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Title:

**Using self-study to explore the processes of pedagogical innovation in physical education teacher education**

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Abstract

This collaborative self-study examined the experiences of two teacher educators who developed and implemented a pedagogical approach that prioritised learning how to facilitate meaningful physical education (PE) experiences in their Physical Education Teacher Education (PETE) programmes. Data sources included 33 individual planning and reflection documents, 33 critical friend responses and transcriptions of over 7 hours of skype conversations, which were gathered across two academic years (2013-2015). Collaborative self-study provided a scaffold to explore our pedagogies in terms of learning about teaching and teaching about teaching (Loughran, 2006). Through development and implementation of an innovation we enhanced our understanding of pedagogies that support pre-service teachers learning how to foster meaningful PE experiences, a process which resulted in better alignment of our beliefs and pedagogical practices. This study illustrates the merits of collaborative self-study to build teacher educators’ capacity for innovation and shape their pedagogical practices through reflection and peer support. The potential of self-study to contribute to the knowledge base of pedagogies of teacher education as part of a larger programme of research is highlighted.
The Pedagogies of Physical Education Teacher Education

Pedagogy as a concept and as part of one’s practice is central to the impact teacher education programmes have on future teachers’ experiences of learning to teach. Teacher education pedagogies include the relationship between teaching and learning, and how teacher education experiences support the development of knowledge and understanding in learning to teach (Loughran, 2006). The pedagogies used in PETE therefore require consideration of both learning about teaching physical education (PE) by pre-service teachers and teaching about teaching PE. Learning about teaching PE involves students learning PE content while simultaneously learning the pedagogical knowledge and pedagogical content knowledge about the teaching of this content to children and youth. Researchers have explored how a variety of pedagogies and teaching styles can best support students’ learning about teaching. Though direct teaching styles still dominate within PETE programmes, more student-centred approaches have emerged in recent years (Byra, 2006). It is suggested that placing pre-service teachers’ experiences at the centre of curriculum decision-making can enhance the impact of PETE pedagogies on their learning (Oliver et al, 2013). Teaching about teaching PE involves teacher educators ‘unpacking teaching in ways that give students access to the pedagogical reasoning, uncertainties and dilemmas of practice that are inherent in understanding teaching as being problematic’ (Loughran, 2006, p.6). Recent exploration of teaching about teaching practices by PE teacher educators (Ovens & Fletcher, 2014a) highlights the crucial role their pedagogical approaches play in determining the outcomes of teacher education.

Despite our increasing understanding of PETE pedagogies, PETE programmes are in some cases failing to prepare future PE teachers for the realities and challenges of contemporary schools (Armour & Harris, 2013; O’Sullivan, 2014). This is reflected in the limited impact of PE in the lives of many students (Green, 2012; Lodewyk & Pybus, 2012).
Teacher educators need to better support pre-service teachers’ learning in PETE to prepare them to teach in ways that respond to and are meaningful and relevant to their students. There is a need to establish empirical evidence supporting pedagogies that can effectively prepare future teachers to facilitate meaningful PE experiences in contemporary school settings. This requires building a more comprehensive evidence-base of pedagogies related to both learning about teaching and teaching about teaching, and how they interact to influence future teachers’ practice. A self-study frame enabled us to gain insight on teacher educators’ experiences of learning about teaching and teaching about teaching pedagogies in PETE. We contribute empirical evidence of PETE pedagogies that support learning how to facilitate meaningful PE experiences, which can guide teacher educators’ pedagogical decision-making and enhance the development of high quality, high impact PETE programmes.

**Our pedagogical approach in PETE**

A key assumption of this work is that fostering meaningful PE experiences and learning about how to teach in ways that support meaningful PE experiences can positively influence the impact of PETE on future teachers’ teaching practice and student learning in schools. We adopted a psycho-philosophical approach to meaning-making (Metheny, 1967; 1968; Polanyi, 1961; Polanyi & Prosch, 1975), recognising the personal, embodied nature of meaning-making where thought, reason and feeling are considered as interrelated concepts. Further, meaning-making encompasses both cognitive and mental processes (Polanyi, 1961) with shared, social, and institutional dimensions. Meaningfulness derives from personal individual meaning interpretations based on the participant’s goals for participation and the value attributed to the personal significance of participation (Chen, 1998).

