts in individual interview situations can become more candid (Barbour, 2007, p.21).

In a focus group, participants might have the same perceptions or represent two diverse positions (Barbour, 2007; Ennis and Chen, 2012, p.220). The results of such a sample selection might lead to disagreements and arguments (Bell, 2005).

Nevertheless, such tension might be the desired consequence in order to achieve deeper findings relating to the subject of the research study.

The focus group undertaken within the present study aimed to gain deep insights into the existing situation of the Greek Cypriot PE-CPD system, its provision and its effectiveness. Finally, through the guidance of the researcher, the debates and the discussion between the participants resulted in the design of a PE-CPD model that meets the professional learning needs of primary school teachers.

The interviewer has a key role through the process of the discussion between participants by operating and functioning as a moderator, and creating a supportive and relaxing atmosphere, rather than being the leader and having control over the interaction and dialogue between the participants (Thomas, 2015). Additionally, the researcher should also use probing questions in order to guide the discussion in an indirect mode.

As a final stage in the data collection process, the decision was taken to bring together teachers and CPD providers in order to discuss the similarities and differences in their perceptions of effective and ineffective CPD. Three case study teachers and the three CPD providers met at a place and time convenient for all participants. The teachers were selected from the fifteen case study teachers. There were precise specifications (Krueger and Casey, 2014) in this selection process: both male and female teachers were to be included, each one at a different career stage, from different provinces and with heterogeneous backgrounds, experiences and levels of PE teaching performance.

The initial key findings from the previous data collection phases were used to design the focus group (*see* Appendix F), meaning that an 'iterative process' (Charmaz, 2014) was followed. The discussion was recorded to assist the researcher in the analysis that followed (Krueger and Casey, 2014). The conversation revolved around the issues and responses of teachers gathered in the survey and case studies, both positive and negative; the effectiveness or ineffectiveness of existing CPD and specifically PE-CPD; and thoughts regarding the design of an ideal CPD model. The focus group discussion ran on for 130 minutes, with both groups of participants expressing their views and in some cases diverse positions, thus leading to a debate (Ennis and Chen, 2012).

3.14. Data Analysis

The data, which were gathered from all the phases of data collection, were composed of 45 transcripts from 15 primary school teachers' interviews, 3 transcripts from 3 CPD providers' interviews, 183 open-ended surveys that were completed from primary school (PE) teachers and, finally, notes and transcripts from the focus group discussion.

Qualitative data analysis can be defined as one of the most basic parts of research but it is not without its complications. Cohen, Manion and Morrison (2011) explain that 'qualitative data analysis involves organizing, accounting for and explaining the data' and providing 'definitions of the situation, noting patterns, themes, categories and regularities' (p.537). Many researchers admit that analyzing qualitative data is difficult and sometimes requires about twice as much time as collecting the data itself (Robson and McCartan, 2016).

Due to the fact that multiple methods were used to collect data, the data analysis was undertaken in a triangulated way. According to Cohen, Manion and Morrison (2011), triangulation contributes to a clear and explicit picture of the situation. Corbin and Strauss (2008) agree and highlight the feature of triangulation, and how it provides a clear idea of how the individuals involved in a situation interpret a specific matter. Moreover, since the study's goal is to shed light on the situation of existing CPD provision in Cyprus, it seems that triangulation could support this study's need to offer a detailed picture of CPD from the participants' perspective.

The present study is grounded in an interpretative paradigm, so data analysis was also undertaken in this framework. Furthermore, the data were analyzed by employing features of a constructivist approach to grounded theory (CGT) (Charmaz, 2014) and thematic analysis (Braun and Clarke, 2006). According to Robson and McCartan (2016), grounded theory is a suitable method to use if the researcher is conducting qualitative research. The constructivist approach to grounded theory enables researchers to focus and attempt to understand research participants' structures of reality and interpretations, whilst encouraging a detailed contextual description of their lived realities (Robson and McCartan, 2016).

3.14.1. Grounded Theory (GT)

Throughout the methodology literature, there is a widely accepted definition that views grounded theory as a traditional qualitative method used for research studies, which leads to the discovery of theory from data (Glaser and Strauss, 1967; Rich, 2012). Grounded theory (GT) is formulated from a constant interaction between data collection and data analysis (Urquhart, Lehmann and Myers, 2010). In other words, it is characterized as a continuous comparison procedure (Glaser and Strauss, 1967) which through several exacting stages produces concepts derived from all the data.

GT consists of a set of practices which serve the management and organization of great quantities of data. The principal stages which are encompassed in the data analysis process are coding, comparative analysis, memo writing, and theoretical sampling (Charmaz, 2014; Corbin and Strauss, 2008) involving coding, memo writing, constant comparison, conceptual categories and theory building.

According to Scott and Howell (2008) and many other academics alongside the employment of continuous comparisons, grounded theory's operation centre is also based on the use of continuous questioning. The use of questions such as 'who, when, why, how' (Strauss and Corbin, 1998, p.127) plays a key role in the effective operation of the data analysis. These two applications lead to a better understanding of the data by the researchers, therefore allowing them to reach some conclusions about the links between the categories and what the data represent (Strauss and Corbin, 1998).

Closely linked with this statement, the intention of GT is to discover the social processes which participants are undergoing and, through participants' actions and operation, the researcher can infer the unseen meanings (Parker and Myrick, 2011). Adopting a similar position, Lingard, Albert and Levinson (2008) support the notion that if the research study revolves around 'social interactions or experiences' (p.459) and its purpose is to enlighten a situation, then GT is the most suitable method to use.

3.14.2. Constructivist Approach to Grounded Theory

In more recent formulations of GT, there is a shift away from Strauss and Corbin's theories towards a more constructivist approach. This specific approach to GT was

established by Charmaz (2014). Charmaz (2014) described Strauss and Corbin's GT and the original form of GT as 'objectivist' and developed a new form of GT drawn from social constructivism. Constructivist grounded theory (CGT) has become a popular method and it is suitable for research studies involved in education (Mills, Bonner and Francis, 2006; Scott and Howell, 2008). A constructivist version of GT lays emphasis on the phenomena of the research study and also involves a treatment of the data exactly as they emerge from the interaction between the researcher and the participants (Charmaz, 2014). It is then impossible for the researcher not to be a part of the data analysis process (Charmaz, 2014). Closely linked with the typical approach, CGT includes stages in order to arrive at the development of the theory. The stages that are involved are: a) initial coding, b) focused coding, c) axial coding, d) memo writing and lastly, e) development of the theory.

3.14.3. Thematic Analysis

Thematic analysis is a qualitative analytic method for 'identifying', analysing and reporting 'patterns (themes)', within data (Braun, Clarke and Weate, 2016, p.191). It minimally organises and describes your data set in detail. However, frequently it goes further than this, and interprets various aspects of the research topic' (Braun and Clarke, 2006, p.79). In short, it involves the use of coding, categorizing units of analysis such as words, phrases and sentences, comparing categories and making connections between them, and drawing theoretical conclusions (Cohen, Manion and Morrison, 2011).

In effect, once the researcher has collected all the descriptive data, then he or she must rigorously go through it in order to discover emerging patterns and themes.

This process is called 'immersion' and allows the researcher to finalize the findings, analyze the themes, and provide a logical and coherent structure. Additionally, it allows for the creation of 'congruence' between the extracted data and the researcher's analytic claims (Braun and Clarke, 2006). The stage where the researcher finally moves 'from description to inference,' that is, from describing the data to making speculative inferences, is an important stage as it obliges the researcher to posit explanations and causes based on the evidence of the data (Cohen, Manion and Morrison 2011, p.569).

3.14.4. Combination of CGT and Thematic Analysis

CGT (Charmaz, 2014) and thematic analysis were combined to analyze the interview data and the responses from the open-ended questions of the survey. Additionally, the process of data analysis was conducted with inductive analytical practices. According to Charmaz (2014), this approach enables the researcher to 'crystallize participants' experience' (p.133), which meets the main research aim. CGT as a framework approach became popular in analyzing qualitative data derived from educational research (Mills, Bonner and Francis, 2006).

Table 4. Brief Summary of Collected Data

Data Collection Phases	Information
1. Survey	183 Teachers 183 Survey Transcriptions 24 Memos
2. Case Studies • Teachers • CPD Providers	15 Teachers 45 Interview Transcriptions 55 Memos 3 Providers

	• 3 Interview Transcriptions
	• 32 Memos
3. Focus Group	• 3 Teachers and 3 Providers
	• 1 Interview Transcription
	• 49 Memos

It is important to note that the aim of using GT in this study was not to construct a theory. The aim was to identify patterns between the categories and 'produce conceptual thematic descriptions rather than explanatory theories' (Starks and Trinidad, 2007, p.1377). In this study, CGT was used as the analytical approach or, in other words, the framework in analyzing the data. GT has been very popular as an analytical approach for analyzing qualitative data over the last decades (Chapman, Hadfield and Chapman, 2015; Fram, 2013).

From all the data collection phases almost 1200 pages of transcription were totaled. Taking into consideration the proportion of data collected (*see* Table 4), NVivo software version 10 was used to manage the data and the ideas supported by the data, and to help implement data analysis processes (Bazeley and Jackson, 2013). All the datasets were transcribed verbatim by the researcher, which allowed her to gain a 'deeper level of understanding' (Charmaz 2014, p.135) of the data and its hidden meanings. Pseudonyms were distributed to the participants in order to guarantee anonymity, respect and confidentiality. Along with the datasets, field notes from data collection phases and memos were also inputted into the NVivo 10 software.

Due to the large amount of data, the analysis involved the coding of meaning units (chunks) (Miles, Huberman and Saldaña 2014; Robson and McCartan, 2016),

leading to the formation of almost 650 initial codes. According to Floersch, Longhofer, Kranke and Townsend (2010), GT and TA are distinguished by the 'unit of text coded' (p.3). When the researcher uses GT for analyzing the data, the coding occurs by focusing on the text and code line by line or word by word. If the researcher uses TA, conversely, there are no limitations regarding the length of the coded text. When analyzing the data that occurred through all the datasets but particularly from interview sessions and the focus group, the line by line coding did not allow the researcher to capture the meaning that the participants wanted to convey. In contrast, focusing on bigger chunks of data was more useful in identifying a category and themes, consequently leading to a thematic map or a story about what these teachers experienced, thought and felt about PE-CPD provision in Cyprus.

The data analysis was divided into two phases. Initially, data from the different data collection phases were analyzed vertically. Multiple readings of the raw format of the data included coding and memo writing and constant comparison processes, where sample codes occurred. As for the coding tactics, in Vivo codes and coding with gerunds encouraged the researcher to perceive the unexpressed links and participants' stance and actions (Charmaz, 2014).

Some of the revealed sample codes involved 'being supportive,' 'being passionate,' 'being a rebel,' and 'being funny'; all referring to the needed personal characteristics of CPD providers. Consequently, the 'CPD providers' personal characteristics' category was created, which included all these codes. In the second phase, horizontal analysis across datasets was undertaken to identify areas of agreement and difference between the diverse participant groups' answers. During the data

analysis processes, there was a constant research questions' recalling. Additionally, the process of data analysis was conducted with inductive and iterative analytical practices.

A constructivist approach to grounded theory (Charmaz, 2014) and thematic analysis (Braun, Clarke, Terry, Rohleder and Lyons, 2014) were combined to analyze all the research data from each data collection phase. The main aim of this research was to incorporate data analytic techniques to study and interpret teachers' responses. Each analytic stage made available several perspectives on primary school PE-CPD provision. It could be argued that each data analysis stage provided a new and different viewpoint on the datasets. If either CGT or TA had been used, rather than both, the interpretation of the data would be reduced, partial and would not credit the richness of the data. The specific combination allowed for great flexibility during data analysis, enabled systematic coding procedures, pattern recognition, the development of conceptual analysis, and the formation of a thematic map that leads to a story rather than a theory (Braun and Clarke, 2006; Braun, Clarke and Weate, 2016; Charmaz, 2014, Clarke and Braun, 2013; Cooper, Chenail and Fleming, 2012; Floersch et al., 2010; Miles, Huberman and Saldana, 2014). It is important for researchers to select an analytic approach that fits with the study's wider methodology and the study's data. This was a consideration when selecting the analytic approach and procedures for this specific study. Therefore, the combination of both CGT and TA was very valuable. It is important to note that in this study, only a few steps of each analytic approach (CGT and TA) were applied during data analysis, and they are thoroughly clarified in the following sections.

3.14.5. Coding

Coding is an important feature of qualitative data analysis (e.g. Corbin and Strauss, 2015). As Holt (2016) stated 'by coding data, researchers move from interview transcripts (and other raw data) toward interpretation' (p.28). Codes are labels or names which the researcher ascribes to a piece of text containing an idea or a piece of information. They can be specific or general. Additionally, more than one code may be ascribed to the same piece of text depending on its content (Cohen, Manion and Morrison, 2011). Coding allows the researcher 'to identify similar information' and 'to search and retrieve the data in terms of those items that bear the same code' (Cohen, Manion and Morrison, 2011, p.559).

3.14.5.1. Initial coding

Initial coding provides a way of understanding the raw data collected in detail. As pointed out by Corbin and Strauss (2015), this can be achieved by ensuring that the initial codes stick closely to the raw data. It is important to note, however, that these initial codes must arise from the research participants' perspectives and the central phenomena, rather than from the researcher's preconceptions about existing theories, if the emerging concepts are to be captured accurately (Corbin and Strauss, 2015; Maxwell, 2013).

Instead of employing 'line-by-line' (Glaser, 1978) or 'word-by-word' coding (Allan, 2003), which would have involved naming each line or word of written data, the research project employed 'chunk' – as a unit of meaning(s) – coding ranging from a word to a paragraph (Miles, Huberman and Saldaña, 2014). When creating these initial codes, all efforts were made to ensure that they were as 'grounded' as

possible by using the words of the research participants. Furthermore, formatting all codes as gerunds was used as far as possible (*see* Figure 3) (Charmaz, 2014).

Name		Sources	References
◯ Winning the weaker students through PE lesson		2	2
◯ Updating your knowledge constantly		7	8
◯ Understanding students' psychology		1	1
◯ Understanding each student's abilities		1	1
◯ Trying to change the trend of the seminars		1	1
◯ Trying a lot to update my knowledge because I love PE lesson		2	2
◯ Supporting teachers theoretically and practically		1	1
◯ Setting the PE goals by MOEC		2	2
◯ Selecting which PE-CPD atcivities I will attend		1	2
◯ Requiring more games and sports' inclusion		2	2
◯ Rejecting PE lesson, teachers are loosing a lot		1	1
◯ Reaching a good level for PE lesson after years of experience		1	2
◯ Providing a more effective PE lesson while the years pass (getting more experience)		1	1
◯ Playing games which are not includesd in the Analytic Program-curriculum		1	1
◯ Planning the whole year's PE lessonf from summer		1	1
◯ Perceiving the PE lesson differently after an effective CPD activity		1	1
◯ Participating in the lesson activities as well		4	5
◯ Not wasting the PE time for nothing		1	1
◯ Not being a fan of the Analytic Program-curriculum		2	2
◯ Needing to strengthen PE lesson		1	1
◯ Needing to improve the PE not only for teachers but mostly the younger generations		1	2
◯ Needing to have a knowledge of who is doing his job right or wrong		1	1
◯ Needing the same attentio which was giver for new curriculum for the PE CPD as well		1	1
◯ Needing more outdoor PE activities for the students		1	1
◯ Needing freedom to create in PE		2	2

Figure 3. Initial coding in NVivo 10

This process allowed the researcher to concentrate on participants' actions and to distinguish small differences between similar codes. Using 'In Vivo codes' was also expedient, as it allowed the researcher to assign a label to a section of data within the interview transcript by using a word or short phrase taken from that data (Saldaña, 2013).

3.14.5.2 Focused coding

Focused coding is, as its name suggests, a focused phase of data analysis which involves 'comparative work to ascertain which codes will serve as focused codes and thus become tentative categories' (Charmaz, 2014, p.141). This particular analytic procedure develops the 'skeleton' (Charmaz, 2014, p.141) of data analysis and it particularly 'break[s] down' (Holt, 2016, p.29) the data. In order to create the

'skeleton' of the data analysis and subsequently the findings/themes, several methods were employed within this data analysis phase. Inter- and intra- comparison of research participants' responses enabled the researcher to group together codes, to identify main patterns within the data, to exclude irrelevant codes, and to rename some codes, resulting in the focused codes or bigger codes that would lead to the initial development of categories (Charmaz, 2014, Corbin and Strauss, 2015). All these procedures together with constant comparison and reference to the research questions were repeated in order to assure a methodical development of categories and a concentration on the dominant data that address the research questions.

From the researcher's perspective, this process includes conceptual work, it can be straightforward and quick, creative, interesting and exciting at the same time since the researcher is an integral part of the analytic process (Floersch et al., 2010, Mills, Bonner and Francis, 2006). It also allowed unexpected ideas and interpretations to be identified (Charmaz, 2014). The phase of focused coding leads to axial coding, an analytic phase that was employed in this study for more systematic work and categorization.

3.14.5.3 Axial coding

Axial coding is the stage where the researcher studies the connections between the categories (Charmaz, 2014). Axial coding is ideal for addressing research questions such as 'when, where, why, who, how, and with what consequences' (Corbin and Strauss, 2015, p.92). This analytic stage was significant for interpreting the datasets because it allowed for data to be brought back together in new ways by linking a category and its subcategories. The Flip-Flop technique was used during this analytic stage, since it allows the researcher to turn a concept 'inside out or upside down to obtain a different perspective' (Corbin and Strauss, 2015, p.97).

Specifically, by comparing 'shared characteristics and meanings' (Floersch et al., 2010, p.8), identifying patterns and writing memos in Evernote (see section 3.14.6) for each code and category the development of more axial codes were created. Axial coding in this study enabled the researcher to frame the categories. For example, when the development of some categories focused on CPD providers' impact on teachers and their learning, axial coding assisted in the identification of the 'properties and dimensions' (Charmaz, 2014, p. 147). Figure 4 illustrates how the categories about CPD providers were sorted and synthesized in an early stage of data analysis. Changes then followed (*see* section 3.14.6), such as renaming the category from CPD providers' character to CPD providers' personal characteristics and excluding irrelevant codes.
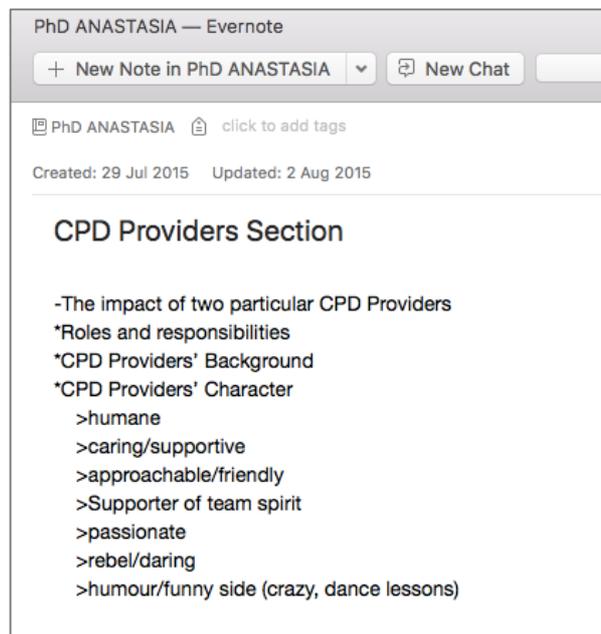
Figure 4. Axial coding in Evernote software (memos)

3.14.6. The development of themes

During this analytic stage, the steps i) 'searching for themes', ii) 'reviewing themes' and iii) 'defining and naming themes' were followed, based on the steps of TA that Braun and Clarke (2006, p.88) recommended. These three steps are considered as

the 'core analytic work in TA' (Braun, Clarke and Weate, 2016, p.198). This particular analytic stage in this study was an active procedure and involved considerable effort in identifying similarities, differences and patterns leading the researcher to construct the themes that were evident in the data.

Firstly, a searching process occurred that was time consuming and messy since the dataset was very large. However, by moving the categories around, reconsidering categories and subcategories, this procedure ended by gathering all the coded data, subcategories, categories under each candidate theme (Clarke and Braun, 2013).

Secondly, the researcher reviewed and revised the initial themes. The researcher was constantly checking to ensure that there was no misinterpretation and misrepresentation of the data, and if the story which was initially created in this stage fitted well with the research questions (Braun, Clarke and Weate, 2016). During this process, a cross-case analysis was conducted between all the participants' testimonies in order to highlight disagreements, emphasize key meanings and conclude with an in-depth description and rationalization of the findings.

The final step was to define and name the themes and to finalize their dimensions, order and position. This active process involved constant changing, rearranging and sometimes collapsing 'two themes together' or splitting 'one theme into two or more themes' (Clarke and Braun, 2013, p.4). Memo writing during this step was very helpful to capture and clarify each theme. In particular, the researcher employed 'theme definition' as shown in Figures 5 and 6, that 'sharpened the analytic focus' (Braun, Clarke and Weate, 2016, p. 200). The process of naming the themes was

creative but crucial too, since the name of a theme represents the focus of the theme.

The outcome of this analytic stage was the development of a thematic map (*see* Appendix H). The themes were grouped into groups that were based on research questions.

3.14.7.   Memo Writing

According to Maxwell (2013) 'not writing memos is the research equivalent of having Alzheimer's disease' (p.20). Writing memos is considered as a very important analytic action that assists the researcher to remember his/her perceptions on a specific topic (or theme) and connect them with the research data (Charmaz, 2014; Saldaña, 2013). Memos are the recorded analytical thoughts of the researcher, which can either be comments on a transcript or complex ideas which will need further investigation. Memos can help questions to arise (Charmaz, 2014) and this can lead to the increase of the quality of data analysis.
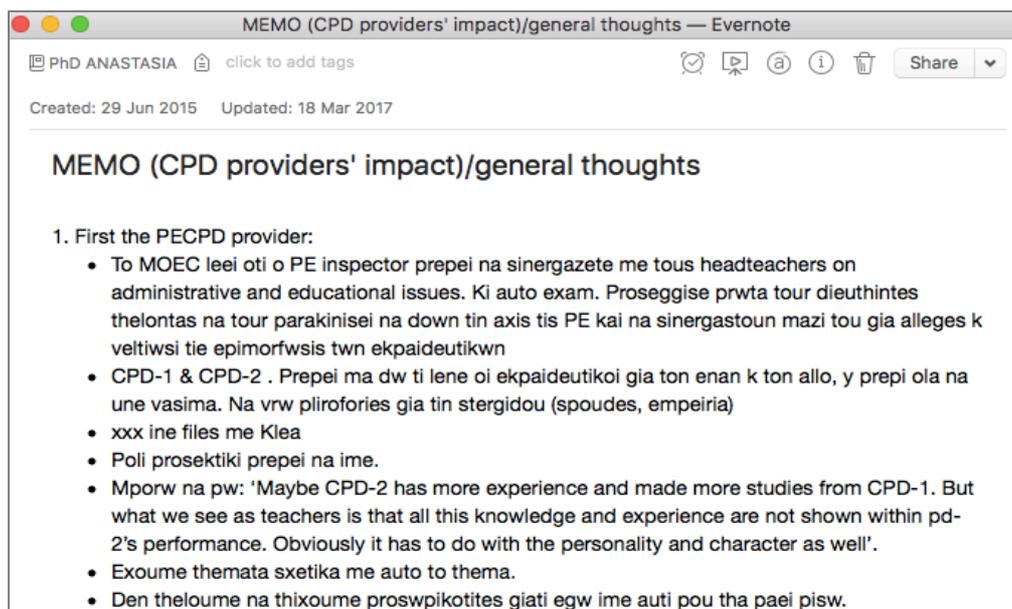
Figure 5. Memos using Evernote

For this study all the thoughts, notes and ideas were written in the form of memos using the Evernote application and NVivo software (*see* Figure 5). Furthermore, writing memos about the initial codes enabled the identification of categories (Charmaz, 2014) and made easier the process of constant comparison. Evernote enabled the researcher to have access to it at any moment and from any location (McNally, 2014). Multiple digital notebooks were developed for each participant as issues emerged from the interviews and focus group (*see* Figure 6).
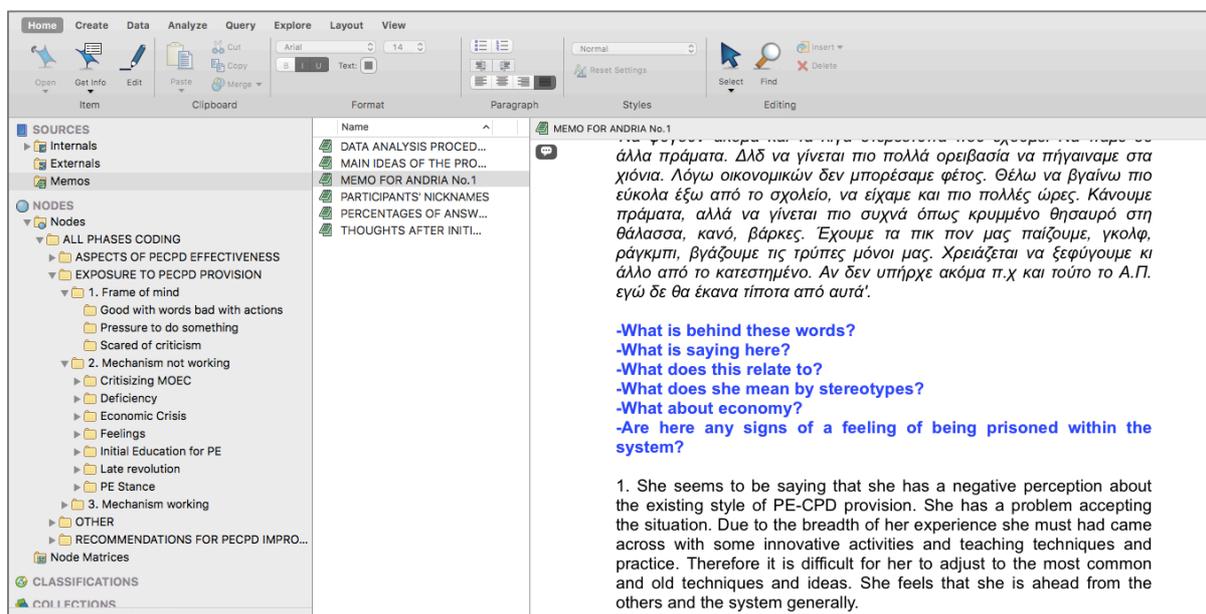
Figure 6. Memos for participants in NVivo10

This application allowed the researcher to be reflective and keep an archive of her own interpretations during the data collection and data analysis procedures. Evernote application was helpful not only for data analysis but for all the procedures which had to do with design, implementation and writing this study. For instance, I was able to keep a journal about the methodological procedures (*see* Figure 7) written either in English or Greek.

3.14.9 Writing up

This procedure, according to Braun, Clarke and Weate (2016), is not considered a 'separate phase you start after you have completed your analysis' (p.200). This analytic stage provides the development of an overall report of the findings. This stage occurred during writing Chapter 4, where the researcher selected data extracts from all datasets in order to show the main meanings of the themes and the richness of the data. The most important aim through this process is to 'tell the reader a coherent and persuasive story about the data' (Clarke and Braun, 2013, p.5). The way Chapter 4 was organized and presented aimed to illustrate the story of the data which adequately represented the research participants' responses.
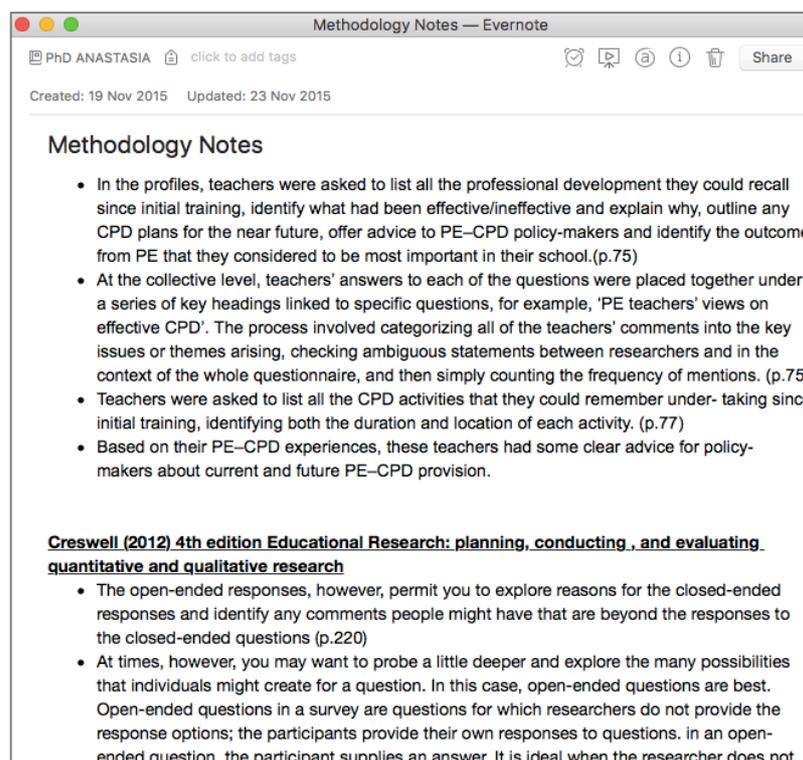
Figure 7. Journal of methodological procedures

3.15. Quality in Qualitative Research

As Corbin and Strauss (2015) so aptly point out, 'quality qualitative research is research that resonates with readers' and participants' life experiences. It is research that is interesting, clear, logical, and makes the reader think and want to read more'

(p.347). At the same time, it needs to satisfy and fulfil certain requirements such as methodological consistency, methodological awareness (Seale, 2002, p.108), clarity of purpose, credibility, originality, usefulness (Charmaz, 2014), and show sensitivity to the data and participants. Mixing different methodologies and using only certain procedures and not others, for example, may 'erode' credibility of the research itself (Corbin and Strauss, 2015, p.347).

In order to secure the quality, rigor and trustworthiness (Lincoln and Guba, 1985) of the research data, member checking, peer review and researcher reflexivity were employed (Merriam and Tisdel, 2016). All the data from the interviews were sent to the participants to check for and ensure accuracy. If participants wanted to add, delete or modify something they could do it through this process. Additionally, the researcher attempted to question the themes and their correlation to the CPD literature, in order to confirm theoretical sensitivity within the codes and therefore increase their 'analytic power' (Charmaz, 2014, p.161; Glaser, 1978; Holton, 2007).

3.16. Reflexivity

After the data collection and during the analysis of the qualitative data, the researcher must conduct a process of reflexivity (Hammersley and Atkinson, 1983). As Hammersley and Atkinson suggest, a qualitative data analysis becomes like a text, and the narrative style, theme selection, chosen chronology, constructed interpretations, together with their ordering and organization, are all subject to the processes of reflexivity (p.212-17). Reflexivity has been conceptualized, defined and employed in many ways (Finefter-Rosenbluh, 2017; Gentles, Jack, Nicholas and McKibbon, 2014; Palaganas, Sanchez, Molintas and Caricativo, 2017). There are similar or relevant concepts such as reflectivity and critical reflection (Berger, 2013).

Reflexivity is defined as a process that involves a critical self-examination of the researcher's positionality within a research (Denzin and Lincoln, 2005, Finefter-Rosenbluh, 2017). In the context of this study, reflexivity is understood and used as 'a methodological tool to better represent, legitimize, or call into question' (Pillow, 2003, p.176) the research data, and it takes the form of internal dialogues (Caetano, 2015). This means that through reflexivity the researchers are able to actively acknowledge and explicitly recognize that the researcher's positionality 'may affect the research process and outcome' (Berger, 2013, p.2). Moreover, reflexivity means that the researchers' lens turns onto themselves (Berger, 2013) highlighting the many positions and influences (personal, professional, social, biographical, cultural) they bring into the research study and how these can impact data collection and analysis (Lichtman, 2014).

