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"I know when I did it, I got frustrated":

The Influence of 'Living' a Curriculum for Preservice Teachers

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Abstract

In addressing the theory-practice divide, this research provides valuable insight into preservice teachers' (PSTs) learning through an experiential learning (EL) framework during teacher education. Utilising an interpretivist approach, this study aims at providing insight on how PSTs link the manner in which they learned during teacher education to how they teach during school placement. Evidence suggested participants valued facilitating enjoyable and meaningful learning experiences for their students in the course of learning through an EL approach. Learning through an experiential approach provided the PSTs with confidence in what to teach. However, the PSTs also assumed their own students would have similar responses to the learning experiences they had themselves when completing tasks during teacher education. PSTs were limited in their ability to recognise student learning and in understanding student capacity for progression. Implications of the findings for teacher education are discussed.

Keywords: Experiential learning frameworks, learning to teach, physical education, outdoor education, adventure education, teacher education.

“I know when I did it, I got frustrated”:

The Influence of ‘Living’ a Curriculum for Preservice Teachers

Introduction

The value of teacher education has been called into question in recent decades with claims that its influence can be ‘washed out’ during the early school experiences of newly qualified teachers (Zeichner&Tabachnick, 1981). Tatto, Richmond and Carter Andrews (2016) advocate urgency in understanding the role and effectiveness of teacher education given the plethora of pathways, including university and/or school based approaches, to gaining qualified teacher status. Teacher education programs that support coursework integrated with school placements have been found to develop more effective teachers who are more likely to enter and remain in teaching (Darling-Hammond, 2000) and address the challenge of bridging the theory-practice divide (Korthagen, 2010).

Teachers need a significant depth of knowledge of their subject area in a way that allows them to make it comprehensible to all learners (Darling-Hammond, 2000). Shulman (1986) suggested that if teachers are to know content sufficiently well to make it understandable to students, what he has referred to as ‘pedagogical content knowledge’ (PCK), content and pedagogy must be learned simultaneously. More recently scholars have suggested that while PCK is significant for teacher learning it does not prepare them for the ad hoc happenings of a classroom (Ball, 2000). If education is to support students in gaining ‘useable’ knowledge, Brown, Collins and Duguid (1989) argue greater attention is needed on the learning activity and the situation in which the learning takes place. Similarly, Loughran (2006) postulates that a pedagogy of teacher education requires teacher educators to help PSTs link the manner in which they learn as students to how they ultimately teach as practicing teachers. Loughran (2006) highlights that through their apprenticeship of

observation (Lortie, 1975) PSTs were not privy to the thinking and planning of the teaching they experienced, resulting in them having a limited perspective of both teaching and learning. As a way of addressing this, Loughran (2006) urges teacher educators to “unpack teaching in ways that gives students access to the pedagogical reasoning, uncertainties and dilemmas of practice” (p. 6).

More active learning approaches have been strongly advocated as a way of supporting PSTs development and understanding of teaching and learning (Korthagen, 2010). There is a plethora of literature to support the view that experiential approaches to learning can afford participants a deeper understanding of an experience, which in turn can lead to growth and development (Beard & Wilson, 2006; Kolb, 1984; Panicucci, 2007). However, Sutherland, Ressler and Stuhr (2011) highlight many complexities faced by PSTs in supporting their students' learning when teaching EL based lessons. Sutherland et al. (2011) noted for example, PSTs failed to recognise the connection between the types of questions they asked students and the responses they received, as well as a tendency for PSTs to facilitate teacher-directed debriefs rather than give students ownership over their learning. Critically, the subjective nature of learning through experience and the applicability of that learning to a wider context have been questioned (Beard & Wilson, 2006). Munby and Russell (1994) noted that PSTs can be hesitant in considering their own experiences as an “authoritative source of knowledge about teaching” (p. 94), suggesting that the very nature of PSTs being observed during school placement can hinder their ability to learn from their own teaching experiences and instead seek validation from university tutors. The lasting effect of knowledge gained through experience is also questioned, as is the usefulness or transferability of learning experiences to other situations (Brown, 2010).

Oslin, Collier and Mitchell (2001) advocated for teacher education to provide opportunities for PSTs to directly experience content and pedagogy simultaneously, which

they coined 'living the curriculum.' This involved discussing curricular models, such as Sport Education, with the PSTs, providing them with examples of how it can be used in practice, as well as providing opportunities to directly experience the model. They suggested such opportunities can support PSTs' ability to teach with more flexibility and employ more learner-centred lessons. Sutherland, Stuhr and Ayvazo (2016) suggested 'living the curriculum' provides PSTs a frame of reference for understanding the intricacies of learning to teach learner centred curricula. This study sought to explore the influence of learning to teach Outdoor and Adventure Education (OAE) through an EL approach where PSTs directly experienced OAE content as way of concurrently learning about OAE and learning about teaching (Loughran, 2006) during a Physical Education and Teacher Education (PETE) programme. It was hoped that this might provide insight about how PSTs link the manner in which they are taught with how they teach (Loughran, 2006) young people in schools. We also sought to gain perspective on the 'usability' of learning through experience and guided reflection (Kolb, 1984) for PSTs when related to learning to teach OAE. The research questions for this study were: (a) What influence does learning through a 'living the curriculum' approach have for PSTs when teaching in schools?; (b) How and in what way do PSTs link learning through an experiential learning approach during PETE to how and what they teach in a school setting?; and (c) In what way does learning through a 'lived' approach support PSTs in facilitating learner-centred lessons?

