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Progression in physical education teachers' career-long professional learning: Conceptual and practical concerns

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Abstract
This paper considers the issue of learning 'progression' in pedagogy for physical education (PE) teachers in their career-long professional development (CPD). This issue arose from an analysis of findings from three research projects in which the authors were involved. The projects were undertaken in different national contexts (Ireland, Greece, England), but all used similar methods to investigate questions about effective/ineffective PE-CPD. The findings identified numerous barriers that teachers and pre-service teachers encountered in accessing effective professional development. Of particular interest, however, was the realization that taken together, the findings raised concerns about teachers' *learning progression*, including progression over time, across learning contexts and in specific areas of interest. This issue has rarely been discussed in the existing literature and is poorly theorized. Indeed, there would appear to be little agreement in the profession about how to conceptualize 'good' or 'adequate' learning progression in pedagogy across a career. This paper, therefore, seeks to open a new line of enquiry.

Keywords
learning progression, physical education pedagogy, physical education teachers, professional development

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Background

This paper focuses on the issue of learning 'progression' for physical education (PE) teachers through their career-long professional development (CPD). 'Progression' in this context does not refer simply to career progression in promotion terms, nor progression through a series of pre-determined teaching grades or generic standards, although both might be outcomes of professional development. Instead, we consider deep learning in the field of PE pedagogy and the ways in which it is supported or hindered through formal professional learning structures across a career.

Standard dictionary definitions of 'progression' frame it as a gradual change, a movement forwards or onwards, or a series of related things. Definitions of pedagogy are, however, more complex and in this paper we are referring to Armour's (2011) three-dimensional concept of pedagogy. Building on the work of Alexander (2008), Grossman (1989), Kirk et al. (2006), Rovegno (2003) and Shulman (1987), Armour argued that pedagogy in the context of PE and sport has three complex, interlinked dimensions (knowledge in context, learners/learning and teachers/teaching) that become even more complex as they interact in each 'pedagogical encounter' (Leach and Moon, 1999). This paper considers teacher learning progression, in PE pedagogy, across different phases of teachers' learning careers, including initial teacher training (ITT).

Different dimensions of the notion of learning progression are illustrated by data from three research projects undertaken in different countries (Ireland, Greece, England) that had all asked similar research questions about effective – and ineffective – CPD. Each study focused on different stages of teacher learning, but used similar qualitative research methods to ask related questions about effective/ineffective professional learning experiences. Unsurprisingly, perhaps, the findings from each study pointed to numerous barriers to effective professional learning that were both specific to each context and that echoed the wider research on CPD and PE-CPD. In considering the studies together, however, the researchers became aware that the findings also led to conceptual and practical questions about teachers' 'learning progression' across a career.

In most definitions of CPD there is a presumption that different stages of professional learning will build on each other in order to support effective teacher learning. In the UK, the Department of Education and Skills (2010: 2) defined CPD as encompassing 'all formal and informal learning that enables individuals to improve their practice'. According to the Teaching Council of Ireland (2011), however, professional learning can be understood as a continuum:

> The continuum of teacher education describes those formal and informal educational and developmental activities in which teachers engage, as lifelong learners, during their teaching career. It encompasses initial teacher education, induction, early and continuing professional development and, indeed, late career support, with each stage merging seamlessly into the next and interconnecting in a dynamic way with each of the others. (p.5)

Coolahan (2003) had earlier presented a similar understanding of CPD as the '3 I's': **I**nitial Teacher Education (ITE), Induction and **I**n-career development. In these examples, there is a clear understanding that the process of becoming a teacher begins at the start of the formal period of ITE (Cochran-Smith, 2001). Indeed, there is increasing evidence that professional experiences in the early years of teaching are a crucial influence on teachers' professional learning and formation of career intentions (Organisation for Economic Cooperation and Development, 2005). As Anderson (1987) pointed out:

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> The challenge for [initial] teacher education is to foster commitment to school teaching and to prepare trainees for the reality of classroom practice, but at the same time to provide them with a broad general education, including the capacity to be critical and self-critical, and a familiarity with diverse viewpoints and experiences. (p.63)

In this context, Smagorinsky (2008: 2) uses the term 'conceptual unity' to describe a process of learning across contexts that provides an 'extended, generative, synergistic set of [curricular] conversations' to enable prospective teachers to 'grasp and modify a conception of appropriate practice'. In this, as in previous examples, there is an implied sense that, over time, CPD will support teachers to make continuous progress in their professional learning. Yet, there is a wealth of research evidence in PE and beyond to suggest that much CPD for teachers is not fit for purpose in this respect (e.g. Armour and Yelling, 2004; Garet et al., 2001). What is unclear, therefore, is how far teachers *could* go in their learning about PE pedagogy if they were supported effectively as career-long, continuous learners, and in what directions – and to what depth – such learning might go.