Our approach was inspired by compelling theoretical arguments in favour of prioritising meaningful experiences in PE and coaching settings (Kretchmar, 2000; 2005;
We sought to instil in future PE teachers and coaches a desire to promote the habit and persistence seen in lifelong commitment to physical activity participation (Kretchmar, 2001). Our approach, which we have called LAMPE (Learning About Meaningful Physical Education), comprises a set of PETE pedagogies that support pre-service teachers’ learning how to facilitate meaningful physical activity experiences in PE (Tjeerdsma Blankenship & Ayers, 2010; Brown, 2014; Kretchmar, 2000; 2008; McCaughtry & Rovegno, 2001). Tjeerdsma Blankenship and Ayers’s (2010) framework ‘A Foundational Approach to Physical Education and PETE’ provided a starting point for LAMPE as it had built on Kretchmar’s writings and prioritised a joy-orientation to teaching PE in schools. Scott Kretchmar’s work informed our identification of criteria for meaningful experience in PE: challenge, social interaction, increased motor competence, fun and delight (Kretchmar 2000; 2001; 2006a; 2007; 2008). We also noted the importance of reflection in considering the significance of movement experiences (Nilges, 2004).

Adapting Loughran’s (2006) key concepts, LAMPE included explicit consideration of both learning about teaching and teaching about teaching. Pedagogical strategies employed\(^1\) included:

\begin{itemize}
  \item an explicit focus on meaningful PE experiences in content selection, task design and instruction,
  \item provision of physical activity experiences aligned with Kretchmar’s (2006a) criteria for meaningful engagement in PE (listed above),
  \item opportunities for pre-service teachers to reflect on both present and past experiences of physical activity,
\end{itemize}

\(^1\) We aim to disseminate further details of pedagogies that support LAMPE in future work.
• critical engagement by pre-service teachers with the pedagogies through which they learned content.

We developed and implemented LAMPE in required university courses with pre-service elementary teachers in Ireland (taught by Déirdre) and undergraduate PE and coach education students in Canada (taught by Tim) in the academic years 2013-2015. A PETE expert (Mary) was involved as a critical friend to support development of the innovation.

**Aim of the study**

This paper addresses the following question: What were the experiences of two teacher educators implementing PETE pedagogies that support learning how to facilitate meaningful PE experiences? We argue that the insights gained can guide the development of an evidence-informed framework of pedagogical approaches that prioritise learning how to facilitate meaningful PE experiences and that can support teacher candidates’ learning about this approach in PETE. Findings of our research can contribute to the knowledge base on pedagogies of PETE by helping us ‘to better understand what can work in teaching, how it works, and why it works’ (Fletcher & Ovens, 2014, p.189). Only one study to date has specifically examined the meaning-making of pre-service teachers in PETE (Maivorsdotter, Lundvall, & Quennerstedt, 2014). While not specifically focused on learning about meaningful engagement the authors highlighted a tension in pre-service teachers’ meaning-making between their role as athlete-participant within the sport activity and their learning and development as a teacher in a games-based course. Their research highlights the importance of examining both the *learning about teaching* and *teaching about teaching* aspects of PETE pedagogy.

This research responds to recent calls in the self-study literature for exploration in cross-institutional and cross-national contexts of ‘how [PETE] pedagogies work and for what
purposes’ (p.178) (O’Sullivan, 2014). To this point, much of the work on pedagogical innovations in PE teaching (in schools or in universities) has focused largely on the products of innovations. Using Sport Education as an example of an innovation, Siedentop, Hastie, and van der Mars’s (2004) text, *The complete guide to sport education* offers readers with a rationale and set of guidelines to implement Sport Education, while Hastie’s (2012) edited volume (and many other research articles) offers evidence to support the effectiveness of the model in multiple contexts in both PE and PETE. While the results of these works have been crucial in advancing the field, what have been missing are examples of the *processes* of innovation: representations of the experiences of the teacher educators as they develop an innovation. Sharing these processes might encourage the creation of other innovative pedagogical approaches. This paper focuses on our experiences of the *processes* of developing and implementing this pedagogical innovation across two academic years. We are using self-study of our own practices as part of a larger programme of PETE research that also investigates students’ experiences of LAMPE. In this way, we respond to Zeichner’s (2007) call to use self-study as an integral part of larger programmes of research on teacher education programmes and practices in ways that extend beyond the immediate contexts of the teacher educators conducting the work.