Thus 'the validity of the selection, analysis and interpretation of events and the data that are included in analysis' are 'reflexively chosen' and 'subject to the validity checks of having other participants' views included and a faithful record made of actual events which involve more than the single researcher' (Cohen, Manion and Morrison, 2011, p. 541-542). Thus, as a researcher, I found it very important to be self-reflective about the way I influenced the research process and how it influenced me (Burke, 2016). Like Hamberg and Johansson (1999), I have tried to carry out my reflexive analysis by scrutinizing certain contradictions or 'conflicting codes' and by showing sensitivity to the data under scrutiny:

> For this reflexive analysis, we have reread the coded interviews to scrutinize parts featuring tension, contradictions, or conflicting codes – passages that had often been discussed when we were striving to find reasonable and legitimate interpretations. We have also read our memos

to recall our instant reactions during, and after, the interviews and our discussions when we compared our coding. (p.458)

3.16.1. Reflective Account

Giving insights of the world of the researcher can be valuable for both the reader and the researcher himself/herself. Through a reflective diary the researcher can have a 'continual internal dialogue' and a 'critical self-evaluation' of his/her 'positionality' (Berger, 2015, p. 220). The positionality can include the personal and biographical characteristics, personal and professional experiences along with beliefs, values, biases, assumptions and emotions of the researcher (Savvides, Al-Youssef, Colin and Garrido, 2014). It is significant to provide my background and ideological stances about my personal interest in teachers' CPD and particularly PE-CPD. The process and reasons for selecting the topic of this research study is presented in the introduction chapter in section 1.1.

Although my parents did not have the chance to study, I grew up in a family where many uncles, aunts and cousins valued education and studied to become teachers. Since I was a little girl, I remember my uncles and aunts spending their summer holidays getting ready for the new school year, getting prepared with lesson plans for every single subject. I remember asking one of my aunts to tell me the reasons for this holistic preparation and the answer was: 'first, it is my job, my duty to be well prepared and secondly, it makes me feel better as a teacher, as a mother and as an individual'. During the family gatherings every Sunday afternoon at pappou's and yiayia's, my grandparents' house, I remember my uncles and aunts having intense discussions about the government's stance towards the improvement of the educational system and the teachers' professional improvement. Their language

expressions and body posture made me feel that they were frustrated, angry and disappointed with what the ministry was providing to them.

In particular, with my interest in PE, my family's stance towards sports, physical activity and PE in school influenced me to be more passionate about this subject. From the age of 6 my father told me that by going to training I would 'be able to get stronger physically, emotionally and intellectually'. Through my experience as an athlete, I could see what my father was trying to tell me. I could see it myself, that by having discipline, by trying to achieve a goal, I was constantly becoming better and better not only in my sports activities (long jump and running) but as a person too. I can now see, after all these years, that my personal and professional development was an ongoing journey of learning with ups and downs, but with a persistent willingness to learn and improve myself.

I kept a research diary from the beginning until the end of the conduct of this study, aiming to record a great range of ideas about PE-CPD and reflections of my methodological, theoretical decisions and actions. In achieving to capture these reflections, I used Evernote, a memo application as noted in a previous section. Furthermore, Evernote was used to compare my perspectives prior to the conduct of the study with the collected data and my reflections on these.

As a novice researcher, I recognised my integral role in the process of data collection by keeping a reflective diary, and I became familiar with my identity as a researcher. Additionally, since I was part of the social context I explored, I also acknowledged my theoretical stances and my own preconceptions (Charmaz, 2014) which could have had any influence on the study.

During the conduct of data collection, I could see how I firstly started as an outsider, and then how my engagement in conversations with both teachers and CPD providers and the short professional experience I had as a teacher brought me as an insider to the crux of the matter of Cypriot PE-CPD provision and generally Cypriot organisational educational structures or, as Thomson and Gunter (2011) defined it, 'local micro-politics' (p.18).

While exploring research participants' experiences and beliefs, a relationship was shaped, which involved sharing the same premises about PE-CPD, and trusting and respecting each other as peers. The connection with the teacher participants that emerged, made me feel that I had the responsibility to listen to their voices and care about what they shared.

3.17. Ethical Considerations

In conducting social science research, according to Punch (2016), the information is collected 'from and about people' (p.35). Hence, ethical issues should be considered, because the research indisputably has an impact on participants (Cohen, Manion and Morrison, 2011). The concern for and establishing of ethical principles preserves research participants' dignity as human beings. It is very important to take into consideration the ethical issues at the beginning of the research, that is, before the implementation of the data collection phase.

The present study had as its main premise to treat all participants with respect, and to abide by appropriate ethical principles. The ethical principles, which are identified as being applicable to the present research, are the avoidance of harm, access and acceptance, informed consent, and the anonymity and confidentiality of the participants. Since the research involves participants' views and experiences, the

researcher should guarantee that the data collected from participants will not be used in a way which could affect their work relationships and status, but be employed only for the purposes and procedures of the research (Maxwell, 2013).

All the research participants were informed about the research aims and given overall information about the research topic. This procedure of informing the participants is known as 'informed consent' (*see* Appendix A, B). Sapsford and Jupp (1996) state that one of the most crucial ethical rules when conducting a study is to have participants' acceptance. Furthermore, all participants received assurance that the data collected from them would be strictly confidential (Cohen, Manion and Morrison, 2011). The participants needed to feel certain that it was safe for them to express their views without fear of repercussion during the research procedure.

Prior to the collection of data, ethical approval for the research was obtained from the MoEC and the Centre of Educational Research and Evaluation (CERE) in Cyprus, and the Ethical Committee of the University of Birmingham. The researcher assured all the research participants that their involvement was voluntary and that all the data would be treated with confidentiality. The names used for this study's participants are all pseudonyms. A consent form was acquired from all participants regarding their contribution. Additionally, the research participants were informed that they had the right to change or delete any comment they felt uncomfortable with and they could withdraw at any stage of the research procedures. It was important to make the participant feel comfortable in expressing their thoughts, experiences and emotions in order to gain a clear and holistic picture of their views about and experiences of PE-CPD provision. Therefore, it was important that the interview

sessions would be conducted at the convenience of the participants and that they felt comfortable in their environment.

Since the data collection phase was conducted in Greek, given that it was the participants' native language, and made them feel at ease whilst expressing their thoughts, it was important ethically to transfer the exact meaning from one language to another, making sure that the translation is reliable (Merriam and Tisdell, 2016). In order to achieve this and to ensure greater accuracy, a review of my translation was enacted by my second supervisor, whose native language is also Greek.

Some other major importance ethical considerations were the reassurance of full respectful treatment, anonymity, research participants' right to privacy and the avoidance of revealing individuals or participants' real identities (Wiles, 2013). The research participants were very open, expressive and direct when they were talking about their experiences and perceptions about PE-CPD provision and about people involved in the PE-CPD system. More specifically, they revealed different aspects of the relationship between themselves and various CPD providers and forms of provision. CPD providers in this study involved people from the MoEC, the Pedagogical Institute, the two inspectors of PE for primary education and the PE consultants. Teacher participants, particularly, tended to compare different PE-CPD providers on aspects such as roles, education, background and personal characteristics (*see* section 4.2.1).

An ethical dilemma while analysing and presenting the data on this finding was how to deal with this teacher participants' argument about the differences between PE-

CPD providers in an ethical manner. The difficulty in this ethical issue was that the population of Cyprus is so small and there is a tendency for everybody to know everybody. The decision was taken was to exclude comments that were so personal that identification of individuals was possible and to label all providers using generic terms such as one specific PE-CPD provider or some PE-CPD providers. It was decided that, as far as possible, the focus should be on the argument the teachers were trying to make about PE-CPD providers' impact on teachers' professional learning rather than being drawn into personal arguments about specific indivuduals.

3.18. Chapter Summary

Chapter Three has presented the methodology and methods used for this research study. It was really important to choose a method which gave the opportunity to research participants to narrate their story, reflect on their experiences, and to tell their 'truth'. Also, it was important to choose the appropriate methodological approach for the researcher to be able to engage with the research participants and to explore and understand their perceptions of, and experiences from, PE-CPD provision.

Particularly, issues regarding the methods, samples, research tools, the processes followed for collection and analysis of the data, research ethics and research quality were addressed. Additionally, the key role of the researcher in the research process was presented.

PRELUDE: Introduction to the Case study teachers

Before presenting the research findings, this section, provides an introduction to case study teachers. Table 5 details information about these fifteen teachers. Each teacher's information comprises their years of service, years of teaching PE, the distinction between teachers being PE Specialists and others being only Generalist Teachers and finally their self-declared rating of their knowledge and expertise PE classification. During individual interviews these teachers were not asked to grade themselves (from one * to ***) describing their proficiency, knowledge, abilities and effectiveness regarding PE learning, but during interview sessions they mentioned their level of PE knowledge and skills.

Additionally, throughout the interviews and the interaction with these teachers, notes and memos were made for each case study teacher. Through these notes key characteristics of each teacher became evident based on what teachers were saying, their attitude, beliefs, PE teaching style and researcher's reconstructions by attempting to interpret these teachers' PE teaching and learning world.

An adjective was used to portray each teachers' characteristics and attitude toward PE learning and teaching. A brief description of each teacher follows.

Table 5. Case Study Teachers' Information

Teacher	Gender	Years of Service	Years of teaching PE	Distinction between Generalist Teacher (G) PE Specialist (PE)	PE Quality Level
Experienced Teachers (20-30 years)					
Andria	F	20	10	PE	***
Michalis	M	27	6	G	**
Mary	F	24	12	PE	***
Nicos	M	22	7	PE	**
Georgia	F	21	5	PE	*
Intermediate Teachers (10-20 years)					
Kiriacos	M	18	13	PE	***
Anna	F	18	10	PE	**
Tasos	M	14	8	PE	**
Helena	F	13	3	PE	*
Zoe	F	16	8	PE	**
Early-career Teachers (1-10 years)					
Pavlos	M	9	9	PE	***
Maria	F	7	5	PE	*
Christos	M	6	6	PE	**
Katerina	F	7	5	PE	***
Marios	M	6	2	PE	**

Andria-*the unconventional PE teacher*

Andria is PE specialist with extensive experience in sports and specifically in PE. She loves learning by herself and finding inspiration from events occurring in her daily routine. She considers professional knowledge and its growth as a vital

component of being an effective and successful teacher. She likes teaching activities that are unique.

Michalis- *the typical public servant PE teacher*

Michalis is a Generalist teacher with basic PE knowledge and a strong interest in football. During the interviews he expressed that he feels reluctant to try new things. He likes to use methods that he definitely knows will work and that are simple and effective.

Mary- *the admirable PE teacher*

Mary is a PE specialist, who loves PE and tries to transfer her passion and enthusiasm for physical activity and sports to her students. She tries to be innovative with her lessons and she is very concerned about ensuring the quality of her teaching practice. She has a group of early-career teachers from her school that call her their "mother-teacher". She considers collaboration with colleagues as one of the strongest PE-CPD sources.

Nicos- *the tired PE teacher*

Nicos is a PE specialist with advanced PE knowledge. During the study, he expressed that he really wants to do more innovative PE lessons, but the lack of of equipment and material do not allow it. He mentioned that next year he would prefer not to teach PE.

Georgia- *the creative PE teacher*

Georgia is a PE specialist, with rather basic PE knowledge and skills but a great amount of imagination and creativity. She grounds her lessons on her students'

needs and desires. She can adapt to any situation and feels she is able to deliver a fun and productive lessons.

Kiriacos- *the conservative PE teacher*

Kiriacos is a PE specialist who likes to have the responsibility of teaching PE lessons for many classes in his school. He says that his time teaching PE passes very easily. He greatly valued the efforts of MoEC and CPD providers.

Anna- *the precisionist PE teacher*

Anna is a PE specialist with great passion for PE and willingness to learn. She reported that every weekend she prepares her PE lessons and tries to achieve a good sequence of knowledge and values in her PE lessons. She highlighted the importance of teachers being honest and having a voice about their professional learning and needs. She considers PE as the most important subject for the development of the children.

Tasos- *the conformist PE teacher*

Tasos is a PE specialist who likes to follow the guidelines that MoEC gives to teachers. His PE knowledge is above basic and he likes to adjust his lessons on his different students' needs.

Helena- *the emotional PE teacher*

Helena is a PE specialist who is very interested in and passionate about PE. Her PE knowledge is average but she is very enthusiastic to learn and try new things. She valued the new PE-CPD activities for keeping her interest and passion for PE learning alive. She was very expressive during the interviews. She appreciated the informal discussions with colleagues and PE lesson observations.

Zoe- *the rational PE teacher*

Zoe is a PE specialist with strong views about PE-CPD. She was not afraid to express her thoughts about the existing PE-CPD provision. She was keen to recount her experiences and ideas and make strong with arguments. She prefers PE-CPD activities with more practical ideas and exercises than seminars and theoretical activities.

Pavlos- *the enthusiastic PE teacher*

Pavlos is a PE specialist teacher with adequate PE knowledge and eagerness to learn more. He expressed that every time he attends PE-CPD activities he feels excited and happy to learn new things. He likes to organise meetings with colleagues for collaboration and sharing ideas. He valued the new initiative of Collaborative Learning Communities (CLC)s due to the effectiveness of observing PE lessons taught by colleagues. He likes to extend his knowledge, skills and experiences in PE.

Maria- *the impatient PE teacher*

Maria is a PE specialist with basic knowledge on PE. She expressed that she feels weak and in teaching PE and she struggles to stay motivated. She feels that the progress of PE-CPD provision is very slow and she does not get what she needs from it.

Christos- *the disorientated PE teacher*

Christos is a PE specialist with basic knowledge in PE. He expressed that most of the times he feels lost and confused about the way he needs to follow in order to teach successful PE lessons. He indicated time and quantity important factors for developing more his professional learning and skills in PE.

Katerina- *the considerate PE teacher*

Katerina is a PE specialist who loves teaching PE and seeing the values that her students get from PE lessons and activities. She likes to share her work with her colleagues and having productive dialogues about the improvement of her teaching skills. She believes that the value of collaboration with colleagues helps her to stay energetic and motivated for more learning.

Marios- *the follower PE teacher*

Marios is a PE specialist, with adequate PE knowledge. He expressed the need for more learning and experiences in PE. He likes to be among other colleagues to get ideas for PE lessons and to listen to experienced teachers' stories and experiences throughout the years. As a novice teacher he feels that he has a long way until he achieves high quality teaching. However, he mentioned that there are several contextual difficulties which hinder PE-CPD effectiveness.

Summary

This prologue to the findings chapter has provided a brief overview of the key characteristics of the case study teachers. The aim was to provide some context for the data that follows.

Chapter 4: FINDINGS

This chapter reports the findings from all data collection phases and the analysis that was undertaken using a constructivist approach to grounded theory (Charmaz, 2014). Ten themes were constructed through the data analysis with the aim of capturing participants' experiences; these were then assembled into three main groups so as to address the research questions of this study.

The first main thematic group, *'Experiences from PE-CPD provision in Cyprus'*, refers to the third research question "What CPD opportunities are offered to PE teachers in Cyprus throughout their careers?", and was shaped in order to distinctly illustrate the nature of CPD opportunities offered to teachers who teach PE throughout their different career stages and how teachers perceive and depict an existing PE-CPD style. The second group, *'PE-CPD effectiveness and ineffectiveness'*, replies to the fourth research question which asks "What evidence is there to suggest that the current model of CPD offered to PE teachers is either effective or ineffective, and why?", focusing on what constitutes effective and ineffective PE-CPD activities in accordance with participants' perceptions and experiences. The third and last group of themes, *'Ideal model of PE-CPD'*, address the fifth research question "What would an effective model of CPD look like for PE teachers and how could it be implemented?", and mainly presents PE teachers' recommendations for a PE-CPD provision system with improved structures.

This chapter is divided into three sections in line with the three groups of themes. Data from the interview transcripts, memos and notes from the researcher's diary have been integrated in order to fully comprehend the circumstances of PE-CPD

provision in Cyprus. In addition to this, evidence from participants' data extracts is presented from all the phases in each section. The data extracts are identified by source and date of collection. In particular, the initials of the data tool and number of the participant (e.g. ST000-survey, FG-focus group, Int. 1, 2, 3), as well as pseudonyms for teacher case studies (e.g. Demetris), are used.

4.1. Experiences from PE-CPD provision in Cyprus

4.1.1. Frame of mind

All teachers who participated in this study – and particularly case-study teachers – viewed this research project as a favourable opportunity to express themselves. Teachers took the opportunity to voice a wide range of disappointments regarding their extant PE-CPD circumstances. One of the reasons for their expressed resentment appeared to be closely linked to what they perceived to be a problematic frame of mind inherent in Cypriots/Cyprus. From what they said - mainly in the interview sessions - three main criticisms were identified and they are reported under the sub-themes: a) "good only with words, bad with actions", "needing pressure to do something," and "scared of criticism". Each of these sub-themes is reported in turn.

4.1.1.1. *"Good only with words, bad with actions"*

It is interesting that teachers' responses varied, yet taken together they reflected a common exasperation with the lack of action by ministry officials and CPD providers, and also fellow teachers. Phrases such as 'many words, no action', 'attention paid only to the wrapping and not the actual content', 'those with power shouldn't be only watchers', and 'self-criticism and self-reflections are needed' were expressed by these teachers at numerous points in the study as they tried to explain their concerns

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about the prevailing attitude of Greek Cypriots in general and in particular those who are involved in the educational system.

Andria, Michalis, Mary, Georgia, Anna, Helena, Zoe, Maria and Christos reported similar concerns' and these are best illustrated by Christos:

> There are only targets in the curricula… that's how I see it. Only on paper, in theory. Many things have been said but nothing really happens (Int. 2, Nov. 12).

It is also interesting that a CPD provider in the focus group expressed a similar view:

> That is the reality. If you take the curriculum and read it, everything is perfect, correct, but what about the practice, the actions? (FG, Nov. 13).

A third interviewee, Michalis, also added that Greek Cypriots are generally 'amazing when it comes to describing theories and objectives, largely as a nation,' and explains that 'that's why we have come to ruin' (Int. 3, Feb. 13). It should be highlighted that 12 out of 15 case-study teachers, in one way or another, expressed the view that this tendency has a negative impact on society, on the nation's progress and, in particular, on the improvement of the educational system and CPD provision for teachers.

4.1.1.2. *"Needing pressure to do something"*
The phrase "needing pressure to do something" is used to encapsulate another concern expressed by teachers about their peers and also those who have power in the educational system. As Maria articulated:

> …due to the lack of control…. Unfortunately, we need pressure from our superiors to actually do something (Int. 2, Nov. 12).

Many teachers stated that some of their colleagues held the belief that the ministry has the responsibility to indicate to teachers exactly what they should do. The following extract from Anna illustrates the point – and her disapproval of it:

> … from the discussion we had with my colleagues, I noticed that many teachers expect everything from the ministry, believing that they shouldn't even move their little finger (Int. 2, Nov. 12).

Within this context, and when asked to give their recommendations for the improvement of PE-CPD provision, the data from teachers from the survey phase reiterated the point made by Anna. For instance, extracts from two survey teachers captured the mentality of those who were not prepared to do anything without the ministry's or CPD providers' instructions:

> We want more detailed guidance of what we should do to become better teachers, as well as exact illustrations and practical applications, because we don't know what is the best action to undertake (ST 181).
>
> … CPD providers have the duty to show us precisely what we should do […] in other words, teachers are the soldiers and CPD providers are our officers. We simply execute orders (ST034).

4.1.1.3. "Scared of criticism"

> I am afraid of being criticized. I am doing what I think is right but when it comes to inspection I prepare what the inspectors want to see from me (Andria, Int. 2, Nov. 12).

This extract from Andria, illustrates a point of view that was very strong in the data. Early-career teachers, in agreement with Andria, indicated similar beliefs. Pavlos, for example, couldn't perceive how feedback and assessment from CPD providers and inspectors could assist teachers in their development as learners and teachers. He

explicitly stated that he didn't 'believe that evaluation can result in something positive,' and that 'especially for us as new teachers the whole procedure causes a great deal of stress and anxiety and nothing else' (Int. 3, Feb. 13).

For a CPD provider, this standpoint of teachers is recognisable and also problematic. During the focus group, this CPD provider's comment echoed the teachers' comments:

> At the end of the day, teachers are afraid of criticism. We are trying to target the development of critical thinking, critical literacy etc. We are afraid of others observing us and giving us constructive feedback, since we always take the negative comments more seriously (FG, Nov. 13).

4.1.2. "Mechanism" working

Within the datasets, the metaphor of a "mechanism" was used by teachers to describe the PE-CPD system. For a number of teachers and CPD providers, the existing PE-CPD provision seemed to have some "cogwheels" (positive aspects) which assisted the mechanism of PE-CPD to be productive. On the other hand, the number of codes on the theme "mechanism" not working was considerably larger, suggesting that this was the strongest sentiment. Overall, there were many data extracts in this theme representing a wide variety of viewpoints, which made the formation of categories challenging. Participants' positive perceptions about the operation of PE-CPD provision were grouped under the category "feeling satisfied with PE-CPD provision".

4.1.2.1. Feeling satisfied with PE-CPD provision

Some teachers reported aspects of existing PE-CPD provision which aligned with some of their individual learning needs. It is important to note, however, that among

the fifteen case-study teachers, only one expressed satisfaction with the existing PE-CPD provided by MoEC and this satisfaction was only partial. Christos comments:

> Eeemmm…I can say that the provision offered by the ministry is at a good level, since there are some efforts which actually impact on our learning positively (Int. 3, Feb. 13).

This extract also indicates that Christos was positive overall but that there are still margins for improvement. In addition, a number of teachers who completed the survey were in agreement with Christos' point. From the analysis of the open-ended surveys, only 41 teachers out of the 185 who completed the survey (22%, see Figure 8) expressed their satisfaction with the existing PE-CPD provision. After allowing them to express their approval or disapproval, the survey followed up with an open-ended question asking them to explain their answer [*Are you satisfied or dissatisfied with PE-CPD provision. Explain why*]. The teachers who stated their satisfaction with the existing PE-CPD provision had a variety of explanations. The following extracts are illustrative:
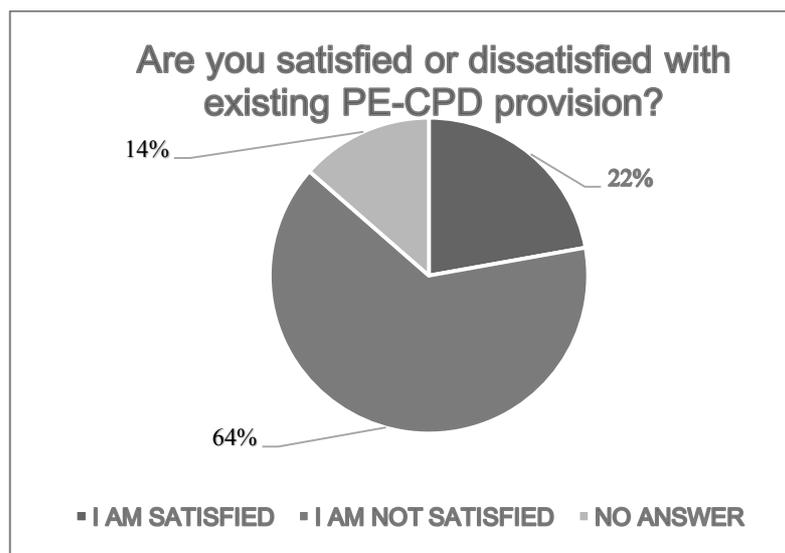
Figure 8. Teachers' responses to the survey

From the first day I got into schools until now, many things have changed for the better (ST 049).

[…] it could be said that there is a kind of escalation with whatever has to do with our learning and academic improvement (ST 076).

I am feeling pleased with the staff who have the responsibility to evaluate our work, to assist us with difficulties and upgrade CPD provision in order to create better teachers, and hence better student performance. This is the reason. Due to the fact that people such as PE consultants and inspectors with proper knowledge, background and attitude have crucial positions in the system (ST 129).

Due to the changed attitude of MoEC. I can see from some of their actions that they are taking the issue of teachers' continuous learning more seriously. One example is the two-day training we are given for every subject at the beginning of the academic year (ST 174).

One main reason these teachers felt satisfied with PE-CPD provision was the fact that 'marks of improvement have started appearing on the horizon' (Christos, Int. 3, Feb. 13). Interestingly, these teachers subconsciously connected signs of improvement with satisfaction.

In the context of signs of improvement in PE-CPD provision from all data collection phases, many teachers affirmed that during the last few years the status and quality of PE-CPD provision have improved due to the efforts of MoEC and some innovative PE-CPD activities which were put into practice. For instance, Katerina points out that 'lately we have seen light in the tunnel' (Int. 3, Feb. 13). In a similar vein to Katerina, Kyriakos stated that 'there is a big difference now in relation to how things were one decade ago regarding CPD provision generally and PE-CPD provision specifically' (Int. 3, Feb. 13). During their individual interviews and focus group some CPD

providers expressed their belief that 'we are finally on a good PE-CPD path' (Interview, Oct. 12) and that 'we are getting warm (*sic*) in teachers' professional learning' (FG, Nov. 13).

On the other hand, it is also important to note that despite the positive signs, teachers and CPD providers are still concerned that 'more time and more efforts and actions are needed to reach high levels of professional development in the subject of PE' (Anna, Int. 3, Feb. 13). Mary also asserted that:

> …although we are making baby steps towards the upgrade of PE-CPD, we still need to carry on and never stop. This is crucial for the success of both teachers' and students' learning (FG, Nov. 13).

4.1.3. "Mechanism" not working

The research participants, that is, both teachers and CPD providers, were most expressive when talking about the limitations of current PE-CPD provision. Teachers mainly emphasized the significance of providing teachers with the opportunity to voice their PE-CPD experiences and views. Generally speaking, teachers perceived the individual interview sessions and the survey as a window of opportunity to unveil not only the problematic aspects of PE-CPD provision but also those aspects of the Cypriot educational system which closely correlate with teachers' appetite for improvement, progress and professional learning.

Teachers were frank and outspoken when it came to discussing these problematic issues as most of them had cropped up in relation to their own personal teaching experiences. Likewise, CPD providers reported that they are aware that current PE-CPD provision has multiple limitations.

This section presents six of the most frequently mentioned problematic aspects of PE-CPD provision: *a) the inadequate initial education and training of teachers; b) the weak status of PE overall; c) the deficiencies within MoEC as an organisation and in regards to its prescribed educational system; d) the general defects of PE-CPD provision; e) the negative impact of the economic crisis; and finally, f) lagging progress in relation to other countries and EU-member states.* Each is now examined in turn.

4.1.3.1. Inadequate initial education for PE

It is expected for a generalist teacher to have a high level of specialization in PE and in all other subjects. Is this possible, since the initial education we get at university for PE is only one module and we just get general ideas and not specialized techniques and strategies? (Anna, Int. 2, Nov. 12).

Anna's extract reflects the views of not only many teachers, but also CPD providers too. During the individual interviews with the three CPD providers and the focus group, two of them agreed that teachers are not ready to teach PE once they are officially employed: 'they have no idea' (CPD provider, Interview, Oct. 12) 'since their initial education for PE at university is restricted and inconsequential' (CPD provider, FG, Nov. 13).

During the survey phase many teachers indicated the difficulties initial education in PE creates for teachers' performance. Two illustrative sections from the teachers' responses to the survey question which asked them why they were satisfied or dissatisfied with current PE-CPD provision, exemplify that one reason for their dissatisfaction is 'the minor, inconsiderable and shallow initial education teachers get for PE' (Mary, FG, Nov. 13):

I am unhappy with PE-CPD provision because mistakes took place from
the very beginning when it came to my studies at University…It can't be
right to have only one module for PE and for maths, Greek and so on.
Lots of things are missing from our studies as teachers at primary schools
(ST 179).

I could have avoided so many mistakes if I had had the right initial
education for PE in the first few years of my career. I was clueless. If the
first step for us is inadequate then many gaps will occur in our expertise,
skills and performance. That's how it goes. In other words, as you make
your bed, so you must lie in it (ST 036).

As Kyriakos, Mary, Anna and one CPD provider agreed, 'when we had the
pedagogic academy the graduates were well-prepared and trained to teach PE'
(Anna, Int. 2, Nov. 12), but 'once the University replaced the pedagogic academy the
graduates had less training time for PE and most of the professors weren't giving the
specific subject any proper attention - in other words, there wasn't any PE
specialization' (CPD provider, Interview, Oct. 12).

4.1.3.2. Low PE status

It is interesting that it was via teachers' negative perceptions about PE-CPD
provision that the low status of PE came to light. Teachers from all the data
collection phases and also CPD providers showed that they were frustrated by the
low value that is accorded to PE by officials, teachers, head teachers, parents and,
more generally, the state and society. Katerina, Maria, Tasos, Anna, Nicos, Michalis
and Andria raised points on this topic. Their common viewpoint is best illustrated by
Nicos' words:

Compared to other subjects such as maths, Greek, Science and History,
PE is very undervalued. …even parents are divided into two groups.
There are parents who support this subject because they recognise the

benefits that their children are getting from it. There are, however, parents who don't realize that through PE their children develop not only as learners but also as future citizens and human beings. The majority of them don't care to visit the teacher who teaches PE to their children in order to ask him (*sic*) about their progress in the subject. This tells us a lot (Int. 3, Feb. 13).

Some phrases used by participants, both teachers and CPD providers, illustrate this point: "doesn't have the position that it should," "botched, sloppy work for PE progress," "they don't care a damn," "they misunderstand this subject," and "overshadowed". Teachers mainly expressed their dissatisfaction with the way the ministry and officials approached the subject and specifically the PE professional development of the teachers. In trying to explain this negative attitude towards the subject of PE in particular, Andria states:

Many officials underrate PE. Even head teachers don't allow teachers who teach PE to attend PE-CPD activities. One possible explanation is that they may have had bad experiences as students from their teacher who was teaching PE (FG, Nov. 13).

Helena, Zoe and Pavlos shared the belief that even teachers themselves 'underestimate the value of PE' (Helena, Int. 2, Nov. 12), 'use the time allotted to PE for other subjects such as Greek or for school events like preparing for a parade and school feasts' (Zoe, Int. 2, Nov. 12), and 'clearly show that they don't love it' (Pavlos, Int. 3, Feb. 13). Conversely, teachers from the survey phase expressed that 'it's a shame to waste the time allotted to PE on other things' (ST 063) because 'it is one of the most important subjects for students' development and helps to create a bond of synergy between teachers and students' (ST 098).

A CPD provider in the focus group discussion took a similar stance to teachers on this issue:

> It is unfortunate that the good ones who love PE are too few and far between to change this depressing, for me, situation in teachers' PE-CPD (FG, Nov. 13).

4.1.3.3. MoEC's deficiencies

Data suggest that most of the teachers in this study blame MoEC for the obstacles and the problematic aspects of primary school education in Cyprus generally, and in particular primary school teachers' CPD and PE-CPD provision. Unsurprisingly perhaps, teachers held MoEC responsible for this 'disheartening and poor' (Anna, Int. 2, Nov. 12) state of PE-CPD provision due to its inability to correctly administer not only the departments of teachers' professional learning and progress, but substantially the whole educational system. Hence, this finding, according to teachers' arguments, seemed to imply that MoEC and its deficiencies was the primary culprit.

