

TEACHER EDUCATION

Inhibitors to Responsibility-Based Professional Development With In-Service Teachers

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Abstract

Researchers of continuing professional development (CPD) in physical education have called for new models that move beyond the traditional CPD model. The outcomes of CPD protocols are hard to predict even when they align with the best practices. Responsibility-based CPD has become the focus of recent attention to assist physical educators in increasing the use of responsibility-based teaching strategies. The purpose of this study was to examine inhibitors to responsibility-based CPD based on Hellison's teaching personal and social responsibility model. A novel CPD protocol was introduced to a group of teachers but was inhibited by philosophical differences between the teachers and university collaborators, perceptions of students' ability to take on responsibility, and strategic compliance with grant-related work.

Researchers of continuing professional development (CPD) in education and physical education (PE) have called for structural changes to the CPD model that advance it beyond a traditional model of CPD that is typically limited to short-term in-service workshops (Armour, Makopoulou, & Chambers, 2009; Borko, 2004; Webster-Wright, 2009). More successful CPD programs tend to be long term in duration, which often requires follow-up support

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beyond an in-service workshop (Birman, Desimone, Porter, & Garet, 2000; WestEd, 2000). Furthermore, CPD is most effective when teachers are engaged in collaborative learning with their peers formally and informally within the context of their teaching environment (Armour & Yelling, 2007; Webster-Wright, 2009). Providers of effective CPD programs also assess its impact on student learning outcomes (WestEd, 2000). Guskey (2000) argued that pupil learning is the most important part of CPD. Changes in teachers' attitudes and beliefs may only occur after they have experienced successful implementation that has a positive effect on students.

Despite the consensus on the important components of successful CPD, researchers have been unable to predict its outcomes (Opfer & Pedder, 2011). Many CPD programs have been characterized as ineffective largely because of the proliferation of traditional in-service workshops (Darling-Hammond & Richardson, 2009). However, other researchers have argued that providers of CPD model fail to consider how professional learning is embedded in teachers' working contexts or how teachers' personal experiences, preferences for CPD, and values influence the outcomes of CPD (Borko, 2004). Findings from CPD research often are not replicable to other settings and sometimes conflict with findings from similar studies (Nuthall & Alton-Lee, 1993).

Despite these findings, the underlying assumption in much of the work on CPD has been that effective professional development will improve teachers' instructional practices. In turn, this is likely to result in improved student performance. Therefore, identifying the central tenets of effective CPD has been the focus of research to promote replication in other settings (Opfer & Pedder, 2011). The format of CPD has received much attention, but it seems that the duration of activities may be more important. Programs that include significant contact hours over a period of time are associated with effective CPD (Guskey, 2002).

In terms of the activities, CPD seems to work best when it is aligned with daily activities of teachers (Garet, Porter, Desimone, Birman, & Yoon, 2001). This calls for providers of CPD to engage teachers with the materials (Borko, 2004), ideally in a classroom setting that empowers teachers to experiment with new strategies with their students (Hawley & Valli, 1999). Those types of activities tend to provide opportunities for teachers to reflect on new activities and strategies for student learning. Furthermore, the reflection

component can also empower teachers to make positive adaptations to the new materials (Webster-Wright, 2009).

Providers of CPD should also promote opportunities for teachers to collaborate, both formally and informally (Armour & Yelling, 2007; Birman et al., 2000). Providers of some programs have called for the development of communities of practice to sustain a focus on the purpose of CPD (Wenger & Snyder, 2000). However, the most appropriate amount of collaboration is context specific and is likely best defined with input from all professional development agents (Warren Little, 2002). Communities of practice in PE have traditionally been described as groups of teachers collaborating effectively to achieve a positive outcome (Armour et al., 2009; Deglau & O'Sullivan, 2006). However, Wenger (1998) suggested communities of practice may develop in any work setting in which responsibilities overlap. Communities of practice can be dysfunctional when there are disagreements, challenges, or competition among participants.

In a study of factors that enhanced and inhibited professional development in multiple schools, Bechtel & O'Sullivan (2007) reported that beliefs about the profession greatly affect excitement and interest in professional development. Hence, it is suggested that designers of professional development consider ways that teachers believe align with the goals of professional development. Additionally, perceived support from colleagues and administrators is considered to be an important factor for implementation and sustainability of professional development.

Teaching Personal and Social Responsibility in Physical Education

Hellison's (2011) teaching personal and social responsibility (TPSR) model is grounded in the notion that teachers can promote personal and social responsibility through sport and physical activity. The TPSR model has been cited as an exemplary curriculum model (Kirk, 1993), is among the featured main theme curriculum models cited in PE texts (Lund & Tannehill, 2010), and has become a regular component of PE teacher education (Doolittle, 2011). Physical educators have often used the TPSR model as a resource for addressing responsibility in their classroom.

Application of TPSR often takes place in after-school or community-based programs characterized by voluntary participation and

a small number of participants (Hellison, 2011). This contrasts with the compulsory nature of PE classes that leads to a group of students with varying degrees of interest and motivation in PE (Wright & Burton, 2008). Therefore, researchers are beginning to examine the potential of TPSR in school settings. From a teacher's perspective, there is the responsibility to meet other curricular goals related that are reflected in national or state standards. Furthermore, teaching styles and curriculum in other school subjects may be in conflict with that presented in the responsibility model (Gordon, 2010).