**Methodology**

**Collaborative Self-study**

Self-study was the starting point to explore our experiences of implementing PETE pedagogies that support learning about how to facilitate meaningful PE experiences. We used LaBoskey’s (2004) criteria for quality in self-study: (a) self-initiated and -focused, (b) improvement aimed, (c) interactive, (d) multiple forms of qualitative data, and (e) validity
based in trustworthiness. Our research aligned with the features of self-study (Ovens & Fletcher, 2014b) through:

1. A commitment to grounding our research and sharing our developing knowledge and understanding in ways that might move beyond our individual contexts to inform and reframe future teacher education practices (Loughran, 2007). We anticipated that self-study would capture the opportunities and challenges of implementing LAMPE in ways that would provide self-illumination as well as allowing for sharing of insights on pedagogies of meaning-making in PETE to the wider teacher education community (Samaras & Freese, 2006).

2. Adoption of an inquiry-oriented stance with a focus on the self enacting practice: Studying our selves within the context of the LAMPE innovation required us to analyze our teacher education practices, make judgments on teaching and learning encounters, and identify enabling and limiting aspects of our pedagogical practices (Ovens & Fletcher, 2014a). Self-study allowed us to examine the ways our experiences and identities led us to engage with questions and challenges surrounding the pedagogical practices of PETE (O'Sullivan, 2014; Tinning, 2014).

3. A desire to learn and improve, which involves a willingness to risk exposure of self in order to open up alternative ways of being a teacher educator and doing teacher education. Self-study provided the tools to inquire systematically into the complex and problematic nature of our teacher education practice (Loughran, 2006) in developing and implementing this pedagogical innovation.

**Participants**

The research involved three teacher educators (Tim and Déirdre, who implemented the innovation, and Mary who acted as critical friend) and more than 100 pre-service teacher
education and coach education students who were the students in our classes. In each of the two years (2013-2015) Déirdre implemented LAMPE in an *Introduction to Teaching Physical Education* course for generalist elementary teachers and Tim implemented the approach in a *Developmental Games* course for future specialist PE teachers and coaches. Mary, an experienced PE teacher educator/researcher, acted as a critical friend throughout the entire study. Tim had extensive experience in collaborative self-study related to his practice. Déirdre and Mary had limited experience of involvement in self-study research though they had both conducted research related to innovative teacher education practices.

**Data Sources**

Ethical approval was granted by both institutions where Tim and Déirdre taught. Multiple qualitative data sources were collected across two years. In semester 1 each year Déirdre implemented LAMPE in her course and Tim acted as critical friend. For each class, data sources included Déirdre’s planning and reflection documents (which were emailed to Tim), non-participant observations (conducted by a research assistant), and Tim’s and Déirdre’s reflections to each other about the process. We also recorded and transcribed two extended Skype conversations that addressed elements of the written reflections. In semester 2 of each year Tim and Déirdre switched roles and repeated the process described above. Table 1 illustrates the data sources for each lecture by Déirdre in semester 1 of each year. A similar range of data was collected for Tim’s lectures in semester 2 of each year.

INSERT TABLE 1 HERE

Table 1: Data sources

We used ‘turning points’ (Bullock & Ritter, 2011) as described in table 1 to frame our approach to data analysis. Three individual turning points from the complete data set were
identified independently at the end of each of four semesters by Déirdre and Tim using a thematic approach to analysis (Braun & Clarke, 2006). These were moments when we came to understand pedagogies that support learning how to facilitate meaningful PE experiences through collaborative self-study. For example, in semester 4 Tim indentified the following turning point: Making both distinctions and connections between meaningful movement experiences for PETE students and K-12 students. Each turning point emerged from an analysis of multiple data sources. To increase trustworthiness Tim and Déirdre discussed their turning points with each other each semester. These conversations provided validation for the accounts presented. Both sets of turning points for each semester were then shared with Mary. She acted as an external critical friend by seeking clarifications, questioning and challenging us to reconsider aspects of the turning points identified both in written responses and during the three-way conversation. These conversations were recorded and used as data. Following feedback from Mary revisions were made to each of the turning point documents.

An end-of-year reflection was completed each academic year to summarise and synthesise developments. The final step involved a further thematic analysis of all turning points to construct three themes that reflected our experiences of developing and implementing LAMPE in our courses. In this paper we draw on the interactions between Tim and Déirdre as outlined in Table 1 to illustrate teacher educator learning in the development of this pedagogical innovation.