It is important to clarify that this is not a standard report of the conduct and findings of one specific research project. Nor is an attempt made to provide full details on the three research projects on which this paper is based, because these are available elsewhere. Instead, this paper looks across three research projects that were undertaken in different national contexts but which were asking similar questions, and seeks to go beyond the obvious findings in order to consider conceptual issues that arise when the findings are considered together. This led the researchers to formulate a number of questions for the wider PE profession about the nature of career-long learning for PE teachers. Questions include: In what senses could such learning be progressive? In what directions would it progress in order to represent a reasonable – or even excellent – learning journey over a career?

In grappling with such questions it became apparent that although the research participants raised concerns about learning progression, neither they nor the researchers possessed an adequate language with which to grasp, analyse and understand these issues. It was as if everyone believed that professional learning should become 'better' or more challenging over time, and should in some sense be 'progressive', but no one was quite clear about the most appropriate direction(s) of travel. The purpose of this paper is, therefore, twofold: firstly, to illustrate some of the dimensions of the concept of learning progression in PE teachers' CPD; and secondly, to raise conceptual and practical questions about this concept with the intention of opening a fruitful line of inquiry for the future. In the next section, key learning theories are reviewed in order to begin to identify a conceptual framework for considering learning progression in PE pedagogy.

Theories on learning . . . and on learning progression

Colley et al. (2003) point out that learning is complex and that each learning theory tends to view learning differently, which adds to the inherent complexity. For example, behaviourism views learning as an observable, measurable change in behaviour, whereas cognitivism focuses on the individual cognitive processes involved in learning. Constructivist approaches foreground the social character of learning with a focus on active, interactive and authentic settings (Harris, 2000). Such theories have been employed extensively in recent CPD research to explain the ways in which teachers can learn effectively, particularly within professional learning communities (Armour and Yelling, 2004, 2007; Borko, 2004; Keay, 2006; WestEd, 2000). Indeed, Lieberman and Miller (2008: 106) concluded that 'Professional learning communities . . . hold the promise of

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transforming teaching and learning for both the educators and students in our schools', and Pollard (2010) argued that a key to professionalism lies in teachers scrutinizing their practice collaboratively.

Learning as participation

The theory of situated learning derived from the anthropological work of Lave and Wenger (1991), who reconceptualized learning as embedded in social practice in a community of practice. From this theoretical standpoint, the workplace – as a context where social practice and professional interactions take place – offers meaningful professional learning opportunities for teachers. Using the concept of 'Legitimate Peripheral Participation', learning is viewed as an integral part of generative social practice, where learners progress towards more central participation in the community of practice (teaching) which, in turn, they have helped to shape (Heaney, 1995). It is in the process of practice that people learn; indeed learning is a 'feature of practice' so it may be present in all sorts of activities, not just in formal instruction or apprenticeship (Hanks, 1991). In addition, because situative learning acknowledges the social nature of learning, learning becomes a multi-directional process, with newcomers and old timers learning from each other (Hanks, 1991; Lave and Wenger, 1991). Lave and Wenger refer to the constant turnover of community of practice members as 'reproduction cycles' (Lave and Wenger, 1991: 98). This essentially means that old timers leave and newcomers enter. It is interesting to focus on how new members move from peripheral to full participation (Lave and Wenger, 1991: 71):

> Legitimate peripheral participation provides a way to speak about the relations between newcomers and old-timers, and about activities, identities, artefacts and communities of knowledge and practice. It concerns the process by which newcomers become part of a community of practice. (p.29)

This learning theory has obvious relevance for understanding the ways in which teachers learn in various contexts across their careers. It offers, however, limited insights into learning progression, for example in determining *what* is – or should be – learnt by teachers over time in a given field.

Reflective practice

There are clear links between situated perspectives on learning and theoretical work on reflective practice (e.g. Day, 1999; Pollard et al., 2005; Schon, 1983). As these authors have pointed out, reflective practice is essential for developing the capacities of teachers to put their practice under scrutiny, to examine the implications of their actions for pupil learning, to engage with relevant theory in order to understand the values and assumptions that underlie their practices, and to explore innovative practice. For Day (1999), a critique of practice in context can lead to effective professional learning. Further, Pollard (2010) has argued that reflection is a key part of pedagogy and the development of communities of 'warranted' practice in teaching. It could be argued that reflective practice, when practised effectively, is the key to developing an evidence-based profession, because it provides the tools for teachers to review and change their practices in the light of new (research) insights. What has been less clear, however, is precisely how teachers learn by engaging in reflective practice.

