

‘The sweetness of struggle’: innovation in physical education teacher education through *student-centered inquiry as curriculum* in a physical education methods course

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Purpose: The purpose of this study was to examine the **challenges and benefits** that emerged while using an innovative field-based student-centered inquiry as curriculum model in a secondary physical education methods course.

Participants and setting: This study took place in the Southwest USA. Participants included 11 pre-service teachers who were enrolled in a secondary physical education methods class, the instructor of the course and a faculty member from another department within the College of Education.

Data collection/analysis: Data were collected during the 2009–2010 school year. Data included (a) all pre-service teachers’ generated coursework; (b) 32 instructor’s lesson plans; (c) 32 observations with field notes; (d) debriefing notes from conversations with colleagues, pre-service teachers, and high school youth; (e) transcripts from three formal 2-hour interviews with each pre-service teacher; and (f) the transcript of a professional conference presentation given by the professor and 8 of the 11 pre-service teachers. We analyzed our data through what Cochran-Smith and Lytle describe as ‘inquiry as stance’ that constructed knowledge through the interaction and inclusion of multiple voices, positions, and realities in order to make sense of a collective experience.

Findings: This study describes the outcomes of utilizing an innovative field-based approach to teaching a physical education methods course, student-centered inquiry as curriculum model, as a means of **challenging the status quo** of physical education in order to better meet the needs of today’s youth. First, we discuss how within the context of inquiry, the pre-service teachers named their experiences and relationships in the course as a ‘community of learners.’ Within this community of learners, we describe the benefits and challenges to teaching and learning that emerged. It was through inquiry that ‘the sweetness of struggle’ created the spaces for all of us to learn what it means to be professionals and challenge the status quo of what exists in our beliefs and values about teaching, learning, and youth.

Implications: When implementing an innovative approach to field-based work, physical education teacher educators need to pay close attention to the challenges that emerge. While some challenges created the spaces for pre-service teacher learning to emerge as benefits, others simply reified long-existing inequities in higher education. Professors need to pay particular attention to how challenges that result in inequities so that they can respond structurally to resolve the inequities. However, the challenges that create spaces for pre-service teachers’ learning, even though discomfoting, need to be left alone.

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Teachers and teacher educators internationally have come under enormous scrutiny in recent years. Numerous reports have highlighted the failure of students to thrive and achieve in schools . . . these failures . . . have been attributed in part to poor teaching and teacher education programs that fail to prepare teachers for the realities and challenges of contemporary schools. (O’Sullivan 2006, 367)

In an attempt to answer the calls for better teachers and teacher education programs in an era of scrutiny, policy has demanded more field-based placements in pre-service teacher education (Levine 2006; National Council for Accreditation of Teacher Education 2010; National Council on Teacher Quality 2010). Physical education teacher educators have indicated a need to intentionally structure field-based placements (Collier 2006). McIntyre, Byrd, and Foxx (1996) warned us, however, that what occurs in field experiences require attention to create any type of change in pre-service teacher’s learning. If we hope to challenge the status quo in physical education (Fernandez-Balboa 1997; Kirk 2010) in order to better meet the interests and needs of today’s youth (Oliver, Hamzeh, and McCaughtry 2009; O’Sullivan and MacPhail 2010; Enright and O’Sullivan 2012), then we must change what we are doing in our physical education teacher education (PETE) field-based placements and seek to understand what impact our practices have on our pre-service teachers’ learning (Oliver and Oesterreich 2013). As such, we must answer the international scrutiny of our PETE practices by turning the lens inward and scrutinizing whatever changes we seek to make. This paper explores the complexities of an innovative field-based secondary PE methods course centered in inquiry and student voice designed to meet the challenges and realities of working with youth in contemporary schools.

From acquisition to inquiry: challenging the meta-realities of PETE

Currently, PETE field-based placements are strongly situated in acquisition models (Collier 2006). Acquisition models ‘push the [pre-service teacher] into an apprenticeship model where [s]he is told what to do and how to do it’ (Behets and Vergauwen 2006, 409). Within apprenticeship models, teaching and curriculum are taught as fixed and immutable so that the status quo of physical education continues. Pre-service teachers are denied an opportunity to have their own long-held beliefs and values about the nature of physical education challenged within such models (Graham 1991; Matanin and Collier 2003). As such, this perpetuates existing physical education practices that continue to fail to meet the needs of today’s youth (Azzarito, Solmon, and Harrison 2006; Enright and O’Sullivan 2012).

Acquisition models in PETE create little space for ‘experimenting with new ideas and restricts the use of innovative teaching approaches’ (Behets and Vergauwen 2006, 409). Without the space to experiment with innovative teaching processes, PETE continues to circle within meta-realities that leave the field wrestling with how best to prepare teachers for contemporary schools. Three reoccurring meta-realities include the perpetuation of the dichotomy between theory and practice (Martinek and Hellison 1997; Hardy 1999), the focus on inculcating pre-service teachers as reflective practitioners (Tsangaridou and Siedentop 1995; Tsangaridou and O’Sullivan 1997), and the struggle to transform pre-service teachers’ beliefs and values about physical education content and teaching (Placek et al. 1995; Graber 1996; Matanin and Collier 2003).