This section reports the negative findings about the way MoEC manages the educational system and particularly PE-CPD provision for primary school teachers. This finding is reported under the following categories: bad management of CPD provision; the absence of an evaluation system, no intrinsic or extrinsic motives for professional development; no change in the *status quo*; and finally, the wasting of time on the development of new curricula.

1) Bad management of PE-CPD provision

This category includes both teachers' and CPD providers' perceptions regarding: 1) MoEC's approach towards PE-CPD provision and 2) 'faulty' PE-CPD structural settings.

a) MOEC's approach towards PE-CPD provision

It is interesting to note that all fifteen case-study teachers commented that the ministry did not have the appropriate faculties to successfully direct PE-CPD provision. As Andria put it, 'It is possible that MoEC has not yet fully understood the term professional development and all that it entails' (Int. 3, Feb. 13). Likewise, when asked to state if he was satisfied or dissatisfied with the extant PE-CPD provision offered by MoEC, Christos simply replied:

> The PE-CPD provision that MoEC provides to us is typical, nothing, zero, partial, incomplete, ineffective. Do I need to say more? (Int. 3, Feb. 13).

Tasos similarly expressed his dissatisfaction and added that teachers can clearly see how MoEC deals with teachers' professional learning, and 'this is the most disappointing aspect of this situation' (Int. 3, Feb. 13). Many teachers from the survey phase reported similar views; for example, they 'have no confidence in the strengths of MoEC, since nothing has changed in PE-CPD provision for decades' (ST 068).

It is noteworthy to add that, despite the heated conversations between the CPD providers and teachers during focus groups, there was mutual agreement about how MoEC deals with PE-CPD provision. Both of them agreed that CPD provision for PE is 'neglected and undervalued' by the ministry officials (Andria, FG, Nov. 13).

b) Faulty PE-CPD structural settings

An assortment of teachers' expressions, words and phrases suggests that for them, the way MoEC organises PE-CPD provision is 'foolish' (ST 096), 'without rationale' (Andria, Int. 3, Feb. 13), 'with ignorance of what we actually need' (Maria, Int2, Nov12), and 'without any thought as to whether the outcome of the PE-CPD activities would be beneficial for us' (Nicos, Int. 2, Nov. 12). What is more, it is 'incomplete' (Kyriakos, Int. 3, Feb. 13), and 'has many gaps' (Christos, Int. 2, Nov. 12). 'PE-CPD structures have remained unchanged for more than a decade' (ST 057), 'it is of the style take it or leave it' (Zoe, Int. 3, Feb. 13), 'not purposeful' (ST 179), 'there isn't a committee that would deal exclusively and only with teachers' CPD' (Anna, Int. 3, Feb. 13) and 'there isn't a right, proper PE-CPD system' (ST 023). More particularly, several problematic structural settings were also revealed by the participants' comments on a) the frequency, b) the duration and c) the format of PE-CPD activities as organised by MoEC.

i) Frequency

Teachers highlighted the importance of the frequency of PE-CPD activities. In particular, from Taso's perspective:

> It is like a friendship […] if you try to visit and meet your friends often, you keep the friendship active and alive. If we don't have frequent doses of professional learning through PE-CPD activities, we won't be active learners and therefore we won't be successful teachers either (Int. 3, Feb. 13).

Even the CPD providers expressed their concern about the infrequency of training and educational activities in PE. During the individual interview a CPD provider commented that the frequency of PE-CPD activities 'is the alpha and omega of PE-

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CPD provision, but unfortunately this is not recognised by all officials' (Interview, Oct. 12).

In the same context, the frequency of PE-CPD provision as scheduled by MoEC was certainly not appreciated by Michalis who commented that:

> …this is unacceptable. How is it possible to have regular CPD activities for teachers who teach Greek, maths and science, with five or six meetings in a year, and nothing for PE, unless it's just one or two meetings per year to save face? (Int. 3, Feb. 13).

In agreement with Michalis, Pavlos and Georgia agreed that the PE training teachers receive during the first week of the academic year 'shouldn't be the only actual professional activity teachers get to learn' (Pavlos, Int. 2, Nov. 12), but that there should be 'more and better activities focused on actual PE learning and not on technical issues, which are issues that clearly refer to officials and not teachers' (Georgia, Int. 2, Nov. 12). Indeed, along similar lines many teachers stated that 'they have one or two meetings per year for the subject of PE' (Andria, Int. 2, Nov. 12) and 'usually one of the two meetings can't really be defined as a PE-CPD activity' (Helena, Int. 2, Nov. 12), but in fact as an activity which is 'irrelevant, unconnected and not focused on PE professional learning for teachers' (Katerina, Int. 2, Nov. 12).

ii) Duration

Some teachers also indicated that the duration of a PE-CPD activity is important for them as learners. Pavlos, Nicos and Zoe agreed that 'MoEC clearly shows that the duration of a PE-CPD activity is not important for them' (Zoe, Int. 3, Feb. 13). Anna also acknowledged the importance of the length of time teachers receive during training and added that 'unfortunately the time we spend in PE-CPD activities is not enough, since it takes time for teachers to get to the gathering point' (Int. 2, Nov. 12).

It is also important to note that 91 teachers from the survey phase revealed their annoyance at the duration of PE-CPD activities during such meetings. Indicatively, one teacher stated that 'during PE-CPD activities half of the time is spent on other issues and, by the end of the meeting, the only thing we are given is PowerPoint slides which serve no practical purpose since they are unaccompanied by hands-on application or further explanation and discussion' (ST 181).

iii) Format

The format of PE-CPD activities was an issue mentioned by both teachers and CPD providers in all data collection phases. Again, teachers highlighted their dissatisfaction with MoEC's planning regarding the design, nature and context of PE-CPD activities and, therefore, teachers' professional learning. For instance, Andria, who was very passionate about this issue, explained that 'the learning environment which is created in a meeting that focuses on teachers' education is something which is usually neglected in CPD activities, and specifically PE-CPD activities' (Int. 2, Nov. 12).

Mary indicated that having an official 'reading the presentation slides doesn't offer us anything' and it would be 'better for us to spend that time by ourselves studying or searching for PE material online which can afford us with actual knowledge and ideas for practical applications' (FG, Nov. 13). Likewise, Maria expressed that 'acquainting ourselves only with the theory is not adequate if we are to develop ourselves as learners and as PE teachers' (Int. 2, Nov. 12). Like Maria, many teachers pointed out that a PE-CPD activity is not effective when 'it includes only theory' (ST 078), 'teachers don't have an active role' (Zoe, Int. 2, Nov. 12), 'as teachers we just sit and listen' (Tasos, Int. 3, Feb. 13), 'it is not enthusiastic and

interesting' (Katerina, Int. 2, Nov. 12), and when 'we are not told how to apply theory to practice' (Andria, Int. 2, Nov. 12).

2) Defects of PE-CPD provision

a) Absence of an evaluation system

Several teachers noted that the experiences, knowledge and learning styles of teachers vary. As Anna put it, 'it is very odd…they expect all of us, early-career teachers and more experienced teachers alike to learn in the same way?' (Int. 3, Feb. 13). Likewise, Helena argued that 'they cannot know if the early-career teacher acquired the desired knowledge from the PE-CPD activity or not, since the background or context is different if there are less familiarities with the PE lesson [...] basically there is no proper assessment of whether specific PE-CPD activities actually work or not' (Int. 2, Nov. 12). Much the same as Anna and Helena, twelve more out of the fifteen case study teachers agreed and pointed out that proper evaluation of PE-CPD activities and how these impact on teachers' learning is 'crucial' (Kyriakos, Int. 3, Feb. 13), 'a serious business' (Maria, Int. 2, Nov. 12), 'high-priority' (Helena, Int. 2, Nov. 12), 'essential' (Georgia, Int. 3, Feb. 13) and 'vitally important' (Nicos, Int. 3, Feb. 13). In this context, both teachers and CPD providers indicated that the existing PE-CPD evaluation system is "non-existent". Their shared view is best made clear by a CPD provider during the focus group:

> A good example is the program which involved a university from abroad coming to Cyprus and training teachers who teach PE in primary schools. What happened in the end? We don't know, because there wasn't an evaluation of this activity and if it had a positive or negative impact on teachers' professional learning and teaching performance…. And this is due to the unjustifiable mistake of MOEC not assessing the specific program and many many others (FG, Nov. 13).

Notably, teachers view MoEC's deficiency as one of the most negative factors which contributes to the ineffectiveness of PE-CPD provision.

b) No motivation

During the research period, teachers had the opportunity to externalise their own sentiments regarding the existing state of primary school teachers' PE-CPD provision. Notwithstanding the dissatisfaction, disappointment and frustration, it was also revealed that for many of these teachers, there was little motivation to engage in further professional training and knowledge. Teachers identified multiple reasons for this. As Anna noted:

> How do they expect us to be motivated since the teacher who is good at their job doesn't get rewarded and the one who isn't good doesn't get punished or warned? I can't get it. Do you? (Int. 3, Feb. 13).

Much the same as Anna, Andria deduced that:

> There is no issue for teachers who are trained through PE-CPD activities to get a higher salary. There aren't any promotions, thus everything has been flattened. The extrinsic motive for PE professional learning doesn't exist (FG, Nov. 13).

Interestingly, one of the CPD providers who was involved in the focus group gave an immediate answer to Andria's question by proposing that becoming motivated for PE-CPD is also up to teachers' own conscience' (FG, Nov. 13).

Nonetheless, several teachers from the survey phase agreed that 'there are no motives or stimuli for more PE-CPD since there is neither control nor regular inspection from the officials' (ST 089). It was also added that from their perspective, the inspection which is carried out 'is not a valid one since the officials notify the

teacher in advance regarding the date they are coming for the evaluation' (ST 137). According to teachers' comments, some teachers 'warn the students to behave when the inspector comes' (Katerina, Int. 2, Nov. 12), 'they clean the storeroom of PE equipment' (Zoe, Int. 2, Nov. 12), 'they prepare a lesson plan in accordance with what the officials expect, and then they just execute it' (Mary, Int. 2, Nov. 12). All these statements clearly illustrate that 'teachers have no reasons to be concerned about attending PE-CPD activities […] they are not afraid that if they are doing something wrong they may lose their job, let's say' (CPD provider, FG, Nov. 13).

4.1.4. Economic crisis

The financial crisis has had a powerful impact on the Cypriot educational system and on teachers' professional learning thereafter. Due to the lack of funds, many changes took place that affected PE-CPD provision and, as a result, teachers' incentives for professional learning.

The economic difficulties certainly had a huge impact on teachers' attitudes towards many things. During the research period, there was a very sudden and monumental transformation in the Cypriot economy as part of the wider international financial crisis. It was clear that during the data collection period, teachers were somewhat bewildered, angry and disoriented. Mary captured the opinions of several teachers when she attempted to assess the consequences of the financial crisis on teachers' future career and professional learning:

> We feel as though we've just crashed into a brick wall. And now what?
> Are we going to lose our jobs? Are we going to have salary reductions?
> Where is the stability, certainty, confidence, strength and motivation for
> more and improved professional learning generally? (FG, Nov. 13).

Some teachers' phrases which indicate their emotional state during that period included: 'we are moving backwards with this situation,' 'this is a huge turning point,' 'bad consequences on education and on us,' 'we're losing our sleep,' 'this is terrifying,' 'the future is uncertain,' 'it's a risky situation,' 'I feel furious,' 'why?', 'everything will collapse,' and 'it's MoEC's fault.'

Within this framework, a great number of teachers mentioned MoEC and its 'mismanagement of economic resources' (Mary, FG, Nov. 13). Notably, teachers seemed to equate these difficult economic circumstances with MoEC's managerial abilities and past actions regarding the use of economic resources. As Andria and Marios commented:

> It's not only the economic crisis, it's also the parochial attitudes of those that are in power. I just wonder where all these funds have gone? (FG, Nov. 13).
> It's neither Troika's fault, nor the European Union's for this difficult situation in the Cypriot sector of education. We were the ones that wasted the funds without any dramatic alterations for the best in education. When we had the funds what were we doing? Were we building only schools? (Int. 2, Nov. 12).

Further teachers' comments regarding the economic difficulties in Cyprus illustrate that this has had a strong negative impact on teachers' PE-CPD. For example, a teacher from the survey phase expressed that due to the current economic situation 'we couldn't do a number of outdoor PE events or tournaments' (ST 096). Zoe also argued that 'you can't progress in your career if there is a need to save economic resources' (Int. 3, Feb. 13). Interestingly, Kyriakos stated that:

Due to the bad state of the economy, the time for PE-CPD provision won't be increased and we probably won't have PE-CPD innovative programs. If you consider it, how much can MoEC do without any economic support? Therefore, we need to act by ourselves. As teachers who really care for their PE professional learning we should try to get education and improve ourselves as learners and teachers without expecting everything from MoEC (Int. 3, Feb. 13).

On the other hand, the negative feelings regarding the economic situation, the mistakes of MoEC and PE-CPD provision's progress were abundant. Notably, CPD providers were in agreement with these views. One of the providers who attended the focus group captures the views of all three CPD providers stating that 'in order to do something different and pioneering, you unavoidably need money, a *lot* of money' (FG, Nov. 13).

4.1.5. Delayed (r)evolution

There was widespread concern that educational progress in Cyprus 'was not and is still not in tandem with the changes and development of other countries' (Mary, FG, Nov. 13). Evidence was brought to light that in the area of professional development, 'there is sluggishness, the MoEC's officials are advanced in years, not giving any chances to the younger generation to pioneer with new and innovative settings in PE-CPD provision and generally in the Cypriot educational system' (CPD provider, FG, Nov. 13). Both teachers and CPD providers agreed that the existing situation of PE-CPD provision 'is problematic *now* due to the structures placed *back then'* (CPD provider, FG, Nov. 13, italics for emphasis). In her efforts to explain the particular situation, Maria used the phrase 'it's like modernisation in small doses' (Int. 3, Feb. 13).

The data highlight the deep rooted concerns of both teachers and CPD providers regarding out-of-date PE-CPD provision. It is interesting to note that providers appeared particularly frustrated about this issue, with one describing it as a 'catch-22 situation' (CPD provider, Interview, Oct. 12). Due to their educational background and experience as officials of the ministry, CPD providers had the chance to look into other countries' educational systems and CPD provision structures (e.g. Finland). Indeed, during the focus group one of the CPD providers made the following observation:

> From my experience in the UK and USA, we are always a decade behind. Our structures are very old-fashioned and, thereafter, ineffective' (FG, Nov. 13).

Teachers who had a postgraduate degree in general education or PE made similar points in phrases such as: 'old stock of PE-CPD activities' (ST 013); 'always last regarding PE-CPD provision' (Georgia, Int. 2, Nov. 12); 'focusing on irrelevant aspects, that's why we are always following other countries' (Pavlos, Int. 3, Feb. 13); and, 'our PE-CPD provision can't be compared with that of other countries… we live in our own little bubble' (Zoe, Int. 2, Nov. 12).

Teachers also indicated that "lagging always behind" means that there are no changes in PE-CPD provision. As Anna put it, 'same old structures and actions for so many years, no change, no progress, nobody tries to bring the PE-CPD provision we need in this decade, just stagnation' (Int. 3, Feb. 13). Much the same as Anna, Tasos suggested that there is an 'urgent need for a kind of rebelliousness in this field' (Int. 3, Feb. 13). It is noteworthy to indicate that teachers linked the necessity for change and revolution in PE-CPD provision with the need for a CPD provider who could act as a transformational leader and "rebel" against the old-fashioned PE-CPD

formulas' (Andria, Int. 2, Nov. 12). Additional information on the issue of CPD providers' rebelliousness is offered in the next section 4.2.1.3.

4.2. PE-CPD effectiveness and ineffectiveness

4.2.1. PE-CPD Providers

This section reports findings on the impact of CPD providers on teachers' learning about PE practice. There are three different categories within this theme: a) the roles and responsibilities of CPD providers, b) CPD providers' background and c) their personality. As noted in the data analysis section of this thesis, the themes are constructed from pertinent data from all the relevant datasets.

4.2.1.1. Roles and responsibilities of CPD providers

As reported in the literature review, a PE-CPD provider's responsibilities are as follows:

a. the 'inspection and guidance' of teachers;

b. cooperation with the head teachers of the primary schools concerning 'administrative and educational issues';

c. 'coordination, planning and the development of educational programmes, educational research.'

(MoEC, 2016)

Six of the fifteen case-study teachers reported that some CPD providers were effective in meeting these criteria and they were very appreciative of the approaches taken by these providers. As Tasos remarks:

> This CPD provider works in a different way. …does more, communicates more, and supports teachers more by using several means, and having frequent meetings with the teachers. Basically, this provider is doing what

the position asks CPD providers to do, and maybe even more (Int. 3, Feb. 13).

Looking across the data, it is interesting to see how much teachers admire the work of some CPD providers. Phrases such as 'worthy of admiration,' 'doing things by heart,' and 'I feel lucky to have this CPD provider' were used by teachers to express their feelings about the work of CPD providers and its impact on them.

Evidence of the alignment of the work of some CPD providers with the expectations of the Ministry of Education is also apparent in the words of the CPD providers themselves during the interviews and focus group. Based on the responsibilities determined by the Ministry, as identified above, one CPD provider mentioned activities that demonstrate how they meet these criteria. For instance, during an initial interview, one CPD provider commented that:

> It is only through personal contact with the teachers that I can understand them and eventually support them to the level they need (Interview, Mar. 13).

This is associated to the first of MoEC's responsibilities. With regards to the second responsibility, another CPD provider remarked:

> From the very first moment, we approached the head teachers in order to remind them of and stress the value of PE as a subject (FG, Nov. 13).

One CPD provider made the following statements which link to the third of MoEC's responsibilities:

> We are developing educational programmes such as the Collaborative Learning Communities, which aim to create more passion in teachers for PE learning (FG, Nov. 13).

and

> One educational program we developed lately within teachers' professional learning is related to preventative management techniques (Interview, Mar. 13).
>
> It is, perhaps, unsurprising to find that eight out of the fifteen case-study teachers reported that the working approach and actions of certain CPD providers were very effective for them. Of these teachers, five believed that the most significant role for CPD providers is to be in frequent communication with the teachers.
>
> Some CPD providers manage to successfully support teachers in their learning and to consult them about any concerns (Maria, Int. 2, Nov. 12).

Furthermore, two out of these eight teachers argued that CPD providers have a responsibility to maintain PE-CPD provision at a high-quality level, keeping up with new CPD trends as well and finding solutions in order to overcome possible obstacles. Here again, there is evidence of the appreciation of CPD provision's effectiveness in supporting PE-CPD changes and improvements. Zoe, specifically, was very appreciative in this regard, commenting that:

> …if we didn't have these CPD providers we wouldn't be able to move forward, and lots of the activities which have been carried out in the last few years wouldn't have been possible (Int. 2, Nov. 12).

In the context of CPD providers' roles and responsibilities, two of the eight teachers acknowledged the importance of providers being role models for teachers since they are regarded as 'teachers' masters' (Zoe, Int. 2, Nov. 12). There was again evidence revealing that some CPD providers were viewed as ideal role models for teachers. What is more, teachers who shared this view argued that an important criterion used to assess a CPD provider's efficacy was the appropriateness of their educational background, not only as a teacher at a primary school but also as an academic and

researcher. Within the framework of CPD providers' role and responsibilities, only one (Zoe, Int. 2, Nov. 12) out of the eight teachers indicated that CPD providers evaluate the PE-CPD provision's effectiveness and teachers' practice. Some illustrative quotes on these issues are presented in Table 6 below.

Table 6. Teachers' quotes on PE-CPD Providers' role and responsibilities

Role	Quote	Teacher
Communicating	A good relationship with CPD providers is really important. […] As long as you meet up with your PE-CPD provider, you can have a nice and easy discussion without any fear and worries, and then things change easily, faster and more efficiently. Besides, this is their job, to be as close to us as possible.	Tasos (Int. 2, Nov.12)
Supporting Teachers' Learning	This CPD provider puts into practice a lot of actions in order to support teachers' learning within the PE-CPD system. That's how it should be, since these providers are the ones who give permission for everything that happens within PE-CPD provision to teachers.	Mary (Int. 3, Feb. 13)
Changing	A big bravo to these CPD providers that do this, trying to change and upgrade the old-fashioned pattern of the PE-CPD system.	Andria (Int. 2, Nov. 12)
Being a role model	Due to the work and efforts which are carried out by some CPD providers, […] and the teaching experience in schools, it is logical for us to consider them as role models.	Georgia (Int. 2, Nov. 12)
Evaluating	In order to have the ability to evaluate a teacher's teaching practice, there are a lot of steps that need to be taken into consideration to get a comprehensive picture, and not only one specific lesson […] This is what these CPD	Zoe (Int. 3, Feb. 13)

	providers are doing, getting a clear idea of how teachers perform by getting closer to them, by encouraging them more and having a good relationship with them.	

In contrast, there were some negative comments about certain CPD providers and particularly about the issue of consistency across different providers. From Marios' viewpoint,

> There are some major differences between CPD providers regarding the approach they follow (Int. 2, Nov. 12).

Tasos also recognized that there were different practice patterns between the CPD providers, and added that

> it is a shame for us not to have the same PE learning opportunities as other teachers due to the dissimilar ways that different CPD providers work (Int. 2, Nov. 12).

Like Marios and Tasos, Andria stated more explicitly:

> Maybe this will sound harsh, but it's the truth and the truth should be heard. We fall short not because we don't want to improve our PE knowledge and teaching practice, but because some CPD providers are probably not meeting all their requirements as CPD providers (Int. 3, Feb. 13).

It might be argued, therefore, that these teachers believe that their practice is not as strong as it might be, and that this problem is associated with the approach taken by some CPD providers. Much the same as Andria, some survey teachers seem to agree that in some cases, the approach of CPD providers has a negative impact on

them and, more specifically, on their motivation for learning. Here is an illustrative excerpt of this:

> In direct contrast to others, some CPD providers haven't won many teachers' hearts, because they don't have proper communication with teachers and aren't very close to them. Therefore, as teachers, we sometimes feel that the environment is very unfriendly (ST 135).

With respect to the differences between CPD providers' practices, Mary notes that

> *it seems that some CPD providers have the X [sic] attitude whereas other CPD providers have the Y [sic] attitude'* (Int. 2, Nov. 12).

Notably, Nicos supports Mary's assertions. If all CPD providers agreed to a common PE and PE-CPD stance, 'there would be better and more fruitful ideas on the table since they would cooperate and put together innovative activities in order to advance our knowledge, and consequently foster students' learning' (Mary, Int. 3, Feb. 13). Such statements seem to be worthy of consideration when formulating future schemes for teachers' CPD generally, and not only for PE.

4.2.1.2. CPD Providers' Background

When Anna was asked about how she views the notion of CPD, she expressed that having 'a CPD provider who didn't have any PE teaching experience in primary schools or the appropriate educational background is not ideal' (Int. 2, Nov. 12). Like Anna, Zoe similarly acknowledged the decisive role that a CPD provider's background and experience play in regards to teachers' learning. She believes that if a CPD provider has little or no experience as a teacher teaching PE in primary schools, then they are 'only able to provide theory and not give any practical applications' (Int. 2, Nov. 12). In addition to this, a teacher from the survey phase

added that 'the proper PE background and experience are the most crucial criteria for a competent CPD provider' (ST 055).

The data highlight the teachers' beliefs in the overriding importance of CPD providers' background when it comes to supporting teachers effectively. Some teachers appeared cautious in how they expressed their views; some were explicit and gave examples from their own experience; while others yet were very passionate and emotional about this issue.

Kyriakos and Pavlos shared the notion that all of the CPD providers are providing as much as they can, always depending on their background and experiences. Their shared viewpoint is best illustrated by Kyriakos:

> Maybe some CPD providers have a wider breadth of knowledge and experience than the others, but what matters the most is that they are all trying (Int. 3, Feb. 13).

Nonetheless, several other teachers were less positive and perhaps more forthright in their views. More specifically, one particular phrase recurred in several parts of the dataset where teachers used the Greek saying "hiding behind our finger" (*"Κρυβόμαστε πίσω από το δάχτυλο μας"*). This refers to the teachers' perceptions that Greek Cypriots tend to hesitate when it comes to revealing the 'real side' of a situation. In these examples, teachers were frustrated about this cultural mentality and they partially blamed this mentality for the current challenges facing Cyprus in relation to the economy, politics, education and more.

In this regard, teachers further explained that the 'real side' of PE-CPD provision and whatever it incorporates should be deliberately heard in order to deal with it and move a step forward. Certain teachers explained that:

> There is an urgent need to tell the truth without any unease. By describing the situation as it is, we are doing the best thing firstly for us, then for our students, and consequently for our society (ST 118).

In particular, two specific extracts illustrate what the teachers believed to be the reality of the situation regarding CPD providers' backgrounds:

> We need more staff like these CPD providers […] people with shrewdness, a clear and modern vision, and with the experiences and qualifications needed to make changes from within the system (Mary, FG, Nov. 13).
>
> As teachers we mostly appreciate and admire the people who spend time studying, and doing research about us, PE as a subject and our own development (Andria, Int. 3 Feb. 13).

From Michalis's perspective, the age of the CPD providers is strongly associated with their background, experience and mentality. He explained:

> I know that some CPD providers are quite young. Therefore, the research that these CPD providers studied is more up-to-date, and the experience they gained from the schools as teachers is quite recent too. Hence due to their age their mentality is more 'open-minded' and 'fresh,' if I can say (Int. 2, Nov. 12).

4.2.1.3. CPD Providers' Personal Characteristics

Questions about teachers' perceptions of CPD, and PE-CPD specifically, resulted in a large amount of data on the positive impact of some particular characteristics of CPD, and also on some specific practices and approaches of CPD providers. In this

context, teachers referred to all the different types of CPD providers they had encountered throughout their careers in the educational system.

There was a large body of data confirming the findings of previous research on teachers' frustration and disappointment with CPD provision. Additionally, it is clear that the economic crisis has resulted in additional pressures on schools. Yet, the data also revealed strong evidence of positive impacts on teachers' passion for learning generated by some aspects of CPD. In particular, the teachers were clear that in order to engage them as learners, CPD providers had to take the time and effort to engage with them *as people*.

The data is reported under seven subheadings. The teachers used terms such as 'personality' and 'character,' yet these were not evidence-based or tested terms, they were simply based on teachers' perceptions. In this section, I use the term 'personal characteristics' to cover these terms. It is important to note that there was no formal personality testing or profiling undertaken in this study.

The term 'characteristics' is an umbrella term used to encapsulate a range of CPD providers' attributes and behaviours that teachers had encountered in their CPD experiences. Helena, for example, stressed not only the importance of CPD providers' expertise in the field, but also the impact of their character and behavior on teachers:

> Maybe a CPD provider can have lots of experience […] what matters to us the most is how a CPD provider approaches us and engages with us (Int. 3, Feb. 13).

Helena felt that her motivation for professional learning and teaching had been directly affected by a CPD provider's personal characteristics and pedagogical approach:

> A CPD provider should exude self-confidence and passion, and dare to come closer to us. A CPD provider's character should inspire us (Int. 2, Nov. 12).

This focus on the personal characteristics of CPD providers was found in all of the data collection phases. Teachers suggested that where CPD providers had a positive and supportive attitude, this impacted positively on their own confidence and helped them to remain optimistic during difficult times. The characteristics that teachers identified with frequently were: 1) 'humane', 2) 'caring', 3) 'friendly', 4) 'importance of team spirit', 5) 'passionate', 6) 'rebel', and 7) 'funny'. Teachers also stressed that CPD providers should be 'sympathetic towards teachers' (Marios, FG, Nov. 13) and Zoe captured the views of many teachers when she reported that she likes for the environment to be 'warm and friendly, so I can feel comfortable and get the sense that we are in good hands' (Int. 2, Nov. 12).

1) Humane

Many teachers expressed the view that CPD providers should be humane and understanding. For instance, Helena, Zoe and Georgia all suggested that these characteristics acted to strengthen the relationship between teachers and CPD providers:

> …tries to be very understanding by identifying our needs and concerns […] a CPD provider should try to walk in our shoes (Helena, Int. 2, Nov. 12).

How can I follow the guidelines that the CPD providers give us if they aren't trying to understand the situation from our perspective? (Zoe, Int. 3, Feb. 13).

If they are unfriendly and distant from us how can we have good communication and collaboration? We can see who is distant and who is on our side (Georgia, Int. 3, Feb. 13).

In summary, these teachers recommended that:

CPD providers need to be close to teachers in order to change the current PE-CPD circumstances (Mary, FG, Nov. 13).

2) Caring

With respect to CPD providers' support and care for teachers, it was clear that there was the expectation that CPD providers 'should locate us at the centre of the PE-CPD system,' (ST 105) and that 'we [teachers] must be CPD providers' number one priority and that's how it should be' (ST 112). A CPD provider expressed a similar view:

The priority is to grasp teachers' diverse needs. I need to enter into their everyday routine, and, most importantly, into their hearts (FG, Nov. 13).

Andria and Christos were clear that 'caring' was a core requirement in order to be an effective CPD provider and, therefore, an essential personal characteristic.

3) Friendly

Teachers could not stress highly enough that when a CPD provider was approachable it acted to: 'create a friendly environment' (Andria, Int. 3, Feb. 13); 'give us a feeling of renewal' (ST 105); 'make us feel secure' (Marios, FG, Nov. 13); and 'create promise for our future PE teaching progress' (ST 094). Reflecting on

their personal PE-CPD experiences, several teachers highlighted differences; for example, Pavlos noted that 'some CPD providers are more approachable than others. …this happens because of the differences in character' (FG, Nov. 13).

Interestingly, although the teachers recognized the official positions and responsibilities of all CPD providers, they remained convinced that 'the CPD providers who try to come closer to us are more appreciated and respected by us' (ST 170). This characteristic was particularly valued by teachers; indeed, they could not conceive of learning without it:

> Some CPD providers make a lot of effort to come closer to us, to make us feel comfortable (Michalis, Int. 3, Feb. 13).
> We need them to be friendly towards us and welcoming in order to feel comfortable in contacting them (Anna, Int. 2, Nov. 12).
> We need CPD providers who are warm, approachable and sympathetic…. How can I approach a CPD provider if I didn't get any friendly signals from them? (Marios, Int. 3, Feb. 13).

4) The importance of team spirit
> Belonging to a team is one of the greatest feelings ever (Christos, Int. 2, Nov. 12).

For the majority of case study teachers 'belonging to a team,' especially during the first few years in the profession, was identified as central to their motivation for learning:

> Some of the CPD providers believe in teamwork and all the efforts that are carried out by them are based on team spirit (Katerina, Int. 2, Nov. 12).

The team-building approach was warmly welcomed by these teachers; as Christos and Kyriakos comment:

> We feel like members of a sports team. We have a purpose – the improvement of the current situation in PE (Int. 3, Feb. 13).
> Some CPD providers show us that we are a solid and unified group […] This makes us feel that we are part of something special (Int. 2, Nov. 12).

5) Passionate

A large number of teachers spoke of the need for 'passion' in CPD provision. Perceptions of passion were directly linked to teachers' willingness to engage in professional learning:

> How will officials who lack passion for their work influence us to improve as teachers? CPD providers should prompt us with their passion and energy to become better (Michalis, Int. 3, Feb. 13).
> CPD providers are our teachers and we are the students. We need them to be enthusiastic and to spark our incentive for change (Anna, Int. 2, Nov. 12).