Given the experiential and situated perspective of OAE (the content areas in which the PSTs were learning to teach during this investigation) we outline below the nature and purpose of OAE. We in turn discuss OAE and its' associated pedagogies used in one teacher education programme and how the PSTs were prepared to teach these subjects using this approach/framework.

Outdoor and Adventure Education

Adventure education (AE) has a strong focus on supporting personal growth through the development of interpersonal and intrapersonal relationships (Priest, 1999). It employs an experiential approach through which participants directly experience a task that in turn is supported by reflection (Panicucci, 2007), frequently referred to as debriefing or processing. Using an 'Adventure Wave' metaphor, Panicucci (2007) described three essential components of adventure experiences: (a) briefing (introducing) of the experience, (b) doing the experience, and (c) debriefing of the experience. Thus inherent to AE is for participants to be afforded the opportunity to construct their own meaning from a lesson's experiences (Panicucci, 2007) and focus on the learning that takes place during their engagement in physical activity (Dyson & Sutherland, 2015). There is often uncertainty of outcome with adventure activities and therefore tasks are carefully sequenced in an effort to support student safety while allowing them to take ownership of their learning (Dyson & Sutherland, 2015).

Outdoor education (OE) is closely linked to AE and follows the experiential approach where learning occurs through doing, and is supported by reflection (Priest & Gass, 2005). It tends to encompass activity taking place in a natural setting (Stiehl & Parker, 2010) or through ensuring a clear connection to the natural environment (Bunting, 2006). A distinct difference between OE and AE is the skill development focus of OE (Stiehl & Parker, 2010). OE involves developing skills related to the out-of-doors such as those needed to locate, navigate to, and set up a campsite including map reading, knot tying, and setting up a tent.

Physical Education Curriculum in Ireland

Outdoor and adventure education is part of the Junior Cycle (JC) physical education curriculum introduced in Ireland in 2003 by the Department of Education and Science (DES) and the National Council for Curriculum and Assessment (NCCA). JC (grades 7-9 in the USA) spans the first three years of post primary school, which consists of five years and an

optional one year between the junior and senior cycle. During JC all students participate in physical education once a week; lessons are guided by a Junior Cycle Physical Education (JCPE) syllabus. The JCPE includes seven physical activity strands: adventure, aquatics, athletics, dance, invasion games, net and fielding games, gymnastics and health-related activity (DES & NCCA, 2003). The adventure strand aims at providing students the “opportunity to develop personally, socially, and physically in a safe and challenging environment...” in an effort to develop “qualities such as self-reliance, self-confidence, responsibility, regard for others and respect for the environment” (p. 9). The content of the syllabus includes orienteering, camp craft and team challenges.

Methods

Case study methodology was used employing an interpretive approach (Cohen, Manion, & Morrison, 2007) intended to examine the relationships between how the PSTs taught during school placement and the manner in which they learned OAE during teacher education. Mindful of Hitchcock and Hughes (1989) characteristics of case study approaches, a significant amount of time was spent prior to, during and post school placement with each PST, and a variety of data collection strategies were employed focusing on their perceptions of teaching OAE. This approach was based on Loughran's (2006) learning to teach framework where PSTs better understand the complexities inherent in how they learn content and how they enact that understanding in teaching it to others.

Research Setting and Participants

Before embarking on a 2nd year school placement experience, a cohort of 75 PSTs were invited to be part of the study and 36 volunteered involvement. The PSTs were completing a four year concurrent PETE program in Ireland. The PSTs had completed an OAE module during their first semester of the PETE program. Using purposeful sampling

(Hartas, 2010), 14 PSTs were chosen based on school timetables (content delivery and time of lesson) and geographical demographics of their school placements, to allow the researcher to travel to the sites for observations. Of this group of PSTs, seven (three male and four female) completed all data collection components and are represented in this manuscript. The PSTs were Caucasian and between 19-20 years old. The PSTs had little to no experience of OAE prior to their PETE programme except for some team building activities through club sport involvement. This six week school placement in a post primary school was their first block placement during the PETE program.

The school placements for these seven PSTs took place in four different post-primary schools across Ireland. The university required the PSTs to team teach and solo teach a number of lessons throughout their placement. Six of the PSTs team taught their OAE lessons (n=3 schools), and one PST solo taught (n=1). The PST teaching teams included Paul and Cliona, Lorraine and Caroline, and Misha and Ronan; Sean solo taught. These are the pseudonyms provided for all seven study participants.

Sport appeared to have high status within the PE programmes of all four schools, with many PSTs suggesting game related PE lessons being the dominant model. Of the four schools supporting the PSTs, Lorraine and Caroline's school did not offer OAE (with the cooperating teacher suggesting they were not familiar with the curricula). Cliona, Paul and Sean's two schools offered OAE to senior students, however the students being taught by the PSTs were from junior classes and had no experience of OAE. In Ronan and Misha's school students experienced 'cooperative activities' in a previous year, though what this constituted was not clear as the cooperating teacher was a new staff. Ronan and Misha's teacher admitted not being knowledgeable regarding OAE and was a first time cooperating teacher. All PSTs signed informed consent forms and were free to withdraw from the study at any time.