Field-based placements in PETE have traditionally created a dichotomy between practice and theory in which pre-service teachers and their professors understand one to exist at the university and the other to exist in schools (Behets and Vergauwen 2006). PETE's historical disconnect of theory from practice has been well defined in our literature (Collier 2006). For example, Hardy (1999) risks perpetuating this dichotomy when he suggests, 'the continual extension of school-based experiences is not only privileging the practical over theory and emphasizing doing more than thinking, but is replacing complexity with simplicity' (378). This false dichotomy creates a misunderstanding of the nature of field-based placements that must become the center for change in PETE in order to address the complexities of preparing teachers for today's schools. As Carr and Kemmis (1986) argue:

... to make such a division between theory and practice is to misunderstand the nature of practice ... By making the twin assumptions that all theory is non-practical and all practice is non-theoretical, this approach always underestimates the extent to which those engaged in education practices have to reflect upon, and hence theorize, what, in general, they are trying to do. (13–14)

This dichotomy is reinforced as physical education pre-service teachers are sent into field experiences largely focused on apprenticeship to acquire the cooperating teachers' teaching methods. This acquisition model ignores what Carr and Kemmis (1986) suggests is the simultaneous existence of theory and practice, and creates little space for reflection, negotiation, and theorization on what is being done in the PE setting. To make 'consequential changes' in PETE field-based experiences, **acquisition models need to shift to inquiry models** (Cochran-Smith and Lytle 1999, 295; Woods, Karp, and Escamilla 2000). Inquiry models in field-based experiences allow pre-service teachers to learn how to listen, plan, and respond, in highly interactive processes with professors and youth to **'collaboratively deconstruct situations, analyze issues, and build uniquely situational knowledge'** (Collier 2006, 400).

Inquiry, in and of itself, challenges the status quo of teaching and learning because it requires us to 'fundamentally question how schooling is done' (Short and Burke 1996, 103). Inquiry changes relationships between students and teachers as well as who has knowledge and how that knowledge must be used. Shifting field-based experiences from acquisition to inquiry offers the possibilities to structure these experiences to challenge the status quo of PETE and physical education for youth in schools (Oliver and Oesterreich 2013).

While PETE has positioned particular facets of inquiry in the terminology of reflective practitioners, they situate it as relying on the self-reflexive process to respond to the complexities of teaching and learning (Tsangaridou and O'Sullivan 1997). Inquiry models in field-based experiences will differ from this idea of reflective practitioners because it involves all of the people and contexts within the field-based setting. It necessitates an **intentional willingness on the part of PETE professors and pre-service teachers to 'rethink their assumptions about education and students, and to re-envision the classroom as a truly collaborative learning space'** (Manor et al. 2010, 11; see also MacPhail 2011). In order for collaboration to occur, PETE field-based settings can include the voices of the youth with whom the pre-service teachers will work. Simultaneously, the PETE professor can include the voices of their pre-service teachers in their work.

Inquiry models of teacher education that include student voice offer possibility for challenging the status quo (Long and Carless 2010; Sandford, Armour, and Duncombe 2010;

Enright and O’Sullivan 2012). This is timely given the long history documenting the incommensurability of traditional PE curriculum and students’ needs, interests, and motivation in physical activity (Azzarito, Solmon, and Harrison 2006; Oliver, Hamzeh, and McCaughtry 2009; Kirk 2010). Through the use and valuing of multiple voices, emanates the possibilities for ‘shared intent’ in the classroom. The vital component of all collaboration is a ‘shared intent’ in which teachers and students might ‘problem solve, request information, seek experience, reuse assets, promote coordination and synergy, discuss developments and visit and map knowledge gaps’ (Brandon and Charlton 2011, 170).

By intentionally structuring field-based experiences to negotiate student voice within inquiry, pre-service teachers can learn how to listen and respond to students in their curricular and pedagogical decisions (Oliver and Oesterreich 2013). Centering student voice can engage learners in order to challenge the status quo of schooling in hopes of creating spaces in which youth will actively participate in their education and feel responsible for their own and others’ learning (Cook-Sather 2002, 2009b; O’Sullivan and MacPhail 2010).

Scholarship and practice in higher education is beginning to follow suit by utilizing student voice to inform curriculum and pedagogy (Cook-Sather 2006, 2009a; Manor et al. 2010; Enright et al. 2012). The necessity of bringing student voice to the higher education realm takes a particular imperative in PETE. When pre-service teachers can learn to include student voice as part of their inquiry, they can no longer strictly rely on their values and beliefs to direct their curricular and pedagogical decisions (Oliver et al. 2010; Enright and O’Sullivan 2012). Student-centered inquiry facilitates consequential change in the views of both PE teacher educators and pre-service teachers because the cacophony of voices makes solitary, long-held beliefs about PE impossible to hold on to. The purpose of this study was to examine the challenges and benefits that emerged while using an innovative field-based student-centered inquiry as curriculum model in a secondary physical education methods course¹ (Oliver and Oesterreich 2013).

Methods

This study is a participatory action research project – ‘a methodological stance rooted in the belief that valid knowledge is produced only in collaboration and in action’ (Fine 2007, 613). The collaboration and action of this study developed within a field-based physical education methods course. All of the participants focused on inquiry into what facilitated and hindered youth interest, motivation, and learning in physical education in order to create curricula that increased youth physical activity. This inquiry led to ‘individual and group action . . . followed by reflection and analysis, planning and further action’ (Zellermayer and Tabak 2006, 34). Thus, we engaged in what Cochran-Smith and Lytle (1999) describe as ‘inquiry as stance’ that constructed knowledge through the interaction and inclusion of multiple voices, positions, and realities in order to make sense of a collective experience.