Where they found passion, these teachers expressed their enthusiasm and gratitude: for example, Georgia said, 'I admire these CPD providers' passion and energy' (Int. 2, Nov. 12); and Kyriakos and Zoe stated:

> There is excitement in everything (Kyriakos, Int. 3, Feb. 13).
> We can see it in these CPD providers' eyes. They are really devoted to the responsibility of improving PE and helping us to become effective (Zoe, Int. 2, Nov. 12).

As ST 118 noted:

> Observing some of the CPD providers' dynamism and passion has given us more positive energy.

6) Rebel

Some teachers duly referred to those CPD officials whom they felt were 'brave' enough to challenge the *status quo* within PE and PE-CPD, and they expressed their appreciation:

> If a CPD provider just sticks to the stereotypical, old-fashioned approach, then what do we get? Nothing (ST 095).
>
> We are tired of the same old attitude from the officials […] We need people who dare to change the current unfortunate situation (Andria, Int. 3, Feb. 13).
>
> What is needed in order for these circumstances to change are CPD providers who don't recoil from the call of duty and try to change the *status quo* (ST 113).

The focus on being 'brave' and on the need to challenge the government or certain dogmas was particularly interesting. Michalis looked for CPD providers who 'have the heart of a genuine rebel' (Int. 2, Nov. 12), and Andria, Mary, Michalis, Christos and Kyriakos agreed with Michalis' assessment; for example, Mary praised those CPD providers who 'refuse to accept the current PE-CPD status and constantly focus their efforts towards PE-CPD improvement' (FG, Nov. 13).

Kyriakos identified the characteristics of being brave and being willing to challenge authority as positive and invigorating:

> We finally see something positive appearing on the horizon […] to extinguish the outdated activities, change mentalities and strengthen the system for professional learning (Kyriakos, Int. 3, Feb. 13).

Here again, some CPD providers were in agreement with the teachers:

We said that we would react and we will react with suitable actions (FG, Nov. 13).

This is in direct contrast to teachers' negative experiences of CPD providers who 'just talk, talk and then talk some more' (Mary Int. 2, Nov. 12) because, as Andria put it, 'despite the economic difficulties, we need people who dare to change things' (Int. 3, Feb. 13).

7) Funny

Some teachers reported that they particularly appreciated CPD providers who were not 'always serious' (Mary, Int. 2, Nov. 12) and had a sense of humour. Indeed, Michalis argued that 'a CPD provider should be a little bit crazy' (Int. 3, Feb. 13). Maria agreed, arguing that CPD providers can be 'a 'little bit crazy. Crazy in a good way though' (Maria, Int. 2, Nov. 12). For Maria, 'craziness' was a sign that 'these CPD providers were trying hard to come closer to teachers' (Int. 2, Nov. 12). She linked this to her own experience as a teacher: 'I strongly believe that when the teacher is funny and has a good sense of humour then he [*sic*] immediately captures students' interest. It's the same for us as well' (Int. 2, Nov. 12). Even more interesting was Katerina's comment about the value she placed on humour:

These CPD providers are like us […] They are funny. I believe this characteristic makes them more endearing to us (Int. 2, Nov. 12).

In other words, as with other comments reported in this section on the characteristics of CPD providers that teachers find to be effective, the teachers seem to be saying as much about how they would like themselves to be viewed and understood, as they are about CPD providers.

4.2.2. Teachers as learners

4.2.2.1. Training from a foreign university

When Zoe was asked to identify one PE-CPD activity which was the most effective for her PE learning and teaching, she immediately responded that 'training from a foreign university was the best and most beneficial PE-CPD activity' (Int. 2, Nov. 12) she ever attended. Interestingly enough, although the question was asking her to identify one effective PE-CPD activity attended within the last five years, Zoe still indicated the particular training she had received from a foreign university even though more than a decade had passed since then. Like Zoe, Mary and Andria agreed that this particular training was 'the most gainful, complete, and worthwhile PE-CPD activity' (Mary, Int. 2, Nov. 12) they had ever done, or, in other words, 'the perfect pattern for proper, adequate and efficient PE-CPD provision' (Andria, FG, Nov. 13).

In relation to these views, Anna also stated that 'this foreign university came to Cyprus and "changed our lights" ["μας άλλαξε τα φώτα"] regarding PE' (Int. 2, Nov. 12). This means that this training changed the way teachers view PE and improved their approach toward the lesson. Kyriakos also added that:

> this training lasted for two months. Imagine what we could do if we could
> have this type of training routinely and on a systematic basis (Int. 2, Nov.
> 12).

Andria, Mary, Georgia and Zoe used similar phrases to express their positive perceptions and appreciation of being part of this PE-CPD activity. These phrases included: 'high levels of confidence and motivation after it,' 'turning point in our teaching career,' 'came closer to our colleagues' and 'we became students again.'

From Nicos' perspective, the specific training changed his 'PE philosophy, frame of mind' (Int. 2, Nov12) and the way he views himself as a PE teacher.

It is important to note that this frequent and passionate mention of this PE-CPD activity was found in all of the datasets. Remarkably, teachers still remember it and still place substantial emphasis on it. However, what is perhaps more interesting is that even the early-career teachers mention it and perceive it as an activity which can be very effective for their progress as learners and PE teachers. Pavlos, for instance, argues the following:

> For us, the younger teachers who teach PE, it is urgent to have something similar to what other teachers previously had from the foreign university [...] from what we've heard from older teachers, we need this in order to finally shake up the stereotypes and clichés within PE-CPD provision (FG, Nov. 13).

Andria captured the views of many teachers who attended the training from the foreign university when she expressed that 'PE educators from abroad are more specialised, and their training programmes are well-planned, updated, more effective and successful compared to the Cypriot CPD providers and PE-CPD activities, respectively' (Int. 2, Nov. 12). As Anna indicated, the specific programme 'was so different and fresh for Cypriot standards that it made us doubt the competence of our own PE-CPD activities and PE-CPD providers' (Int. 2, Nov. 12).

4.2.2.2. Collaborative Learning Communities (CLC)

After looking across the data, it is interesting to see how enthusiastic teachers were about the innovative practice of CLC [*"Συνεργατικές Κοινότητες Μάθησης"*] which had been introduced into Cypriot primary school PE-CPD provision. Teachers had

much to say about this specific PE-CPD activity. A great number of teachers emphasized the friendly learning environment within CLC. For instance, Katerina remarked that having teachers gathered together with 'one common purpose, the improvement of our PE learning and teaching' can 'result in numerous positive outcomes' (Int. 3, Feb. 13). Much the same as Katerina, Christos, Helena and Georgia agreed and pointed out that within CLC there is a 'positive stimulus,' a 'supportive environment,' 'good vibes' and 'the drive for more and improved PE learning and teaching' (Int. 2, Nov. 12). Phrases such as 'feeling united,' 'there is growing optimism,' 'it is a time for cheer and joy,' 'it's a good way to socialize with our colleagues,' and 'it builds up our confidence' were all used to vocalise their feelings about the positive atmosphere in CLC. In addition to this, Zoe expressed that 'the more we meet, the happier I feel' (Int. 2, Nov. 12).

Within this framework, teachers also indicated that they get 'extra ideas and inspiration' (Katerina, Int. 2, Nov. 12), they 'share pedagogies and teaching practices' (Georgia, Int. 2, Nov. 12), they 'receive and give constructive feedback' (Christos, Int. 2, Nov. 12), and 'even the preparation for a sample lesson within CLC, as opposed to only participation within it, is beneficial' (Helena, Int. 3, Feb. 13). The benefits of CLC were also valued by CPD providers. During the focus group two providers did not miss the opportunity to convey their positive perspectives about CLC. Phrases which were expressed by both providers were as follows: 'a chain of learning is created,' 'noble rivalry between the teachers exists,' 'teachers create a bank of new ideas, practices and suggestions,' and 'this practice can really work.' Their shared viewpoint is best illustrated in the quote below:

CLC is a practice that teachers feel satisfied with; they are challenged and simultaneously need to correspond to the challenges […] and thus PE professional learning becomes a personal affair (FG, Nov. 13).

Teachers also stated that CLC 'can really work' because this PE-CPD activity 'combines theory and practice' (Helena, Int. 2, Nov. 12), 'is a small-scale PE-CPD and allows better communication with colleagues and CPD providers' (Georgia, Int. 2, Nov. 12), 'covers our individual and learning needs as teachers' (ST 137), and allows 'experienced teachers to share their valuable knowledge and experiences' (Christos, Int. 2, Nov. 12).

Notably, even more interesting were the perceptions of certain teachers regarding the effectiveness of CLC and its impact on their teaching performance:

After the first meeting we had in our CLC, I couldn't wait to test the new practices we got from the CLC meeting. And guess what? The result was 100% flawless (Maria, Int. 2, Nov. 12).

Attempting to try the new ideas I got from experienced teachers from my CLC gave me a big boost and increased my confidence. I can clearly say that this way of learning through CLC can really have a positive influence on my teaching practice (Anna, Int. 3, Feb. 13).

4.2.2.3. Odyssey of learning

This concept is drawn from Homer's poem "Odyssey", with Odysseus being the hero. The destination of Odysseus's journey is homeland, Ithaca. Odysseus's long journey was full of unexpected perils. However, according to Cavafy's most famous poem "Ithaca", it is the journey that matters the most and not the destination, because during the adventures and difficulties the traveller becomes more knowledgeable, have more experiences and develops. This sub-theme is labelled 'odyssey of

learning' because Cypriot primary school teachers' journey to the effective PE-CPD provision is also long and difficult similar to Odysseus's journey. It is interesting to note, however, that due to the difficulties and the obstacles, they are able to see what could benefit their professional learning.

1) PE-CPD Sources

Throughout all the data collection phases, teachers had the opportunity to express their thoughts and perspectives on what kinds of activities, practices or approaches that constituted PE-CPD provision they felt were advantageous for teachers' growth and improvement. The sources for effective PE-CPD that teachers identified repeatedly were: a) 'collaboration with colleagues,' b) 'personal interest,' c) 'combination of theory and practice,' d) 'sample PE lessons,' e) the 'Internet,' f) 'academic research' and g) 'small-scale PE-CPD.'

a) Collaboration with colleagues

Maria summarises the views of many teachers in this study when she says that:

> it was through the discussion and communication with my colleagues that
> I gained and profited the most (Int. 2, Nov. 12).

Likewise, Marios, Kyriakos, Anna and Georgia all advocated that 'resorting to each other' (Marios, Int. 2, Nov. 12) is a practice which creates solidarity and strengthens their professional learning, generating feelings of confidence, safety and positive energy:

> Having a conversation with a colleague helps me to get inspiration and to
> move a step further with no fear (Marios, Int. 2, Nov. 12).
> When I share with my colleagues the zeal, concerns and difficulties I may
> have during a PE lesson, I feel much more calm and motivated to do my
> best (Kyriakos, Int. 3, Feb. 13).

Social interaction with colleagues has many benefits. We can remind each other of things which we may have forgotten, and exchange ideas that we may not have thought of before… (Anna, Int. 2, Nov. 12).

Personally, having a dialogue with a colleague helps me a lot. The activities that MOEC provides are considered uninteresting and unstimulating by not just me, but also many other teachers (Georgia, Int. 2, Nov. 12).

The beneficial outcomes from collaboration between colleagues and social interaction within the workplace are particularly valued by younger teachers who lack experience and tried-and-tested practices. As early-career teachers, Pavlos, Maria, Christos and Katerina all stressed the high value of 'more experienced teachers sharing their expertise in PE with us' (Pavlos, FG, Nov. 13), a fruitful practice leading to their own self-development and self-education. Christos added that it comforts him 'to know that other teachers have been through the phase I am in now and have overcome the difficulties, moved on and become better for it (Int. 2, Nov. 12).

Interestingly, multiple teachers from the survey phase were in agreement with this viewpoint. Specifically, 52 out of the 183 teachers who completed and returned the surveys made similar comments when responding to the question about the three most powerful sources for professional learning. These teachers identified the connection with colleagues as their first priority; for example, one teacher noted that it was important to have a connection with colleagues 'that was rewarding and beneficial' (ST 069).

b) Personal interest in PE

Andria stated that teachers who have 'the inner drive to get better and make progress' (Int. 2, Nov. 12) are more likely to improve their teaching performance as a result of PE-CDP provision. Similarly, many teachers identified that personal interest

plays a crucial role within the structure of CPD provision and PE-CPD provision in particular. As indicated by Anna and Katerina:

> Interest for personal development in any subject can have an immediate positive impact […] we can clearly observe this productive impact in PE through the students' reaction (Anna, Int. 3, Feb. 13).
>
> […] to create your own activities or practices, searching, updating your knowledge and learning by yourself is one form of PE-CPD (Katerina, Int. 2, Nov. 12).

Even more interesting were the opinions of Pavlos and Marios, who were impatient with some of their peers for being apathetic and expecting others to educate them:

> I can't listen to teachers who are dissatisfied with the current provision and the approach of MOEC and don't try to do something by themselves. If you are concerned about your teaching practice and you love what you do, you will have more passion and keenness to search for innovative approaches and methods to use in the PE lesson (Pavlos, Int. 3, Feb. 13). It is certain that many teachers expect MOEC to provide everything regarding PE-CPD […] this is not the proper stance for a teacher who has the conscience of a real teacher (Marios, Int. 2, Nov. 12).

There was also evidence of a prevailing belief that more experienced teachers had many years of teaching service and multiple experiences, skills and knowledge, so they felt as though they 'didn't need PE-CPD activities in PE anymore' (Andria, Int. 2, Nov. 12). For Michalis, their 'only source for PE-CPD was themselves and self-study' (Int. 3, Feb. 13), and their basic principle was to 'merge experience and knowledge with a hungry appetite for learning' (Nicos, Int. 3, Feb. 13).

c) Combination of theory and practice

Some teachers reported that they particularly appreciate those PE-CPD activities which incorporate both theory and practice. This recognition of the effectiveness of activities embracing theory *and* practice was found in all of the data collection phases. Teachers were passionate in their insistence on the integration of theory with practice. For example, teachers in the survey were asked to identify three powerful sources of PE-CPD. 42 teachers out of the 183 who had completed the survey mentioned the 'marriage of theory and practice' (ST 059). Christos expressed the view that 'if you get both theory and practice together, then you have a stronger idea of what you need to do.' In this context, however, Maria, Andria and Kyriakos indicated the significance of not *just* the combination of theory and practice, but the right combination:

> Every PE-CPD activity needs to have a rationale behind it. We can't just have any combination of theory and practice. The educators need to choose the right one in order to have the desired outcomes (Maria, Int. 3, Feb. 13).
>
> The combination of theory and practice has to offer us that theory which will inform critical thinking about our practice (Andria, Int. 2, Nov. 12).
>
> Combining theoretical knowledge and practical applications should promote critical reflection on the theory and the practice too. We don't want ready-made meals. We need to process what we learn and adjust it not only to our own needs and skills, but also to those of our students (Kyriakos, Int. 3, Feb. 13).

Additionally, Nicos stressed not only the importance of theoretical principles and practical applications, but also the need to 'blend theory with practice' (Int. 3, Feb. 13). In agreement with Nicos, Anna reflected on her own personal PE-CPD experiences and commented that when 'the combination is right, the outcome is brilliant' (Int. 2, Nov. 12), and this helps her as a teacher since she feels as though

she is doing something that 'has a major impact on students' learning and even on their personality' (Int. 2, Nov. 12). This kind of PE-CPD source was certainly appreciated by teachers and, what is more, it seems that many were unwilling to accept CPD provision unless it had this component of theory/practice alignment. Indeed, teachers questioned the quality of some PE-CPD activities that appeared to be too theoretical:

> A suit can't be complete without buttons. Similarly, any CPD activity can't be 100% complete without the inclusion of practice (Tasos, Int. 3, Feb. 13).
>
> PE-CPD activities can shape our performance. How can activity be beneficial for us without giving us inspiration on how we can apply theory into practice? (Anna, Int. 3, Feb. 13).

Some CPD providers were in agreement with teachers' opinions, commenting that it was their task to offer PE-CPD provision which 'could help teachers to immediately understand theory through practical activities – that is the best-case scenario' (FG, Nov. 13).

   d) Sample PE lessons/ PE lesson observations

A large number of teachers recognised the value of observing colleagues' lessons. Pavlos commented that doing peer observation and obtaining sample PE lessons could be very advantageous to teachers:

> We used to do it in our initial training in university. A colleague of ours was our teacher and we were the students. It used to work then and it can still work now 100% (Int. 3, Feb. 13).

Andria, Mary, Anna, Tasos, Zoe, Katerina and Marios showed the same appreciation for the importance of sample PE lessons and learning through PE lesson

observations. Andria also emphasised this appreciation by adding that sample PE lessons 'equal immediate effective PE-CPD' (Int. 2, Nov. 12).

Teachers seem to notice positive results from PE sample lessons not only in their PE learning but in their teaching style too. Michalis indicated that through sample PE lessons 'teachers can become aware of different dogmas in teaching generally and not only in PE' (Int. 2, Nov. 12). In agreement with Michalis, Anna also acknowledged that 'PE sample lessons are a very good opportunity to view the subject of PE from diverse and interesting angles' (Int. 3, Feb. 13). Furthermore, teachers from the survey phase showed the same partiality towards the use of sample PE lessons and their effectiveness in their PE learning and practice. Forty-nine out of the 183 teachers who returned the survey indicated PE sample lessons as one of the three most powerful sources for PE learning.

Numerous teachers' remarks refer to the effective features of sample PE lessons as a PE-CPD activity. For instance, Christos, Kyriakos and Zoe were 'fascinated by the team spirit and the bond with colleagues which were present in these kinds of activities' (Christos, Int. 3, Feb. 13):

> It is all about sharing […] peer learning in my opinion is the most effective way to learn and develop yourself as a high quality teacher (Christos, Int. 3, Feb. 13).
> […] the time period after the observation, where teachers have the opportunity to discuss things, ask questions, give friendly feedback, get inspiration and share knowledge and experiences […] we bond with other colleagues and it can be said that we support each other for better outcomes in PE (Kyriakos, Int. 2, Nov. 12).

There is no grading or criticizing each other in this process. That's why it works 100%, because it creates an open climate for communication, trust between the teachers and strong partnership (Zoe, Int. 3, Feb. 13).

Additionally, and most importantly, Andria and Pavlos shared the view that in order for this activity to be effective, trust and good terms of collaboration between the colleagues should exist from the outset:

Teachers should be always open and willing to help each other either by observing each other's lessons or discussing the lessons' activities and having a constructive dialogue in the form of feedback (Andria, FG, Nov. 13).
Via recourse to these observations we are prompted with the help of our colleagues to risk more in our teaching performance […] we are all equal, with no differences between us, and we are all facing similar difficulties so why shouldn't we share ideas via sample PE lessons and observations? (Pavlos, Int. 3, Feb. 13).

There is, however, another side to this argument that is evident in some teachers' comments; for example, Helena expressed:

I feel a little bit awkward to ask a colleague to observe his or her teaching during a PE lesson (Int. 2, Nov. 12).

This may be indicative of strained relationships between teachers at Helena's school, or a personal reluctance on the part of Helena to take part in peer observation. Many teachers from the survey phase shared similar notions with Helena:

I feel uncomfortable observing a colleague and being the audience (ST 076).

Despite certain teachers' unease on the subject of peer observation, however, some CPD providers seemed to agree with the majority of teachers who supported the effectiveness of sample PE lessons

> Teachers go and observe their peers, and eventually they see or learn something new and different. What's better than this? (FG, Nov. 13).
> This PE-CPD activity is also encouraged in collaborative learning communities, which we are trying to promote as much as we can and to set them up as a compulsory PE-CPD activity (FG, Nov. 13).

More interestingly, a CPD provider expressed the view that 'not one size fits all in the case of lesson observations' (FG, Nov. 13). This particular provider also added that teachers 'just absorb ideas which they can later adjust to their own skillset and students' needs too' (Interview, Oct. 12).

Echoing phrases from the teachers' statements, this practice seemed to be highly valued for a range of reasons; for example: 'this can generate reflective thinking' (Anna, Int. 2, Nov. 12), the element of feedback is evident (Michalis, Int. 3, Feb. 13), there is a dynamics of equality (ST 165), 'even CPD providers and PE consultants recommend it' (Andria, FG, Nov13) and it allows PE learning to become continuous (ST 068). The message behind all these teachers' views is illustrated by Mary's comment below:

> By getting the sample lessons or doing peer observations we are all gathering ideas in our PE-CPD "piggy bank" … the more the merrier. Hahaha (FG, Nov. 13).

e) The use of Internet and Technology

The use of the Internet, websites and technology is an issue generally discussed by all teachers during the data collection period and certainly during interviews. It is also interesting that teachers' responses varied and this reflected on how they used the Internet not only for professional learning but also for personal technological learning. A substantial number of teachers highlighted the magnitude of the use of the Internet for professional learning and development.

When the teachers in the survey were asked to identify the three most powerful PE-CPD sources, half of them (92 out of 183) mentioned the Internet, online resources from MoEC's website, and other websites where teachers could interact online for PE issues. The same stance was evident during the individual interviews. Words and phrases like 'necessary,' 'gives us a feeling of renewal,' 'stimulating,' 'preferred,' 'powerful' and 'effective' were used in teachers' responses during the interviews to convey the importance of Internet use. Each teacher in their own way stressed how the Internet helps them to progress as learners and as teachers. For instance, Anna highlighted that 'the Internet generally and specifically PE websites and YouTube channels are my learning treasures' (Int. 2, Nov. 12). Andria and Michalis also shared a similar belief:

> The Internet is the tool that I can't live without it as a teacher and specifically as PE teacher. I frequently visit MoEC's website for updates and sample lesson plans. It is essential for inspiration, getting to know the latest trends or formulas for effective PE teaching and to update your teaching style too (Andria, Int. 2, Nov. 12).
> After browsing the Internet for information, theories, new ideas and examples I feel excited, inspired, optimistic, confident that I can get better, and positive that the outcome will be great and that my students will be enthusiastic (Michalis, Int. 2, Nov. 12).

In their quotes, Andria and Michalis acknowledged how this PE-CPD practice prompts them to put into practice new and innovative ideas and how it builds their confidence in learning, and hence teaching, effectively.

Apart from the exigency of Internet use, several teachers voiced their resentment regarding the absence of widespread technology use within the Cypriot educational system, and specifically within PE-CPD provision. Katerina mentions that due to this lack, teachers feel that they are 'stuck with old-fashioned methods, without any fresh practices' (Int. 2, Nov. 12) and this leads them, therefore, to 'feel puzzled and confused' (Int. 2, Nov. 12). Along similar lines, Maria, expressed that 'more use of technology, and the Internet in particular, is needed for efficient PE-CPD provision' (Int. 3, Feb. 13).

f) Academic research

It is rational to say that if we have adequate knowledge of research that is focused on effective teaching – or in our case PE teaching – and then link it to our professional practice, then we will succeed (Mary, FG, Nov. 13).

Like many other teachers, Mary addressed the issue of how research can be instrumental in teachers' PE effectiveness. Georgia and Christos also recognised that through research 'we can get ideas about which practices are working and which ones aren't' (Int. 3, Feb. 13), and 'by reading the latest studies on effective learning and teaching our practice can be influenced positively' (Int. 2, Nov. 12). Teachers also mentioned that when they want to prepare a lesson they use academic research as a learning source. For instance, Anna states:

Every time I prepare for a lesson by reading academic research I feel more sure and confident about the lesson I will teach (Int. 2, Nov. 12).

Likewise, Zoe stated that:

> It is not easy to read research and understand what you can get from it,
> but at the same time it is not that difficult as well to keep trying, and to
> slowly learn new things and get better, and use academic research as an
> example for your own teaching practice or as a treasure-trove or wealth of
> evidence indicating what is effective in other more successful systems
> used in other countries (Int. 3, Feb. 13).

A further point raised by several teachers was that all teachers should be 'involved in research, here in our schools in Cyprus' (Anna, Int. 2, Nov. 12). Within this framework, ST 166, ST 154, and ST 126 from the survey phase, as well as Andria and Nicos from the teacher case studies, agreed that 'firstly policymakers and CPD providers should have adequate knowledge of research, and then they should transfer the important evidence and effective practices to us' (Nicos, Int. 3, Feb. 13). Teachers with this perspective implied that 'there are some CPD providers who actually did research and know the procedures and how beneficial they are for the system, and specifically for PE-CPD' (Andria, Int. 3, Feb. 13). Unfortunately, however, either 'they are not enough or they don't place the required emphasis on how much research can actually contribute to us as teachers and to our students' learning and success' (ST 166).

Although teachers recognised the significance of academic research in their professional lives, they also had concerns about the state of Cypriot research due to the economic crisis. Interestingly, for Mary it is:

> unacceptable that everything has been frozen in educational research.
> Ok, we have economic difficulties. I understand that. What I don't
> understand, though, is why we need to stop doing research? Research

takes us further and allows us to make progress. Why do we choose to stay stagnant? (FG, Nov. 13).

g) Small-scale PE-CPD
PE-CPD activities which involve smaller groups of teachers who teach PE is always more effective and more interesting, and the atmosphere is always warmer and friendlier (Andria, FG, Nov. 13).

The extract above shows that teachers believe that small-scale PE-CPD provision has a lot to offer. This is due to 'the pleasant environment, and the ease with which you can come closer to your colleagues and CPD providers without losing your identity as a teacher and as a person' (Michalis, Int. 3, Feb. 13). Teachers identified some challenges with large-scale PE-CPD activities and compared these to the advantages afforded by those activities which focus on a smaller number of teachers. As Katerina and Tasos point out:

For me as an early-career teacher, it is really difficult to learn during these activities when all the teachers who teach PE in my province are present. We are so many that in the end CPD providers can't give us the time to express our ideas, thoughts and concerns so we leave without getting anything out of these activities (Int. 2, Nov. 12).
I just feel awkward being in a gathering with other 70 or even more people. It feels like I'm losing my voice. I don't like it. I prefer to go to the learning communities where there are only other eight or ten teachers present. It works better for me (Int. 3, Nov. 13).

During the focus group and the individual face-to-face interviews, some CPD providers were in agreement with the teachers. One CPD provider, for example, commented:

We are trying to move away from massification within PE-CPD activities since it doesn't give us any critical results (Interview, Oct. 12).

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The model of PE-CPD provision needs to change. We have to move to the model of decentralisation, where we will have the opportunity to assess teachers' needs more clearly. That is really important (FG, Nov. 13).

2) Obstacles for PE learning

Like Odysseus in Greek mythology, these Cypriot teachers are searching for their "Ithaca," the PE-CPD provision which will lead them to success. Their journey is full of adventures, not only stops which lead them closer to "Ithaca," but also obstacles which complicate their journey. For these teachers, the obstacles which make the journey towards efficient PE-CPD provision more difficult and problematic are: a) 'the use of only theoretical PE-CPD activities', b) 'no motives for learning' and c) 'the lack of an evaluation system.'

a) Only theoretical PE-CPD activities

In relation to the format of PE-CPD activities, the majority of teachers demonstrated their disagreement over the design of PE-CPD activities. There was evidence revealing that the theoretical activities are viewed as 'a barrier to the advancement of teachers' PE learning and teaching' (ST 107).

The data highlight the difficulties that teachers face daily in their PE lessons, caused by the lack of more practical PE-CPD activities such as 'workshops, actual training in the field, demonstrations of PE classes and so on (Maria, Int. 2, Nov. 12).

It might be argued, therefore, that ten out of the fifteen case-study teachers share the notion that since most of the PE-CPD activities have a theoretical nature, teachers feel helpless when it comes to applying the theory into practice. Their shared opinion is best made clear by Helena:

We can't move further by having only theoretical PE-CPD activities. It blocks progress. These activities are old-fashioned. Let's do something else. Let's have a variety of activities (Int. 2, Nov. 12).

Notwithstanding this negative stance towards theoretical PE-CPD activities, some teachers illustrated that by having activities that only cover theory, teachers' stimuli for further PE learning decreases instead of increases. In relation to this view, Michalis stipulated:

Isn't it a shame to have us in a room, sitting for one hour or more, just to hear the educator reading the words from the slide and doing nothing? It is so monotonous and we don't gain anything, only a set of papers with the presentation slides on it (Int. 2, Nov. 12).

b) No motives for learning

One of the most repeated complaints of teachers was that there are insufficient motives for further professional learning. Teachers explained that:

it is unfortunate that we can't find any stimuli to become better (ST 037).

If we the younger teachers can't find inspiration and passion for professional learning, imagine the older teachers who are more experienced. Probably they've just given up (Int. 2, Nov. 12).

During the focus group a CPD provider also showed his concern regarding demotivated teachers:

By implementing some new schemes, we are trying our best to spark teachers' need for PE-CPD […] but the traditional model of CPD and the demoded PE-CPD activities do not help us to achieve our goal (FG, Nov. 13).

c) No evaluation system

Drawing on the data from the case-study teachers, it is interesting to find that almost all teachers apart from Christos expressed their disappointment and frustration at the lack of a functional evaluation system for PE-CPD provision. For instance, Andria argued that:

> we are talking basically about a PE-CPD evaluation system that doesn't exist, it's in the air somewhere […] I don't know what to say. We have a seminar, let's say, and neither us nor CPD providers know if it was effective or unsuccessful. They just do it, that's it […] (Int. 3, Feb. 13).

In an even more fiery and fervent spirit, Tasos and Georgia talked about the lack of premeditation which exists within PE-CPD provision. Mary and Anna too shared the perception that 'there is no evidence to show if what we are getting from MoEC's PE-CPD provision is actually good for us or not' (Mary, Int. 2, Nov. 12); 'evaluating what impact PE-CPD activities have on our teaching practice and on student learning outcomes should be first priority in the agendas of the ministry' (Anna, Int. 3, Feb. 13).

The majority of these teachers actually feel disenchanted with the setting of PE-CPD evaluation. For instance, Pavlos states:

> Honestly, this situation makes me feel sad and worried. How can we do this? Ignore such a basic procedure, the evaluation of something that has to do with our future, our students' future. It is unacceptable (Int. 3, Feb. 13).

Furthermore, many teachers feel that 'with this attitude MoEC is showing us clearly that they are neglecting us' (ST 105). Nicos also agrees and adds that:

we get a piece of paper after the PE-CPD activity, we complete it and then what? What if we wrote that the activity was bad and/or irrelevant to our needs? Nothing will happen. There is no continuity, no further procedures to ensure that the PE-CPD provision has actually done what it should have been doing (Int. 3, Feb. 13).

Through these teachers' comments, it was revealed that there was only a basic process of CPD evaluation in place but without having continuity or follow up procedures. After a CPD activity, teachers are given a sheet requesting them to give feedback on the training's effectiveness and impact. From their responses, some teachers showed how they dealt with PE-CPD evaluation. For instance, Andria indicated that most of the teachers lie when they have to assess the activity they attended:

As teachers we have attended multiple PE-CPD activities and seminars and at the end we've said that we've liked them when the truth is that many of them were utterly useless. They will figure out who gave the negative feedback and he/she will be stigmatized. I am too scared to give my honest opinion (Int. 2, Nov. 12).

Further teachers' comments and their recommendations for changing the PE-CPD evaluation system are mentioned in the next section 4.3.3.

4.2.3. Structure of PE-CPD activities

The structures of PE-CPD provision that are currently in place do not seem to align with teachers' needs for effective PE-CPD provision. As Maria simply put it, 'MoEC

doesn't offer PE-CPD provision to a satisfactory degree' (Int. 3, Feb. 13). Like Maria, many other teachers expressed their discontent. For instance, Anna wondered:

> How do they expect us to have improved PE teaching practice if we aren't getting adequate and well-organised PE learning via PE-CPD provision?