Physical Education Teacher Education (PETE) Module

The PSTs completed an OAE module in semester one that emphasised 'living' the experiential learning cycle, receiving support about what they learned through debriefing/processing their own experiences. As they progressed through the module, PSTs considered how they might design learning experiences, facilitate students in identifying their learning through the debriefing process, and understanding how learning might look different in their teaching contexts in schools than during participation in the PETE module. The approach involved PSTs directly experiencing content and associated pedagogies both on campus and spending a day in an outdoor activity centre.

Each week, over a 12-week period students attended a 1-hour lecture focused on theoretical aspects of OAE pedagogies (e.g., experiential learning and debriefing). PSTs also attended a 2-hour and a 1-hour practicum experiencing OAE content and pedagogies simultaneously, and the opportunity to peer teach a team challenge, orienteering and camp craft lessons. Following the Project Adventure OAE framework (Henton, 1996), the pedagogies and tasks used by the lecturers supported PSTs in gaining both theoretical knowledge and practical experience in establishing group consensus by creating a 'shared commitment' contract, experiencing and reflecting on OAE activities, and being provided 'challenge by choice' options to meet their personal level of risk during the activities. The focus of the approach was for PSTs to experience and gain a realistic perspective on how the lesson/activities might look/feel in practice, and to have a set of activities to inform their choice of activities when planning for teaching. A theme-based approach was employed supporting PSTs in moving through the themes in a progressive manner, beginning with 'getting to know you' activities and progressing towards communication, co-operation, trust building, problem-solving, low level initiative activities and on to orienteering, indoor wall climbing and camp craft activities. Through directly experiencing OAE content and

pedagogy simultaneously, PSTs were situated as learners in a manner similar to how their students would learn in schools. Through discussion and questioning led by PSTs, PSTs' experiences were then unpacked and reframed as part of the teacher education program.

In addition to the PSTs peer teaching lessons on campus they also taught a problem-solving lesson in a primary school setting receiving peer and tutor feedback on this lesson. Content delivered in the module aligned with three elements of the JCPE syllabus (DES & NCCA, 2003), team challenges, orienteering and camp craft.

The lead author completed all data collection components of the study. The first two authors co-delivered the PETE module to the PSTs; both valued the role experiencing content and pedagogy can have for PSTs development of knowledge. The authors were not involved in teaching the PSTs during school placement or any aspect of the time of data collection.

Data Collection and Document Collection

In an effort to understand the PSTs' experiences, an array of data collection methods were used including observations, interviews/discussions, and document collection.

Observations. The first author acted as a participant and non-participant observer at various stages throughout the investigation. Participant observations were utilised during planning meetings in the university setting prior to school placement, and non-participant observations of PSTs lessons during school placement visits.

Participant observations. Prior to school placement the PSTs met in small cluster groups in a student lab, to discuss and prepare planning materials, allowing the researchers access to their thinking and decision making. The first author observed from the periphery, moving from cluster to cluster and at times probing and seeking clarification on students' discussions and decisions. Four cluster meetings took place prior to school placement. All

meetings were recorded using a Dictaphone and conversations later transcribed for analysis; planning materials (scheme of works, lesson plans, resource materials) were gathered. The PSTs forwarded remaining/updated schemes of work and lesson plans the day prior to each lesson delivery.

Non participant observations. During school placement each PST was observed by the first author teaching two OAE lessons. The intent of the observations was to develop a deeper understanding of what the PSTs do during teaching episodes. A blank column was added to the PSTs' lesson plans and used for researcher observation notes during observations. Behaviours, actions and key dialogue surrounding each element of the lesson were recorded. Eight non-participant observations took place with the seven PSTs across the six weeks.

Interviews. Three interview techniques were used during the study, telephone, face to face and focus group discussion. All interviews were semi-structured to allow the PSTs to discuss what was significant to them as well as to ensure the research questions were addressed (Hartas, 2010). PSTs were asked about their concerns, expectations and influences on their planning and pedagogies. All interviews/discussions were recorded via Dictaphone, with audio recordings transcribed for analysis.

Telephone interviews (n=43) were completed across the six weeks of placement, prior to and post each OAE lesson delivery. The pre-lesson delivery interviews were guided by the lesson plan received via email the previous day (n=27). When possible, interviews took place the morning of or the evening before the lesson was taught. The focus of these interviews was to ascertain the PSTs' perceived challenges, concerns, and expectations for the lesson and gain insight about planning decisions and readiness to teach the lesson. Post lesson discussions took place at the end of the school day and, where possible, immediately

after the lesson. Post lesson discussions focused on key issues addressed during the pre-lesson interview and the PSTs perceptions of the lesson.

Face to face interviews with the PSTs took place immediately after the lesson observations to discuss details of the lesson. These interviews were either individual or group orientated depending on the teaching format (i.e., solo or pair teaching). The PSTs tended to lead these discussions with the researcher gently probing any pertinent issues. The focus of the discussions was to gain an understanding of the PSTs' teaching behaviours, and perceptions of their teaching and student learning. Interviews typically lasted one hour. A total of eight face to face interviews were completed with the seven PSTs across the six weeks, two per school.