Participants

The participants in this research course included the professor of the methods’ course, Kim Oliver; 11 pre-service teachers enrolled in the course; and a faculty member focused in secondary education in another department, Heather. The two female faculty identify as White American feminist critical scholars. Seven of the pre-service teachers were female and four were male. Six were Hispanic American, one was African American/Hispanic, and four were White American. Eight of the 11 pre-service teachers were traditional students and

3 were non-traditional. Institutional Review Board permission was obtained through the university and participant informed consent was obtained prior to the beginning of the class. All names used in this paper are the pre-service teachers' actual names as per their request.

Course context

In the Fall of 2009, Kim taught an undergraduate level secondary physical education methods course in the Southwest USA. This course met 2 days a week for 90 minutes for 16 weeks. The course was required for pre-service teachers seeking initial licensure in physical education who were one to two semesters away from their final extended school teaching practicum (e.g. student teaching).

The methods class was designed to be field-based; thus, 85% of the course took place in a local high school where Kim and her pre-service teachers worked with 25 youth, 14–15 years of age, enrolled in a required PE class. The other 15% of the course was held at the university. Kim designed the course to assist pre-service teachers to learn how to be student-centered in their curricular and pedagogical practices. The pre-service teachers engaged in a student-centered inquiry *as* curriculum model that centered on listening and responding to youths' voices. This model is a four-phase cyclical process of *Planning, Responding to Students, Listening to Respond*, and *Analyzing Responses* as the basis of all content and pedagogical decisions (Figure 1).

Building the foundation

The foundation of student-centered inquiry *as* curriculum allowed pre-service teachers to work with youth and evaluate literature in order to better create a learning environment that met the needs of the youth. The pre-service teachers interviewed the youth about their perceptions of PE and what a safe learning environment entails. They inquired into where the youth wanted to focus their learning within the context of required state standards for physical education. Additionally, they read literature on creating classroom

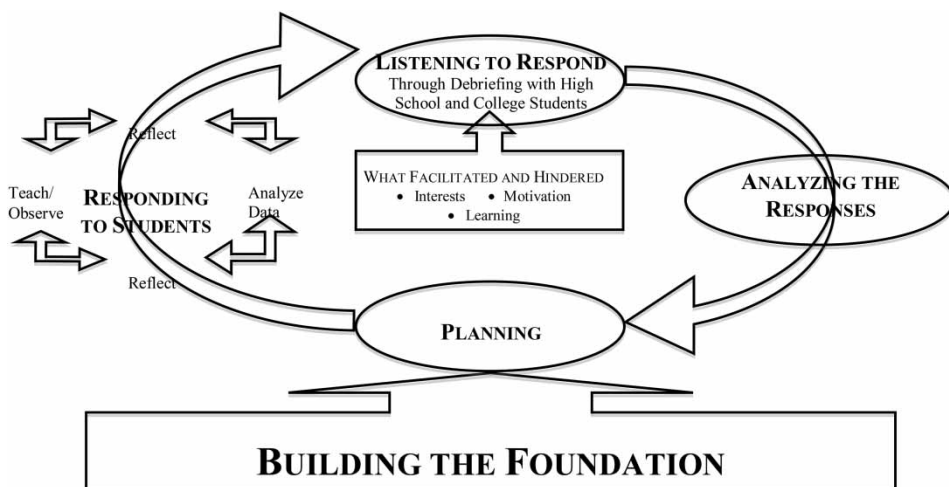


Figure 1. Student-centered inquiry *as* curriculum model.
Source: Oliver and Oesterreich (2013).

environments and bullying. After analyzing the data from the youth and connecting it with the theories in the texts, the professor, the pre-service teachers, and the youth collectively created rules for the class and curricular directions.

Planning

Planning required the pre-service teachers to match what they learned about the youths' interests and motivation *with* their knowledge of their content. Every time the pre-service teachers developed lesson plans, they needed to identify how their lessons related to student voice. The content of the lessons also had to connect to the state standards and not reflect pre-designed traditional curriculum. Pre-service teachers were assigned to groups with whom they would teach. Each group had to plan and teach five lessons for the youth across the 16-week semester.

Responding to students

Responding to students required pre-service teachers to learn about teaching from the perspective of a teacher and an outside observer. In this process, when their colleagues taught a lesson, they observed and collected data on youth and the pre-service teachers' behaviors. The pre-service teachers who had taught had to reflect on their teaching and then analyze, interpret, and discuss their observational data from their peers.

Listening to respond

In this phase, the youth, the professor, and the pre-service teachers discussed how each of the lessons thus far had facilitated and/or hindered their interest, motivation, and learning. The pre-service teachers provided data for the professor to analyze in terms of her curricular decisions and the youth provided data for the pre-service teachers.

Analyzing the responses

In this phase, the pre-service teachers utilized feedback from their experience as teachers and the youth's experiences in the class in order to create changes they needed to make in their future planning and teaching. This portion of the course was typically held at the university.

Across the course of the 16-week semester, the professor and the pre-service teachers cycled through the model four times. Within the model, Kim had pre-service teachers complete the following assignments:

- Physical activity biographies;
- Interviews with youth regarding their perceptions of physical education/class environments;
- Readings from textbooks, fiction, and journal articles;
- Reflective written assignments designed to connect texts, student voice, faculty-modeled instructional teaching units with youth, and personal experiences to understand processes of teaching and learning;
- Planning and teaching in the high school classroom;
- Peer observations; and
- Data collection, analysis, and interpretations.

Data sources/analysis

In addition to all pre-service teachers' generated coursework listed above, data for this study included: (a) 32 instructor's lesson plans; (b) 32 observations with field notes; (c) debriefing notes from conversations with colleagues, pre-service teachers, and high school youth; (c) transcripts from three formal 2-hour interviews with each pre-service teacher; and (d) the transcript of a professional conference presentation given by Kim and 8 of the 11 pre-service teachers.