Martinek and Hellison (2009) noted that more research is needed on program leaders (e.g., teachers) related to their learning and implementation of the TPSR model. Most recently, Doolittle (2011) outlined the nine ways that TPSR has been implemented in PE teacher education. The strategies range from brief experiences such as a conference seminar to in-depth experiences such as semester-long courses. Programs that were longer in nature, included continuous feedback, and provided opportunities to work with students were the most effective (Doolittle, 2011). Few researchers have considered the learning experiences of in-service PE teachers; however, researchers in Canada have successfully used a self-supervision process to facilitate one teacher's implementation of the TPSR model. This model is one example of an effective professional development strategy as an alternative to traditional workshops (Beaudoin, Brunelle, & Spallanzani, 2010).

A central question raised by Hellison and Templin (1991) is, what is worth doing in school PE? The National Physical Education Standards are focused on a well-rounded approach to PE in which a physically educated student demonstrates competency in motor skills, understands movement concepts, participates in regular physical activity, achieves a health-enhancing level of physical fitness, exhibits personal and social responsibility, and values physical activity (American Alliance for Health, Physical Education, Recreation, and Dance [AAHPERD], 2013). Many teachers prefer to address each of those six areas, yet they make decisions about what is best for their programs (Hellison, 2011). In their review of the standards, Lund and Tannehill (2010) concluded, "It will be up to the teacher and each school district to interpret the standards based on values, beliefs, and philosophy what is ultimately important for students to know and do" (p. 29).

Purpose

The purpose of this study was to explore inhibitors to responsibility-based CPD with a group of in-service physical educators. A novel approach to professional development was employed that was designed to follow best practices.

Method

In this study, four teachers were introduced to a novel CPD protocol. The PE teachers were enlisted as key contributors and asked to undergo training that would enable them to observe their peers and conduct self-reflections. Prior to the inception of the study, I met with the teachers to discuss the CPD protocol and data collection. Based on each teacher's feedback, minor changes were made to the CPD protocol. For example, the teachers did not prefer to work collaboratively as a group of four. Instead, they requested for the male and female teachers to meet and experience the CPD separately. After those accommodations were made, each teacher agreed to participate. Based on my field notes at the time, each teacher was interested in participating in this CPD protocol because it was different from a series of workshops they had attended during the previous 2 years. The institutional review boards of the participating university and school district approved this study.

Setting

This study took place at a public coeducational school located in a midsize city that includes all of the seventh and eighth grade students in one school district. Approximately 1,000 students attend the junior high school and represent diverse ethnic backgrounds. Over half of the students were White (63%), 11% were Black, 18% were Hispanic, and 7% were multiracial. Sixty-five percent of students were on the free or reduced-price lunch program.

The school was in the final year of a 3-year federal grant. With support from the grant, the school made substantial upgrades to its facilities, purchased new equipment, and invested in CPD programs. Throughout the day, there are seven PE periods that range from 50–55 min. Class sizes varied; the smallest class had 15 students and the largest class had 39 students. Although PE classes were not coeducational, the boys and girls classes are often combined for unstructured activities.

Participants

The PE department includes four teachers in the late stages of their careers. Sarah, Ashley, and Derek have over 30 years of teaching experience. Terry has 18 years of experience following an initial career in the insurance industry. With the exception of Terry, the teachers plan to retire in the next 2 to 5 years.

Professional Development Protocol and Data Collection

Planning meeting. In November 2010, each teacher was presented with the CPD protocol and the research plan, which are outlined below. Hellison's TPSR model and related research were used as primary resources for introducing the teachers to responsibility-based teaching strategies. However, I emphasized that the TPSR model is not a one-size-fits-all approach. Instead, this was an effort to introduce responsibility-based teaching strategies and examine ways to integrate TPSR into their existing curriculum. It was suggested that the results could then lead to new knowledge about best practices for responsibility-based teaching in PE.

Training tools. The Tools for Assessing Responsibility-Based Education (TARE) were developed to address implementation fidelity of the TPSR model. The TARE instruments are aligned with Hellison's (2011) TPSR model and include nine responsibility-based teaching strategies. The TARE observation instrument has been established as a reliable and feasible instrument for assessing TPSR implementation and can assist in the implementation of responsibility-based teaching in K–12 PE programs (Wright & Craig, 2011). It includes a time-sampling methodology to document teachers' use of nine discrete teaching strategies: modeling respect, setting expectations, opportunities for success, promoting social interaction, assigning tasks, leadership, giving voices and choices, assessment, and transfer. Additionally, it includes holistic measurements of responsibility themes and student responsibility levels. The TARE post-teaching reflection was adapted from the observation instrument and serves as a self-report complement to the time-sampling tool. The TARE instruments were employed as training tools and were the central component of the CPD. The CPD protocol was designed to introduce the teachers to the responsibility-based teaching strategies through the training in the instruments used to assess those strategies and then follow-up with structured observations and reflections.