Teachers expressed their negative feelings about the existing operation of PE-CPD provision (*see* section 4.1.3). Apart from their negative comments, they also highlighted some of their perceptions of how and when PE-CPD provision can be fruitful for their learning and teaching progress.

With respect to the frequency of PE-CPD provision, it was clear that there was a belief that 'when we meet more than twice a year, which seems to be the norm now, logically we gain more' (Tasos, Int. 2, Nov. 12). This belief was particularly recognised and valued by all teachers from all phases. Twelve out of the fifteen case-study teachers indicated the urgency for PE-CPD provision to be more frequent, systematic, and continuous. Their common viewpoint is best illustrated by Mary:

> CPD provision is like medicine for us. If we don't get it regularly, something will go wrong. In our case, the Cypriot educational system is not helping us to improve our PE learning and thus our teaching practices (Int. 3, Feb. 13).

Teachers also highlighted the significance of the format of PE-CPD activities. In particular, Mary and Anna agreed that the activities are usually seminars where the 'CPD provider just reads the slides of a presentation from the computer. That's so boring!' (Mary, Int. 3, Feb. 13). When asked to give recommendations for the improvement of PE-CPD provision, survey teachers underlined the need to introduce

'activities which combine theory and practice' (ST 052) and 'include workshops and seminars' (ST 132). From Zoe's perspective:

> …if MoEC doesn't provide workshops which involve practical application of the theory, then we won't be able to improve ourselves as teachers, since we won't have a clue how to apply what the curriculum asks us to do (Int. 3, Feb. 13).

4.3. Ideal model of PE-CPD provision

4.3.1. Teachers' recommendations based on their career stage

Drawing on the data from teachers across the different datasets, it is evident that teachers had a great many proposals to make on how to improve PE-CPD provision. It is important to point out that the case-study teachers, in particular, did not wait to be asked questions on this topic in order to make their recommendations (i.e. in the third interview session where the researcher asked the specific question: "What are your recommendations for the improvement of PE-CPD provision?").

Despite finding many areas of agreement in the data, there were also a variety of views depending on the career stage of each teacher. In particular, early-career teachers, intermediate teachers and more experienced teachers had different learning needs, and different recommendations accordingly. This was also indicated by Georgia in the extract below:

> Realistically and logically the learning needs differ between the "new" recently qualified teacher and the "old" more experienced teacher. The training of each should be handled differently. PE-CPD provision needs diversity, decentralization and better organization in order to meet the needs of each teacher either 'new' or 'old' (Int. 3, Feb. 13).

In the section which follows, the recommendations of CPD providers are also included. The recommendations are presented under three headings according to the teachers' career stage.

4.3.1.1. Early-career teachers

> Most of the early-career teachers lack knowledge and educational material. I can see it through my own practice that I lack the necessary education regarding each thematic unit of PE as a subject (Maria, Int. 3, Feb. 13).

Many other early-career teachers like Maria also identified this shortfall and they indicated their need for more PE-CPD activities which focused on 'the knowledge component of the PE subject' (ST 091) and 'provided the skills and techniques to successfully implement the PE lessons' (ST 178). Additionally, Katerina and Christos agreed that there is an urgent and insistent need among early-career teachers 'to enrich their teaching material per PE thematic unit' (Katerina, Int. 3, Feb. 13) and 'utilize a variety of learning and teaching resources for better outcomes' (Christos, Int. 2, Nov. 12).

Pavlos, who was in agreement with these teachers' views, stated that by gaining the correct knowledge and using the proper techniques in the PE subject, he would be able to feel as though he were 'brimming with confidence' (Int. 3, Feb. 13) in his teaching practice. One of the areas of agreement for early-career teachers' is captured by Pavlos' comment:

> Firstly, MoEC needs to treat us as learners and listen to our learning and teaching needs […] more needs assessments, more communication and preparing of PE-CPD activities which respond to our difficulties and

deficiencies. By making a valid evaluation of our needs, MoEC will be in a position to achieve awareness of our skills and knowledge, and subsequently what they need to provide to us through these PE-CPD activities. What is more important, though, is the constant guidance, good communication and strong support which early-career teachers need. By support I also mean emotional support (Int. 3, Feb. 13).

It cannot be said that Pavlos, who was very passionate about his and other early-career teachers' needs, gave a specific recommendation, but he clearly had strong views.

4.3.1.2. Intermediate teachers

It is important to mention that this group of teachers had a very large number of comments on this topic based on their perception of their needs as teachers and also as learners too. Drawing on their testimonies, intermediate teachers gave prominence to the issue of change in the organizational structure of PE-CPD provision. As Anna stated:

I have been in this profession for almost two decades. In all this time, I have witnessed a repetition of the same events, activities and attitudes towards PE-CPD and teachers' learning. All we do is talk about educational reform and improvement, successful teaching and effective teachers but we don't do anything to change the settings and the arrangement of teachers' CPD provision generally. Why? For how much longer will things remain stagnant? (Int. 3, Feb. 13).

In the same context, intermediate teachers who completed the survey indicated that they had the 'knowledge and skills; the only thing that is needed now is educational redevelopment (ST 043) and 'inclusion within the curriculum and practical activities of modern and revolutionary ideas in teaching PE' (ST 071).

4.3.1.3. Experienced teachers

This group of teachers considered themselves to be 'veterans' (Michalis, Int. 3, Feb. 13), 'experts' (Andria, Int. 2, Nov. 12) and 'knowledgeable enough' (Mary, Int. 2, Nov. 12). It was also evident that they had a different perspective on PE-CPD provision. By having adequate experiences, skills and knowledge, some felt that they did 'not have any learning needs' (Georgia, Int. 2, Nov. 12), hence they did 'not have the need to attend the PE-CPD activities' (Andria, Int. 2, Nov. 12).

Words and phrases such as "inaction", "not eager to learn more", "burnout", "many roadblocks to modern learning and effective teaching", "feeling disengaged most of the time", "nothing to stimulate our curiosity for more learning", "professionally confident", "we are on our own in this" are illustrative of the views of the experienced teachers from all data collection phases. Notably, all five experienced teachers from the case studies phase expressed these points of view.

Nonetheless, as Mary put it 'all teachers regardless the career stage need to be heard, need to express their feelings and MoEC needs to be aware of these feelings' (Int. 3, Feb. 13). In this context, Michalis, Nicos and Georgia also acknowledged that especially 'for us the older teachers who are in a state of withdrawal' (Int. 2, Nov.12) emotions and feelings 'can play a vital role in the progress of professional learning' (Int. 2, Nov. 12), 'only if MoEC and CPDproviders approach us the right way and encourages us with actions and not only words to keep on going and delivering good teaching' (Int. 3, Feb. 13).

Although experienced teachers recognized their passive attitude towards PE-CPD provision and their need for letting out their emotions, they also had

recommendations to give to MoEC for improvements to PE-CPD provision. For instance, some teachers who participated in the survey agreed that 'in order to stop the yawning among the more experienced teachers, MoEC needs to get evidence' (ST153), 'data, good and bad about the real side of PE-CPD provision' (ST041) and 'invest more effort, money, time and more thought for high-quality CPD' (ST136). Interestingly three of the five experienced teachers from the case studies phase shared the belief that the CPD providers of other countries are more specialized and expert. Based on this belief they all suggested the same proposal:

> What is needed, is to have experts of this field, to come to Cyprus and show to our educational authorities how to arrange and manage the professional learning of teachers in order to have more effective teachers and hence more successful students' outcomes (Michalis, Int. 2, Nov. 12).

> If MoEC wants to have high quality teachers, then the CPD providers need to explore what is going on in the other countries, what works and what isn't. They need to study, to read academic research, to become experts in the filed of professional learning. They don't know everything; they need to constantly learn like us (Mary, FG, Nov. 13).

> We don't want people with outdated ideas and knowledge. We need staff who will transfer to us the latest trend for teaching PE successfully. How will they do this if they don't have adequate knowledge of what is effective for us as learners? (Andria, Int. 3, Feb. 13).

The focus on having specialized staff and specifically people from abroad to guide the development of PE-CPD provision was particularly notable. Experienced teachers highlighted the significance CPD providers' role in supporting teachers' professional learning. Experienced teachers due to the many years of service had 'the opportunity to observe and interact with different CPD providers, what most of

them had in common was the lack of creativity, innovative ideas and abilities to actually change the old same routine of PE-CPD provision' (Michalis, Int. 2, Nov. 12).

4.3.2. Designing the ideal PE-CPD provision

When teachers from all data collection phases were asked how they would design the ideal model of Cypriot PE-CPD provision, they gave very clear answers. The teachers appeared to appreciate this question as it gave them an opportunity to express their strongly held views, ideas and also advocate for how the ideal PE-CPD provision should be designed and which values and characteristics it should embrace.

In particular, the features and ideas that most of the teachers identified repeatedly were: "decentralization", "empowerment of school units", "presence of CPD national policy", "raising teachers' status", "bottom up approach", "peer support", "stronger promotion prospects", "teacher unions having more power", "better management of funds", "teachers having active role in the process of CPD", "more use of research evidence", "university strong contribution to PE-CPD", "high quality system of recruiting". Additionally, teachers identified commitment to the improvement and effectiveness of PE-CPD as the first priority; for example, Anna, Zoe, Pavlos and Mary commented that it is key to have a ministry which 'constantly shows with actions its devotion to the success of PE-CPD provision' (Int.3, Feb. 13), 'creates a positive climate for professional learning' (Int.3, Feb.13), 'treats teachers as professionals' (Int.3, Feb.13), 'allows constructive dialogue between the ministry and teachers' (Int.3, Feb13).

Teachers had also some interesting and original ideas. For instance, a teacher from the survey phase suggested:

Summer camps would be the ideal PE-CPD activity for teachers who really love what they are doing and want to be better and deliver high quality lessons to their students (ST143).

Likewise, Maria and Nicos agreed that 'it's time for bold actions for change' and 'summer camps focused on specific subjects is something which is pioneering for the Cypriot educational system and will attract more teachers for professional learning and at the same time having fun and socializing through learning' (Int.3, Feb. 13). In the same context, one third of the case-study teachers had interesting ideas:

Sabbatical leaves will enable teachers to develop their professional learning (Andria, Int.3, Feb.13).

If we can apply Erasmus program for teachers it would be great. Teachers will be able to explore other educational systems and get ideas which are actually effective for teachers' learning (Pavlos, Int.3, Feb.13).

Putting the right people in the right positions is really important. By having someone with good understanding of teacher development in each school. We need expertise (Katerina, Int.3, Feb.13).

What would be really effective and functional is to have a panel of experts independent of government and doing what is best for teachers and students (Anna, Int.3, Feb.13).

Different system of recruiting would allow younger teachers and with more updated knowledge to get into schools and with their modern practices would change the stereotypes. Enough with the old people, they can't even connect with students (Christos, Int.3, Feb.13).

Interestingly, all three CPD providers had the same ideas for inclusion in designing the ideal model of PE-CPD provision. For instance, a CPD provider during the focus group expressed the following point with some degree of annoyance:

> If you take academic articles of Cypriot researchers, you will see that they were giving recommendations such us: CPD portfolios, teachers' exchange, performance-based rewards for teachers who are good, having a CPD expert in each school who will manage the CPD of each school, and having the role of CPD advisor, cooperation of foreign and Cypriot universities for the development of CPD programs. And all these have been stated one decade ago. Why the ministry doesn't involve academics in the design of CPD provision for each subject? I am telling you that if academic were involved in this process the CPD provision would change 360° (FG, Nov.13).

4.3.3. Evaluating PE-CPD

The large amount of data collected indicated that both teachers and CPD providers considered the design of a functional, practical and effective evaluation model as an issue of immense importance for the development of PE-CPD provision. Teachers from all data collection phases were really passionate when talking about this issue and they had many recommendations for MoEC and for developing the right formula for PE-CPD evaluation.

For the majority of teachers, PE-CPD evaluation 'should be oriented towards teachers' needs' (Andria, FG, Nov. 13), 'should run alongside PE-CPD events and activities' (ST 089) and 'shouldn't be short-lived or a one-off proceeding' (Marios, Int. 2, Nov. 12). Additionally, for one CPD provider (and as reported earlier), 'PE-CPD provision should be assessed both pre- and post-PE-CPD activities in order to

enable comparisons' (FG, Nov. 13). Some of the most recurrent suggestions for evaluating PE-CPD were:

A department should be formed within MoEC which focuses only on assessing CPD provision. We need experts on this (Pavlos, Int. 2, Nov. 12).

MOEC should assign some CPD providers or, even better, some researchers from the University to keep notes or a diary during the PE-CPD activities and during classroom observations and teachers' practice pre- and post-PE-CPD activity (Zoe, Int. 3, Feb. 13).
MoEC needs to incorporate teachers in the process of the evaluation of PE-CPD provision. By doing so, teachers will feel that they are co-leaders (Helena, Int. 2, Nov. 12).

Teachers' reactions to PE-CPD activities, their learning and evolution, the use of new knowledge in teaching practices, and also students' learning should be positioned at the core of the constitution of the PE-CPD evaluation system (ST 091).

CPD providers should gather qualitative and quantitative data about the impact of PE-CPD activities on teachers' learning and teaching practice […] surveys with open and closed-ended questions […] listen to what teachers have to say (Georgia, Int. 2, Nov. 12).

According to many teachers, the ideal model of PE-CPD evaluation should include: 'pencil and paper quizzes' (ST 076), 'written or oral reflections' (ST 181), 'interviewing us [teachers], making us feel important' (Maria, Int. 3, Feb. 13), 'a skills demonstration by teachers to make sure they have grasped the new knowledge' (Andria, Int. 3, Feb. 13), 'the development of a database for comparisons and clarity in the evaluation process' (CPD provider, Interview, Oct. 12), 'asking teachers

incisive questions which will give them [MoEC] the answers they need in order to understand if PE-CPD is working or not' (Michalis, Int. 3, Feb. 13), 'videotaping PE-CPD activities and then uploading them onto MoEC's website, as a source of study for teachers' (Katerina, Int. 3, Feb. 13), 'having checklists' (CPD provider, FG, Nov. 13), and 'the creation of portfolios with the activities teachers attended, and maybe videos of their lessons, lesson plans, and the feedback of students about a PE lesson' (Nicos, Int. 2, Nov. 12). Kyriakos added that 'there are many ways and many tools for evaluating PE-CPD provision. What is needed is an understanding of the best and most effective version of PE-CPD for Cypriot primary school teachers' (Int. 3, Feb. 13).

Looking across the data, it is interesting to note that teachers strongly feel they need 'actions which create the atmosphere for change' (CPD provider, FG, Nov13). In short, 'any changes which arise for the proper evaluation of PE-CPD provision are always welcome and highly appreciated because this signifies progress' (Mary, FG, Nov. 13).

4.3.4. Use of technology

Numerous teachers and CPD providers mentioned the use of technology not only as a PE-CPD source, as presented in section 4.2.2.3 but also as a means for constructing new forms of teachers' professional development and thus improving PE-CPD provision within what they regarded as a highly centralized and conservative Cypriot educational system. Examples of teachers words and phrases is illustrative: 'YouTube educational channels,' 'learning via social networking,' 'using iPads,' 'Dropbox,' 'online conferencing,' 'blogs as learning environments,' and 'online learning communities,'. These phrases are illustrative of a belief that 'the integration

of technology into PE-CPD activities will benefit teachers' PE professional learning' (Mary, FG, Nov. 13), 'will speed up all communication procedures' (CPD provider, FG, Nov. 13) and 'will help teachers to collaborate more and learn from each other' (Anna, Int. 3, Feb. 13).

It is important to note that the majority of 'experienced teachers' did not mention technology as a way of improving current PE-CPD provision, however, among early-career teachers, intermediate teachers and CPD providers there was support. From Kyriakos' point of view:

> Many positive outcomes will come about generally if technology is included in the design of our professional learning (Int. 3, Feb. 13).

Likewise, Katerina stated that 'the ideal model of PE-CPD provision would involve technology in every procedure which has to do with primary school teachers and their professional development' (Int. 3, Feb. 13). In particular, Anna, Tasos, Helena, Zoe, Maria, Marios, Katerina and Christos had a similar recommendation to give to CPD providers and MoEC about the design of PE-CPD provision:

> A specific educational department needs to be established which will have the responsibility of integrating technology within the educational system generally and, more specifically, within primary school teachers' training (Tasos, Int. 3, Feb. 13).

These teachers were clear that 'it's time to move on from communicating with letters and the post, and any type of communication which slows down progress' (Zoe, Int. 2, Nov. 12); 'we need to use the Internet and technology to accelerate all PE-CPD activities and procedures' (Maria, Int. 3, Feb. 13), since 'we are aiming for modernization and greater effectiveness within our educational system and hence

teachers' productiveness' (Christos, Int. 3, Feb. 13). It was also mentioned that by using technology for PE-CPD activities, 'money and time can be saved' (CPD provider, FG, Nov. 13).

Notably, the data highlight the inventiveness of teachers and the vision they have for the ideal model of PE-CPD provision that incorporates technological tools. Additional ideas for the inclusion of technology within PE-CPD provision that teachers suggested were: 'creating an application which all teachers can use on their smartphone, getting the guidelines they need to enhance their teaching practice and their learning' (Pavlos, Int. 3, Feb. 13), 'creating learning communities online and sharing ideas via Skype' (ST 017), 'teachers having access to academic research on PE' (Mary, FG, Nov. 12).

Teachers were very confident, persistent and passionate when talking about the incorporation of technology into PE-CPD provision. As Maria stressed:

> We need to eat and breathe CPD not only during work but outside school too, if we want to be effective teachers. This can be simply achieved by MOEC embracing technology and the Internet for our CPD generally and specifically for PE-CPD. We should be able to access learning sources whenever and wherever. It is that simple (Int. 3, Feb. 13).

This indicates a strong interest in changing the style of PE-CPD provision, redesigning it and updating it to meet teachers' needs. For teachers need more 'updated PE-CPD provision instead of the traditional and ineffective forms that MoEC still uses' (Katerina, Int. 3, Feb. 13).

4.4. Chapter Summary

Firstly, it was important to provide a brief overview of the characteristics of the case study teachers, as a preface to the findings chapter. Chapter Four presented the ten themes that occurred through the data analysis. The data generated themes such as inadequate initial education for PE, MoEC's deficiencies and the low status of PE. These ten themes were then collected into three main thematic groups so as to address the research questions of this study. Like other studies, it was found that dissatisfaction and disappointment were evident in teachers' responses. Unlike other studies, however, it was discovered that a CPD provider's personal characteristics had a very positive and significant impact on these teachers' eagerness to learn more and improve themselves as individuals and professionals.

Chapter 5: DISCUSSION

This chapter interprets the findings of the study. The first section of the chapter, entitled 'new understandings' (5.1), analyses findings that are new in this study and that add new insights to the existing literature. The second section of the chapter, 'same old blues' (5.2) identifies those areas where the findings of this study reinforce findings of previous studies on teachers' PE-CPD. Lastly, the section on 'a forward direction' (5.3) is a discussion of the recommendations made by the teachers about moving forward in their careers as educators and/or PE-CPD providers.

5.1. New understandings

5.1.1. CPD providers' personal characteristics
The participants in this research offer interesting insights into PE-CPD provision in Cyprus in particular, but their comments also resonate with research on CPD beyond PE and beyond Cyprus. In particular, within the context of PE, there are links to the findings of a number of studies (Bechtel and O'Sullivan, 2007; Gaikhorst, Beishuizen, Zijlstra and Volman, 2016; Patton and Parker, 2014). Nonetheless, the importance of specific contextual issues cannot be ignored.

At the time of the research there were ongoing and dynamic educational reforms in the centralized Cypriot context, together with an economic crisis that had a major impact on Cypriot society. Looking across the data it was clear that teachers were 'outside of their usual comfort zones' (Priestley, Biesta, Philippou and Robinson, 2016, p.193), since 'change affects not only teachers' work, but also how teachers feel about their work' (Day and Kington, 2008, p.8). Therefore, feelings of frustration,

displeasure, isolation and neglect were prominent in the data and it could be argued that the potential support offered by CPD providers was of particular value to these teachers at this time (Priestley, Biesta, Philippou and Robinson, 2015). Certainly, there was clear evidence across the board of the positive impact of teachers' strengthened relationships with CPD providers on their learning and their passion for learning. This finding reinforces the importance of considering learning as an active, dialogical and social process, that is highlighted through a social constructivist perspective (Salomon and Perkins, 1998). In particular, teachers emphasized the significance of the close communication and strong relationship with their CPD providers, and how this can influence their motivation for learning positively. According to Wenger (1998) and Hodkinson and Hodkinson (2004), learning is a process which has a very strong connection with the dimension of human relationships. In this sense, an overall argument occurring from this finding is that developing strong and positive relationships between the members of an educational system and particularly teachers and CPD providers, can contribute to the effectiveness of professional development and learning.

Some of the findings from this study echo previous research, although the strength of the feelings that teachers expressed about the quality of their personal relationships with CPD providers was much greater than expected. Teacher participants were very passionate when discussing this issue, as is evidenced in the earlier findings section (*see* section 4.2.1.3).

Brookfield (1990) too has noted that by defining themselves 'only as content or skill experts within some narrowly restricted domain,' educators deprive themselves from the opportunity to act 'as change agents involved in helping students [and other

teachers] shape the world they inhabit' (p.17). The personal, political, professional and pedagogic aspects of teaching should go hand in hand. As Day (1999) put it: teaching 'is a synthesis of the head and the heart' (p.2). In a similar vein, Hargreaves (1998a) argued that the 'emotional politics' (p.316) of teachers' professional learning should be acknowledged in educational reforms and in CPD design. Indeed, throughout the data, the 'human' element of teacher learning is foregrounded:

> …professional development must be concerned with teachers' whole selves since it is these which bring significance to the meaning of the teaching act and the learning which results (Day, 1999, p.206).

The data in this study goes further, however, by identifying specific features of CPD providers' characteristics that resonate with these teachers in a PE-CPD context. They point to an optimal mixture of personal characteristics and behaviours that lead to a friendly, open and warm climate that enables teachers to feel 'comfortable' to learn, and where teachers and CPD providers share the joint mission of improving PE. In contrast, as Reio Jr. (2011) points out, negative emotions have the tendency to decrease teachers' levels of learning motivation.

Teachers identified a range of specific personal characteristics that they sought in CPD providers. These were expressed in strong and emotive terms; for example, CPD providers should be 'humane,' 'caring,' 'friendly,' believe in the importance of 'team spirit,' 'passionate,' 'funny,' and – even – 'rebels.' It was also clear that in expressing these views, the teachers were saying as much about the flip-side of these qualities that they disliked in a CPD provider. For example, although teachers talked about valuing CPD providers who were approachable and friendly, they also recounted negative experiences of the opposite behaviour as a comparison.

The teachers' focus on 'passion' was also striking in this study. For these teachers, if a CPD provider exudes passion in their approach, this helps to instil passion in teachers too. Similarly, Day (2013) suggested that 'having passion and enthusiasm about others' learning and achievement creates energy and fuels determination, conviction, and commitment' (p.66). Moreover, the teachers in this study placed a high value on risk-takers and those who would openly challenge authority. This echoes a finding from an earlier study where teachers appreciated CPD providers who are 'risk-takers and who actively seek out new opportunities, experiences and challenges' (Day, 2014, p.652). The prominence of this finding in the current study can, perhaps, be linked to the wider social and economic context in Cyprus at the time, as well as the imperative to address severe economic difficulties by improving the educational system.

Up to this point, these findings echo previous findings (Cordingley et al. 2015; Makopoulou and Armour 2014; Patton and Parker 2014). An interesting addition from the data in this study, however, is the way in which teachers seemed to believe CPD providers should mirror the positive characteristics that they see in themselves. So, in discussing CPD providers, the data also gives us fascinating insights into how the teachers view themselves as learners.

This finding can be considered in a number of different ways. For example, Dewey (1938) talked about the principle of 'continuity of experience.' The key word here is continuity. Dewey (1938) argued that 'every experience enacted and undergone modifies the one who acts and undergoes' and 'the quality of subsequent experiences' (p.26-27). From this perspective, it can be suggested that the dynamics of the learning culture generated by some CPD providers 'sparked' teachers' desire

for more effective PE-CPD. It was evident that teachers believed they learnt best when they experienced sustained support and positive interactions, and also felt that CPD providers were able to 'walk in our shoes' (Helena). This is a viewpoint which signifies a 'social constructed' and 'situated' understanding of learning discussed in sections 2.4.3 and 2.4.4 of the literature review. These Cypriot teachers illustrate Dewey's arguments about designing learning for beneficial and productive future experiences and 'growth' (Dewey 1938, p.28).

There is little doubt that in their PE-CPD, these teachers wished to be treated 'as peers and co-learners' (Cordingley et al. 2015, p.6) and 'as professionals and leaders' (Parker and Patton, 2017). In this sense, they were echoing the findings of Armour and Yelling (2007) who found that CPD providers needed to be 'leaders…and followers' simultaneously (p.195). Indeed, it has been argued that by viewing teachers and CPD providers as "co-workers" this cannot only enrich teachers' professional learning, but also improve 'retention, quality improvement and organisational performance' (Eraut 2007, p.421). Certainly the data in this study support Hodkinson and Hodkinson's (2003) arguments that more attention should be focused on the social aspects of learning.

Yet, the notion of 'continuity' can also be seen in a different light in this study. Revisiting the teachers' responses, it seems that for these teachers, a key part of continuity in the context of learning can be expressed as 'alignment.' The teachers expressed strong views about the important characteristics of effective CPD providers, and they aligned these with how they view themselves as effective learners and teachers. Examples from the data reported in the last chapter include: 'is one of us,' 'can walk in our shoes,' 'is a team player.' They also noted that

effective CPD providers were those who 'dare to change,' 'don't recoil' and have the 'heart of a genuine rebel.'

If the teachers perceived that this level of alignment was in place, they reported positive learning experiences; for example: 'we are in good hands,' and there is a 'feeling of renewal' and 'excitement in everything'. Essentially, it would appear that they wanted to feel emotionally connected through their CPD experiences with CPD providers who were very much like themselves. In turn, these teachers reveal to us how they perceive themselves, and the importance of these alignments of learner identities. As Hargreaves (1998b) argued, 'good teaching is charged with positive emotion' (p.835), and this seems to reflect what these teachers were voicing; essentially, their emotions can have an immediate and great impact on their learning, growth and practice (Reio Jr., 2011). In this context, the multi-layered nature of the concept of 'continuity' and growth in learning is illustrated further.

The fifteen case study teachers were asked what kind of CPD can really meet their learning needs and they all had strong views! In particular, teachers stated that what matters is the way in which CPD providers – or educators – engage with them. They are willing to engage in CPD activities when a provider '*exudes self-confidence, passion and comes closer*,' and '*tries to be very understanding by trying to identify our needs and concerns… In other words, [providers] should try to walk in our shoes.*'

This is interesting because these Cypriot teachers overwhelmingly prioritized the human element of learning. They described 'effective' PE-CPD as that which is delivered by providers who are '*sympathetic*,' '*friendly*,' and '*warm*,' and who show a '*humane and understanding side*.' With these qualities in place, they felt that

providers and teachers could cooperate to support teachers' learning. Certainly they felt that they would ideally like providers to be *'more accessible and open'* and, as they put it, not *'only white-collar officials.'* These comments give us insight into their previous CPD activities. Indeed, some teachers appeared to have been bruised by the experience.

The teachers went even further, however. Theirs was not just a focus on the human element of learning; it was a plea for passionate humanity. Teachers admired providers who are *'passionate,'* have *'energy'* and are *'positive.'* This makes the difference because the level of positivity inspires them in the same ways that they try to inspire their pupils: '*CPD Providers are our teachers and we are the students… we need them to be enthusiastic and to spark our energy.'* Even more interesting was the fact that teachers want to encounter providers who '*don't recoil,'* are '*rebels,'* a '*little bit crazy,'* and '*funny'* because this suggests that the provider is more like '*one of us.'* One of us. In other words, the teachers seem to be telling us as much about how they see their ideal selves as how they see their ideal CPD providers.

So, what does all this tell us about the rather dry notion of CPD 'effectiveness'? Dewey (1902) argued that learning '*involves organic assimilation starting from within'* (p.9). The Cypriot PE teachers illustrate Dewey's argument in action. They value the CPD provider as a person and, from their perspective, the development of a close and mutually understanding relationship between teacher and CPD provider is a pre-requisite for optimal learning. Dewey expressed a similar belief over 70 years ago when he argued that we need a clear understanding of 'what is actually going on in the minds of those who are learning' (Dewey 1938, p.33).

5.1.2. The Odyssey of learning: teachers' journey

This section explores a major theme in this study. As presented in the previous chapter in section 4.2.2.3, teachers identified sources and obstacles to PE-CPD effectiveness. This identification can lead to a better understanding of what it is possible to use and avoid in teachers' PE-CPD provision, capturing primarily teachers' beliefs and experiences. All teachers from all data collection phases seemed to be very clear about what benefits and what hinders their professional learning. In this context, both constructivism and situated learning theories can be helpful in understanding the procedure of learning from the perspective of these teachers and deducing valuable suggestions for the achievement of effective PE-CPD.

They all had explicit and pragmatic positions about how and when PE-CPD opportunities could be more effective and meaningful to them and, consequently, their students. The most repeatedly identified sources for effective PE-CPD were:

- Collaboration with colleagues

- Personal interest

- Combination of theory and practice

- Sample PE lessons

- The Internet

- Academic research

- Small-scale PE-CPD

The most repeatedly identified obstacles to PE-CPD were:

- Use of only theoretical PE-CPD activities

- No motives for learning

- Lack of an evaluation system

Based on the data, it was evident that teachers were feeling 'stuck,' 'confused,' 'lost,' 'at a crossroads,' 'off course' and far away from their destination – that is, from a situation where they would have effective PE-CPD support. Like Odysseus in his odyssey or journey, these teachers are trying in their own way to 'overcome seemingly insurmountable obstacles to reinstate stability, order, and purpose in a homeland to which forces seem determined to prevent our [their] return' (Brown and Moffett, 1999, p.2). This metaphor seems to fit well with the situation which the Cypriot teachers of this study currently find themselves in. These teachers seemed to know better than anyone else what can and cannot be effective in their PE-CPD. One reason that CPD providers, policymakers and educational authorities cannot identify what matters the most for teachers' PE-CPD effectiveness is that they are not 'into the journey' (Fullan,1994, p.24). Fullan's (1994) words accord with the metaphor used for the theme of an odyssey of learning; a learning journey. He argued that 'you don't know what is going to matter until you are into the journey' (p.24). Certainly, teachers are into this journey, but what matters the most is that all teachers and CPD providers need to be into this journey together. This theme and subthemes are highly linked with what situated learning theory supports regarding the active position that teachers have in the learning process and the situated nature of learning development (Lave and Wenger, 1991). These views are clearly mirrored in this study in the teachers' responses and feelings about how they learn.

5.1.2.1.   Sources

1) Collaboration with colleagues

Data collected from this study are compatible with previous findings about the value of social interactions as an important source of teacher learning (Darling-Hammond & McLaughlin, 2011; Goodyear and Casey, 2015; Patton and Parker, 2014; Wenger, 1998, 2009). The work of theorists Piaget, Vygotsky and Dewey provide a rationale for how teachers can learn by having social interactions which serve to generate new forms of understanding (Piaget, 1985) from the people they interact with (Vygotsky, 1978) and from real world experiences (Dewey, 1938). Teachers' professional growth can be regarded as an outcome occurring within the sociocultural procedures of a group where relationships and interactions transpire via collaborative structures and routines of CPD.