Data analysis was multi-layered and occurred (1) during the course, (2) during preparation for a conference presentation, and (3) in meetings between Kim and Heather. Each of these layers negotiated different positionalities within the inquiry community – the professor, the pre-service teachers, the youth, and Heather – to create constant emergent themes and analysis. Each participant, individually and collectively, was involved in 'a process of iteration' in which the analysis took place through multiple, simultaneous cycles of action and reflection (Zellermayer and Tabak 2006).

Kim and the 11 pre-service teachers met during the semester at the university as part of the course requirements to analyze their processes and the youths' data. During these meetings, themes emerged about youth wanting variety of content, non-traditional activities, and choices within lessons. The themes around the pre-service teachers' learning and engagement included issues of group work, whose knowledge was of value, and assumption of ownership and responsibility.

Upon the conclusion of the class, Kim invited pre-service teachers to continue in a community of inquiry (Zellermayer and Tabak 2006) to analyze what had occurred in the course to present at a national conference. Eight of the 11 pre-service teachers agreed to continue the process. To start this phase of the analysis, Kim and the pre-service teachers took all of their generated course work and two 2-hour interview transcripts and analyzed the data to explore what they learned while using a student-centered, inquiry-based approach. The group met 20 times for 2–3 hours to discuss their individual data analyses and integrated the stances of the professor and pre-service teachers into a collective analysis. The themes that emerged during this initial analysis included (a) the importance of listening and responding to youths' interests and needs, (b) the importance of co-creating a community of learners, (c) the successes, and (d) the challenges and struggles.

Kim and Heather met weekly during data collection to debrief and engage in iterative data analysis to inform future data collection and have continued to meet weekly over the past 4 years. For this particular paper, they utilized the conference presentation as their initial themes and reiterated the analysis through all the additional data sources. Thus, this paper represents 'inquiry as stance' in which all positions were used to generate and verify assertions that accurately and thoroughly reflected those data (Cochran-Smith and Lytle 1999).

The assertions that follow describe the outcomes of utilizing student-centered inquiry *as* curriculum. First, we discuss how within the context of inquiry, the pre-service teachers named their experiences and relationships in the course as a 'community of learners.' Within this community of learners, we describe the benefits and challenges to teaching and learning that emerged.

Outcomes of using a student-centered inquiry *as* curriculum model

... We were allowing [the high school students] to build their community but not only were they building it we were also building it with them in our own classroom. All of us as colleagues um we became a real community of learners... We really started to see a brand new sense of responsibility coming about with all of us. (Rinaldo)

The field-based student-centered inquiry *as* curriculum model facilitated the creation of what the pre-service teachers collectively named a ‘community of learners.’ Their ‘community of learners’ referred to the relationships that developed within the constructs of student-centered inquiry *as* curriculum between the youth, the pre-service teachers and the professor and how these relationships fostered a sense of responsibility to teaching and learning amongst all participants.

Centering a course and its curriculum with student voice creates the place for relationships that are multi-layered and deeply connected to teaching and learning (Cook-Sather 2006; Manor et al. 2010; Oliver and Oesterreich 2013). Casey explains:

... we sat down and we talked to the students and this wasn’t just what’s your name what’s your name what’s your name. This was what do you like, what don’t you like, where do you thrive, where do you struggle. And in turn we got to know them as well as we let them know us. We let them know what we liked, what we didn’t like, where we thrive, where we struggle, rather than just being a superior ... So rather than controlling the situation we allowed them to take ownership of their classroom, to be responsible ...

The interaction of the pre-service teachers and the youth was not based in the simplicity of recognition or the necessity of knowing who the youth are in the class. This community of learners **repositioned power** as shared rather than controlled entirely by the teacher. Similarly, in the college classroom, this was happening between Kim and her pre-service teachers. As Lacie demonstrates:

... my own past experience, it was an authoritarian figure commanding everybody down here whereas Dr. Oliver has created a way to help us be a part of the decision making and ... take into consideration what we feel and how we feel about it and if we don’t like something then she’ll work with us and try to figure out how to fix it while it’s still accomplishing what she wants to get accomplished ... She has created a sense of community with our class modeling how to do it with [youth].

The negotiation of power via inquiry in student voice creates a community in which all the participants share the responsibilities, but each is uniquely situated with different forms of knowledge to influence teaching and learning. For example, the youth come with their knowledge of what it takes to motivate them to participate in physical activity. The pre-service teachers come with a similar understanding of what it takes to motivate them to want to work with youth in new and different ways. They also come with content knowledge. The professor brings the overall picture of the larger schemata of the interactions of teaching, youth, and content. In student-centered inquiry *as* curriculum, the community of learners develops through the utilization and valuing of the collective knowledges. Casey explains how the youth understood this process:

In the final debriefing with the [youth] we asked what they thought we did well. And one of them said we listened to their suggestions, another student said that everyone participated. And when we asked why we thought they all participated, he said it was because the games were fun, we got to make them, you change them to fit us and it was our choice. So we can see how important letting them have a say in what they do really played into this.

Manor et al. (2010, 10) have argued that, ‘The concepts of power and responsibility are intimately connected. Greater power means a greater ability to act and thus a greater sense of responsibility.’ As Casey translated above, all of the youth actively participated. It is notable that their participation included dressing out and attending class every day in a culture where 100% engagement is rare.