To address issues of trustworthiness we completed an ‘expert’ member check (Braun & Clarke, 2013) with four scholars whose conceptual papers on prioritising meaningful experiences in PE had guided our pedagogical approach. We interacted individually with each expert by email, sharing a preliminary framework of the pedagogies we had developed for our students to use on school placements. Their responses were encouraging and mostly confirmed overall alignment of our pedagogical approach with their theoretical writings. In
the spirit of exemplar-based validation used in self-studies (LaBoskey, 2004), we call on readers to judge the trustworthiness based on the extent to which our findings and interpretations resonate with readers’ experiences and understanding of PETE practice.

**Findings**

Engagement in self-study allowed us to support students in learning about teaching for meaningful PE experiences (what and why) and in teaching about teaching for meaningful experiences in PE lessons (how). We developed our knowledge and understanding of pedagogies that support pre-service teachers to learn the content and practices that foster meaningful PE experiences through discussions and examination of our experiences of implementing LAMPE pedagogies. In the three themes below we discuss examples from our PETE practices related to both *learning about teaching PE that prioritises* meaningful experiences and *teaching about teaching PE that prioritises* meaningful experiences.

**1. Self-study processes supported development of the pedagogical innovation**

Self-study processes helped us to explore, question and ultimately better understand the content and pedagogical content knowledge in PETE needed to *learn about teaching* PE for meaningful experiences and what learning this content entailed for our students. Sharing of our perspectives on those pedagogies allowed us to express concerns about implementing the approach consistently. It was not unusual for Déirdre to email Tim about aspects of *learning about teaching* that began as follows: ‘Déirdre here in search of some advice…’ (Week 6, Year 1). These interactions became a source of support, advice and reassurance in *learning about teaching* aspects of the innovation. For example, at the end of year 1 Déirdre questioned ‘if I was doing this on my own …. I don’t know if I’d be still be doing it’ (Final reflection, Year 1). This illustrates how collaborative self-study supported our persistence during early stages of the innovation. Conversations between Tim and Déirdre allowed
questions to be raised and solutions to be found in identifying and implementing pedagogies that supported students’ learning about teaching for meaningful PE experiences. Déirdre also acknowledged her progression in facilitating learning about teaching at the start of year 2:

The main difference this year was that I had been in this situation before… I had evidence from year 1 of the kinds of pedagogies that might support pre-service teachers to learn about teaching PE using a meaning-making lens (Turning points, Semester 3).

Teaching about teaching for meaningful PE engagement in PETE also supported our learning about the content and pedagogies needed to support student learning of the approach. Being explicit about our planning and teaching decisions and providing opportunities for students to interrogate those decisions and practices emerged as a pedagogy that supported a focus on meaningful PE engagement. For example, Tim said:

Most of the time I have also made a point of being explicit about my pedagogy, articulating the thoughts and reasons behind my decisions and actions, and tried to show how those decisions and actions have been enacted with a meaning-making focus in mind (Lab 5, Semester 4).

Tim used questioning to prompt students to reflect on and unpack his teaching decisions. For example, Tim shared:

... While I was with the group, they said they were confused and weren’t sure if they were doing it right, and I asked: “Well, what’s the problem?” After several minutes of them describing things to me and walking through some situations or interpretations when they still did not find a suitable solution, I explained how I envisioned the
activity working... I asked them to reflect on the situation that just happened and my involvement as the teacher. I was intentionally quiet (in fact, telling myself to SHUT UP throughout the entire episode) so that the onus of solving the problem, communicating, etc. was left with them. I told this to the small group and then to the large group at the end of class and said how easy it would have been for me to tell them the answer and how difficult it can be for teachers to just SHUT UP and let students try to work through problems themselves. (Lab 3, Semester 2).

In this instance it was Déirdre’s questioning about how Tim approached teaching about teaching that led us to make more explicit connections to the theories underpinning our practices. The interactive nature of our self-study process provided multiple opportunities to interrogate and learn about teaching for meaningful PE engagement. Discussion of our pedagogies-in-action helped us be explicit about our practices with students (thus influencing their learning about teaching). Weekly discussions about planning, content, and assessment supported Tim and Déirdre’s analysis and refinement of specific pedagogies and discourses related to meaningful PE engagement. In turn, this supported the implementation of these pedagogies drawing on PETE pedagogies of learning about teaching and teaching about teaching (Loughran, 2006).