The work of Attard and Armour (2006) provides some powerful insights into the process and the challenges of professional learning in PE through critical reflection. In particular, analysis of

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Attard's three year long 'reflective odyssey' led the authors to conclude that whereas critical reflection is a never-ending quest for improvement, it does not always result in learning and improvements in practice. Attard and Armour concluded that teachers need considerable (external) support to engage in reflective practice in order to maximize its learning potential. Furthermore, perhaps the most striking finding from the research was the level of personal and professional challenge posed by the process in which Attard engaged. It could be argued, therefore, that in order to understand this challenge, it is necessary to consider professional learning differently, that is, as a process bound up with 'becoming' both person and professional. This perspective, however, adds a considerable layer of complexity to understanding professional learning – and learning progression.

Learning as a process of 'becoming'

Understanding learning as a process of 'becoming' foregrounds the relationship between learning and identity. Hodkinson et al. (2008) explained:

> Learning can change and/or reinforce that which is learned, and can change and/or reinforce the habitus of the learner. In these ways, a person is constantly learning through becoming, and becoming through learning. (p.41)

The links with the notion of reflection are evident. What this perspective on learning highlights, as reflected in Attard and Armour's (2006) study, is that learning does not involve only the development of practice but also the development of the person. The work of John Dewey (1958) informs this perspective.

Dewey argued that the nature and quality of current learning experiences influence how humans understand and learn in subsequent experiences. He theorized this as the principle of *continuing of experience*, explaining that, 'Every experience both takes up something from those which have gone before and modifies in some way the quality of those which come after' (p.27). In the light of this insight, Dewey (1916) suggested that 'life is growth' (p.43) and that education entails *a continual process of becoming.* This means that development (or learning) has neither a fixed direction nor a finished identity. Growth, in a Deweyian sense, is understood as an ongoing process of constant reconstruction of experiences in ways that enable a person to make sense of even broader realms of experience (Davis and Sumara, 2003). This view is also echoed in Greene's (1995) work, where she made reference to powerful learning that results in learners who '*become different* and move beyond where they are' (p.13, our emphasis).

Dewey (1958), however, urged caution, reminding us that not all experiences are genuinely or equally educative. He claimed that some experiences can restrict or 'narrow the field' (p.26) of future experiences, and thus be detrimental to further growth. Dewey was particularly concerned that when students are passive in the learning process and are directed towards achieving a stipulated end point, possibilities for further growth and innovation are limited. This means that through different (learning) experiences, a person can *become* more or less critical, more or less willing to learn in future experiences, more or less able to subject their own practice to scrutiny, more or less creative or independent. Learning progression, from this standpoint, refers to building PE teachers' 'learning capacity' (Claxton, 2007) for ongoing learning and development. If, as was stated in the first section, professional learning across a career is understood as a *continuum,* then such capacity building seems to be essential. Yet there is little evidence to suggest that professional

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development is designed in this way. Indeed, in the next section we draw upon data from three research projects highlighting ways in which some professional development does almost the opposite – that is, it restricts capacity for further learning.

Three research projects on physical education teachers' professional learning

This paper is based on data from research projects examining different aspects of PE teachers' learning, but asking similar research questions about the nature of effective – and ineffective – professional development. The studies were undertaken in three countries during the same time period (2004–2008). In all three projects, the issue of teachers' learning progression (and lack of it) arose as an unanticipated finding and was a concern for the research participants. The research was undertaken in Ireland, Greece and England, and each focussed on professional learning in different stages of teachers' career cycles. It is impossible to provide extensive detail on the three projects in one paper, but an overview of each project follows with the location of further details identified. In each case, illustrative data are presented followed by an initial analysis of learning progression issues arising in that context.

Project 1: Ireland

Project 1, based in Ireland, analysed the ways in which PE pre-service teachers (PTs) make progress in their learning across different elements of ITE. As was noted earlier, ITT is regarded as the beginning of the CPD continuum. The focus of the study was on the role of school-based teaching practice (TP) and how the cooperating teachers (CTs) (i.e. school-based experienced PE teachers who are *not* trained formally to be mentors) supported PE PTs to learn during this formative period in their career.