What becomes apparent in this community of learners is that the teacher has not relinquished their power and responsibility to every whim and desire of the students. This is clear as Rinaldo, Casey, and Lacie situate the teacher as still maintaining the position of ‘allowing’ and ‘letting’ the youth have ownership. From this exchange of power emanates the spaces for all members of the community of learners to share responsibility for learning (Manor et al. 2010).

When negotiation of power and shared responsibility is part of a class structure as they are in this self-identified ‘community of learners,’ complexities emerge. As Decyk et al. (2010, 49) explain, ‘Established beliefs are very difficult to change . . . there is likely to be resistance . . . from members of the group.’ As such, this community of learners experienced what Johnson Reagon (1975) has called ‘the sweetness of struggle’ in which there were, ‘difficulties, set-backs, successes, and steps forward’ (Ayers 2000, vii).

Benefits of a community of learners

The creation of a community of learners that resulted in this class fostered several benefits that cultivated the pre-service teachers’ learning. These benefits manifested themselves in the pre-service teachers situating their learning in the context of their own professional development as future teachers. As a result, they were motivated to achieve excellence through an unspoken competition they created; they developed a network with each other in and out of class; and they began to take more direct ownership over their individual and collective learning.

Unspoken competition

. . . A result of creating a community of learners was that there seemed to be unspoken competition between the 4 groups of [pre-service teachers] to see whose lessons were viewed by the [youth] as more engaging and whose lessons were viewed by their peers as better. (Jarrod)

For most of the pre-service teachers in this community of learners, competition was at the core of their being. Physical education teacher educators have struggled over the years to help their pre-service teachers learn the differences between appropriate and inappropriate forms of competition as well as understand that many youth do not thrive on or even like competition at all (Siedentop 2009). While these pre-service teachers understood, and even valued the fact that there are youth who do not enjoy competition, they found ways of channeling their love of competing into their educational experiences rather than in their work with youth. The unspoken competition that emerged during the semester was the motivating factor behind their pursuit of excellence, with excellence being defined as their 14–15-year-old youth’s engagement and interest. Jarrod and Daniel explain this unspoken competition:

It was interesting to see how when Kandy and my group was creating our lesson we would always try to out do everybody else’s lesson. We would say things like you know Daniel’s group did this and the [youth] liked it but if we did this I think they would like it better. (Jarrod)

There was definitely a sense of competition between the groups. But it wasn’t specifically to show up another group or that we’re taking points because we all wanted to do well, but definitely . . . the competition was there. (Daniel)

Jenn explains in her final interview how she saw the unspoken competition play out and what this did for their collective learning.

... I know for my group whenever we would get together for our lesson plan making, it was always 'well what can we do to make this go better than the other groups,' ... We never really talked about it but we knew that it was there ... it was just little questions like that ... what are you doing, or how are you assessing your kids you know like just little questions here and there to try and elicit some information ... and find out ok this is what we need to do to make it better.

As Jenn's description of competition highlights, student-centered inquiry *as* curriculum provided a context for pre-service teachers to negotiate rather than negate their love of competition. They channeled their love of competing into their own learning and performance as a class, and as a result were willing to work outside of their comfort zone in pursuit of outdoing the other groups. Jenn highlights this stepping out of their comfort zone:

I think the competition made us take more risks, we were willing to step out on the edge and try new and different things not only for us but for the [youth] as well ... I think it helped us in the long run to become better at what we do, because I believe that competition pushes you to your limits ... and it gets us out of our comfort zones and a lot of us went out of our comfort zones during the course of that semester.

In order to win in a competition, you often take calculated risks to outsmart or outmaneuver your opponent. The calculations will not always result in success, but the possibility of winning outweighs the potential risk of failure. The risks that this unspoken competition fostered in this community of learners pushed these pre-service teachers to move out of their comfort zones, thus the potential for failure and success exponentially increases. Eckert, Goldman, and Wenger (1997, 5) have argued that, 'Active and engaged learning involves the risk of error ... It is the quality of the risk taken – the potential that the risk offers for learning – that should be rewarded, rather than the glossiness or ease of the success [e.g. winning].' As Jenn discussed above, the competition, which fostered the pre-service teachers' willingness to take risk made everyone 'be better at what we do.' And, when asked, 'Who do you think won?' Jarrod summed it up, 'Nobody (laughing). I have to say everybody did. Just because how hard we were all trying.'

Jarrod's claim that everybody wins demonstrates how the pre-service teachers' unspoken competition within a community of learners reflects Siedentop's (2009, 293) description of 'good competition.' That is, 'good competition involves rivalry but never the kind of rivalry in which one side can win only to the extent that the other side loses ... Good competition also means striving to make the best effort possible.' Through the community of learners, a space was created that allowed for good appropriate competition between the pre-service teachers to develop so they did not have the need to impose their passion for competition on the youth.

'We are colleagues': fostering a professional network

The unintended creation of a community of learners cultivated a professional network among the pre-service teachers that transcended a personal support system. The development of a community can support learning and create social support (Solomon et al. 1996; Eckert, Goldman, and Wenger 1997; Felding 2001). However, this community of learners also fostered their continual engagement with each other as professional colleagues whose interests center on improving teaching and learning. 'I think we even got closer after that process you know cause we are colleagues, we are professional, we are educators and you know we are like this gang of people ...' (Rinaldo).

Rinaldo echoes Jenn's use of 'we' to situate a collective identity that is not solely as pre-service teachers but as members of a professional group. He declares, 'we are professionals' as a collective identity that situates he and his classmates' transformation from college student to professional whom Maggee claims, 'aren't trying to figure out this teaching thing alone.' As Manor et al. (2010, 7) have pointed out, 'While student-teacher partnerships are key, student-student collaborations are even more important considering that throughout school [they] interact far more with each other than with ... professors.'