2 Self-study processes developed our teacher educator practices

Tim had previous experience of sharing aspects of his pedagogical practice with students (teaching about teaching). This allowed him to support Déirdre’s development of teaching about teaching pedagogies. For example, in what Déirdre describes as a ‘lightbulb’ moment in Semester 1, Tim asked her ‘What do the students think of the approach?’ (Skype 1, Semester 1). Déirdre reflected:
I realised I had been focused completely on the [meaning-oriented] approach... (I was still working out the approach) and that this focus on content had moved me away from a student-centred approach that I claimed to align with... I had completely forgotten that my focus needed to be on how the learners were experiencing this content (Turning point 1, Semester 1).

Déirdre’s preoccupation with figuring out the content and pedagogical activities for meaningful PE experiences to engage students had resulted in her overlooking how students were experiencing their learning about teaching. Tim’s questions prompted Déirdre to readjust her focus and the resultant feedback highlighted that students’ concerns were more focused on school placement than on learning pedagogies to support meaningful engagement in PE. Déirdre’s students’ perspectives highlighted the challenge of addressing students’ immediate needs and beliefs while also providing a solid basis for future professional learning. It also indicates that when teaching about teaching pedagogies are not given equal emphasis a utilitarian focus on learning about teaching for school placement can result. Tim suggested placing greater emphasis on teaching about teaching:

…do you think you will share your disappointment with students? And if so, how? Because it has the scope to create some tension/discomfort which could unravel a whole series of “unwanted” things… But if you are trying to provide transparency into your teaching decisions, thoughts, actions, this might provide a good example that the best laid plans don’t always come to fruition (Week 7, Semester 1).

Together Déirdre and Tim explored approaches to teaching about teaching the reasons behind pedagogical decisions to help refocus students on meaningful PE engagement. Déirdre further developed her emphasis on teaching about teaching in year 2 by adopting a similar
approach to Tim in reflecting back on the previous week’s lecture with students. She acknowledged:

Tim’s sharing of his placing his practice central to engage students in critical discussion about the decisions and actions of his teaching showed me/ modelled ways that I could go further than I currently do to allow for critical analysis of my practice (Final reflection, Year 1).

In this way, our students were invited into the processes of making teacher education a site for inquiry into the complex and problematic nature of teaching practice (Loughran, 2014).

Tim’s articulations of his student-centred teacher education practices related to teaching about teaching allowed Déirdre to rethink her approach, prompting her to spend more time thinking about the questions she asks, but also to become more comfortable feeling uncomfortable while teaching about teaching: ‘asking open-ended questions (that I do not necessarily’ know’ the answer to) creates moments of uncertainty that are also moments of potentiality…resulting in better quality discussion’ (Final reflection, Year 1). Déirdre’s questions to Tim about his pedagogical approaches pushed him to think about and articulate the reasoning behind his decisions, helping him to see his own teaching from another viewpoint. Déirdre’s turning points at the end of year 2 show how her engagement with teaching about teaching pedagogies has developed:

Interrogation of the value of teaching about teaching strategies where I am explicit to students about my decisions and actions using thinking out loud and reflection strategies are important as part of my pedagogy of teacher education but I need to carefully consider how my narrative becomes the only story and has the potential to contradict student stories – this reminds me again of the importance of capturing student perspectives (Turning points, Year 2)
Our sharing of teacher education practices provided insight on approaches to learning about teaching and teaching about teaching of another teacher educator and resulted in greater understanding of how to effectively implement innovative pedagogies of teacher education to support student learning.

3. Self-study processes encouraged alignment of beliefs and practices

To develop and implement LAMPE we translated theoretical ideas related to meaningful PE engagement into concrete PETE pedagogical actions which we then reviewed and refined. Through discussion and reflection we were prompted to integrate these new pedagogical approaches with our existing beliefs and practices about teaching and teacher education. For example, Déirdre said: ‘[Tim’s] reflections have really helped me to plan and to focus on what counts to me (by asking what counts)’ (Week 6, Semester 1). The data unearthed some assumptions that, in particular, Tim had about ways in which PETE students might make meaning from movement experiences and how this influenced his pedagogies. For example:

I had an assumption that because this course is “Developmental Games” and there is a focus on games for elementary school aged children (5-12) that this group of university students (age 20ish) would not find this lesson on cooperative games meaningful to their own personal physical activity participation (Week 1, Semester 4).