The study analysed one umbrella case in Ireland, which comprised five individual cases (five tetrads of University Tutor (UT), PE PT, CT and School Principal (SP)). Through this vehicle, the phenomenon of how PE PTs experienced learning support from CTs, UTs and SPs during TP was studied over a seven-month period. There were *five* individual case studies (CS1-5) centred around five female PE PTs who volunteered to take part in this study. The UT, CT and SP assigned to each of these PE PTs on TP were asked to engage in the study and thus became part of the case. This resulted in five individual case studies each comprising of four individuals: the PE PT, CT, UT and SP. It is important to recognize at the outset, therefore, that the PE PTs [Aoife, Barbara, Carol, Dara and Edel] at the core of each case study were self-selected research participants.

The research utilized a range of qualitative research methods, including open profile questionnaires, focus group interviews, in-depth interviews and reflective journal writing. A systematic six-level approach to grounded theory (Harry et al., 2005) was used to analyse data. The limitations of this approach are acknowledged (see Thomas and James, 2006), but undertaken systematically, it was also found to offer a manageable way of analysing large quantities of 'messy' qualitative data (see Harry et al., 2005). The data extracts below are identified by participant role, pseudonym, source (i.e. 'Int' for interview) and date. Further detail on the study design and methods can be found in Chambers and Armour (2011). For all three studies (Ireland, Greece and England) the participants are identified only by pseudonyms.

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Findings from the Irish study: contextual barriers to learning progression. PTs' learning was affected by a number of issues; two key issues reported here are quality of the CT and school–university partnerships in providing learning support. These findings are illustrated in 'data trails' that resulted from the data collection process whereby five individuals within each case study (UT, PT, CT and SP) were given opportunities to comment on specific teacher and PT learning issues from their own perspectives. The data trails provide some interesting examples of findings being verified by different participants in the case studies. Learning 'progression' in this instance is conceptualized as learning coherence across different learning contexts that – in theory at least – should be compatible. In addition, there were examples of conflict in the relationship between the school and the university even though they were supposed to be partners in supporting PT learning.

(i) CT learning progression: the influence of prior professional learning experiences on the quality of the CTs' learning support. Joan was a CT in the study who, as a PT, had received little support from her own school-based CT: 'No feedback at all. Nothing . . . didn't learn anything from her except that I know how not to treat people' (CT, Joan, Int 2, December 2006). Yet, despite being critical of this experience, in her subsequent role as a CT Joan appeared to reproduce her personal experience. Edel, the PT assigned to Joan, reported that throughout TP she was left mainly to her own devices and that for various reasons Joan was rarely present in her lessons (PT, focus group, March 2007).

On the other hand, a third CT, Anita, had spent time in England where mentor training is an established part of the ITT process. This experience resulted in Anita having a very different approach to the role of CT, as reported by Anita's PT, Dara: 'Like every class she used to sit down and she would write out an evaluation for me, what went well, what didn't go well'. (PT, Dara, Int 3, February 2007). It was apparent from the broader study that CTs lacked support for their own professional learning, making it something of a challenge for them to support PTs in their learning. It is interesting to speculate on the cumulative impact of this limitation on the potential development of PTs. However, this was not the only barrier to PT learning in the Irish study.

(ii) School/university 'partnerships' (Can learning progress across two different and 'separated' contexts?). All the SPs in this study suggested there was something amiss in the relationship between school and university and that this impacted negatively on PT learning. Mr Noonan, SP, felt there was a divide between school and university asserting 'you learn more in what you do in the school, I am afraid, than you do in lectures' (SP, Mr Noonan, Int, February, 2007). Another SP was also concerned about the impact of the school TP experience on PTs' development:

> One thing that kind of disturbs me a small bit is that from time to time when I do some work in X University, as I do from time to time, I hear that quite often the pre-service teachers go out on teaching practice full of enthusiasm and so forth, and return somewhat disillusioned. (SP, Mr Cotter, Int, 12 February 2007)

Mr Cotter tried to explain this observation by suggesting that perhaps ' . . . reality is so different from you know the theory and in terms of pedagogy and so forth' (SP, Mr Cotter, Int, 12 February 2007). This view of university learning being somehow divorced from the realities of learning in schools appeared to be endorsed (and expected) by some of the PTs. For example, one CT suggested that 'If you asked any teacher in the country let's say what they learned in College. You know a lot of it is forgotten.' (CT, John, Interview 1, 9 October 2006). One PT commented of the university: 'They are all in fairyland here' (PT, Dara, PT Focus Group Int, March 2007). These two

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contexts were, therefore, separated in the minds of these PTs, restricting their ability to reflect upon their practice and develop effectively. As one SP put it: 'feedback and self awareness . . . self awareness I think is probably the biggest missing ingredient in all teaching training' (SP, Mr Cotter, Int, February 2007). In other words, PTs were not trained to reflect on the learning opportunities in both contexts and to interconnect them. The PTs were on the periphery of the community of practice where 'one is kept from participating more fully – a disempowering position' (Lave and Wenger, 1991: 36). Although Heaney (1995) described peripherality as having the 'dynamic and at times chaotic energy which is experienced on the edge where the frenzy of transformative learning is more likely to occur' (p.3), such peripheral participation is not always a positive experience. As this study illustrates, PTs (newcomers) sometimes experienced difficulties in accessing the community of practices of the TP school and university.