Upon completion of school placement, the PSTs participated in a focus group discussion (n=2) to reflect on their school placement experience. Focus group discussions sought further insights of the PSTs' experiences and perspectives (Wilkinson & Birmingham, 2003). Efforts to create a shared, negotiated and dynamic social environment (Cohen et al, 2007) were given consideration, with PSTs grouped in a different focus group to their teaching partner to avoid the possibility of talking over or influencing each other. This opportunity also allowed for member checking (Creswell, 2009) as a way of seeking clarification on the PSTs' views and further validating their interpretations of the experiences. Focus group discussions lasted approximately one hour and took place at the university.

Document Collection. A range of artefacts were also collected to examine the planning and reflection of the PSTs. Documents collected included the PSTs' teaching plans (schemes of work, lesson plans, and teaching resources they developed) and reflective writings (post lesson appraisals and weekly teaching reflections). These artefacts helped

guide interviews/discussions and gain in-depth knowledge of the PSTs' thinking and decision making. Researcher field notes also provided a record to contextualise situations when PSTs' perceptions and/or actions did not always align.

Data Analysis

An inductive approach to data analysis was applied through repeated examination and comparison of data. All interviews were transcribed and uploaded to Atlas ti for coding and as a way of organising the data. Using a constant comparison approach (Barbour, 2008), data were read and reviewed repeatedly to identify patterns. Codes were assigned in consideration of the investigation's research questions; example codes included 'student behaviour' and 'student enjoyment.' Data analysis was discussed during regular meetings between the researchers about how codes were used to construct themes. Themes were generated around concepts related to the research questions. As themes were generated, further probing was sought through the various data sources as their school placements continued. Data were constantly compared and contrasted as well as examined "who [said] what and in what context" (Barbour, 2008, p. 217). Triangulation of pre and post lesson interviews, together with lesson plans, researcher field notes and reflections provided the opportunity for in-depth understanding of the concerns shared by PSTs, their perception of challenges, decisions made as a result and the outcomes of these decisions. The PSTs' understandings of the role/purpose of OAE were explored further through reviews of field notes and during focus group discussions. Trustworthiness was enhanced as the lead author was in continuous engagement with the PSTs throughout the data collection period. These interactions provided opportunities to query and search for more detail around themes as they presented themselves, while also allowing the PSTs to comment on our interpretations of the views identified.

Results

Three dominant themes were generated from the data for these PSTs: (a) meaningful direct experience, (b) expectations of students, and (c) physical activity and competition.

Meaningful Direct Experience

PSTs indicated that learning through an experiential learning approach during teacher education provided a base by which to judge the suitability and appropriateness of activities for the students they were teaching. Directly experiencing OAE activities during PETE provided PSTs with an added sense of authenticity which they believed would afford enjoyment for students. In a planning discussion, Sean, for example referred to the value of directly experiencing activities in the natural environment, *"I think it'd make it fierce interesting... do you know the way we did [erecting a tent] here [in PETE], we did it down by the river...it was nearly 100% a real situation like."* During their planning for school placement Ronan felt allowing students to erect tents would increase student interest in activities, *"Yeah that would make it a bit more interesting..."* (Planning Meeting).

PSTs used their own enjoyment level of activities as a criterion for including activities in lesson plans for their students. For example, Caroline suggested *"I think the activities that we've laid out for them will be enjoyable. Like we found them very enjoyable [during PETE] and I think they will as well"* (Pre Lesson II). PSTs believed if they had not enjoyed the activities students would not enjoy them either. In support of this the PSTs used 67% to 87% of the activities they experienced during the OAE module in their own planning for teaching. It appeared the PSTs own experience of completing tasks was more influential for their planning, than the conversations they had unpacking content and pedagogies during the PETE module. 'Living the curriculum' approach then raises questions about how realistic is it for PSTs to facilitate learner-centred experiences if their own levels of enjoyment act as a dominant criterion for content inclusion. The approach appeared to equip the PSTs with

confidence in what activities to teach for example, Caroline noted “*we done those activities numerous times so I’d be confident in teaching them...we are prepared and we know the games*” (Pre Lesson I). However, while they were able to describe pedagogical practices enacted during the PETE module (e.g., facilitating debriefs), they did not enact them in a way that could support meaningful learning for the students. The importance of needing students to enjoy the lessons appeared to be a contributing factor in how the PSTs taught, and is linked to the findings that follow.

Expectations of Students

The problem-solving nature of OAE tasks affords many ways of completing tasks, and this ambiguity proved challenging for PSTs, especially when looking at their narrow range of expectations they held for how students might complete a task. Several PSTs had similar perceptions to Misha who noted, “*It’s hard to be specific about the instructions for the games like... well like in the toxic waste game today, we never said that they couldn’t use the handle, they do stuff you wouldn’t think of but you’re just thinking of the game the way you want them to do it...*” (Post Lesson Discussion II).

The PSTs seemed limited in their ability to recognise that students might complete tasks differently than how they had completed them as PETE students. This, combined with the unpredictable nature of OAE, posed many challenges for the PSTs. The PSTs did not seem to grasp how important it was to support students to take responsibility for their own learning and decision making, nor did they demonstrate how they might do this. This may well be a case that PSTs tend to seek the familiar, as in what they had experienced and therefore what they ‘know.’

Interestingly, the PSTs discussed recalling experiencing similar feelings to their students (perceived or otherwise) during their OAE module when completing some tasks.