Jenn describes the benefits of their community of learners:

We not only have a support system in our class but we have one outside as well ... The [pre-service teachers] ... I guess you can kind of say we grew together like a family. And you know what it gets like whenever you get families together there are some really good times but ... your families they fight, they argue, they make-up, they fight, they argue, they make-up, but it was this cycle that I think that brought us closer together ... and I think that through it all that we have created this nice lil' support system that we can rely on as we go out and we graduate from this program, and I believe that is what has made us become better educators and better students.

Maggee continues Jenn's idea about having a professional support system that allowed them to nurture one another's educational practice as she discusses her colleagues who were student teaching.

As Jenn was saying I think we've all definitely taken some lifelong friendships from this college experience and this semester. But we have also been able to develop our professional networking, five of us are out in the schools this semester doing their student teaching and I know I have sent lesson plans, and just been there to give ideas and support ... I think networking with my peers, before it's always been like a concept, an idea, but this semester I think we've all been able to learn a lot from each other.

Maggee's use of 'us' to refer to the collective 'we' even during student teaching highlights their reliance on continued collaboration to understand teaching and learning. Kandy discusses how this network will extend into their professional careers.

It's awesome I can tell we are all going to keep in touch no matter what no matter what ... like someone can move out of the country but we still are going to keep in touch because that is how close we are. You know if you need something you can rely on someone in this group.

The benefit of developing a network of professional colleagues promises to ensure their development as teachers. As Darling-Hammond (2007, 68) argues, teachers need to be more sophisticated in their ability to 'work together collegially to design instruction that meets the demands of the subject matter as well as the needs of their students.'

'I feel responsible': pre-service teachers taking ownership over their learning

... we really took on different roles within the classroom and we took ownership of our own classroom ... we really started to see a brand new sense of responsibility coming about with all of us. (Rinaldo)

Manor et al. (2010, 7) ask, 'Can you imagine a classroom where students take responsibility for each other in addition to just themselves? Can you imagine how much more we would benefit?' Based on the benefits emerged from this community of learners, we do not

have to imagine. The pre-service teachers took more direct ownership over their individual and collective learning because of the sense of responsibility they felt for all involved. Casey describes:

We are in charge of what we're doing, like even with the [youth]. I feel responsible for making a good lesson plan because I am teaching these [youth]. I feel like we have really taken ownership where you know we came up with this curriculum, we are designing the lesson plans.

Maggee shows the intersections between her sense of responsibility to the youth as well as to her peers learning:

One of the first things I think we all noticed was the quality of our work was really high . . . and I think this is because we all felt a greater sense not only for the [youth] but also to our peers . . . It is left to the 11 of us to go to the high school and to do our job and to be the responsible people that we are. And for the most part we were, the people who were suppose to teach had their equipment, taught the lessons and it went great. The problem was with the observations, people were showing up they didn't know what they were observing they didn't put a lot of effort into it . . . We went back to the university, we sat down, we talked about it, and we talked about how important every aspect, every job was to this process. And so we all stepped up and the responsibility was right back there for the rest of the semester.

Part of what emerged from this community of learners was the pre-service teachers not only becoming responsible for what they did in front of the youth that was public, but what they did for their peers that went unnoticed by the youth in private spaces. The community of learners facilitated the necessity of stepping up responsibility and taking ownership for the public and the private spaces.

Challenges in a community of learners

Even though we had successes we also had a lot of challenges. (Daniel)

The creation of a community of learners necessitates collaborative practice that ultimately exposes various forms of tension that can and do exist when people work together (Osguthorpe and Patterson 1998; Mizrahi and Rosenthal 2001). We highlight two main challenges that existed within this community of learners. The first resulted as the pre-service teachers worked together in groups and negotiated interpersonal dynamics. The second were challenges that emerged as they learned to situate each other as colleagues in one another's learning.

Interpersonal dynamics

The course was designed for pre-service teachers to work collaboratively in their planning, teaching, and observing. This collaboration occurred in groups assigned by Kim based on her knowledge of the students' outside lives, content knowledge, and their strengths and weaknesses as learners of teaching. In a community of learners that requires groups to plan and teach unified products, interpersonal dynamics presented challenges.

Like-minded people. 'My group was really great all semester long. We really scaffolded each other's learning, however we did have some struggles, we were made up of three people who are strong mind, strong willed, and stubborn' (Jenn). Group work created interpersonal challenges in part because these pre-service teachers share like-minded ways of working. When you put people together who share similar dispositions, whether it is in their

situatedness as the person with the best idea who wants to take charge or the person who is willing to step back and let others do the work, they could clash around this like-mindedness.

As Jenn notes, her group struggled with three like-minded people in terms of their necessity to each want their own ideas fore-grounded. Lacie explained:

I felt that Jenn was very overpowering and left little to no room for Rinalldo and I to voice our input. However . . . after talking to her and pointing a few things out . . . she became more aware of what she was doing and agreed that it was something that she needed to learn to control.

Rinalldo explained that this 'like-mindedness' also played out in the delivery of their instruction of the youth:

I think that some of the times when we're teaching . . . we may tend to step on each other's toes at times – like if one of us feels more comfortable teaching a certain lesson plan that we all plan, they might start taking ownership over it rather than the other two.

Jenn explains how the group came to work together through the struggle. 'Individually we thought that our idea was *the* idea, so we would spend quite sometime trying to make our lesson plans in which everybody in our group felt that they were fairly represented and um involved in someway.' Learning to engage in this type of collaboration is important, insofar as an indicator of quality teaching is a teacher's ability and willingness to seek, to hear, and to implement feedback and input with colleagues (Darling-Hammond 2007).