Spendlove et al. (2010) suggest that the differing roles of school and university 'represents a division of labour, which can be characterized as theory on the one hand, and practice on the other' (p.66). In reality, it has been argued that there is often considerable strain in the relationship between school and universities within TP, with the majority of *joint* training programmes being 'neither complementary nor collaborative' (Edwards and Mutton, 2007: 505). The picture that emerges from this project is of a fractured professional development system that falls far short of Dewey's (1958) understanding of the continuing of experience in learning. Moreover, it seems that whereas the different elements in the system were able to recognize shortcomings and gaps in learning support for CTs and PTs, they lacked a practical and conceptual map to enable them to address the issues. For these Irish teachers, therefore, it is difficult to see how ITT was setting the foundations for a career of dynamic and progressive learning in PE pedagogy.

Project 2: Greece

This study, based in Greece, had three objectives: to examine how and why PE teachers engaged (or failed to engage) in career-long professional learning; to explore the nature and quality of existing 'formal' PE-CPD provision; and to examine the characteristics of effective/ ineffective PE-CPD from the perspective of both PE teachers and CPD stakeholders. The research design was based on Borko's (2004) suggestion that an understanding of professional development must be based on a thorough analysis of all elements of a professional development system (i.e. CPD programme, teacher-learners, CPD providers, learning context). Despite the fact that the Greek study explored both PE teachers' and CPD stakeholders' views and experiences, this paper draws upon illustrative findings from the teacher case studies to convey their views on the issue of teacher learning progression.

A case study framework (Stake 2000, 2005; Yin, 1994), with the case specified at the level of the teacher ($n = 9$), was adopted as the most suitable research design to answer the research questions on effective/ineffective CPD over a career. The decision to undertake descriptive, teacher-level case studies was rooted in the overriding purpose of the study, that is, to locate teachers at the centre of the research process (Goodson, 1992) and to learn from their experiences. The process of selecting the research participants was incremental until a satisfactory range was achieved. The study took place over two academic years (2004–2005 and 2005–2006) and included a series of at least three visits to each teacher participant. A total of 25 in-depth interviews (between 25 and 80 minutes duration) with the nine case study teachers was conducted at a time and place convenient to them. Similar to the Irish study, a constructivist version of grounded theory

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(Charmaz, 2006) was used to analyse the data. Further details on the selection process, methods and data analysis can be found in Makopoulou and Armour (2011a; 2011b).

Teacher learning in formal settings. The issue of learning progression arose in the Greek study where the PE teachers felt they were treated as 'passive' participants in PE-CPD events that lacked challenge, relevance and a sense of continuity; all of which are conceptually linked to the notion of learning progression.

Progression understood as engaging teachers as active learners. Teachers described the majority of their PE-CPD experiences as dominated by an out-of-school, courses-led approach, where teachers had little influence on what or how they learned. The local system appeared to provide limited opportunities for participants to have an input into the content or the direction of the experiences. Philippos, for example, argued that 'teachers participate in courses in which content, form, and substance have been pre-determined by CPD providers' (Int 1, April 2006, p.5). Kostantinos, echoing the views of most of the teachers, argued that this prevailing, top-down PE-CPD model had little, if any, impact upon practice: 'These courses are, most of the time, boring. I do not feel we learn many things' (Int 1, April 2006, p.1). This resulted in PE-CPD experiences that were neither carefully designed nor targeted appropriately to address these PE teachers' needs and to challenge them in their learning. In this context, Maria drew attention to the unchallenging, repetitive nature of provision:

> I went on this PE-CPD last week . . . .They [coaches] demonstrated skills . . . .but there was nothing new there. They taught us how to teach skills in the same way I learnt volleyball 20 plus years ago in the university. (Int 3, September 2005, p.3)

Margarita's lack of enthusiasm for PE-CPD is not surprising. She questioned the importance of learning how to teach motor skills, which she felt was straightforward and already known: 'What should I learn? How to teach passing, digging, serves, lay-up, jump shot?' (Int 1, April 2005, p.6) It was clear that these PE teachers wanted to learn something else than what was on offer (e.g. how to engage disaffected pupils, how to teach in ways that support pupils to develop not only physically but also personally and socially) but their voices had not been taken into account.