When this was the case PSTs often did not hold students accountable for their actions (e.g., for breaking rules). It appeared that if students behaved in a way similar to how the PST had behaved during OAE, then they came to 'expect' and accept the same behaviour of their own students, regardless of its alignment with the learning focus. Lorraine, recalled the frustration with a marble pass activity she experienced during PETE and then used it with her students in a similar way. The marble pass activity involved transporting a ball from one location to another using pieces of pipe. When Lorraine facilitated the activity with her students she let rules slide as she understood their frustration in completing the task, *"I helped them near the end because they really were getting frustrated...I just let them go... they were getting mad at each other like...I know when I did it I got frustrated...but like you would have if you couldn't have got [the ball] down..."* (Post Lesson Discussion II).

As a result of directly experiencing these tasks during teacher education, the PSTs appeared to have gained a sense of affiliation with students in understanding how they might feel. They did not remember they had not been given solutions or a 'pass' when they became frustrated with tasks/each other and why that might have been important to address. 'Living the curriculum' for the PSTs during teacher education included processing activities and thus drawing meaning from what happened and what they learned rather than whether tasks were completed or not. For example, instead of allowing rules to slide in PETE, PSTs would have been moved through the various stages of debriefing and thus challenged to consider what may have caused the ball to drop, to identify what happened that caused frustration for them, and to consider how they might overcome this. It was noted during field observations that this experiential learning aspect of OAE philosophy and pedagogy seemed to have been misunderstood by PSTs who appeared to view the learning process as error free, with their role understood to assist students to complete tasks without frustration. The PSTs did not seem to consider the potential of the struggle to solve the problem as a valuable aspect of the

learning process. PETE staff would have expected in the above example that Lorraine and Caroline support their students in developing their “communication and problem solving skills” as were identified as the learning focus in their lesson plan (Lesson Plan II, p 3-4), through debriefing. We would have expected they support students to reflect on what happened, why this happened and how they might begin to identify ways of progressing. Instead Lorraine and Caroline overlooked/ignored these teachable moments as a result of their ‘associating’ with students’ frustration in completing the tasks. It became apparent that the PSTs’ focus was on students’ completing an activity in a fun way as the key learning outcome, as opposed to the learning to be gained through doing the activity, regardless of their success. In the above mentioned activity Lorraine and Caroline provided solutions for students to aid them in completing a task instead of supporting the students to share ideas how they might solve the problem and learn from the experience. It would appear the PSTs were more focused on task completion than on the learning gained through doing the task. However, it’s important to note when asked about what was challenging about teaching OAE, the PSTs noted students were not familiar with OAE and were more interested in playing games (sports), as noted by Caroline, *“It’s hard to keep students on task especially if they haven’t heard of it before and it’s a games focused school”* (Post Lesson III).

Physical Activity and Competition

OAE is collaborative in nature and the ‘lived curriculum’ these PSTs experienced aligned with this philosophy. Despite the non-competitive approach PSTs taught OAE through competitive activities encouraging high levels of physical activity in order to complete an activity faster than others, and win. Many believed OAE did not afford a high enough level of physical activity for their students as can be seen in Ronan’s comment, *“I believe that some of the activities today bored some of the pupils. I think that they did not require enough active movement...”* (Post Lesson Reflection). Rather than draw on their

experiences of OAE in PETE, these PSTs seemed to revert to the type of curriculum they experienced in school which was a traditional competitive games based approach that they deemed would be more motivating for their students.

The PSTs believed competition provided more enjoyable and engaging activities for students that in turn motivated them to participate. Sean noted, *“when there’s competition there’s an extra motivation to go on because you see the others doing it as well...”* (Post Lesson II). As a result many PSTs integrated a competitive approach to their OAE activities, which often detracted from the intended focus of the activity; however, it appeared PSTs were more confident of student learning when they were more competitively active regardless of the learning outcome. PSTs also believed competition reduced off task behaviour, *“I think once they’re [students] in teams and there’s a little bit of competition in the activity then they seem to stay on task”* (Lorraine, Post Lesson III).

The PSTs understanding was more nuanced however as before they also believed it was critical that winning and losing not be overly emphasised during lessons. While students were competitive in their approach to activities in some instances, PSTs went to great lengths to ensure no comparisons between winners and losers were highlighted. Paul observed *“...they’re kind of competitive about being the first to finish and then we kind of had to keep an eye on them and say to them it doesn’t matter who finishes first just as long as you finish”* (Post Lesson I). Similarly Sean stressed, *“I didn’t make a big massive deal out of it [competition] ... I just said ‘right, we’re going to have a competition’ ... I never kept score or anything like that”* (Post Lesson II). By not focusing on results the PSTs appeared to be attempting to adapt how they learned OAE during the PETE module to the contexts in which they were now teaching. Tasks facilitated during the PETE module were non-competitive in nature. PSTs were not organised in teams or lined up against each other; if a group completed a task prior to another group, a small group debrief was facilitated while other

groups remained in activity. The PSTs in this study did not appear to recognise that focusing on completing tasks with speed focused their students on winning as opposed to working together as a group to complete a task, which is a key focus of OAE. Researcher field notes described many situations with students breaking rules and using cheating tactics to overcome opponents. For example, in one activity where students were in two lines and were required to move as prompted by PSTs' prompts, the students ignored the prompt and performed a slide tackle on a fellow student. The PST put the student in time out. No field note observations recorded PSTs encouraging students to consider why the cheating occurred and how they might overcome it. In contrast, when cheating occurred in the 'lived' experience during PETE, they were encouraged to reflect upon and understand why cheating arose and finding alternatives to removing a student from activity.