Non-traditional students. And also one of the persons in my group, well they're both married, they both have kids. One of them coaches and the other one lives out of town . . . So it just does not work, no matter what we do, it just doesn't work (Angelica). Group work created interpersonal struggles for the students in part because of their busy lives outside of school. As Angelica noted about her group, some had families, some worked full time, and some commuted to school. Given that the class was not structured to allow time for groups to work together, the pre-service teachers had to find time outside of class to meet which created logistical difficulties for some. In this particular class, the group that struggled the most was comprised of non-traditional students.

Daniel highlights the necessity of needing to *actually* work together in order to develop teaching plans that they would teach together to the high school students. Unlike other classes where tasks could be divided amongst group members, this class necessitated collaboration rather than delegation. Daniel explains:

Group work in any class is kind of hard, but especially for this one. One of the girls that goes to class . . . nothing works for her. She doesn't have time for this, she doesn't really want to make time . . . You can't just ok we're going to be a group but you do this part and you do this part. And then we'll put it together.

As Daniel and Angelica highlight, this group's work was negatively impacted by their lack of time to work together outside of class. The lessons that they facilitated for the youth were disconnected in content and delivery because of what they agreed to as their approach of 'you do this part and you do this part.' In one of their lessons focused on the theme of moderate to vigorous physical activity, each of the three group members planned and presented a different activity. Angelica introduced a modified kicking game in which Bianca and Daniel could not understand what the rules were so they had trouble, beyond joining in play with the youth, in assisting her in teaching. Immediately following this activity, Bianca introduced an obstacle course that was not linked with Angelica's

game in any way. Daniel did not get to teach his planned activity because they ran out of time. Even when they realized their separate planning and teaching approach did not facilitate the youth's learning and they attempted to plan together, there were times that their busy schedules and disparate geographical locations kept them disjointed.

As in all group work, the time factor was central in how groups negotiated their work. Unfortunately, student-centered inquiry *as* curriculum can create inequitable learning outcomes for different types of students. Non-traditional students bore the brunt of these inequities. What transpired in this group because they lived in the 'pedagogy of necessity' (Tinning 1998) was getting the work done to ensure they had something for the high school students. This overshadowed the quality of their work and their ability to reflect on their practice. Thus, learning to teach in the 'pedagogy of necessity' can perpetuate the belief that quality teaching does not require committed time to plan, teach, and reflect on one's practice.

Situating each other as colleagues

Another one of the challenges in this community of learners emerged as the pre-service teachers learned to situate each other as colleagues in one another's learning. This occurred as a result of them having to conduct peer observations of their colleague's teaching and utilize data from these observations to reflect on their own teaching. Two areas emerged as challenging. The first was the pre-service teacher's inability to value observational data because it did not come from the professor. And the second was their inability to separate the message in the data from the person writing the observation.

'I come to college . . . for the professor.' So another challenge we were faced with was trying to write and interpret observational data. When I was doing observations at times I would feel I wasn't qualified to give feedback to my peers who were teaching, mainly because I was use to the professors always telling me, they were always giving me feedback. (Jarrod)

One challenge the pre-service teachers experienced centered in their inability to value themselves and their colleagues as capable of providing viable information to improve teaching. Part of this stemmed from their beliefs that the professor was the expert (Manor et al. 2010; Oliver and Oesterreich 2011). Angelica reports her dislike for being asked to situate herself and her colleagues as capable of observing someone else's teaching:

Sometimes I don't like it. Sometimes I'm like – why did you put that because sometimes – I mean it's good that they point us out, but sometimes I feel offended because sometimes I have a problem with peer feedback. Like I come to college for the college professor to instruct me and I go to them for help and things like that . . . So I just have a problem with peer reviews, peer anything.

Manor et al. (2010, 11) have noted that '... students do not see their fellow classmates as offering unique and valuable perspectives. They rarely see classmates as partners or resources; instead, they are individuals who happen to be receiving knowledge from the same professor.' Pre-service teachers, like other students, come to class with the belief that the teacher must direct all teaching and learning (Knight and Oesterreich 2009). In student-centered inquiry *as* curriculum, simply placing students in the roles of peer observers do not easily challenge the belief of the professor as the center of knowledge. As Decyk et al. (2010, 55) remind us, 'We should not deceive ourselves that giving-sharing power with the

students will be welcomed by all of them,' and as such, requiring pre-service teachers to participate in a feedback loop will be met with some resistance (Lorente and Kirk 2012).

Inability to discern the individual and the message. I know specifically there's... a fight between two girls in our class. And so one cannot look at what the other one is saying critically and from a professional standpoint but she takes it as if she is attacking her... And so they're unable to separate it. (Lacie)

The second challenge that some of the pre-service teachers experienced as a result of having to write peer observations was in their inability to separate the message in the data from the person writing the observation. One example of this was on the day that Bianca, Daniel, and Angelica taught a lesson that was very creative but too complicated given the youth's background knowledge and skill level. In order to accommodate the high school youth's request for variety of content and trying new things, Daniel, Bianca, and Angelica created a scavenger hunt lesson plan in which students needed to be able to (a) read maps, (b) find directions with a compass, (c) complete 15 different physical activities, and (d) orienteer to find information to complete the scavenger hunt. All of these elements were designed as a race between student-groups, so that the youth were attempting to do all of these things as quickly as possible. The result in terms of physical activity was abysmal. For long periods of time, youth stood and stared at compasses, information youth needed had been moved by previous groups, youth could not understand the instructions because they were in technical orienteering language and included multiple detailed steps. In the end, the youth spent the majority of their 75-minute period asking repeatedly what they were supposed to do or trying to get assistance to know what to do.