Moreover, these teachers felt they were passive not only in the process of selecting/directing PE-CPD, but also during CPD where they had few opportunities to think for themselves or to generate knowledge grounded in their practices. Philippos, Margarita, Ioanna and Giannis questioned PE-CPD opportunities that encouraged teachers to 'sit and listen'. Ellie commented that such courses 'merely inform rather than genuinely educate teachers', thus they failed to support her to 'learn in meaningful ways' and to reach 'deeper levels of understanding' (Int 1, April 2005, p.5). Likewise, Maria was critical of PE-CPD that did not enable her to raise questions and debate ideas; Kostantinos was convinced, like all these PE teachers, that teachers 'are not passive beings who sit and receive the messages sent from others. 'If given the opportunities, we [teachers] can generate very meaningful suggestions that are grounded in our experiences and which are realistic' (Int 1, April 2006, p.3).

Maria stressed that

> Tutors must achieve the right balance between theoretical input, practical experiences and opportunities for knowledge construction in order to enable teachers coming from different schools and having

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> different needs and personalities . . . to explore ways to accommodate new ideas in their specific contexts. (Int 2, April 2005, p.4)

From the perspectives of these teachers, PE-CPD opportunities could only be meaningful if they allowed teachers to develop and further expand knowledge and understandings that inform – and crucially are being informed – by their practices. Ioanna and Giannis argued that it was PE teachers, rather than CPD providers, who possess significant, practical-based knowledge. Ioanna stressed that those who deliver PE-CPD, who 'sit at the top of hierarchy', are 'out of touch' with reality and, thus, fail to offer knowledge or advice that help teachers to challenge themselves and to progress in their learning (Int 1, April 2005, p.1). Thus, opportunities should be provided to teachers to share what they already know and develop new resources and ideas that could be useful to others. At the same time, learning was understood as taking place in multiple contexts. In Petros' words:

> You discuss something new or different in CPD, but you truly learn through reflection, . . . when you observe that these ideas actually work and how they work in your school. You might even need to further work on them to better suit your pupils. Others' experiences are valuable. You learn from what they did and why. (Int 2, April 2005, p.2)

This reflects a situated perspective on learning, where learning takes places in multiple contexts and situations. However, this form of engagement was not evident in these PE teachers' experiences and the overwhelming feeling from the case study teachers was one of frustration – and even some anger.

Over time, some of these teachers became increasingly de-motivated. In the absence of enabling CPD structures, some teachers had abandoned attempts to engage in sustained and meaningful professional learning. Four teachers in particular (Giannis, Petros, Margarita and Ioanna) reported that their interest in professional learning had waned over time as they developed a 'passive' orientation to development. Giannis, for example, commented that he had been highly motivated to learn during the early years of his career, but that 20 years later he struggled: 'I no longer reflect in the sense, in the same intensity as I used to' (Int 1, March 2005, p.3). For Ioanna, limited opportunities to participate in meaningful PE-CPD led to a perception that she lacked the tools to learn in her context. These teachers seemed to have developed a 'fragile' tendency towards professional learning, withdrawing from learning at signs of difficulty by 'shifting from "learning mode" into a defensive, self-protective stance' (Claxton, 2002: 28). As a consequence, they reported that their TPs had remained largely unchanged for years (Makopoulou and Armour, 2011a; 2011b).

It is interesting to contrast the views and experiences of these teachers with those of another teacher, Katerina, who had been involved in CPD where she was expected to be an active and interactive learner:

> [In this programme] we worked for the first time on projects and round tables, we worked together as a team; in groups we had to solve problems or work together on a specific topic. It was very interesting. I learnt so much! (Int 1, April 2006, p.2)

The 'innovative' professional development described by Katerina was unique in this project; it appeared to allow this teacher to make progress in professional learning by, in Greene's (1995) terms, shifting the learner to a new place.

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Project 3: England

This study was an evaluation of a National PE-CPD programme funded by central Government in England. Between 2003 and 2006 (phase one), a range of taught and resource-based PE-CPD 'modules', designed nationally but delivered locally (by 150 providers known as Local Delivery Agencies; 'LDAs'), were available to all teachers and other adults working in both primary (pupils age 5–11) and secondary (pupils aged 11–18) schools. In September 2006 (phase two), 50 LDAs received additional funding to design 'innovative' PE-CPD programmes that could meet the needs of secondary PE teachers in their areas. The evaluation sought to establish which aspects of the programme were effective or ineffective for participating teachers, and why.