Critically, it is not an accident that most teachers of this study identified this PE-CPD source as one of the best means to develop themselves professionally. The statements of the teacher participants and CPD providers too, which revolved around collaborative learning or learning from colleagues, assisted in the interpretation of various other themes. It is, perhaps, hardly surprising that cooperation and teamwork are important and can enhance motivation and performance. Clear links can be drawn here with the theory on 'learning as participation' discussed in section 2.4.4. Yet upon reflection, and bearing in mind these teachers' accounts, it is also important to remember that team spirit is only developed under a certain set of conditions such as individual accountability, social skills, positive interdependence, promotive interaction and group processing (Johnson and Johnson, 1989). In effect, it is cooperation efforts such as these which can promote the maximization of learning for all members of the team and lead to joint success.

Due to the dissatisfaction and disappointment that teachers felt about the existing PE-CPD provided by MoEC, they turned to other means for improvement of their professional learning. They considered all the social interactions and collaborations with their colleagues, either informal, casual or formal in the form of networks or CLCs (see section 4.2.2.2), as good alternatives to traditional formal PE-CPD provision. In agreement with what Armour and Yelling (2007) discovered in their study, these teacher participants resorted to any type of collaborative learning 'to compensate for the shortcomings of what might be termed "official" CPD' (p.189).

As presented in 4.2.2.2, it was found that four out of the five early-career teachers (case studies) expressed that learning from the experienced teachers gave them feelings of safety and certainty, as they knew that experienced teachers 'have been through the phase' (Christos) the early-career teachers are in now. Notably, the help and support given to early-career teachers was highly valued since it enabled them to 'understand the context in which the strategies or content will be presented' (DiPaola and Hoy, 2014, p.162), and to obtain new insights (Kennedy, 2016) about the PE subject and how to enhance their teaching strategies and practices.

Both teachers and CPD providers gave only positive comments about this PE-CPD source. There are multiple clear examples, and not only within this theme where teachers link PE-CPD effectiveness with their emotional dimension as teachers, learners and mostly as humans. This finding can be an indication that in order to provide effective PE-CPD to these teachers, a more holistic teacher-centred approach is needed. In contrast, a culture that ignores the 'underlying relationships, will be stilted, forced, and even damaging' (Hargreaves and Fullan, 2012, p.114).

The creation of a supportive environment, friendly climate and positive stimulus within the CLC for the teachers in this study did not come about easily. It took some time for teachers to bond and connect with their colleagues and feel comfortable. Moreover, many efforts were made by CPD providers, PE consultants and head teachers to establish the architecture, design, organization and effectiveness of these CLCs.

The teachers of this study believed that this initiative of learning communities for PE teachers 'can really work' (section 4.2.2.2) because of particular CPD providers who, from the teachers' perspectives, have all the essential personal characteristics (section 4.2.1). Indeed, these specific CPD providers are the ones who developed this idea and turned it into a reality. These CPD providers were the ones who were pushing the limits of the Cypriot centralized educational system, trying to enhance social interactions between teachers, and aiming to develop 'internal and external social capital' (Hargreaves and Fullan, 2012, p.145). In this sense, CPD providers took the role of the facilitator in these teachers' eyes (Armour and Yelling, 2007; Cordingley, 2015; Cordingley et al., 2015; Parker, Patton and O'Sullivan, 2016; Patton, Parker and Neutzling, 2012). Based on teachers' testimonies, some of the CPD providers had the appropriate mind-set, background, experience, personal characteristics and attitude in order to treat teachers as learners *and* as colleagues. Indeed, teachers felt that they were working with CPD providers as part of a team, and aiming to improve not only their PE-CPD but the status and structures of the PE subject. The strength of the teachers' views on the imperative role of CPD providers as facilitators, supporters, and motivators in the complex and multidimensional processes of teachers' CPD cannot be stressed highly enough.

2) Personal interest in PE

The teachers considered the personal interest in the PE subject and the drive to be successful professionals, as a way to enhance their professional learning. This view is supported by the work of Attard (2017). Attard argued that there is a necessity for teachers to develop the 'tools that are needed for them to take charge of their own continuous professional development' (p.40), and therefore 'such control can also motivate the teacher to put more effort into his/her own learning' (p.43). In the same context, Attard referred to self-study and self-reflection as two elements that serve CPD as being a more personal rather than a public process. In the present study, the teachers wanted to place emphasis on teachers' active and personal engagement and involvement in the learning process. Findings suggested that it is necessary for these teachers to be equipped with both practical and conceptual mechanisms in order to not only be in a position to commit and engage in lifelong learning but also in an ongoing evaluation of their own skills, learning and practice. It became apparent throughout this study that, with the help of the experts and CPD providers, these teachers need to gain a stance of inquiry (Cochran-Smith and Lytle, 2009) towards their professional learning in PE and, most essentially, to learn and understand how to learn as active and independent participants in their own PE-CPD. Dewey (1938) also argued that the opportunities which broaden the learning range contribute to more growth and development.

As Pavlos and Marios reported in the data, there is a negative attitude on the part of some teachers about how their approach towards PE-CPD should be. 'Being apathetic and expecting others to educate them' (see section 4.2.2.3) cannot be the appropriate approach for teachers to achieve high quality teaching. It could be argued that this attitude acts as a constraint in seeking effective CPD. These findings

reinforce previous findings on the importance of teachers moving from a passive to an active mode of learning and to accept 'responsibility for and commitment to their own learning' (Patton and Parker, 2014, p.70). As Attard (2017) argued through his experience, 'when I face a problem, I do not have to wait for an in-service course or workshop hoping that it will tackle my particular concern' (p.47). As experienced teachers, Andria, Michalis and Nicos also indicated that the most effective and motivating source for their PE-CPD was their own selves and the 'right' attitude toward professional learning, which is, according to Nicos, to have the feeling of a hungry appetite for learning.

3) Combination of theory and practice

As presented in section 4.2.2.3 these teachers felt that they could improve their professional learning in PE when there is a 'blend' or 'marriage' of theory with practice within the PE-CPD activities. For all the teachers in this study, practical PE-CPD activities are more meaningful to them and provide them with the necessary resources to apply knowledge into practice. Evidence from the related international literature signified the high value of learning activities which merge theoretical concepts, practicalities, and mechanisms, thus facilitating the highest quality of teachers' teaching (Armour et al., 2015; Desimone and Garet, 2015; Korthagen, 2017; Miller et al., 2016).

The teachers felt uneasy about the PE-CPD activities provided by MoEC due to the absence of any practical element. For them, the reality is that they need to apply the knowledge to their practice effectively in order to achieve students' learning. Unquestionably, to move 'from intellectual understanding of the theory to enactment in practice' (Korthagen, 2017, p.2) is not a simple task. In addition to this, this viewpoint of teachers calls into question the usefulness of PE-CPD activities offered

by MoEC, where teachers are not active but very passive in the learning process and this results in teachers not being in a position to apply the new knowledge into their pedagogical practices.

In light of this, three case study teachers (Maria, Andria and Kyriacos) had views about the best combination of theory and practice. For example, Kyriacos expressed that 'ready-made meals' versions of activities are not appreciated by teachers. Andria also mentioned the need for critical thinking. This indicates their need to be treated as professionals.

The value of reflective practice, however, is missing from teachers' statements. It has been argued that teachers' reflection is a requisite procedure for teachers' benefit and meaningful learning (Attard, 2017; Koutselini, 2017; Korthagen, 2017). In light of this notion, the need to encourage teachers to engage in sustained reflections on their teaching is highlighted. Indeed, the provision of PE-CPD which enables deep engagement with theory and practice is essential. Despite that, a PE-CPD activity that combines both theory and practice cannot be effective if teachers' reflective practice is missing.

It is also significant for reflection to be a constant practice over the learning process for effective teachers' learning and teaching. At the school level, individual and collective reflection is 'an invaluable tool for the professionalization of teaching' (Koutselini and Patsalidou, 2015, p.136) and promotes innovative school practices. At the same time, it also serves as a powerful tool against the devaluation of education, promoting strong democratic ideals in education and giving teachers power and extra agency.

It is important to encourage both "reflection-in-action" and "reflection-for-action" (Cowan, 2006). In other words, reflection on learning activities should be based not only on prior experiences when it comes to acquiring new knowledge but also on how those activities can shape action in the future, allowing prior experience to "feed into" the next learning sequence (Cowan, 2006, p.39). Only then can learning become meaningful, sustained and ongoing, allowing teachers to shape society and create both effective teaching practices and socio-political awareness both in themselves and in their students. The teacher participants of this study seem to appreciate the value of reflection indicating that through reflection they can 'process' (Kyriacos) what they learn.

4) Sample PE lessons/ PE lesson observations

A prevalent source for effective PE-CPD recognized by these teacher participants is the observation of sample PE lessons. When asked to select the three most powerful sources for PE (*see* Appendix E), almost the one third of the teacher participants who completed the survey identified PE sample lessons as one of the three most important sources. Likewise, the majority of case study teachers expressed the same notion, by mentioning the multiple advantages of this source for PE learning and its immediate impact on their teaching practice. These teachers highlighted that observing the sample lesson of a colleague, teachers really added more dimensions to their PE teaching, gaining more credits as teachers and reaching higher levels of confidence. By delivering a good quality lesson to their students, they succeeded in enhancing their students' learning, and this motivated them to learn and develop themselves constantly.

Pavlos also indicated that in teachers' initial education at the University of Cyprus, a method which was followed in several courses was to observe colleagues teaching

and critically discuss their observations with the professor and colleagues, and then reflect on them as individuals and future teachers. Pavlos suggested that if this method used to work back then, it means that it can still work now.

A closer look at the data of this theme, and in particular phrases such as 'team spirit,' 'bonding with colleagues,' 'peer sharing,' 'a climate of communication,' 'trust between teachers,' and 'strong partnership,' indicate the value of collaborative learning. It would appear that teachers want to learn how to teach in the "right" way and be productive and successful teachers. The evidence in this theme suggests that through peer observation or by observing sample PE lessons, teachers actually feel that they are learning and improving their teaching practice. Likewise, the teachers who participated in Charner-Laird, Szczesiul, Kirkpatrick, Watson and Gordon (2016) study followed a similar approach (p.4) to the one this study's teachers followed, and that too had similar positive outcomes. This type of professional learning has its origins in Japan and is called lesson study (Howel and Saye, 2016; Lieberman, 2009). As Darling-Hammond (2005) pointed out, these countries systematically try to support their teachers and in the case of the teachers of this study, it is also important to 'mak[e] it possible for [them] to spend more time polishing their craft with colleagues' (p.240).

5) Use of Internet and Technology

The Internet and technology are two PE-CPD sources which were identified by the teachers in this study, help teachers grow as teachers but as learners too. Half of the teachers who completed the survey identified online PE-CPD sources as one of the three most powerful sources for professional learning, and particularly PE learning. All teachers from all data collection phases emphasized the power that the Internet

has and how they use it in order to get new ideas about how to improve their teaching practice.

Teachers expressed how they feel by using this PE-CPD source. They reported positive emotions; 'excited' since this PE-CPD source is not dull and monotonous like the theoretical seminars, 'optimistic' as they consider it to be an innovative practice, 'confident' because the impact is immediate on their teaching, and therefore on students' enthusiasm and learning. Given the connection which these teachers make between the effectiveness of a PE-CPD source and how it makes them feel, they also conveyed that the absence of technology and the Internet in PE-CPD provision leads to the opposite effect and to feelings of being 'stuck' in a monotonous and old-fashioned *modus operandi* or system.

The use of videos was discussed extensively by the teacher participants. Several studies draw connections between the use of video and teachers' professional learning (Beach, 2017; Christ, Arya and Chiu, 2017; Petty, Heafner, Farinde and Plaisance, 2015; Kennedy, Hirsch, Rodgers, Bruce and Lloyd, 2017). The use of videos by teachers for their CPD includes 'video case-studies, video embedded in multimedia, video self-reflections, and video reflections with peers' (Christ, Arya and Chiu, 2017, p.24). According to Dewey (1938), 'every experience is a moving force' (p.31). Significantly, video use 'creates a lens that transcends classroom experiences' (Petty et al., 2015, p.378), 'can support teachers' abilities to notice and analyse instructional practices from multiple perspectives, and identify problems and solutions' (Christ, Arya and Chiu, 2017, p.24), and improves teacher effectiveness, which 'may increase and contribute to the quality of classroom practice' (Beach,

2017, p.69). All these benefits and many more are reflected in these research participants' testimonies about the use of videos as a PE-CPD source.

6) Academic research

The use of academic research focused on PE-CPD effectiveness, and was perceived by several teachers from this study to be a key source for their learning improvement and for their preparation for PE lessons. Evidence from the teachers' statements through the interview sessions showed that using PE-CPD academic research for teachers' learning can lead to positive outcomes. Zoe added that since there are studies which focus on how teachers can be more effective, then for her there is no reason not to use these studies as a means to understand what works best for teachers' learning.

Teachers also noticed a decrease in research studies implemented by the MoEC and the Pedagogical Institute of Cyprus. Due to the lack of economic resources, the implementation of research on teachers' CPD effectiveness has been marginalised. Mary felt very disappointed with this situation since, according to her, the implementation of research is an indication of a country's progress. Along similar lines, teachers also showed that they wanted to admire their CPD providers for having research experience and a strong educational background (*see* section 4.2.1.2). They felt this would enable CPD providers to guide teachers towards the "right" learning direction and, more specifically, to transfer the theoretical concepts of PE-CPD academic studies to teachers and consequently affect teachers' learning and teaching practices positively. Links can be drawn here with what Dewey (1938) indicated about the role of the educator and, in the case of this study, CPD providers: 'It is then the business of the educator to see in what direction an

experience is heading' (p.32). Interestingly, teachers seemed conflicted between viewing themselves as experts and needing to see CPD providers as "the" experts.

7) Small-scale PE-CPD

This theme and indications by the teachers raises numerous critical questions about PE-CPD effectiveness. When PE-CPD is delivered 'en masse,' how can teachers feel supported? How are they going to be heard? How can teachers' PE-CPD be based on their needs and interests? How can teachers establish a close relationship with a CPD provider? These features of traditional large-scale CPD provision are difficult to design (Armour, 2006).

The participants in this study, both teachers and CPD providers alike, demonstrated through their experiences that when PE-CPD provision is delivered in a smaller group of teachers as opposed to the usual larger audiences, it is easier for teachers to engage in the activity and with the new knowledge. Teachers consider that by decreasing the number of teachers in a PE-CPD activity, the environment becomes friendlier for learning, the support from CPD providers is immediate and evident, and the warm atmosphere allows connection and collaboration with colleagues. Another key advantage of having a smaller number of teachers in a PE-CPD activity as identified by these teachers is the maintenance of teachers' identity as teachers and individuals.

It has been acknowledged through several studies (Day and Gu, 2009; Schutz and Zembylas, 2010) that the key requirement for teachers' commitment to professional learning and development is the feeling of identity. As an early-career teacher, Katerina stated that it is more difficult as a young teacher to feel confident and comfortable among a large number of teachers with more experience and self-

assurance. In agreement with what the teacher participants voiced, the CPD providers expressed the urgent need for decentralisation in order to arrange teachers' CPD in a way that will eventually satisfy teachers' learning needs and enable teachers who face the same difficulties and are at the same career stage to come together and collaborate.

5.1.2.2.   Obstacles

1) Use of only theoretical PE-CPD activities

Teachers in this study were unanimous in their belief that the application of PE-CPD activities which do not integrate practice with theoretical concepts is perceived as a hazardous obstacle to their professional growth. Helena, echoing the opinions of most of the teachers, contended that flat and one-dimensional activities which only incorporate theory obstruct teachers' PE-CPD and, for most teachers, this kind of PE-CPD provision feels old-fashioned and way behind the new trends in teachers' professional learning.

In accordance with Dewey's (1938) principle of continuity of experience, the key implication for PE-CPD provision for Cypriot primary school teachers is not 'the absence of experiences, but their defective and wrong character – wrong and defective from the standpoint of connection with further experience' (Dewey, p.15-16). It seems evident that these teachers are trying to recommend, as presented in the previous section (see section 4.2.2.3), that if they are required to progress and develop as highly quality professionals, then they should be provided with activities that combine theory and practical applications. In this way, they will be able to apprehend the new knowledge, apply it to their teaching practice and simultaneously get stimuli for more professional growth. This finding has been echoed repeatedly in

the literature (e.g. Bayar, 2014; Cordingley et al., 2015; Kennedy, 2016; Larsson, Linner and Schenker, 2016; Maivorsdotter, Lundvall and Quennerstedt, 2014).

2) No motives for learning

One of the fundamental features for successful and effective CPD, is to have CPD activities or programmes which are consonant with teachers' motivations and needs (Bautista and Ortega-Ruiz, 2015; Caddle, Bautista, Brizuela and Sharpe, 2016; Desimone, 2009; Desimone and Garet, 2015). Overall findings from this study showed that the majority of the teachers are not motivated by what is on offer currently, hence their 'desire to act and/or to exert effort' (Daniels, 2016, p.62) towards professional learning is low. The Cypriot educational context is similar to the Greek one, 'where monetary incentives are absent, engagement in continuous professional development is voluntary, and teachers' wages have decreased substantially' (Gorozidis and Papaioannou, 2014, p.2) as a consequence of the Cypriot economic crisis/recession.

As Gorozidis and Papaioannou (2014) and other academics (Coward, Hamman, Johnson, Lambert, Indiatsi and Zhou, 2015; Daniels, 2016) suggested, Self-Determination Theory (SDT) under the circumstances mentioned above could provide new insights into teachers' motivation and what does and does not engage them in further CPD. Gemeda, Fiorucci and Catarci (2014) indicated that when teachers are 'motivated, satisfied, encouraged and supported to apply the new knowledge and skills acquired from professional development' (p.80), they are then able to impact on their students' learning. In the same vein, when teachers are not satisfied, as can be evidenced with these Cypriot teachers, then they do not have the motive 'to learn, and are not committed to helping their students' (p.80).

As specified in literature focused on STD (Ryan and Deci, 2000), teachers can be motivated to enhance their professional learning if 'three basic psychological needs – autonomy, competence, and connectedness' (Daniels, 2016, p.62) are satisfied. Given the highly centralised educational system of Cyprus, teachers' habits of working in isolation and the evident feelings of uncertainty and lack of confidence, it could be argued that these needs were not met for teachers in this study.

Teachers can be motivated intrinsically and extrinsically (Avidov-Ungar, 2016). Intrinsic motivation relates to teachers own autonomous self-determined motivation and extrinsic motivation pertains to their participation in CPD activities for salary improvement and professional recognition (Gorozidis and Papaioannou, 2014). These Cypriot teachers highlighted the centrality of personal interest and drive for professional improvement and considered it as a PE-CPD source (see section 4.2.2.3).

Additionally, an interesting question expressed by Marios, an early-career teacher, indicated the changes in motivation throughout teachers' different career stages. In their first stage as early-career teachers, teachers are striving for knowledge, skills and tips to enhance their learning, and hence their teaching practice. For more experienced teachers, who are near retirement finding new ways of motivating them and encouraging them to participate in CPD activities is not an easy task.

3) Lack of an evaluation system

In this finding, some of the teachers' comments and perspectives are similar to the findings of previous research. However, through what these teachers conveyed about the non-existence of a PE-CPD evaluation system, several fresh and interesting views were certainly identified. Teacher participants were very animated

when talking about this issue, as is evidenced in the earlier findings sections (see section 4.2.2.3 and 4.3.3). In particular, the feelings which were prominent in teachers' comments were feelings of anger, disaffection, sadness and disappointment with the lack of an adequate evaluation system in place for CPD activities. Looking across teachers' testimonies, their facial expressions and body language, it was evident that teachers were mostly frustrated with MoEC's officials and their ignorance of the problematic matter of 'a PE-CPD evaluation system that doesn't exist' (Andria). Evaluating the impact of a CPD activity is of major importance since it has the power to eventually increase and improve teachers' learning and teaching, and thus students' learning outcomes as well (Earley and Poritt, 2014; Parker and Patton, 2017).

Arguably, teachers identified, even in a vague way, the reasons for this absence of a proper CPD evaluation system. According to their comments and in agreement with some existing research, this may be due to the lack of experience and expertise from CPD providers, lack of tools to implement CPD evaluation correctly, and the lack of well-planned initial design and organization (King, 2014). The struggle for a quality CPD evaluation system was evident in the data.

Additionally, the teachers in this study placed a high value on evaluating the impact of each PE-CPD activity, because it gives teachers and CPD providers the opportunity to increase their understanding of whether the CPD provided is actually working or not. Like many other teachers, Nicos is questioning what happens after they complete a piece of paper as an assessment of the PE-CPD activity which they attended. It is logical for these teachers to wonder what CPD providers and the MoEC do with the teachers' feedback, and how they use it – if they use it all, since

these teachers have not noticed any changes in the manner in which CPD is organised, conducted and provided. Indeed, the need for follow-up is essential to examine if the CPD activity's goals have been achieved or not.

In a similar vein, participants were concerned that even if teachers have the opportunity to evaluate a CPD activity, the way it was implemented and how it impacted on their learning, still 'nothing will happen' (Nicos). Similarly, Earley and Porritt (2014) pointed out that usually CPD evaluation concentrates 'on the detail of the PD activity (what has happened) rather than the difference the development activity makes for the participants' (p.116). King (2014) also argued that in order to properly evaluate CPD there is a need 'to move from looking at teacher satisfaction to exploring impact on teacher practices, which in turn aim to enhance pupils' outcomes and school improvement' (p.108). In the case of this study, a shift in focus from the provision of CPD activities to better understanding the need of the learners/teachers is urgently needed.

Up to this point, these findings echo previous findings (Earley and Poritt, 2014). A noteworthy addition from the data in this study, however, is the way in which teachers seemed to know and suggest means to effectively evaluate CPD activities. The teachers were very clear about the practices that could lead to effective CPD evaluation. On the other hand, it was also evident that some teachers felt hesitant to write "the truth" in feedback questionnaires given after the completion of a CPD activity. This may be due to the small society of the island and concerns that they could easily be identified, criticized and stigmatized by colleagues and MoEC officials for having a negative opinion.

5.2. Same old blues

5.2.1. "Mechanism" working

At the time of the research, there was a pervasive climate of distress, as might be expected, due to the ongoing reforms in the centralized Cypriot context and the sudden turning point of the Cypriot economy, which came under the grip of an economic crisis. Despite this turbulence, some teachers in the study were happy with PE-CPD. Christos was the only teacher from the fifteen teacher case studies who stated complete satisfaction with PE-CPD effectiveness. The evidence these teachers gave to support feelings that some aspects of PE-CPD are working is that there are 'marks of improvement on the horizon.' It is clear that very few teachers drew a connection between PE-CPD effectiveness, satisfaction and signs of improvement. In the same vein, it is interesting that teachers expressed their great dissatisfaction with other questions, but when they were asked to say if they were satisfied with the existing PE-CPD provision their answer was affirmative, and they explained that there has been some instigation for change. This calls into question the reasons for these positive comments about PE-CPD effectiveness.

Drawing upon teachers' statements, it could be argued that these teachers are satisfied with small movements or events which may not have any effect on the improvement of PE-CPD provision. Compared to the limited actions that have been implemented in the previous decade, they feel that since currently there is more action in the field of PE-CPD this might mean that the situation is improving, and this gives them a feeling of satisfaction.

In essence, the evidence from these findings reinforces the extremely significant notion that reflection is a vitally important component in teachers' professional

growth (Korthagen, 2010). Consistent with Dewey's (1910) work, reflection can support teachers to make changes in their practice. Likewise, teacher participants of this study need to carefully consider and ask what any particular activity provided to them (Dewey, 1910).

In other words, there is a need for teachers to extract meaning from experience or gain the necessary skills to reflect in order to learn. However, as Gordon (2017) pointed out, 'reflection cannot be placed solely on the student but must be demonstrated by the person responsible for teaching reflection' (p.27). In the same vein, CPD providers must recognize the importance of teachers' reflection. The central idea of this evidence is that teachers need to question for themselves if an activity provided them with new knowledge, and how this knowledge impacted on their teaching practice following their learning. Through reflection, teachers can clearly understand if a PE-CPD activity was effective or not, instead of simply being satisfied with the implementation of actions and events related to PE-CPD.

As Koutselini and Patsalidou (2013) indicate, improvements can also be created through active and collaborative participation. They undertook a research action project entitled RELEASE between March 2012 and February 2013 in Cyprus. It was funded by the European Commission's EACEA Agency, developed in collaboration with the University of Cyprus and MoEC and involved 100 primary teachers. School teachers and principals collaborated and drew up an action plan geared towards a specific area of improvement. Teachers were also given training on how to perform action research, as well as counselling by specialists in their area of interest. Teachers and principals discussed issues relating to their action plans, organized classroom observations, 'shared responsibility about the effectiveness of the

developed action plans' (Koutselini and Patsalidou, 2013, p.88), and gained feedback from each other.

Teachers were asked to write down their reflections both before and after the implementation of the action research. It was discovered that teachers' written reflections after their involvement in doing active research revealed an 'increased consciousness of what we teach and why' (Koutselini and Patsalidou, 2013, p.90), and the development of supportive interaction amongst the participants. Additionally, 'reflection facilitated self-assessment and self-improvement' (Koutselini and Patsalidou, 2013, p.90). Thus, according to Dewey (1938), 'everything depends upon the quality of the experience which is had' (p.16).

5.2.2. "Mechanism" not working
An analysis of the data showed that the finding on PE-CPD as ineffective had a large number of codes (*see* Appendix G). The majority of the teachers from all data collection phases seemed to express similar views about the limitations of existing PE-CPD provision. As stated in section 4.1.3-, teacher participants considered this study to be an opportunity to explain their perspectives of what hinders their PE-CPD.

5.2.2.1. *Inadequate initial education for PE*
These teachers indicated their 'concerns about the adequacy and quality of primary PE-ITT (Initial Teacher Training)' (Harris, Cale and Musson, 2012, p.370). The majority of the teachers expressed that they felt unprepared to teach PE once they were employed due to the limited attention and time focused on PE during their initial training. Interestingly, CPD providers agreed and added that teachers face difficulties in teaching PE and do not feel confident with their knowledge in PE. Given that these

teachers had only had one module for PE during their initil education, it is not unexpected that they would feel uncomfortable in teaching PE (Jess and McEvilly, 2013).

As an academic based in the University of Cyprus, Tsangaridou (2016) specified that at the beginning of her career there was only module focused on primary school PE, but recently there was a module addition as a specialisation in PE. However, she pointed out that more drastic actions need to be done in order for us to 'feel confident that our graduates are skilled enough to teach physical education to the children' (Tsangaridou, 2016, p.638). The data from this study, along with Tsangaridou's (2016) study and statements, raise serious concern about Cypriot primary school teachers' PE-ITT and PE-CPD, calling for 'much closer attention' (p.643) from the MoEC officials and CPD providers.

5.2.2.2.   Low PE status
Yet teachers' comments in this study indicate the low status of PE as a subject. This finding is considered to be highly problematic given the exceptional efforts that Cyprus undertook to improve the educational system since it became a European Union member in May 2004 (Karagiorgi and Nicolaidou, 2010). Evidence from the teachers from all data collection phases illustrated that they feel PE is undervalued and considered to be 'one of the 'black sheep' of the family of curriculum subjects' (Casey and O'Donovan, 2015, p.347-348; Tsangaridou, 2016). Helena, Zoe, Pavlos and many other teachers who completed the survey reported that generalist teachers tend to cancel PE lessons and they use this time for other subjects such as maths, Greek, or history. This indicates that there are some teachers who do not recognise the value of this subject and clearly 'do not love' (Pavlos) teaching it. Subsequently, this attitude has had a negative effect on students' viewpoints

regarding PE.

According to Griggs (2016) and Haydn-Davies (2008) there is evidence that trainee primary school teachers often do not teach PE lessons during their initial training phase. The school-based experiences of primary school teachers have been found to be 'at best adequate, and at worst non-existent' (Griggs, 2016, p.552). This may be reflective of a low value placed on PE in these schools.

There was also evidence that teacher and CPD provider participants are working hard to try and change this negative belief and improve the status of PE in the position it deserves (Jess, McEvilly and Carse, 2016; Tsangaridou, 2016). Like other teachers during the focus group, one CPD provider mentioned the issue low status of PE not only in schools but in Cypriot society too. In particular, this specific CPD provider drew attention to the teachers who teach PE, and the requirement for "loving" PE in order to teach it successfully. Similar to concerns raised in England (Harris, Cale and Musson, 2012), the participants in this study linked the low status of the PE subject to teachers' tendency to have negative attitudes towards PE. One of the aims of PE-CPD is to alter this attitude through effective learning activities and supportive guidance which can be meaningful to teachers.

These research participants' statements regarding teachers' negative attitudes towards PE, and the lack of confidence about teaching PE in Cypriot primary schools, echoed Hargreaves and Fullan's (2012) views on professional capital, which can give teachers the power to perform like professionals. Hargreaves and Fullan (2012, p.5) argued that 'people can only teach like pros when they want and know how to do so.' Equally, Nolan and Molla's (2017) views on teachers'

confidence and professional learning clearly bring to the fore steps that are important to take in order to change these negative beliefs about PE among Cypriot teachers, and society in general. Again, teachers are at the centre of this situation. As Nolan and Molla (2017) illustrated through their study, 'professional learning, teacher professionalism, and teacher confidence are interconnected' (p.12).

The teacher participants in this study go further, by suggesting a way that change can occur. As presented in section 4.2.1.3, evidence from the teachers' testimonies in this study gave prominence to an ideal assortment of CPD providers' personal characteristics and behaviours that can impact on teachers' frame of mind in a positive way.

5.2.2.3.   MoEC's deficiencies

It is also noteworthy that all fifteen case-study teachers were very passionate when they were expressing their views on why the "mechanism" is not working. The majority of their comments referred to the MoEC's deficiencies. As noted earlier, specific Cypriot contextual factors also make it difficult for teachers to voice their concerns in relevant settings. Hence, they consider this study and the interview sessions as their chance to clearly articulate their thoughts and feelings without fear. Additionally, responses in the survey confirmed this finding.

In the European context of education, teachers are considered to be 'the most important in-school factor affecting student outcomes,' and 'targeting them is likely to bring the biggest returns in terms of efficiency of education systems' (European Commission 2012, p.60). The European Commission has also formed Common European Principles for Teacher Competences and Qualifications, setting an example that member states can use as a stimulation for the planning and actions of

their national scheme for increasing teachers' competences which involves teachers' CPD (Biesta, 2015; Caena, 2014).

Hence, it is expected for member states to follow the European Union's guidelines and guarantee that their teachers are provided with high-quality opportunities for enriching their education, expertise and practices in order to meet the European Union's Strategic Objectives (Koutselini and Koumi, 2013). As pointed out by Caena (2014), different education systems run in 'different ways' (p.315). In the Cypriot educational context, although policy documents state the importance of PE and teachers' PE-CPD (MoEC 2013, 2014), there is little existing evidence about the most effective ways to design PE-CPD to meet teachers' complex learning needs. In the same vein, the data of this study from teachers' perspective, who are at the heart of this procedure, indicate that there is a prevalent lack of success of CPD, and particularly PE-CPD, to meet their learning needs.

This study's dataset is full of the rich, emotional, intense and passionate voices of these particular teachers, who are trying to highlight the key role of the Cypriot government, and specifically the MoEC, in this effort to enhance teachers' professional learning. In other words, they hold the MoEC and ministry officials responsible for this 'disheartening' (Anna) state of PE-CPD provision. The teacher participants had a lot to point out regarding which specific aspects of the MoEC's approach towards PE-CPD are problematic and hinder educational progress in general, and teachers' PE-CPD in particular.