Bianca and Angelica had very different feedback experiences than Daniel after this lesson. Maggee explains a conversation she had with Daniel, who she identified as a friend, about how to improve the lesson in the future based on its shortcomings.

We had a conversation about it and brainstormed ideas about how we could do it differently and with some people that works and he's one of my friends so I feel like we're able to have that conversation about you know – this didn't go so well, and he takes it as constructive criticism but I guess some people could take it offensively and think that I'm bashing their lesson plan which was never my intent.

While Daniel was able to engage in a critical conversation about his lesson's shortcomings and possibilities, he recognized Angelica and Bianca's struggle to hear Maggee's critique because of their strained relationship. He explains, 'We've also received some feedback that the other girls in my group were just bent out of shape you know, don't take it to heart, that's what they're seeing you know?' Daniel goes on to recall his group members' responses, 'Well they don't like us.' Bianca articulates how the mutual dislike between she and Maggee affected what she was able to process about the data she provided:

I don't like her personality and I don't think she likes mine so I feel like she thinks she knows it all and I don't like people like that and so I pretty much stay away but when she comes and tells me what I should've done – oh it gets me bad.

As Bianca and Maggee highlight, there were times when the person providing the observation was more important to the receiver of that data than the data itself.

When relationships are at the center of teaching and learning and most of the work that is done is through a feedback loop, pre-service teachers should be ‘valued for their diverse backgrounds, experience, abilities, concerns, knowledge, interests and accomplishments . . . so that activities are conceived in such a way as to encourage diversity in forms of participation, contribution, and knowledge’ (Eckert, Goldman, and Wenger 1997, 5). What is key here is the ‘should be,’ because in the reality of interpersonal dynamics, conflict exists that impacts teaching and learning. Pre-service teachers working within conflict learn to exist in the realities of contemporary schools.

Implications

Any attempt to innovate within PETE ought to also challenge the status quo of physical education in the schools in order to better meet the needs of contemporary youth. This innovation in PETE centered in inquiry through student voice, did allow the pre-service teachers and the professor to work together to meet the needs of contemporary youth in schools. It was through inquiry that power was negotiated between the youth, the pre-service teachers and the professor. It was through inquiry that pre-service teachers learned to listen to youth and come to understand what motivates and hinders their engagement in physical education. It was through inquiry that they began to situate in the responsibility of professionalism and to recognize their importance to each other’s learning. And, it was through inquiry that ‘the sweetness of struggle’ created the spaces for all of us to learn what it means to be professionals and challenge the status quo of what exists in our beliefs and values about teaching, learning, and youth.

The pre-service teachers learned to see themselves as a community in which they valued each other’s input in order to challenge beliefs that knowledge does not only come from the authority of a teacher. They fought to work across difference and sameness in groups so that the beneficiaries of their efforts were the youth. And, they learned how to channel their love of competition to outcomes of their own learning rather than imposing their myopic belief of the universality of competition as a motivator. They learned that they are professionals that must take responsibility for their own and others learning. When pre-service teachers are allowed to listen to youth, their colleagues, and the professor, their responses can no longer allow them to situate in their solitary values and beliefs about teaching physical education. They understand a more complex world in which meeting the needs of today’s youth requires both listening and responding to input, critique, and feedback from all parties involved.

However, they also learned, as did the professor, learning through the innovation of inquiry through student voice has challenges. Inequities will emerge as people work together in groups. *Any* community of learners will have interpersonal dynamics that need to be negotiated. Some pre-service teachers in this course simply did not like, nor respect, each other. It created conflict and challenges to the learning environment, but these students could not be forced to like or respect each other regardless of the amount of time focused on these dynamics. Ultimately, in schools, people have to work together and conflict with colleagues, families, students, and administrators will occur. Negotiating these realities of the profession within a community of learners is a vital professional skill.

However, professors need to be conscious of the impact of the challenges. While some challenges created the spaces for pre-service teacher learning to emerge as benefits, others simply reified long-existing inequities in higher education. Constant vigilance to the difference between benefits that will emerge through struggle and structures within innovations that perpetuate inequities require particular attention by the professor. In this particular course, the amount of time students were expected to work outside of class in groups

perpetuated the inequities between traditional and non-traditional college students. In order to address the inequities, the professor must respond structurally. Ultimately, the innovative practice of student-centered inquiry *as* curriculum required a structural change. In order to provide more time for planning for all of the pre-service teachers, the course was doubled in meeting time and changed in credit production from three to six. In this program, it required combining a curriculum and assessment course with a secondary PE methods course and renegotiating the graduation requirements for the program.

Conversely, the challenges that create spaces for pre-service teachers' learning, even though discomforting, need to be left alone. Ultimately, to fully recognize and reap the benefits that are possible within PETE innovations, professors and pre-service teachers alike need to be able to live and work within the messiness of the process. Any sudden attempt to tidy up the inevitable chaos will negate the possible benefits. As Daniel explains:

So it wasn't until the very end of the semester that finally we snapped, we got it . . . We just had to put everything aside and we all worked and we all put together the best lesson we had all semester, and it was a great lesson. And I believe that it was because we lived the experiences and the troubles we had, that we now know the positives and the negatives of how a group can work together.

Note

1. For a detailed description and analysis of the student-centered inquiry *as* curriculum model, see Oliver and Oesterreich (2013).

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