Drawing on approaches from evaluation theory (Connell and Kubisch, 1998), Logic Models (Kellogg Foundation, 2004) were used as an organizing framework for the evaluation. The data for this paper were collected between April 2004 and June 2007 and include single interviews with 25 secondary school specialist PE teachers, 10 generalist primary teachers and 8 head teachers, and repeat interviews with 10 local CPD managers and other key LDA personnel relevant in each case study area. Data were analysed thematically in relation to the stated aims of the programme and the key criterion of effectiveness as defined by the programme aims. Data extracts in the section that follows are all from interviews and are identified by participant role and date. Further information on the project, methods and findings is available in Armour and Makopoulou (2012).

Progression understood as increasing depth in professional learning. In the English evaluation project, a number of issues centred on learning progression were raised by both teachers and CPD providers (LDAs). One key progression issue, however, is reported here: progression as increasing *depth* of learning in a teacher's area of interest. Although a wide range of learning opportunities was made available through the programme in different content areas (breadth of provision), teachers reported that there were insufficient opportunities for them to pursue their learning in areas of interest (depth of provision).

Almost all the teachers and LDA managers in this research were critical of the fact that the National CPD Programme was based on traditional 'one-shot' CPD modules. Interestingly, as the programme was rolled out, and teachers' learning expectations were raised, the teachers seemed to come to the realization that they needed the kind of sustained activities and long-term involvement that would enable them to deepen, expand and, essentially, make progress in their learning in specific areas. The following examples illustrate the point: 'The discussion was interesting but I needed more information about how we can move it on' (female PE teacher, December 2006) and 'The content was interesting and stimulating . . . but I would like to attend a module to further study health and body issues. It might sound similar, but it would be a step forward' (male primary teacher, October 2005). One LDA manager recognized that the national CPD modules were too repetitive to develop teachers' knowledge and to motivate them to engage in sustained professional learning:

> One of our biggest challenges here is to lock people into longitudinal training and obviously having modules with a lot of repetition was not going to be helpful to us long term. (Lead trainer, May 2005)

This view was echoed by teachers: 'I would like to construct the knowledge. I would like to start to lead it and see where it goes. But it needs to have some sort of guidance' (female PE teacher, December 2006) and:

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> I came out with lots of ideas, which need time to be implemented and then, maybe it would be useful to go back and say I have done this, maybe we could now move on. (Male PE teacher, December 2006)

However, even where a LDA took the initiative to provide a follow-up module for the same cohort of teachers, it was a disappointment; there was a feeling that both teachers and tutors wanted to learn more, but no one was quite clear how to progress or in which direction:

> We [delegate teachers] discussed the possibility of a follow-up course in order to take that learning to a higher level. The LDA manager was positive and set up a follow-up gymnastics course. But it was not as helpful as we expected it to be. (Male PE teacher, February 2006)

Some LDAs were keen to support teachers' learning by facilitating the sharing of good practice: 'So, for instance, if you are very experienced and I'm not so experienced, and I can set up a task that can enable you to share your experience with me, we will both learn' (LDA manager, May 2006). For others, however, the need to determine the learning agenda in order to ensure teachers addressed issues that 'hit' current educational policy agendas was more important: 'I thought that we needed to answer the agendas that needed answering, like assessment for learning and personalized learning, through PE' (CPD manager, November 2006). What became clear was that LDAs experienced some conflict between, on the one hand, trying to develop teachers as independent learners, and on the other hand trying to control the learning agenda to demonstrate the ways in which the programme addressed contemporary government agendas.

Discussion

It seems self-evident to suggest that if PE teachers are expected to grow and develop as professionals throughout their careers, they should be supported by CPD systems that facilitate that professional growth across learning contexts. Hager and Hodkinson (2009) argue that 'learning is more fruitfully viewed as an ongoing process rather than a series of acquisition events' (p.620), a view that was shared by these PE teachers but consistently lacking in their CPD experiences. Teachers from the three different countries raised concerns about the inability to make progress in their learning in a number of areas: across career phases and contexts (structural barriers); from passive to active learners (learning theory/model barriers); and in deepening their knowledge within specific areas of knowledge and interest (subject knowledge barriers). In the Irish study, the CTs' practices were influenced by an unhelpful structure reflected in their personal learning experiences and making it difficult for them to support PTs. In the Greek study, the prevailing PE-CPD model that encouraged teacher passivity led some teachers to lose the impetus to learn and to continue to develop professionally. Both examples seem to reinforce Dewey's (1958) principle of continuity of experience. If Dewey's view is accepted, the key implication for PE-CPD is that it needs to be organized in ways that *extend teachers' capacity to engage in ongoing/future learning*. Progression viewed in this sense could have profound implications for the design and conduct of professional development and the ways in which CPD 'effectiveness' is measured. For example, 'opinionnaires' distributed at the end of a day's training would be inappropriate as a form of evaluation because, like all one-shot evaluation instruments, they fail to capture *evidence* of the forward trajectory of a teacher's learning.