PSTs' preferences were for students to be highly active even if that did not align with the learning outcome for that aspect of the lesson. Sean discusses how he believed students disliked less active elements within lessons: "*... as weeks went on, I think we nearly got the feeling that they kind of resented being told to sit down... as I went on... I was kind of getting more into just like say talking to students as they were doing activities ...as opposed to doing a formal [debrief]*" (Focus Group Discussion). As a result, it would seem the PSTs moved towards merely stimulating learners to be active and have fun as end goals of their lessons rather than move students through the entire EL process. PSTs often sought information on student enjoyment of the lesson rather than student learning as a result of an activity. In some instances, PSTs told students what they learned, rather than eliciting students' own understandings and meaning making of the lesson just completed. In a sense lessons became about an activity rather than learning.

In summary the PSTs found that learning OAE through a 'living the curriculum' approach gave them confidence in their planning and teaching decisions. They felt more

prepared having had directly experienced these tasks prior to teaching. It became evident, however, that the PSTs expected students to complete tasks in a similar way to how they had struggled to support students in learning through and from their own direct experiences. PSTs shifted during these lessons from cooperative to competitive activities as a way of keeping students engaged and motivated.

Discussion and Implications

The purpose of this study was to understand how PSTs link the manner in which they learned during teacher education to how they teach. Although the complex nature of learning content and how to teach that content to others is substantiated through the findings, we noted a stronger link between what (i.e., the content) the PSTs taught and their intended pedagogies than how they learned it and their enacted pedagogical practices. The findings support the heightened affordance that can be achieved when learning to teach through direct experience, while also highlighting the intricacies in supporting PSTs to be flexible practitioners' given the diverse environments in which they may find themselves teaching.

A 'living the curriculum' approach in PETE afforded these PSTs opportunities to directly experience and explore OAE content and related pedagogies. Such an approach has been advocated as a way of supporting PSTs in teaching with more flexibility and employing more learner-centred lessons (Oslin et al., 2001). As a result of having directly experienced OAE content and pedagogy simultaneously during PETE, the PSTs could relate to why students might behave in certain ways (e.g., breaking rules out of frustration in problem solving tasks). While PSTs made attempts to facilitate what they considered a learner-centred environment, their teaching decisions most often did not align with the goals and/or pedagogical approaches of OAE. Most notably PSTs drew from how they felt when they completed tasks during PETE, which in turn strongly influenced their on the spot teaching

decisions; however, the dynamic nature and uncertain environment of facilitating 'experiential learning' based lessons proved too much for many. This pointed out that through a 'living the curriculum' approach PSTs gained a particular understanding of what it means to learn and the role of enjoyment seemed to play for them in the process. They sacrificed learning opportunities because they believed that adversity during the learning process was not desirable (e.g., frustration during the marble pass activity). It was evident in their planning that the PSTs gained a strong sense of how and what OAE tasks can support student learning, but 'living the curriculum' did not appear to equip them with an ability to facilitate the personalised potential of this curriculum for their students own development. Similar to Sutherland and Stuhr's (2014) findings, this study noted that recognising student learning as a process proved difficult for PSTs when teaching OAE in a school where team sport is a key focus. The findings draw attention to the challenge for PSTs to look beyond their own interests and expectations, and towards their students' needs. Critically, it became evident that what the PSTs experienced during their school placement (namely lack of buy-in from students) was unexpected. It also appeared PSTs assumed they knew what their students were interested in, and that their students would know how to behave in and through OAE activities. Directly experiencing OAE tasks during PETE appeared to provide the PSTs with strong beliefs that they knew what their students' perceptions and interests would be in OAE. These findings support Rovegno's (1994) conclusions that PSTs, when faced with challenges, retreat towards a curricular zone of safety and keeping students active, or as mentioned previously towards seeking the familiar (Loughran, 2006).

We are mindful that while Korthagen (2001c) suggests PSTs' learning is more effective when integrated (as is the case of the 'living the curriculum' approach) in the learners' own experiences, in this study the learners own experiences clouded their ability to recognise if and how student learning was taking place. Interestingly, Timken and McNamee

(2012) allude to the personal nature of OAE activities, where by drawing emotional responses from participants, offers PETE the opportunity to challenge PSTs' teaching beliefs built on their experiences. Pertinent to this study the PSTs encountered teaching in school cultures that they believed required competitive and highly active lessons to meet the needs of students. In turn, they struggled to align the goals of the curricula they were delivering with what they believed the students needed/wanted. The study accentuates the challenge PSTs encountered in gaining knowledge of content, pedagogy and practice and applying it in unpredictable school environments, environments that may afford practices that differ to their beliefs and aspiring teaching practices.