For Andria this situation may be due to the MoEC's lack of expertise and awareness of how to support teachers through CPD processes. As with many 'top-down' educational reforms, there is a lack of understanding about how teachers – who are

required to implement the reforms – should be supported in their learning needs. This finding strongly gives weight to the belief that this study's teacher participant should be sufficiently supported (Karagiorgi, 2012), and treated not only as teachers but most significantly as learners and co-leaders (Armour et al., 2015), as well as the necessity for the collaboration of all educational authorities (the MoEC, the University of Cyprus, inspectors, CPD providers, officials) with teachers (Parker and Patton, 2017) for a more comprehensive approach towards teachers' CPD. Not surprisingly, the findings of this study related to what obstructs improvements in teachers' CPD echo similar findings from previous studies with similar educational contexts (Armour and Makopoulou, 2012; Makopoulou and Armour, 2011a, b). The constructivist learning theory highlights the active participation of teachers in learning activities, which is something that is clearly missing from the PE-CPD activities provided to this study's teachers by MoEC.

5.2.2.4.   Economic crisis
The economic crisis impacted strongly on Cyprus and other members of the European Union (Izsak, Markianidou, Lukach and Wastyn, 2013). The crisis impacted severely on the educational system, and thus the CPD provision of teachers. This, unavoidably, impacted not only on teachers' professional growth, but on their motivation for their jobs as well.

While teachers were expressing their thoughts about this unfortunate situation, it was obvious that they were feeling shocked, angry and confused. This is reflected in Mary's phrase very clearly; 'we've just crashed into a brick wall.' Moreover, evidence showed that according to teachers the MoEC bears a burden and a share of the responsibility. For Mary, Andria and Marios, if MoEC was managing its funds for the

educational system better, more innovative programmes would be in place now, and the structural settings would definitely be improved.

This finding shows the vital necessity for MoEC and CPD providers to be alongside teachers, walk with them and work with them through these circumstances of educational change and economic crisis. The emotional dimension should not be disregarded (Chen, 2016; Day, 2011) and, in the case of the Cypriot educational context, it is necessary for negative emotions to be reconfigured and turned to positivity and motivation for learning despite the difficulties (economic, political or contextual). This is driven by the understanding that all the emotions of teachers, either negative or positive, can influence teachers' behaviour (Crow, Day and Moller, 2016; Korthagen, 2017; Saunders, 2013; Sutton and Wheatley, 2003).

Evidence from this study showed that CPD providers held similar beliefs with the teacher participants. Additionally, it showed that there are many challenging issues to be addressed in terms of how to achieve teachers' emotional and professional stability, of who is responsible for this task, and how to develop those approaches which will lead to better days for the Cypriot educational system, and more specifically teachers' PE-CPD provision.

5.2.2.5. Delayed (r)evolution
The majority of the case study teachers shared the notion that PE-CPD cannot be effective when it provides teachers with 'out-of-date', 'sluggish' and stagnant activities. Both CPD providers and teachers acknowledged that the type of CPD that the MoEC provides is old-fashioned compared to other countries which try to improve their CPD provision with modern and innovative initiatives (Karagiorgi, 2012; Nicolaidou, Karagiorgi and Petridou, 2016; Tsangaridou, 2012, 2016). Interestingly,

these teachers' testimonies explain teachers' dissatisfaction with CPD provision. How can they be satisfied when they are provided with an 'old stock of PE-CPD activities?' (ST 013). In light of this, Day (1999) pointed out that

> Traditional concepts of and approaches to professional development are limiting in their ability to connect with individual and system needs because they are not based upon an understanding of the complexities of teachers' lives and conditions of work nor upon an understanding of how teachers learn and why they change (or do not change), and thus how schools also develop (204).

Teachers agreed that the state of PE-CPD provision is ineffective, problematic and out-dated, and suggested that what is missing is rebellion against this. Teachers need to react and with the help of CPD providers (see section 4.2.1) who care about the teaching profession bring revolution to the field. This is particularly interesting and surprising in view of the Cypriot context and the highly centralised educational system. Also, this finding strengthens the significance of close and strong connections and collaboration among teachers and CPD providers (Armour et al., 2015; Parker and Patton, 2017) with the aim of CPD upgrading, the improvement of teachers' teaching practice and, most importantly, the increase of students' learning outcomes.

In effect, the abovementioned concerns of these teachers are both valid and crucial. Teachers like Zoe, Tasos *et al*. are voicing out their frustrations at simply becoming passive receptacles or consumers of knowledge. By implication, this raises the question of how best to train (and retrain) teachers in order to achieve conceptual change. This will motivate teachers to consciously engage in the diversification of their teaching methods to meet student needs, as well as to acquire the necessary

knowledge and skills required in the application of these methods (May, 2007; Santangelo and Tomlinson, 2012).

5.3. A forward direction

Looking across the whole project and all the data collection phases, it was clear that teachers feel they want to move forward, in their learning, but everything related to educational reform and in particular teachers' CPD provision is stagnant. The prevalent attitude among teacher participants was that it is time to move forward; they are ready for a fresh new start. This study adopted the socio-cultural theoretical framework (Vygotsky, 1978), implying a need to give adequate attention not only to the contextual, political, and cultural settings, and the challenges of the Cypriot educational system and particularly PE-CPD provision, but also to the voices, ways of thinking and views of the teachers, who have a central role in the process of CPD provision.

This study offered teachers an opportune occasion to reflect on the PE-CPD that is provided by the MoEC, to document how they view it, and to make recommendations for upcoming CPD activities and events which will contribute to the improvement of teachers' CPD. Teachers seemed to appreciate this opportunity. They not only voiced concerns they also offered proposals for educational changes in general for the Cypriot educational system, and specifically for their professional learning. In order to respect the views of these teachers, and attempt to give voice to their frustrations, their suggestions for a new system are considered.

There were numerous common proposals made by teacher participants, but there were some proposals which differ based on teachers' career stage. This study's

particular findings demonstrate that teachers at different career stages have different needs, interests and expectations from CPD, and hence CPD provision and activities should be personally meaningful to the teachers involved in this process (Griffiths, Armour and Cushion, 2016). Furthermore, this study also suggested that both "new" and "old" teachers (Georgia) can profit from the same CPD activities, even though they gain different benefits based on their needs and varying levels of experience (Bayar, 2014).

Early-career teachers emphasized their need for more learning resources, subject knowledge and teaching material. This can be explained by their 'unbalanced personal and professional side of (becoming) a teacher' (Pillen, Beijaard and den Brok, 2013, p.240), and feelings of disorientation and lack of confidence. It can be argued that early-career teachers, despite being very passionate and enthusiastic, were unable to give specific proposals for achieving improved PE-CPD provision. This may be due to early-career teachers frequently not being able to comprehend the difference 'between what they desire and what is possible in reality' (Pillen, Beijaard and den Brok, 2013, p.240).

Conversely, most intermediate teachers had clear opinions on this topic. They indicated that they feel confident with their PE knowledge and experiences, but they need changes which will give them the chance to get involved in innovative and modern learning activities.

The experienced teachers, however reported a rather passive approach to professional learning. They added that expertise in PE-CPD provision design and implementation is vital, and the role that CPD providers play in the process of CPD provision should be emphasized. They suggested that an exploration of other

countries' approaches to PE-CPD provision is necessary in order to embrace their effective activities and remodel them in order to suit the Cypriot PE-CPD system's needs for development and more efficiency.

5.4. Chapter Summary

This chapter provided a discussion of the findings in the context of the existing literature. This chapter was divided into three sections: 'new understandings', 'same old blues' and 'a forward direction.' The first section emphasized teachers' perceptions of what helps and what hinders PE-CPD effectiveness. These teachers were very strong about the procedures that could help towards the improvement of PE-CPD provision. Certainly, teachers' perceptions seemed to link with Dewey's (1938) principle of the continuing of experience. In the second section, a discussion was provided regarding the findings of this study, which are similar to findings of previous studies concentrating on teachers' PE-CPD. Finally, the last section discussed the recommendations the teacher participants had for the MoEC and CPD providers. It is important to indicate that teachers' passion during the research procedures was noteworthy and played a key role in the interpretation of the findings.

Chapter 6: CONCLUSION

The concluding chapter of this thesis primarily aims to reflect on how this study has answered the research questions and to present the conclusions of this study as derived from the findings presented and deliberated in preceding chapters. The strengths and limitations of the research study are provided, together with the study's contribution to knowledge, and a consideration of how the findings of this study can inform and advise practice and future agendas. The chapter concludes with closing thoughts and some recommendations for the future.

6.1. Conclusions

As evidenced by the research findings, teachers are generally aware of what constitutes effective or ineffective CPD provision. Many of them, particularly early-career and intermediate teachers, also realize that their ongoing professional learning and growth is instrumental in broadening their knowledge base and 'provid[ing] them with new skills and professional understanding,' thus allowing them to reach higher student outcomes (OECD, 2005, p.122). This makes it extremely significant to understand what constitutes effective CPD, with CPD on PE being no exception (Cordingley, 2015; Unesco, 2014; Hargreaves and Fullan, 2012).

Unfortunately, however, teachers' PE-CPD provision is often inadequate or ineffective in cultivating professional growth and learning among teachers (Parker and Patton, 2017; Armour and Makopoulou, 2012; Parker, Patton, and Tannehill, 2012).

As the dominant discourse in education in Europe is lifelong learning, it was fundamental to ask whether the existing CPD system in Cyprus was well equipped to keep abreast of European developments. Thus the main research question which this study sought to answer was: Does PE-CPD meet the career-long learning needs of primary school teachers in Cyprus? In order to answer this particular question, an extensive literature review was conducted which focused on both the international CPD and PE-CPD literature, the existing CPD policies and educational structures within the Cypriot context, and contemporary learning theories in order to shed some light on the complex process of teachers' professional learning.

Chapter 2 presented the central conceptual ideas and relevant literature concerning the notion of teachers' CPD and PE-CPD. It delineated some of the challenges teachers face in their profession and raised fundamental issues about the lack of adequate PE facilities and in-service training. As argued in Chapter 2, the aim of committing myself to this research study was based on the concern and recognition that CPD provision cannot be effective if it does not move away from traditional forms (Armour, 2010; Armour and Yelling, 2004a, b; Braga, Jones, Bulger and Elliott, 2017; Patton and Parker, 2014) and if teachers' voices, needs and perspectives are excluded and not considered (Bayar, 2014; Gemeda, Fiorucci and Catarci, 2013;Samuel, 2014; Twinning, Raffaghelli, Albion and Knezek, 2013) in the processes of CPD design or decision-making.

The second section of Chapter 2 presented a description of the Cypriot educational system and contextual information relevant to CPD and PE-CPD provision, as well as making references to EU policy documents and the economic crisis as a backdrop to the study. What this section highlights, above all, is that even though a

strong policy framework is in place to ensure adequate CPD provision in general, there are glaring gaps between theory and practice. Furthermore, particular emphasis was placed on situated and social constructivist approaches to learning, as many researchers claim that they provide a powerful framework for exploring and understanding teacher learning (Ertmer and Newby, 2013).

The six research questions (*see* section 1.5) were formed in order to explore and understand if the PE-CPD provided by the MoEC meets the learning needs of primary school teachers, if it has the ability to offer meaningful and relevant leaning experiences and, therefore, be effective in teachers' professional growth. The findings of this study powerfully extend the discussions made by Armour et al. (2015) on the argument for 'a step back' and a consideration of 'whether we are approaching questions about teachers' CPD from the most appropriate starting point' (p.10).

Indeed, the significance of this study is that it has explored PE-CPD in Cyprus from the perspective of the teachers and their experiences, giving them the opportunity to be heard. Significantly, it has achieved to respond to the argument made by many academics (e.g. Armour et al., 2015; Attard, 2017; Peercy and Troyan, 2017) for the necessity of 'unpacking the complexities' (Vanassche and Kelchtermans, 2015, p.509) of teachers' learning and teaching in PE.

As for Chapter 4, the research findings uncovered six of the most frequently mentioned problematic aspects of PE-CPD provision: *a) the inadequate initial education and training of teachers; b) the weak status of PE overall; c) the deficiencies within the MoEC as an organisation and in regards to its prescribed educational system; d) the general defects of PE-CPD provision; e) the negative*

impact of the economic crisis; and finally, f) the lagging progress in relation to other countries and EU-member states.

In effect, the majority of the research participants voiced their concerns about the limited and often inadequate PE-CPD provision on offer, which subsequently failed to engage teachers in sustained and meaningful learning. There was widespread and almost unanimous consensus that the "mechanism" was not working, there were deficiencies within the MOEC's highly centralized system, inadequate initial PE training and further PE-CPD provision, as well as a glaringly absent system of evaluation and 'no agreed standards for professional development training programmes' (Koutselini and Koumi, 2013). In addition to this, there was widespread agreement that one-shot, top-down and traditional PE-CPD courses were ineffective and failed to meet teachers' needs and to engage them in sustained and ongoing professional learning.

Interestingly enough, teachers reported that CPD courses and activities were most effective when CPD providers showed certain personal characteristics such as being 'humane,' 'caring,' 'friendly,' 'a team player,' 'passionate,' 'rebellious,' and 'funny.' Such qualities allowed the teachers to feel more at ease and to engage more fully in the CPD activities. This study identifies how the CPD providers' personal characteristics impact on teachers' keenness to learn.

Additionally, it is highlighted that an adequate connection between teachers and CPD providers can be a strong facilitation in the PE-CPD effectiveness of Cypriot primary school teachers. In the same vein, it is reasonable to conclude that since these teachers' needs are not fully acknowledged by the MoEC, and that the CPD activities provided are often meaningless, the lack of connection between teachers

and CPD providers can be a possible cause for the stagnant, slow and challenging status of the PE-CPD provided to Cypriot primary school teachers. Likewise, for these teachers a solid connection with CPD providers seems to mean a form of learning that involves understanding, motivation, support and encouragement to overcome the obstacles to their effectiveness not only as teachers, but as learners too.

Teacher participants had very strong ideas of what can help them to enhance their learning and teaching. It could be argued that teachers are engaged within and with the complex and disorganized PE-CPD provision on offer, and this enables them to clearly identify what kind of activities hinder their learning and what activities can have a positive impact on their CPD and improvement as teachers and learners. Through their experiences and participation in CPD events which did not influence teachers' teaching practice and willingness to learn more, they were able to define 'good'/effective or 'bad'/ineffective PE-CPD. Finally, it can be concluded that PE-CPD improvement is possible for Cypriot primary school teachers, but this is affected by the context and the structural settings of the learning environment.

6.2   How the research questions have been addressed in the study

The main research question that this study set out to answer was: *Does PE-CPD meet the career-long learning needs of primary school teachers in Cyprus?* From the findings, it was concluded that only one out of the fifteen teachers showed partial satisfaction with MoEC's PE-CPD provision. Thus, it was deemed that PE-CPD provision was inadequate. Teachers' responses also verified that initial education in PE was inadequate. A major cause of this was the low value accorded to PE by

government officials, teachers, head teachers, parents and, more generally, society and the state.

Concomitant with the main research question addressed above, the study also aimed to address the following research sub-questions in particular: i. *What can be learnt from the research literature about 'effective' and 'ineffective' models of CPD for professionals, teachers and PE teachers?* ii. *What learning theories underpin different models of CPD?*, and iii. *What is the nature of CPD opportunities offered to PE teachers in Cyprus throughout their careers?* The first two questions were addressed both in the literature review and the findings. As has been demonstrated, effective CPD involves trying to bridge the theory/praxis divide and to trigger intrinsic and extrinsic motivation in teachers, with a major contributing factor to facilitate effective PE-CPD provision being the CPD provider's personal approaches and 'characteristics'. At the same time, decentralizing the educational system and providing more sustained and practical PE-CPD activities rather than short one-off sessions was deemed as being a more effective method to provide better CPD provision and enhance teachers' learning.

The second question was addressed by examining constructivist learning theory, which has had wide-ranging impact on learning theories and teaching methods in education (Koutselini, 2009), and sociocultural and situated theoretical approaches which locate learning in context and in social practice;i.e. 'learning as participation' in a social world. Communities of Practice were also explored in order to show how collaboration with more experienced colleagues can enhance the knowledge and teaching practices of early career teachers and foster learning in a warm and friendly environment. As for the third question, it was answered in the survey (*see* appendix

E), where teachers were asked to recall the PE-CPD activities they had attended in the last five years. Through interview sessions the teachers also had the chance to reveal the nature (form, duration, location) of these PE-CPD activities. They also expressed whether they had been effective or not, if they had had an impact on their learning and teaching, how they had experienced them and how they felt about them. The survey data clearly illustrated that teachers were unhappy with the existing PE-CPD provision and the types of PE-CPD activities they had participated in (*see* figure 7 in the Findings chapter).

Both teachers and CPD providers expressed that: a) a suitable learning environment is not created during PE-CPD activities - the place where PE-CPD activities are delivered does not usually help teachers to learn, since they have to travel a long distance during school hours to gather at a school, b) often PowerPoint presentation slides are the main approach to learning because PE-CPD activities take the form of a lecture where the lecturer speaks, and the audience just sits and listens with no interaction, c) there is the lack of a practical dimension; there is no practical application of the theories, d) the time that is dedicated to PE-CPD is inadequate (*see* 4.1.3), e) it feels like mass production PE-CPD (sometimes approximately 350 teachers who teach PE gather together to attend a PE-CPD activity) and there is the lack of more personal contact and a warm learning environment. All of these factors prevent teachers from cooperating with others. As a result – and perhaps unsurprisingly – teachers tend to want to attend, get the attendance certificate and leave.

In effect, teachers considered the nature of CPD opportunities problematic regarding the type of CPD activities on offer, their duration, as well as their location. They

considered this ineffective nature of CPD opportunities as a barrier to teachers' effective learning and progress (*see* 4.2.2.3). It was interesting that teachers were able to clearly identify what should be done in order to create more effective CPD opportunities (*see* 4.2.2.3 - odyssey of learning). In short, they emphasized the importance of practical PE-CPD activities, small-scale PE-CPD rather than *en masse* provision, and collaboration with colleagues. They also identified barriers to PE learning, such as the lack of an evaluation system and the lack of motives for learning within PE-CPD activities.

The fourth research question which this study sought to answer was: *What evidence is there to suggest that the current model of CPD offered to PE teachers in Cyprus is either 'effective' or 'ineffective,' and why?* The overall picture from the findings show that both teachers and CPD providers are unsatisfied with the existing model of PE-CPD provision. In this study, the approach that was followed was based on the perception that teachers' voices should be heard. During the data collection teachers appeared to feel comfortable about expressing strong views about their PE-CPD experiences, thoughts and concerns. The majority of the teachers seemed keen to report their views and experiences of PE-CPD's ineffectiveness. From a researcher's perspective, it was interesting to observe the passion with which they expressed their views.

From the survey data it was clearly illustrated that teachers were unhappy with the existing PE-CPD provision and believed that PE-CPD activities fail to have a positive impact on their motivation for learning and their teaching practice (*see* Figure 7 in the Findings chapter).

The most frequently expressed concerns were:

i. the ministry does not do enough to change the disappointing nature of PE-CPD

ii. the frame of mind of Cypriots does not help progress in the area of PE-CPD

iii. problematic PE-CPD structures

iv. there is no follow-up – the PE-CPD activity is delivered to the teachers but there is no assessment regarding whether the teachers used it in their teaching practice, whether it was effective or not, if it had a positive impact on their teaching and, subsequently, on students' learning. CPD providers do not follow up teachers after CPD activities to see if they have assimilated the new knowledge or if they knew how to apply the new ideas to their teaching practice

v. the economic crisis and therefore cuts have a strong negative impact on teachers' CPD

vi. an out-of-date approach to PE-CPD provision

vii. teachers do not have motives for further learning

viii. the highly centralised system does not allow for innovative schemes to actually work.

Teachers' statements and perceptions reinforced the argument for a fresh start regarding the design, planning and delivery of PE-CPD (Armour et al. 2015).

The fifth research question that was addressed was: *What would an 'effective' model of CPD look like for PE teachers in Cyprus and how could it be implemented?* Taken together, data from all the data collection phases and from both CPD providers' and teachers' responses provide an answer to this question. This was explicated further in the focus group and the debate between the two groups of

participants (teachers vs. CPD providers). Currently, the majority of PE-CPD activities include only theory. Most teachers agreed that if PE-CPD activities combined both theory and practice, then the result would be more positive and promising for overall progress in PE learning and teaching.

The teachers' suggestions for an effective PE-CPD model according to their career stage included: a) stronger and richer material for PE and more resources for learning (early career teachers), b) the avoidance of repetitive activities in PE-CPD, c) provision of a stronger platform where teachers can be heard and d) having CPD providers with a strong educational background, who are experienced in CPD provision and have the appropriate personal characteristics and attitude toward teachers and teachers' PE-CPD.

The final research question which was answered was: *What are the implications of this research for PE teachers in Cyprus and in other comparable international contexts? How can this research inform CPD policy?* To answer this question, it is important to remember that in giving teachers a platform to voice their opinions about PE-CPD, teachers were also able to offer comments more broadly about their views on and experiences of the education system. Teachers' voices can be a good starting point for policymakers, the ministry and CPD providers when planning or designing PE-CPD programmes, activities, events and projects that purport to be for teachers. Although educational reforms are already under way in Cyprus, many of them are not seen as being very effective, since there are perceptions of a wide gap between theory, policy and practice. It is thus important to identify what policies have been the most effective, and to explore how other reforms which affect the relevant parties and stakeholders could be implemented more effectively. Indeed,

acknowledging what major issues have hindered the success of the reform process gives all the stakeholders the opportunity to take adequate measures and to develop more effective action plans to make sure that praxis and theory are better aligned.

Additionally, countries with similar backgrounds and settings could use the findings from this study as a reference point for analysing their PE-CPD policies and provision. Not only does this study fill in gaps with respect to teachers' perceptions of CPD providers and what constitutes effective CPD provision at a time of educational reform in Cyprus, it also enriches the international literature by illustrating the ways in which specific characteristics of CPD providers are an important factor in enhancing teachers' motivation for and engagement with CPD.

6.2. Strengths and Limitations of the Study

From the outset, it has been noted that the findings were led by specific research questions and generated from a deliberately selected pool of participants. While this study was primarily conducted to analyze the views of Cypriot primary school teachers on PE-CPD provision, it should be noted that the sample of teacher case studies chosen was very small, and thus it could be argued that making overgeneralizations may lead to errors in deductive reasoning. On the other hand, however, the fact that the researcher used case studies as a qualitative research tool allowed for such generalizations, since the strength of case studies 'lies in their attention to the subtlety and complexity of the case in its own right' (Cohen, Manion and Morrison, 2011, p.292). Additionally, case studies are strong on reality, immediately intelligible, and capture unique features that may otherwise be lost when

using larger scale data such as surveys (e.g. Nisbet and Watt, 1984; Cohen, Manion and Morrison, 2011).

Although the overall findings appear to apply only to the research participants, it could be argued that the deliberate choice of teachers from different career stages and different areas allows the findings to be generalized, and that the findings themselves may be used to partially explain – or at the very least compare – the notions and perspectives of a wider group of PE practitioners. This is also corroborated by other findings echoed in a wider range of literature. Moreover, the sample for the survey phase focused on one teacher per school who has the general responsibility of PE in his/her school (340 PE specialists). Therefore, the answers of the teachers in the survey can be claimed to offer a representative idea of all the teachers who teach PE in Cypriot primary schools.

One of the strengths of the study is that the research design, which involved various methods used for data collection, enabled an in-depth understanding of the research participants' perspectives and experiences about existing PE-CPD provision. In addition, although this study strictly adhered to the analytic procedures of a constructivist approach to grounded theory, it is acknowledged that the research was influenced by the researcher's own experiences and perspectives, and that even had it been desirable, the researcher's bias is a variable that cannot be done away with entirely.

The findings themselves are the result of a construction which is based on the interaction between the researcher, the research questions, the data and, most importantly, the participants (Charmaz, 2014). During the conduct of fieldwork, the data analysis, and translations from Greek into English, the quality of the research

findings is subject to various limitations. It was up to me as a researcher to select and interpret the data as I saw fit, and to deal with various problems along the way, both before, during, and after the data collection.

6.3. Contribution to knowledge

This research project contributes further to the theory base in the educational policy field regarding the ways in which teachers in a highly centralised system such as the one in Cyprus experience and respond to CPD provision. It also sheds further light on what teachers feel constitutes effective CPD, and what enhances and undermines their professional development. The outcomes of this research study not only add to the international literature on CPD but they also fill important gaps in our understanding of teachers' professional identity at a time of system-wide change at a national level in Cyprus. This research adds to the debates surrounding the effectiveness of educational reforms in Cyprus by investigating the ways in which teachers' professional identity is developed, and how it is affected by the role and personal characteristics of the CPD provider, classroom experiences, collegial relationships, external reforms and organisational structures. These are complex questions which appear to have been overlooked in the national education reform policies in Cyprus.

Another contribution of this study relates to the time during which this research was conducted. Specifically, the researcher examined teachers' practices and their perceptions of CPD provision only a few years after the introduction of a major curriculum reform in Cyprus. Arguably, after a reform agenda has been forwarded in schools and put into place for some time, it is important to examine how it has affected the relevant parties and stakeholders, and to identify what policies have

been the most effective. Acknowledging what major issues have hindered the success of the reform process gives all the stakeholders the opportunity to take adequate measures and to develop more effective action plans to make sure that praxis and theory overlap.

Additionally, the research itself also contributes to our understanding of methodologies in research on teachers' views about and experiences of CPD. This study linked the in-depth data on the experiences of fifteen teachers and three CPD providers to that collected from a wider population of teachers,a wider population, allowing inferences to be made in relation to teachers' practices, professional identity and development. To begin with, the survey was delivered to the whole population of teachers who teach PE in Cyprus. The response rate was high, resulting in a robust data set on PE and PE-CPD provision. Teachers in the survey expressed what is working and what is not for them and, in addition, the focus group added particularly important insights given the intense debate that took place between teachers and CPD providers. Many concerns about PE-CPD were expressed and these not only reinforced the findings of the survey, they also clarified the issues at a deeper level. Combining the datasets in this way and ensuring each data collection phase was aligned enabled the researcher to gain a comprehensive understanding of the state and status of PE and PE-CPD in Cyprus.

Given the multi-layered and robust dataset. This research can inform the actions of policy developers in Cyprus. Furthermore, the depth and complexity of investigating CPD provision and teachers' professional development while major educational policy reforms are still in effect depicts the ways in which interrelated elements can

impact upon each other to influence both teaching and learning outcomes. Such elements relate to teachers' and CPD providers' educational backgrounds, their own perceptions about what constitutes effective teaching, environmental factors and time constraints, the adequacy of PE equipment and facilities, the adequacy of in-service training, teachers' own intrinsic and extrinsic motivation, as well as their willingness to take risks, reflect more deeply about their teaching practices, and challenge the status quo.

6.4. Future Recommendations

As with many other research findings in different national contexts, the findings of this study show that there is a gap between theory and practice, between policy makers and practitioners. The gaps found between PE teachers' expectations of effective CPD courses and the official in-service training courses, and between the changes proposed by the educational reforms, the curriculum guidelines and teachers' teaching practices, clearly pointed out that the MoEC, which is a highly centralized system, has failed to consider PE teachers' perspectives.

In particular, the features and ideas that most of the teachers identified repeatedly were: "decentralization", "the empowerment of school units", "the presence of a CPD national policy", "raising teachers' status", "a bottom up approach", "peer support", "stronger promotion prospects", "teacher unions having more power", "better management of funds", "teachers having an active role in the process of CPD", "more use of research evidence", "university strong contribution to PE-CPD", and a "high quality system of recruiting". Additionally, teachers identified commitment to the improvement and effectiveness of PE-CPD as the first priority.

In short, the outcomes of this research suggest that it would be helpful if any future recommendations for the improvement and adequate provision of PE-CPD took into consideration teachers' opinions and perspectives. It can also be argued that even though teachers should probably have greater agency and assist in interpreting curriculum guidelines, as well as designing and implementing teaching programmes, it is also important to note that teachers "cannot be left on their own to develop good programs" (Wirszyla, 2002, p.16). In order to facilitate curriculum innovation, teachers' professional development opportunities, as well as the quality of relevant training courses, are vital (Bechtel and O'Sullivan, 2007; Wirszyla, 2002). In addition to this, the content, structure, and the way in which the official CPD courses are organized require fundamental change (Armour and Yelling, 2004b). To maximize teachers' learning during or after participation in CPD or in-service training courses, this research study suggests that both PE teachers and CPD providers need to reflect on their practice, on what constitutes a practical or effective course, and the processes of teaching, learning and applying knowledge.

The findings also suggest that the focus of MoEC has been on short term solutions to meeting PE-CPD need rather than the development and establishment of an effective and valid evaluation system to capture the reality of PE-CPD provision, and particularly the effect of PE-CPD activities. As teachers mentioned, giving a feedback sheet to teachers is inadequate and there is little evidence that these have improved PE-CPD provision. In short; the existing evaluation system is deficient (Karagiorgi and Symeou, 2006a; Kyriakides, Demetriou and Charalambous, 2006). MoEC could usefully work more closely with teachers to better understand how they

experience their practice and whether they make use of any of the material delivered in PE-CPD to improve their practice.

It is also clear that in order to set new CPD settings and programmes that act in response to the learning needs of the teachers, a bold cultural shift is required, with the MoEC refocusing its attention on teachers' CPD issues in a way such that teachers are viewed as professionals or experts in their field, as co-leaders, and as 'agents of change' (Priestley, Biesta and Robinson, 2015; Simmons and MacLean, 2016).

Based on the limited time concentrated on teachers' initial training (Griggs,2017; Griggs and Ward, 2013), the low status of PE as a subject (Casey and O'Donovan, 2015), the reluctance of many teachers to teach PE in primary schools and the absence of substantial PE-CPD provision (Tangaridou, 2016), teachers' identities as teachers of PE is influenced and not in a positive manner (Griggs and Petrie, 2016). Nevertheless, 'a renewed investment in continuing professional learning opportunities and supporting resources is a welcome shift' (Griggs, 2016).

Based on the findings of this study, it is proposed that before applying CPD activities or structures, a thorough, systematic investigation that unravels and interprets the 'truth' of the Cypriot context is required. This is also linked to the suggestion of designing PE-CPD opportunities that are in line with teachers' needs. A particularly important concern that teachers stated was the absence of an evaluation system that can indicate if the provided PE-CPD activity is effective or ineffective towards teachers' learning or teaching. It could be argued that by evaluating the PE-CPD

activities in a rigorous manner, future CPD schemes could avoid including practices that evidently are proven to be ineffective. In reality, however, if the status quo does not change this is not an achievable objective.

This study provided significant and rare insights into the complexities of PE-CPD provision and the perceptions and experiences for Cypriot primary school teachers that have been overlooked in previous studies. However, this study could be extended for a longer period, including more methods for data collection. For instance, observations of the case study teachers' lessons could provide more explicit details about their knowledge, approaches, teaching practice and effectiveness and their workplace environment (e.g. interaction with peers). Another consideration for further study is to explore more comprehensively the impact of CPD providers on teachers' learning and teaching. This could be done via comparison, that is, by having two groups of teachers, with one group having a CPD provider that has the personal characteristics that the teachers of this study identified, and the other having a CPD provider without these characteristics.

6.5. Closing thoughts

Looking back over this PhD 'rollercoaster,' with its emotional ups and downs, I can see a positive difference in me as a researcher, as a teacher and as a learner. I am grateful for all the knowledge, abilities, experiences and feelings this ride gave me.