Tim’s reflection on his role in classes exposes the power of making oneself and one’s practice vulnerable. He also struggled initially in being comfortable with taking a facilitative role with students when being observed by a research assistant:

There were several instances throughout the term when I felt very uncomfortable with having my teaching observed…because of my thoughts about what she was thinking
while watching me teach. The challenge was because on quite a few occasions after I had set up an activity I found myself standing on the side-lines saying nothing, feeling like I was doing nothing…. (Turning Points, Semester 2).

By thinking through his feelings and reactions Tim became reassured that his practice was grounded in his beliefs related to learning about teaching:

However, as time and the classes progressed, and as Déirdre offered much needed thought and feedback as a critical friend, I came to feel somewhat comfortable in not talking and in standing by observing as though I was an innocent bystander. The comfort came when I returned to my aims and beliefs for the course, in particular, in wanting to set up a student-centred environment where students could feel empowered to take some ownership or have some autonomy in the ways in which they participated (Turning points, Semester 2).

This example illustrates how the interactive nature of the self-study and particularly the weekly reflections on practice prompted a conscious alignment of beliefs and practices that consolidated our approaches to enhance students’ learning about teaching.

Overall, the use of meaningful PE engagement as a point of reference and filter for all decision-making related to our practices resulted in greater coherence, clarity of intention and better alignment of our beliefs and practices. Déirdre reflected:

I feel like this approach provides a frame that allows me to teach from one coherent, consistent base that fits with my philosophy of physical education and the kinds of physical activity experiences I think we should be creating for young people - I can draw on this as I plan and teach. This makes me feel more confident and makes my teaching more satisfying and more meaningful (Final reflection, Year 1).
Discussion and Implications

Our experiences reflect those of other self-study PETE scholars who found increased ‘confidence in the validity of their actions and voice, as well as becoming more resilient and supported in their work’ (Fletcher & Ovens, 2014, p.182). In sharing our experiences of developing and implementing LAMPE we contribute to the knowledge base of pedagogies for PETE. We show how the integrated theoretical ideas of learning about teaching and teaching about teaching (Loughran, 2006) provide an important framework for thinking about and enacting pedagogies for PETE. Empirical evidence of implementing these approaches illustrates both opportunities and challenges in enhancing pedagogical practices in PETE. These findings provide guidance to other PETE educators to ensure both learning about teaching and teaching about teaching pedagogies are given sufficient emphasis within their PETE programmes. Insight from experiences of implementing pedagogies can facilitate refinement of PETE practices and result in enhanced PETE experiences for pre-service teachers.

Our research also illustrates the merits of self-study research in supporting the development of innovations in PETE practices (Ovens & Fletcher, 2014a). By building on the conceptual work of others (Kretchmar, 2000; 2008; McCaughtry & Rovegno, 2001; Tjeerdsma Blankenship & Ayers, 2010) our illustration of PETE pedagogies that support learning how to facilitate meaningful PE experiences is significant because it provides an approach to support early career teachers to appreciate the value of meaningful engagement with PE and provide them with pedagogical approaches to support student learning (O’Sullivan, 2014). If attention to intrinsic forms of motivation (such as personal satisfaction, joy, and meaning) are so important in developing long-term commitments to physical activity (Ryan, Frederick, Lepes, Rubio & Sheldon, 1997), and if many students report finding a lack
of meaning in current forms of PE (Lodewyk & Pybus, 2012), understanding pedagogies that can help prepare future teachers and coaches to foster these experiences is an important contribution to the literature. Increased knowledge and understanding of pedagogies that supports learning how to foster meaningful PE engagement through our research takes some tentative and partial steps toward such understanding.

We developed our identities as teacher educators (Zeichner, 2007) and our capacities as teacher educators to support student learning (Ovens & Fletcher, 2014a). For example, we developed and better articulated our own teacher education practices and ensured we aligned with student-centred approaches and philosophies, despite the challenges of working though unfamiliar content and pedagogies. Finally, we engaged in a recalibration of our beliefs and practices to align with pedagogies that support learning how to facilitate meaningful engagement in PE, and improved the ways in which we communicated the thoughts, decisions, and dilemmas of these new pedagogies with our PETE students. In the process we established a more confident and authentic representation of our teacher educator identities.

This potential for change on personal and programmatic levels points to the opportunity self-study research presents to impact wider teacher education pedagogical practices (Vanassche & Kelchtermans, 2015).