At this stage in their careers, the challenge for PSTs to facilitate learner-centred learning environments, and provide students the opportunity to construct their own meaning from lesson experiences is well reported in the literature (Holt-Reynolds, 2000). In this study, 'living the curriculum' did not appear to prepare the PSTs for utilising 'teachable moments' despite having experienced such teachable moments during teacher education. In line with the findings of Sutherland, Ressler and Stuhr (2011) the PSTs in this study were able to articulate understandings of the purpose and value of OAE but misunderstood and/or were challenged with how best to integrate this knowledge into their school practices. Ball (2000) emphasises a difference in teachers knowing content and in knowing how to use this content in practice, highlighting a key challenge for teacher educators to prepare PSTs to be mindful that knowing and understanding pedagogical practices is explicitly different to knowing and understanding pedagogy in practice. Similarly, a distinctive feature for teacher educators in teaching about teaching is supporting PSTs to appreciate how they learn to teach in teacher education may differ from how teaching and learning occurs in schools (Loughran 2006). The findings accentuate the highly complex and problematic nature of teaching about teaching and learning to teach (Loughran, 2006).

Ball and Forzani (2009) argue that teachers need ample opportunity to explore the core practices of teaching, such as leading discussions with students, reviewing and evaluating student materials, explaining and interpreting texts based on the teacher's knowledge and understanding of students. Core practices related to learning to teach OAE pedagogies could involve recognising and using teachable moments, practicing how to deal with what PSTs might feel is 'unexpected' (i.e., different experiences to their own in doing OAE activities), considering and discussing how to deal with frustration during problem-solving tasks. Providing opportunities to discuss 'core practices' may complement a 'living the curriculum' approach as a way of preparing PSTs to better recognize student learning and challenges, and how to approach and deal with them. The opportunity to unpack teacher educators' pedagogical reasoning and decisions (Loughran, 2006) about their teaching actions may also extend the potential for learning to teach in this context. Affordance of such may help delineate the complexities of teacher reasoning for PSTs, and in turn channel them to consider the possibility that their students learning may well be somewhat different to their own experiences. This combined approach could encourage PSTs towards recognising the very nature of teaching as something complex and uncertain, along with offering them the opportunity to draw from their own experiences, and at the same time encourage them to consider their students learning as something beyond their own reference experiences.

A limitation of this study was the absence of the co-operating teachers' and students' perspectives. While some ad hoc conversations were recorded in researcher/observer field notes, our understanding of the school context and the cohort of students the PSTs taught would have been further supported (or enhanced) had we interviewed the co-operating teachers and students. Student and teacher perspectives would have helped further contextualise the PSTs' perceived perspectives of their own teaching and their students' learning.

Conclusion and Recommendations

In conclusion we propose 'living the curriculum' offers a way to enhance PSTs' understandings and use of the core pedagogies associated with OAE, and in particular the role of processing experiences. The approach offers meaningful direct experience, and opportunity to experience all stages of EL reflection, analysis and generalising. We encourage teacher educators to both examine and share their pedagogical reasoning and decision-making, in and on action, as a way of offering a lens into the complexities of teaching. Research and dialogue focused on alternative pedagogical possibilities, as a way of supporting PSTs to move beyond merely stimulating learners is critical in developing effective teachers. Mindful that the PSTs in this study were limited in their ability to see beyond their own experiences, we advocate for 'living the curriculum' as way to consider and explore core OAE practices and alternative possibilities of engagement. This might include discussing with PSTs the diverse ways students might complete tasks, and the challenges this might cause (e.g., breaking/bending rules). Alternatively PSTs consider student resistance to various activities and pedagogies and how as teachers, we might use OAE approaches to engage students rather than retreat towards keeping them active, assuming that activity infers students are learning. Finally, through OAE practices PSTs can be facilitated in developing the ability to consider and utilise unexpected occurrences/behaviours of students as teachable moments. We therefore proffer 'living the curriculum' as a way of supporting PSTs in recognising what they have learned about teaching and learning, while also advocating the need for teacher education to actively support PSTs in identifying how they will teach this content in schools.

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References

- Ball, D. L. (2000). Bridging practices: Intertwining content and pedagogy in teaching and learning to teach. *Journal of Teacher Education*, 51(3), 241-247. DOI: 10.1177/00224871000510030.
- Ball, D.L., & Forzani, F. (2009). The work of teaching and the challenge for teacher education. *Journal of Teacher Education*, 60(5), 497-511. DOI: 10.1177/0022487109348479.
- Barbour, R. S. (2008). *Introducing qualitative research: A student's guide to the craft of doing qualitative research*. London: Sage Publications.
- Beard, C., & Wilson, J. P. (2006). *Experiential learning: A best practice handbook for educators and trainers* (2nd ed.). London: Kogan Page.
- Brown, J. S., Collins, A., & Duguid, P. (1989). *Situated cognition and the culture of learning*. *Educational Researcher*, 18(1), 32-42. DOI: 10.3102/0013189x018001032.
- Brown, M. (2010). Transfer: Outdoor adventure education's achilles heel? Changing participation as a viable option. *Australian Journal of Outdoor Education*, 14(1), 13-22. http://outdoorcouncil.asn.au/doc/Brown_v14n1_2010.pdf.
- Bunting, C. (2006). *Interdisciplinary teaching through outdoor education*. Champaign, IL. Human Kinetics.
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education* (6th ed.). Oxon, UK: Routledge.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. London: Sage Publications.

Darling-Hammond, L. (2000). How teacher education matters. *Journal of Teacher Education*, 51(3), 166-173. DOI: 10.1177/0022487100051003002.