Both the Irish and Greek studies raised another concern that is fundamentally linked to learning progression: learning in and across different contexts. Some of the Greek PE teachers reported

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being unable to develop their practice in the absence of effective external support. Likewise, the Irish PTs missed important learning opportunities because of a discontinuity between their school-based TP and the support they received in the university. These experiences align with situated perspectives on learning that view learning and knowledge as growing ever more complex and 'useful' in a variety of contexts (e.g. formal CPD, TP, collaboration with other teachers) through the learner's participation in these contexts (Peressini et al., 2004). This means that if learning progression is the goal, there is a clear imperative for PE-CPD providers to analyse individual learning contexts and their synchronicity for teacher learning. Segall (2001) suggested that there is a need in education to make the 'practice more theoretical and theory more practical' (p.226). There would seem to be much potential in organizing professional development around situated learning theories that can support teachers to link theory and practice in their contexts, engage in supported critical reflection and grow theories that can be shared with peers.

The English study raised a different issue around the notion of learning progression. Data suggested that although both teachers and tutors wanted to learn more, no one was quite clear how to progress, or in which direction; in other words what would 'more' or 'better' CPD in gymnastics pedagogy look like in practice? How much is 'enough' for 'adequate', 'good' or 'outstanding' practice? The national CPD programme had enthused teachers about professional learning, but it then frustrated them in their attempts to extend that learning further in specific areas of interest, as if the direction of professional learning travel in PE pedagogy had been pre-defined as growth in 'breadth' rather than 'depth'. Yet, supporting teachers to engage in progressive professional learning is something more than offering them opportunities to engage in a series of individual (and often unconnected) knowledge-bites to be accumulated over a career. Nor can progression be understood as the progressive development of some kind of fixed knowledge 'base', because the dimensions of that knowledge base in PE have not been mapped.

Professional 'standards' do not address the issue of progression in learning in PE pedagogy, as they are simply too generic. Consider, for example, the case of a PE teacher who is 20 years into a career. What would we expect such a teacher to know and do in any particular aspect of *PE* pedagogy and how would it differ from a teacher who is 5, 10 or 35 years into a career? Added to that, we need to take into account the shifting nature of knowledge. Sowa (2000) has argued that knowledge is fluid, heterogeneous, ever-changing and often inconsistent, leading him to conceptualize it as *knowledge soup* (p.248). Considered from this point of view, progressive professional learning is all about 'dynamic extension', that is, extending (continuously, progressively) what we know and what can be known in PE practice. The implications for CPD design and conduct in PE pedagogy are far reaching indeed. This is, therefore, a matter of concern specifically for the PE profession (rather than for the wider teaching profession).

Conclusion

Interrogating the findings of three PE-CPD studies undertaken in three different national contexts had led us to some interesting questions about learning progression in PE pedagogy for teachers across their careers. We have argued that for both professional developers and teachers, the challenge is to create and engage in dynamic and fluid learning opportunities that are framed around the concepts of capacity building for learning and 'becoming' as a learner over time. In addition, the growth of situated learning theories has the potential to link theory and practice in ways that can extend the professional field of PE beyond where it is and where we believe it can be which, in turn, provides a focus for reflection and reflective practice. Finally, learning in communities of

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practice seems to offer the potential for the development of teachers as learners who can learn continuously *in* and *through* practice, in addition to drawing upon external knowledge and developing it as required. In this view of professional learning, trainee teachers are nurtured in the community of practice framework, universities have the clear task of developing teachers who can work effectively within such a structure, and professional development providers seek to support and sustain these communities in PE pedagogy. The potential for new development and growth of new pedagogical knowledge *in* PE is considerable.

The questions left to consider seem to be all about 'What if?'. For example: What would the PE profession look like if teachers were supported to learn effectively in PE pedagogy – to 'become' – progressively – over the whole course of their careers? How might theory and practice in PE change? How could PE researchers respond and what would be the impact on research quality and relevance? As things stand, it could be argued that the profession (in its widest sense) simply does not have the capacity to support PE teachers to learn/grow/become continuously and progressively over a 40-year career. Nonetheless, further consideration of the issues raised in this paper could offer an interesting lens through which to analyse PE-CPD activities and consider future research findings in the area.

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