We also show how self-study can support the development of innovative pedagogical practices. For example, we have demonstrated the central role that collaboration in the form of critical friendship has played in the development and articulation of new pedagogies. There were several times when we each felt confused, in doubt, or willing to give up, and risked putting the potential of the innovation at risk, however, the moral and emotional support offered through critical friendship encouraged persistence through vulnerable situations. In this way, our research demonstrates the necessity of attention to selves-in-
practice in self-study research that offers unique insights into the often very personal processes of teacher education (Pinnegar & Hamilton, 2009).

**Conclusion**

Vanassche and Kelchtermans (2015) emphasise the importance of grounding the local everyday practices and decisions described and critically analysed by individual teacher educators engaged in self-study to offer ‘a conceptualization of knowledge that others may use to frame and investigate their situations and seek the general from the particular’ (p.15). For us, changing PETE practices presents a starting point to reshape the practices of school-based PE. Our next steps in developing the innovation require us to build on our own personal experiences and capture the experiences of future teachers and coaches who are learning to teach through the LAMPE approach. This will be followed by tracking future teachers and coaches into the field. At each stage of the process, experiences from our students and their students will inform our own future practice. This study is an example of the building of ‘chains of inquiry’ that Zeichner (2007) suggested is much needed if self-study is to continue making a vibrant contribution to research on teacher education. Our self-study research offered us the opportunity to extend the conversation about and contribute to knowledge and understanding of PETE pedagogies as innovation in the ongoing process of developing high quality teacher education programmes.
References


### Table 1: Data Sources

<table>
<thead>
<tr>
<th>Source</th>
<th>Prompts/ Detail</th>
<th>Quantity of Source</th>
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| Written planning documents      | • Topic of the session  
|                                 | • Information gathered since the last lecture/ Changes to your approach  
|                                 | • Assumptions about student teachers and learning to teach guiding planning decisions                                                            | Déirdre 17        |
|                                 | Tim 16                                                                                                                                          |                    |
| Written reflection documents    | • How were my assumptions challenged?  
|                                 | • How/when was I made to feel vulnerable during the lesson? How did I handle this?  
|                                 | • What moments were particularly “joyful” for me teaching this lesson? Why were they joyful?  
|                                 | • What insights and understandings about teaching and learning did I gain?  
|                                 | Déirdre 17                                                                                                                                       |                    |
|                                 | Tim 16                                                                                                                                          |                    |
| Non-participant observations    | • Was meaningful PE engagement made explicit throughout the lesson? How?  
|                                 | • What students seemed to be doing during the session                                                                                           | Déirdre 17        |
|                                 | Tim 16                                                                                                                                          |                    |
| Critical friend responses       | Year 1: Responses were inserted on the planning template. No specific prompts were provided.  
|                                 | Year 2: Reading the account above:  
|                                 | • What resonated with my thinking was…  
|                                 | • The questions that it raised for me are…..  
|                                 | • If I was going to be contentious I might suggest….                                                                                           | Déirdre 16        |
|                                 | Tim 17                                                                                                                                          |                    |
| Final lecture response          | Reflecting on the response above:  
|                                 | • My position now is….  
|                                 | • I still have questions about….                                                                                                               | Déirdre 17        |
|                                 | Tim 16                                                                                                                                          |                    |
| Skype transcripts               | Sample agenda items for discussion at skype 1 included:  
|                                 | 1. A 'soundbite' for a meaning-oriented approach in words that are accessible to students - to articulate the vision/ overall approach  
|                                 | 2. A framework for a meaning-oriented approach  
|                                 | 3. Assessing joy/ delight/ personal meaning/ identity  
<p>|                                 | 4. Providing students with a meaning-oriented experience                                                                                      | +7 hours           |
| Turning                         | Turning points have the following characteristics:                                                                                              | Déirdre            |</p>
<table>
<thead>
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<th>points</th>
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<tr>
<td>• An affective element to the data</td>
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<td>• The data frame a problem of practice</td>
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<td>• The author of the data is implicitly or explicitly asking for help from a critical friend</td>
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<td>• The data allow time to take action on the problem</td>
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<td>(Bullock &amp; Ritter, 2011).</td>
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| 3-way conversations with Mary                                           |   |
| • Clarification of turning points                                      |   |
| • Challenging of assumptions                                            |   |
| • Implications for future practice                                     |   |

| End of year reflection                                                  |   |
| • Reflecting on my turning points…                                      |   |
| • The next steps are…                                                    |   |

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<thead>
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<th>Tim 2</th>
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