Department of Education and Science, & National Council for Curriculum and Assessment (2003). *Junior cycle physical education*. Dublin: The Stationary Office.

Dyson, B., & Sutherland, S. (2015). Adventure in your physical education programme. In J. Lund & D. Tannehill (Eds.), *Standards-based physical education curriculum development*, (pp. 229-252). Burlington, MA: Jones and Bartlett.

Hartas, D. (2010). *Educational research and inquiry: Qualitative and quantitative approaches*. London: Continuum.

Henton, M. (1996). *Adventure in the classroom: Using adventure to strengthen learning and build a community of life-long learners*. Dubuque, IA: Kendall/Hunt.

Hitchcock, G., & Hughes, D. (1989). *Research and the teacher: A qualitative introduction to school-based research*. London: Routledge.

Holt-Reynolds, D. (2000). What does the teacher do?: Constructivist pedagogies and prospective teachers' beliefs about the role of a teacher. *Training and Teacher Education*, 16(1), 21-32. DOI: 10.1016/S0742-051X(99)00032-3.

Kolb, D. (1984). *Experiential learning. Experience as source of learning and development*. Englewood Cliffs, New Jersey: Prentice-Hall.

Korthagen, F. A. J. (2001c). Building a realistic teacher education program. In F. A. J. Korthagen with J. Kessels, B. Koster, B. Langerwarfand T. Wubbels (Eds.), *Linking practice and theory: The pedagogy of realistic teacher education* (pp. 69-87). Mahwah, New Jersey: Lawrence Erlbaum Associates.

- Korthagen, F. A. J. (2010). Situated learning theory and the pedagogy of teacher education: Towards an integrative view of teacher behavior and teacher learning. *Teaching and Teacher Education*, 26, 98-106.
<http://dx.doi.org/10.1016/j.tate.2009.05.001>.
- Korthagen, F., Loughran, J., & Russell, T. (2006). Developing fundamental principles for teacher education programs and practices. *Teaching and Teacher Education*, 22, 1020-1041. <http://dx.doi.org/10.1016/j.tate.2006.04.022>.
- Loughran, J. (2006). *Developing a pedagogy of teacher education: Understanding teaching and learning about teaching*. New York: Routledge.
- Lortie, D.C. (1975). *Schoolteacher*. Chicago: Chicago University Press.
- Munby, T., & Russell, T. (1994). The authority of experience in learning to teach: Messages from a physics methods class. *Journal of Teacher Education*, 45(2), 86-95. DOI: 10.1177/0022487194045002002.
- Oslin, J., Collier, C., & Mitchell, S. (2001). Living the curriculum. *Journal of Physical Education, Recreation and Dance*, 72(5), 47-51. DOI: 10.1080/07303084.2001.10605753
- Panicucci, J. (2007). Cornerstones of adventure education. In D. Prouty, J. Panicucci & R. Collinson (Eds.), *Adventure education theory and applications* (pp. 33-48). Champaign, IL: Human Kinetics.
- Priest, S. (1999). The semantics of adventure programming. In J. Miles and S. Priest (Eds), *Adventure programming* (pp. 111-114). State College, PA: Venture.
- Priest, S., & Gass, M. A. (2005). *Effective leadership in adventure programming*. Leeds, UK: Human Kinetics.

- Rovegno, I. (1994). Teaching within a curricular zone of safety: School culture and the situated nature of student teachers' pedagogical content knowledge. *Research Quarterly for Exercise and Sport*, 65, 269-279. DOI: 10.1080/02701367.1994.10607628.
- Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4-14. DOI: 10.3102/0013189X015002004.
- Stiehl, J., & Parker, M. (2010). Outdoor education. In J. Lund & D Tannehill (Eds.), *Standards-based physical education curriculum development* (2nd ed., pp. 247-270). London: Jones and Bartlett.
- Sutherland, S., Ressler, J., & Stuhr, P.T. (2011). Adventure-based Learning and Reflection: The journey of One Cohort of Teacher Candidates. *International Journal of human Movement Science*, 5(2), 5-24.
- Sutherland, S., & Stuhr, P. T. (2014). Reactions to implementing adventure-based learning in physical education. *Sport, Education and Society*, 19, 489-506. DOI: 10.1080/13573322.2012.688807
- Sutherland, S., Stuhr, P. T., & Ayvazo, S. (2016). Learning to teach: Pedagogical content knowledge in adventure based learning. *Physical Education and Sport Pedagogy*, 21, 233 –248. DOI: 10.1080/17408989.2014.931365.
- Tatto, M. T., Richmond, G., Carter Andrews, D. J. (2016). The research we need in teacher education. *Journal of Teacher Education*, 67(4), 247-250. DOI: 10.1177/0022487116663694.

- Timken, G. L. & McNamee, J. (2012). New perspectives for teaching physical education: Preservice teachers' reflections on outdoor and adventure education. *Journal of Teaching in Physical Education*, 31, 21-38. DOI: 10.1123/jtpe.31.1.21.
- Wilkinson, D., & Birmingham, P. (2003). *Using research instruments: A guide for researchers*. London: Routledge Falmer.
- Zeichner, K., & Tabachnik, B. R. (1981). Are the effects of university teacher education washed out by school experiences? *Journal of Teacher Education*, 32, 7-11. DOI: 10.1177/002248718103200302.