Governments, researchers and teachers have the responsibility to give all the essentials to children in order to enable them, through PE and other subjects, to have a holistic development as learners and individuals. Most significantly, through providing adequate and effective education, students can be encouraged to become engaged with ongoing development and learning in any field and aspect of life.

However, a prerequisite for this is to provide ongoing CPD development to teachers, who are at the crux of these efforts.

Despite the difficulties and challenges that our world is facing, there are means to help us keep going and trying. Likewise, there are ways to help teachers to become more effective and to constantly learn and educate themselves. At the very least, a willingness to try to change and improve is the first step towards change. And, as the inspirational leader Nelson Mandela once said, "Education is the most powerful weapon which you can use to change the world."

Appendices

Appendix A: Participant Information Sheet

Participant Information Sheet

Anastasia Hadjimatheou

Professor Kathleen Armour
Head of School of Sport and Exercise Sciences
University of Birmingham

What is the purpose of the study?

A small research project is commenced based at the University of Birmingham. The study is seeking to explore how existing Continuing Professional Development (CPD) structures in Cyprus support primary teachers to learn about PE during their careers (PE-CPD).

Why am I being asked to participate?

Research suggests that in order to improve future CPD provision, we must locate teachers centre-stage in the research process. Therefore, you are being asked to participate in order to share your views and experiences about existing forms of PE-CPD provision.

What will I be asked to do?

You will be asked to take part in an individual interview (approximate duration: 30-40 minutes), in order to explore the issues above. Interviews will take place at a location and at a time convenient to you. Interviews will be recorded using a digital voice recorder.

Who is doing the research and why?

The research is being conducted by Anastasia Hadjimatheou, a doctoral candidate studying at the University of Birmingham.

Once I take part, can I change my mind?

Yes. After you have read this information and asked any questions you may have we will ask you to complete an Informed Consent Form. However, if at any time, before, during or after the interview you wish to withdraw from the study please just contact the researcher. You can withdraw at any time, for any reason and you will not be asked to explain your reasons for withdrawing. All data will be destroyed at this point.

Will my taking part in this study be kept confidential?

Yes. All procedures have been approved by the University of Birmingham Ethical Review Committee. All information provided will be treated in strict confidence and will be kept completely anonymous. Following the completion of the research, the recordings and the transcripts will be kept on password-protected computer and any hard copies will be kept securely in a locked place. According to university regulations, all data will be preserved and accessible for ten years. All identifying information will be changed so that any records kept will be anonymous (complying with the University's Data Protection Policy and the University's Records Management Policy). In relation to this, you will be asked to complete an Informed Consent Form and to provide details and this is for the purpose of contacting individuals to ask if they wish to engage in follow up focus groups.

What will happen to the results of the study?

The results of the study will be presented at research papers.

What do I get for participating?

A summary report of the findings of the project will be provided.

I have some more questions who should I contact?

You are free to contact me by email (AXH847@bham.ac.uk) or phone (0035799975969/00447864126490).

Appendix B: Consent Form

Consent Form

- The purpose and details of this study have been explained to me. I understand that this study is designed to further scientific knowledge and that all procedures have been approved by the University of Birmingham Ethical Review Committee.

- I have read and understood the information letter and this Informed Consent Form.

- I have had an opportunity to ask questions about my participation in the study.

- I understand that I am under no obligation to participate in the study.

- I understand that I have the right to withdraw from this study at any stage for any reason and that we will not be required to explain the reasons for withdrawing.

- I understand that all the information I provide will be treated in strict confidence and will be completely anonymised in reporting the findings.

- I understand that the personal details that I am providing are requested from the investigator for later contact.

I agree to take part in this study.

Your name: _____

Your signature: _____

Your email: _____

Date: _____

Appendix C: Interview Schedule

Interview Schedule

CASE STUDIES

TEACHERS:

- **1st interview session**

10/09/2012 – 15/09/2012 first interview with the 5 'new teachers'

16/09/2012 – 20/09/2012 first interview with the 5 'intermediate teachers'

21/09/2012 – 25/09/2012 first interview with the 5 'experienced teachers'

- **2nd interview session**

10/11/2012–15/11/2012 second interview with the 5 'new teachers'

16/11/2012–20/11/2012 second interview with the 5 'intermediate teachers'

21/11/2012–25/11/2012 second interview with the 5 'experienced teachers'

- **3rd interview session**

10/01/2013 – 15/01/2013 third interview with the 5 'new teachers'

16/01/2013 – 20/01/2013 third interview with the 5 'intermediate teachers'

21/01/2013 – 25/01/2013 third interview with the 5 'experienced teachers'

CPD PROVIDERS

- **1st interview session**

1st-10th of September 2012- interview with the 3 CPD providers.

Appendix D: Interview Questions for Case Studies Phase

INTERVIEW QUESTIONS

CASE STUDIES

(TEACHERS)

- **Personal Information**

-How many years of teaching experience do you have?

-How many years do you teach in this school?

-What is your role in this school?

-What is the most challenging aspect of your job?

- **Teaching Physical Education**

-Can you please describe the PE curriculum in your school? (e.g., activities they teach, structure of the year)

-What are you trying to achieve in and through PE in your school?

-Can you please describe a typical PE lesson?

Prompts:
- o Learning objectives
- o Structures of the lesson
- o How pupil learning is supported
- o Tasks

-What are your strengths when teaching PE?

-Is there anything you would like to change or improve in the way you teach PE and why?

-What is the most important purpose of PE in your view?

-How are you trying to achieve this purpose?

-Any other important purposes?

-How would you describe high quality teaching PE?

-What are the features of an effective PE teacher?

-In what ways is PE similar and different to other subjects?

-Can you please briefly describe the training you received in ITT in relation to PE? (e.g., structure, duration, activities)

-In your view, was this training sufficient and effective? Did you feel well prepared to teach PE or not and why?

- **The notion of PE CPD**

-Could you define the notion of CPD? / What is your understanding of the notion CPD?

Prompts:
- o What activities do you consider as CPD?
- o What does the notion of CPD entail for you and why?

-In your view, when is a CPD activity effective and why?

-Can you please describe a very effective CPD (within or beyond the boundaries of PE)?

-I recognise that you have attended many or a few or very few PE CPD activities. Would you be able to explain to me why this is the case? (Revisit survey)

-You identified this activity to be particularly effective. Can you give me more details please? (Revisit survey)

Prompts:
- o Why did you attend it? What did you want to get out of it?
- o How was the PE CPE activity structured?
- o Can you make a list with the things you believed you learned by attending this activity?
- o Have you incorporated anything from the activity into your practice? Can you say what in particular? How did you incorporate it?

-What is the most effective way to learn in PE CPD?

- **The nature of ('formal') CPD and PE-CPD provision**

-Why do you normally pursue formal PE CPD opportunities?

-What types of CPD opportunities are mostly made available to you?

-Would you like something different, what and why?

-Who decides what CPD is available to whom?

-How do you find out about CPD courses?

-What type of activities does your school encourage you to pursue as CPD?

-What is the nature of PE CPD provision provided by the Ministry?

    -Could you describe the availability of PE CPD opportunities provided from the Ministry of Education or your school?

-How are your PE CPD goals determined? Who determines these?

- **Experiences from PE CPD ('formal' PE CPD)**

Primary teachers will firstly complete the survey and the interview discussion will revolve around their responses (revisit survey).

-Have you been on any courses of PE CPD?

-If yes, can you identify the PE CPD activities you have attended?

-What do you feel you learned from these activities?

-Have you been able to put your PE CPD into practice?

    -Can you identify any professional development activities that have helped you to teach PE more effectively?

-Can you identify any PE CPD activities that were ineffective? What and why?

-What are your criticisms of the PE CPD you have received?

- **Formal PE CPD impact on teachers' practices and their pupils' learning**

    -Do you think that the experiences you had from PE CPD activities had an impact on your teaching practice?

-If yes, which activities and how? (Examples)

-As a result of the learning from these activities, what have you done differently?

    -Do you think that the experiences you had from PE CPD activities had an impact on your pupils' learning?

-If yes, which activities and how? (Examples)

-How can you tell that? What evidence verifies this?

- **'Informal' PE CPD**

-What is the most important source of professional learning and why?

-Can you identify other sources of learning for you?

-From where do you get ideas for PE lessons? Can you describe the procedure?

   -Do you do any other learning activities except the activities offered from ministry for updating your knowledge about PE teaching?

Prompts:
   o If yes, what kind of activities and how often?
   o How these forms of learning have impacted your teaching practice or your work generally?

   -Please outline three powerful sources of professional learning and rank them putting first the most important. Explain your selection and ranking? (revisit survey).

   -Can you think of other kinds of activities that you would like to do for learning but does not happen at present? Why? What do you hope to obtain from them?

- **Future PE CPD provision**

-If you had the power to organize PE CPD, based on your needs, requests, aims and expectations, what would be its specific content? What would you like to learn?

-Based on your experience, do you notice any gaps to PE CPD provision for teachers offered from the Ministry? If yes, what kind?

-What the Ministry of Education and Culture and CPD contributors could do differently to improve the PE CPD system and provision? What advice would you give to them?

INTERVIEW QUESTIONS
CASE STUDIES
(CPD PROVIDERS)

- **<u>Roles and responsibilities</u>**

-What are your roles and responsibilities?

-How do you encourage the primary teachers to develop?

   -How do you decide who to participate in PE CPD activities, the type of the program, the content of programs and the scheduling of the programs? (this question refers only to one from the three CPD contributors)

   -Do you have some primary teachers who do not join in the PE CPD activities? How do you increase their interest?

- **<u>Teaching Physical Education</u>**

   -Can you please describe the PE curriculum for primary schools? (e.g., activities they teach, structure of the year)

-What are you trying to achieve in and through PE in primary schools?

-Can you please describe a typical PE lesson?

<u>Prompts:</u>
   o Learning objectives
   o Structures of the lesson
   o How pupil learning is supported
   o Tasks

-What is the most important purpose of PE in your view?

-How are you trying to achieve this purpose as a CPD contributor?

-Any other important purposes?

-How would you describe high quality teaching PE?

-What are the features of an effective PE teacher in your view?

-In what ways is PE similar and different to other subjects?

   -Can you please briefly describe the training primary teachers receive in ITT in relation to PE? (e.g., structure, duration, activities)

-In your view, is this training sufficient and effective? Do you feel that teachers are well prepared to teach PE once they will be qualified or not and why?

- **Notion of CPD and especially PE CPD**

-Could you define the notion of CPD? / What is your understanding of the notion CPD?

<u>Prompts:</u>
   o What activities do you consider as CPD?
   o What does the notion of CPD entail for you and why?

-In your view, when is a CPD activity effective and why?
   -Can you please describe a very effective CPD (within or beyond the boundaries of PE)?
-What do you aim for teachers to get out of PE CPD and why?
-What is the most effective way to learn in PE CPD?

- **Nature, focus and quality of CPD and especially PE CPD provision**

-Who decides what CPD is available to whom?
-How are the PE CPD goals for teachers determined? Who determines these?
   -What is the focus of PE CPD provision? Is it on training for specific skills (kinetics) or on a broader concept of development (values, self confidence etc)?
-What types of PE CPD activities have been offered to primary teachers?
- What areas of PE lesson cover the PE CPD activities?
-How frequent are the PE CPD activities provided by the Ministry?
-In what PE CPD activities are primary teachers mostly interested?
   -How do you evaluate the PE CPD provision, which is offered to primary teachers? What ways do you use to evaluate PE CPD activities? (research/questionnaires/interviews/observations)
   -Which activities do you find them to be effective and which ones to be ineffective for primary teachers learning?
   -Do you feel that the existing PE CPD provision helps primary teachers to provide PE higher quality levels?

- **Formal PE CPD impact on teachers' practices and their pupils' learning**

-Do you think that the experiences primary teachers have from PE CPD activities have an impact on their teaching practice?

-If yes, which activities and how? (Examples)

-Do you think that the experiences primary teachers have from PE CPD activities have an impact on their pupils' learning?

-If yes, which activities and how? (Examples)

-How can you tell that? What evidence verifies this?

- **<u>Future PE CPD provision</u>**

-Based on your experience, do you notice any gaps/lacks to the PE CPD provision to teachers? If yes, what kind?

-Do you have any recommendations for the improvement of the PE CPD provision that is offered to primary teachers?

Appendix E: Survey

PE-CPD SURVEY

Dear Teacher,

I am conducting research on the ***Physical Education Continuing Professional Development of primary school teachers in Cyprus*** as part of my PhD degree. I appreciate your participation, time and effort in answering this questionnaire. It should take around 20 minutes to complete.

Before answering the questionnaire, I would like you to consider the following:

- This questionnaire is divided into three sections
- Names are not required
- All data obtained from the specific questionnaire will be treated with respect and strict confidentiality and not for any other purposes except the research purpose.
- Your notions and experiences are very important and your participation is crucial to this study. However, you have the right if you do not wish to participate, not to answer the questionnaire.

Thank you for your assistance,
Anastasia Hadjimatheou
PhD Student
School of Sport and Exercise Sciences
University of Birmingham
UK

PART ONE: PERSONAL DETAILS

Please tick (√) and answer where is necessary:

Gender: Male   Female

Years of teaching experience:

0-5 years   6-10 years   11-15 years   16-20 years   21 & above

Name of School and district:

Why did you choose to be a teacher?

PART TWO: PROFESSIONAL DEVELOPMENT ACTIVITIES

2a) Thinking back over the last five years, please list as many PE CPD activities you have attended as you can.

Topic	Type/Form (e.g. conference, workshop, study group)	Date attended and Provider	Duration and Span (e.g. 60 hours over 3 months)	Location (e.g. school-based)	Self-funded/ State-funded	Was it effective or ineffective and why (in one-two words)

2b) Please identify one PE CPD activity that you would describe as effective. In the boxes below please explain why this activity was effective and describe the ways in which you changed your practices as a result.

Topic	
Type/Form	
Provider	
It was effective because	• .... • .... • ....
What have you learnt and how did you change your practice as a result?	

2c) Please identify one PE CPD activity that you would describe as ineffective. In the boxes below please explain why this activity was ineffective.

Topic	
Type/Form	
Provider	
It was ineffective because	• .... • .... • ....
Can you identify any unanticipated learning outcomes?	

PART THREE: YOUR OPINION ABOUT PE-CPD

3a) What do you consider as the most important purpose of PE?

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3b) Please outline three powerful sources of professional learning and rank them putting first the most important.

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3c) What would you like to learn in order to develop your teaching in relation to PE and why?

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3d) Please tick (√) the statement that represents your notion about the existing PE CPD provision.

☐ I am satisfied with the existing PE CPD system and provision, which is offered to teachers.

☐ I am not satisfied with the existing PE CPD system and provision, which is offered to teachers.

Could you explain your answer below please?

3e) Recommendations for future PE-CPD provision

Thank you for your spending time on this and for your co-operation!
Anastasia

Appendix F: Material used during focus group

ΣΥΝΕΧΗΣ ΕΠΑΓΓΕΛΜΑΤΙΚΗ ΚΑΤΑΡΤΙΣΗ ΦΥΣΙΚΗΣ ΑΓΩΓΗΣ ΣΤΗΝ ΚΥΠΡΟ

Αναστασία Χ''Ματθαίου

Θέματα που προέκυψαν από απαντήσεις εκπαιδευτικών στα ερωτηματολόγια και συνεντεύξεις:

- Έλλειψη σεμιναρίων εργαστηριακού τύπου
- Ο χρόνος επαγγελματικής επιμόρφωσης στη Φυσική Αγωγή δεν είναι αρκετός
- Πίεση πολλή για τα Νέα Αναλυτικά Προγράμματα

Σχόλια Συμμετεχόντων (Σ) σε αυτή την έρευνα που υποστηρίζουν αυτές τις απόψεις:

- *'Δεν υπάρχει σχεδόν καθόλου Συνεχής Επαγγελματική Επιμόρφωση για τη Φυσική Αγωγή. Το μάθημα είναι υποβαθμισμένο και συνήθως οι εκπαιδευτικοί δεν έχουν τις απαιτούμενες γνώσεις ή δεξιότητες και το ενδιαφέρον και το βαριούνται. Το μάθημα έπρεπε να είναι καθημερινό και να γίνεται από εκπαιδευτικούς με ειδίκευση και που το αγαπούν' (Σ1).*

- *'Χρειάζεται να εμπλουτιστεί η επιμόρφωση των εκπαιδευτικών με περισσότερες και διαφόρων τύπων δραστηριότητες' (Σ2).*

- *'Μειωμένο θεματολόγιο, λίγες διοργανώσεις και προβληματική επικοινωνία μεταξύ υπουργείου, τριτοβάθμιας εκπαίδευσης και μάχιμων εκπαιδευτικών'(Σ3).*

- *'Πρέπει να τυγχάνουν επιμόρφωσης στη Φυσική Αγωγή όλοι οι εκπαιδευτικοί κι αυτοί που διδάσκουν περισσότερο κι αυτοί που διδάσκουν λιγότερο ή και καθόλου'(Σ4).*

- *'Απλά χρειάζεται και ζητούμε επιμόρφωση για όλους σε ικανοποιητικό βαθμό'(Σ5).*

- *'Μπορούν με πάρα πολλούς και οικονομικούς τρόπους να επεκταθεί η επιμόρφωση των εκπαιδευτικών και για τη Φυσική Αγωγή, αλλά και για όλα τα μαθήματα'(Σ6).*

- *'Η επαγγελματική επιμόρφωση των εκπαιδευτικών γενικά και ειδικά για τη Φυσική Αγωγή που προσφέρεται δε διαφέρει τα τελευταία χρόνια και είναι επιφανειακή'(Σ8).*

- *'Δε γίνεται με τη θεωρία να αλλάξουμε κάτι, χρειάζονται περισσότερες πρακτικού τύπου επιμορφώσεις με καλύτερη εκτίμηση κι αξιολόγηση'(Σ9).*

ΣΥΝΕΧΗΣ ΕΠΑΓΓΕΛΜΑΤΙΚΗ ΚΑΤΑΡΤΙΣΗ ΦΥΣΙΚΗΣ ΑΓΩΓΗΣ ΣΤΗΝ ΚΥΠΡΟ

Αναστασία Χ''Ματθαίου

Εάν είχατε τη δύναμη και τους οικονομικούς πόρους να οργανώσετε τη Συνεχή Επαγγελματική Επιμόρφωση Φυσικής Αγωγής για τους εκπαιδευτικούς, ποιο θα ήταν το περιεχόμενο της; Δώστε τις απαντήσεις σας βασισμένοι στις δικές σας εμπειρίες και από τη δική σας προοπτική.

ΣΥΝΕΧΗΣ ΕΠΑΓΓΕΛΜΑΤΙΚΗ ΚΑΤΑΡΤΙΣΗ ΦΥΣΙΚΗΣ ΑΓΩΓΗΣ ΣΤΗΝ ΚΥΠΡΟ

Αναστασία Χ''Ματθαίου
Ηλεκτρονικό ταχυδρομείο: AXH847@bham.ac.uk
Τηλέφωνο: 0035799975969/00447864126490

(Α) Αξιολόγηση της Παροχής Συνεχούς Επαγγελματικής Επιμόρφωσης (Guskey, 2000)

▪ Οι καλές αξιολογήσεις παροχής Συνεχούς Επαγγελματικής Επιμόρφωσης απλώς χρειάζονται στοχαστικό προγραμματισμό, συγκεκριμένη εστίαση προσοχής και σκοπό από πριν.
'We conduct evaluations for clear reasons and with explicit intent'

▪ Χρησιμοποιούμε τις αξιολογήσεις για να καθορίσουμε την αξία κάποιας διαδικασίας και να απαντήσουμε συγκεκριμένες ερωτήσεις όπως: Αυτό το πρόγραμμα ή δραστηριότητα πετυχαίνει τα ζητούμενα αποτελέσματα;/ Είναι καλύτερο από το πρόγραμμα που γινόταν πιο πριν;/Αξίζει το κόστος;

▪ Η Συνεχής Επαγγελματική Επιμόρφωση πρέπει να είναι μια σκόπιμη προσπάθεια. Μέσω της αξιολόγησης, μπορεί να καθοριστεί αν αυτές οι δραστηριότητες πετυχαίνουν τον σκοπό τους.

▪ Αποτελεσματικές αξιολογήσεις απαιτούν τη συλλογή και ανάλυση πέντε κρίσιμων επιπέδων πληροφοριών, σύμφωνα με τον Guskey (2000).
1. Αντιδράσεις των συμμετεχόντων στην εμπειρία της Συνεχούς Επαγγελματικής Επιμόρφωσης (συλλογή των πληροφοριών μέσω ερωτηματολογίων).
2. Εκμάθηση των συμμετεχόντων (τι γνώσεις και δεξιότητες πήραν-μέσω ασκήσεων γραπτών και προφορικών/ μέσω διατήρησης πορτφόλιου από εκπαιδευτικούς καταχωρώντας τι έμαθαν από κάθε δραστηριότητα).
3. Οργάνωση, Στήριξη και Αλλαγή (η έλλειψη υποστήριξης της οργάνωσης και αλλαγής μπορεί να σαμποτάρει οποιαδήποτε προσπάθεια Συνεχούς Επαγγελματικής Επιμόρφωσης).Τέτοιου τύπου πληροφορίες μπορούν να μαζευτούν μέσω αρχείων του σχολείου, ερωτηματολογίων, συνεντεύξεων από τους εκπαιδευτικούς.
4. Η χρήση των νέων γνώσεων και δεξιοτήτων από τους εκπαιδευτικούς (Η νέα γνώση που έμαθαν οι συμμετέχοντες έκανε κάποια διαφορά στην πρακτική τους;). Συλλέγονται μέσω ερωτηματολογίων, συνεντεύξεων, έλεγχος πορτφολίων, παρακολουθήσεις μαθημάτων.

5. Μαθησιακά αποτελέσματα των μαθητών. Αυτές οι πληροφορίες συλλέγονται μέσω ερωτηματολογίων ή συνεντεύξεων από εκπαιδευτικούς και μαθητές.

(Β) Συνεργατικές Κοινότητες Μάθησης

▪ 'To create a professional learning community, focus on learning rather than teaching, work collaboratively, and hold yourself accountable for results' (Du Four, 2004).

▪ Παρά τα δεδομένα που αποδεικνύουν ότι οι εκπαιδευτικοί δουλεύοντας συνεργατικά πετυχαίνουν καλύτερη διδακτική απόδοση, πολλοί εκπαιδευτικοί εξακολουθούν να δουλεύουν μόνοι τους.

▪ 'A group of staff members who are determined to work together will find a way' (Du Four, 2004).

▪ Οι Συνεργατικές Κοινότητες Μάθησης αποτελούν σημαντικό μέσο για να οργανωθούν τα σχολεία έτσι ώστε να αυξηθεί ο χρόνος της Συνεχούς Επαγγελματικής Επιμόρφωσης των εκπαιδευτικών (Vescio et al., 2008).

▪ 'It requires the school staff to focus on learning rather than teaching, work collaboratively on matters related to learning, and hold itself accountable for the kind of results that fuel continual improvement' (Du Four, 2004).

▪ Η γνώση που παίρνουν οι εκπαιδευτικοί βρίσκεται στις καθημερινές εμπειρίες τους και κατανοείται καλύτερα η γνώση μέσω της κριτικής σκέψης με άλλους εκπαιδευτικούς, οι οποίοι έχουν τις ίδιες εμπειρίες (Buysse,Sparkman, & Wesley, 2003). Επίσης, οι εκπαιδευτικοί που ενεργά μετέχουν στις Συνεργατικές Κοινότητες Μάθησης αυξάνουν την επαγγελματική τους γνώση και ενισχύουν την μάθηση των μαθητών τους (Vescio et al., 2008).

(Γ) Συνεχής Επαγγελματική Επιμόρφωση μέσω διαδικτύου (Online learning)

▪ Τα δίκτυα εκπαιδευτικών προσφέρουν στους εκπαιδευτικούς ένα χώρο,στον οποίο μπορούν να μοιραστούν τις εμπειρίες τους, τους προβληματισμούς τους, τις γνώσεις τους και αποτελεσματικές διδακτικές πρακτικές.

▪ Ίσως η πιο χαλαρή δομή των δικτύων και η ευέλικτη οργάνωση τους να ταιριάζει καλύτερα με τους γρήγορους ρυθμούς των τεχνολογικών και κοινωνικοοικονομικών αλλαγών και να προσφέρει τους τύπους γνώσεων και εμπειριών που οι εκπαιδευτικοί χρειάζονται για να πετυχαίνουν τους σκοπούς που θέτουν για τους μαθητές τους (Lieberman, 2000).

▪ Αυτά τα δίκτυα είναι θετικά ως προς την ανάπτυξη και διατήρηση των Συνεργατικών Κοινοτήτων Μάθησης. Είναι ακόμη ένας τρόπος άμεσης επικοινωνίας και συνεργασίας μεταξύ των εκπαιδευτικών.

Appendix G: Differences in the number of the codes

Codes of each theme

Legend:
- Frame of mind
- Mechanism working
- Mechanism not working
- PE-CPD Providers
- Teachers as learners
- Structures of PE-CPD
- Teachers' recommendations
- Designing PE-CPD
- Evaluation System
- Use of technology
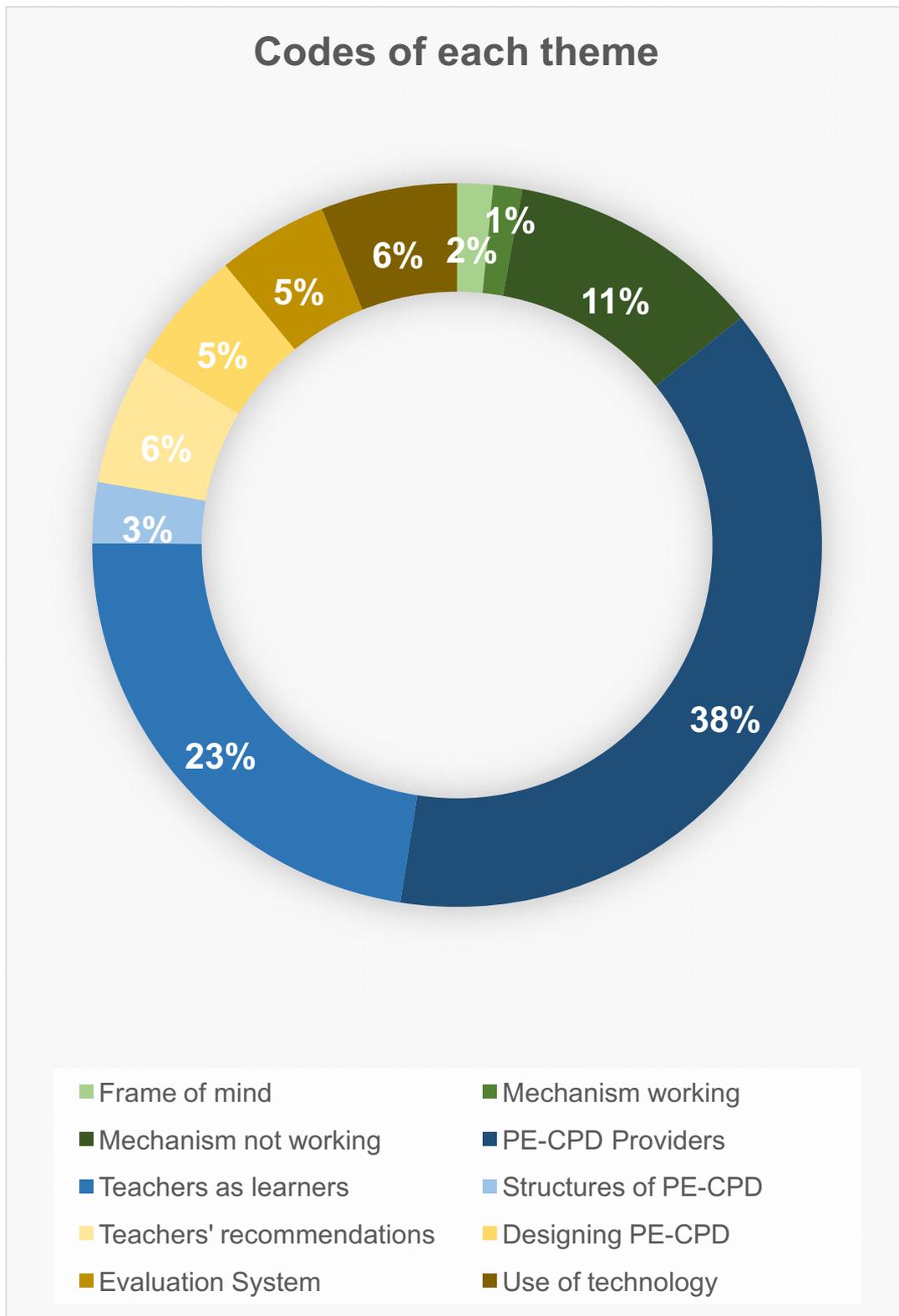
Appendix H: Thematic map

Group	Theme	Description
Current PE-CPD Provision		
Experiences from PE-CPD provision	**1.Frame of mind (culture)**	-('good with words bad with actions', scared of criticism, cultural taboos, needing pressure to do something, preference of programs and educators from abroad-ξενομανία)
	2. Mechanism Working -Signs of improvement	-(signs of improvement and change in educational system and PECPD, gradual progress)
	-Criticizing MOEC	-(judging MOEC PECPD provision good and frequently)
	-Feelings	-(satisfied, security when following MOEC PECPD)
	3. Mechanism Not working -Criticizing MOEC	*(initial education not adequate for PE)-context* -(absence of evaluation system, no motives, bad management of PECPD, no change, wasting time on new curriculums)
	-PE Status/Quality	-(weak teachers for PE, using PE time for other subjects)
	-Deficiency	-(frequency, duration, nature of PECPD activities, PECPD centralization) the PECPD provider aims for decentralization!
	-Economic crisis	-(not doing anything for educational reform due to lack of funds, decreasing PECPD activities, bad impact on PECPD effectiveness)
	-Late revolution	-(always a decade behind from European

	-Feelings	countries) -(disappointment, frustration, boredom, lack of confidence, neglect, sadness)
PE-CPD Effectiveness and Ineffectiveness	**4. PECPD Providers** -Responsibilities -Background -Personal characteristics **5. Teachers as learners** -Brunel Training -CoP -Odyssey of learning **6. Structures of PECPD**	 -(communicate, support, evaluate, change, being a role model, motivate, taking PECPD decisions) -(PhD, research, experience in schools as a teacher) -(daring, passionate, positive, ignores the negatives and does what is best for PE and PECPD for teachers) -(turning point of teaching career, changing philosophy, getting confidence, still mentioning it after a decade, the most effective PECPD activity, wanting to have something similar again) -(Learning together, learning from the experienced teachers, sample lessons, socialisation, positive results in teaching practice after CoP, nice learning environment) -PECPD Sources: *Collaboration with colleagues *Personal interest and study for PE lesson *Combination of theory and practice *Practical PECPD activities *Sample PE lessons *Internet, PE websites, MOEC websites *Academic research *Small-scale PECPD(decentralisation) -Barriers to PE learning: *Only theoretical PECPD activities *No motives for learning within the PECPD activities *No evaluation system for PECPD Provision -(organization of PECPD: frequency, location, duration, format etc)

Ideal model of PE-CPD	7.Different Individual Needs based on career stage	-(experienced, intermediate, new teachers) & -(dance mostly the male, challenging activities, needing continuity in PECPD)
	8. Views on the design of PECPD	-(change PE philosophy, more organised PECPD, younger teachers for PE, needs assessment)
	9. Evaluation System	-(change the evaluation system for better PE
	10. Use of technology	-(using technology to make PECPD easier and faster)

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