Training meeting. Each teacher met individually with me for two training meetings. During the first meeting, the teacher was presented with the TARE observation instrument (Wright & Craig, 2011) and post-teaching reflection (Hellison, 2011). I explained the protocol for using time-sampling observations. Once the teacher was comfortable with the TARE instruments, a practice coding session commenced using video observation.

During the second training meeting, the teacher and I independently coded a 45-min videotaped lesson using the TARE observation instrument. The tape was paused periodically to address questions. Following the coding session, the teacher and I shared observations. This meeting confirmed that the teachers generally understood the responsibility-based teaching strategies and could observe them in practice.

TARE observations. Following the training, all four PE teachers were observed teaching one PE lessons. Figure 1 illustrates the key roles of the observations: (a) instructor, (b) peer observer, and (c) researcher. The instructor was a PE teacher who led all instruction during the observation period. Another PE teacher served as the peer observer and observed an entire lesson alongside me. The peer observer and I used the TARE observation instrument. Immediately after teaching a lesson, the instructor completed the TARE post-teaching reflection. I compiled the results from the three documents and provided them to the teachers in an effort to provide feedback to promote further discussion and reflection. TARE observations were conducted at times convenient to the PE teachers over the 4-month semester.

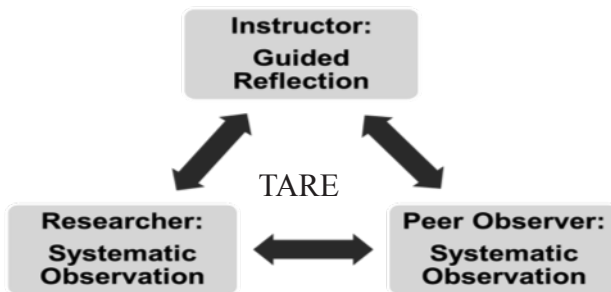


Figure 1. TARE observation cycle

Interviews. At the end of the CPD protocol, each teacher participated in two interviews, with the exception of Terry, who opted out of the second. The interview was semistructured, lasted between 45 min and 1 hr, and was focused on the teachers experience with the CPD protocol.

Observations. I visited Tuscola Junior High School two times per week over 4 months. During the visits, I observed PE classes and had informal discussions with the teachers. Following each visit, I audio recorded field notes and transcribed them for analysis.

Incomplete data. The CPD protocol and data collection was not completed as planned. As the CPD protocol began, the teachers opted out of much of the process including videotaped lessons and follow-up TARE observations. Each teacher taught one structured lesson to accommodate TARE observations, served as a peer observer, participated in at least one interview, and was observed on a weekly basis by me. Since the CPD protocol was based on completing multiple TARE observations, the CPD protocol was incomplete.

Data Analysis

Typological data analysis was employed in this study (Hatch, 2002). A typological analysis begins by dividing the overall data set into categories based on predetermined typologies, which can be based on theory, common sense, or research objectives. For this study, the predetermined typologies included the individual teachers, the school, the TARE instruments, and CPD. Once typologies were identified, the data were reviewed with one typology in mind. Once the typologies were organized into categories, an inductive analysis was conducted and themes were developed within each category. Following this, the themes were compared with those from the other categories. The resulting themes were supported by multiple data sources and evident within each of the typologies. A qualitative software program, NVivo 9 (QSR International, 2010), was used in the data analysis. The software program was designed to help organize and store the data (Patton, 2002).

Results

Over the course of the data collection for this study, observation notes indicated a pattern of unstructured activities. Although the classes were segregated by gender, during free play, activities became integrated. The teachers' role was primarily as observer and disciplinarian when needed. The following excerpt from a field note is representative of a typical PE lesson:

Ashley led the warm up activity. The students were instructed to jog the length of the basketball court. Upon blowing the whistle, they could stop and walk until the whistle came again. Following the warm up, Ashley literally said “go” as I am standing by the basketballs and the students race to get a ball. Most of the girls walk around the perimeter of the court... the girls don’t get much of a chance to play basketball although they seem to want a basketball. One girl even settled for a volleyball and shot it at the basketball hoop.

The unstructured setting made it difficult for me, and other university researchers, to follow through on professional development support. The following themes provide insights related to the Tuscola teachers’ perceptions of the CPD process.

University Collaboration

In the interviews, the four teachers provided mixed perceptions about the relationship between the university collaborators and the junior high school. Ashley stated, “[The university] was great about not making us feel pushed into it,” when referring to curriculum reforms. Sarah remarked, “I think everybody at [the university] is wonderful. I am not just saying that. I think you all have done a wonderful job in what you are doing and have helped us adjust to what you are doing.” The female teachers suggested that they had benefited from working with the university and appreciated this partnership.

Contrarily, the male teachers often highlighted philosophical differences that may have made it difficult for the professional development to be effective. For example, physical educators, especially those in higher education, have condemned dodgeball in PE (National Association for Sport and Physical Education, 2006). Terry argued, “Everybody at [the university] hates dodgeball, and they don’t understand that this is an activity that 100% of the kids get involved in and love.” He went on to argue at length about the educational benefits of dodgeball. Derek argued that the content offered in the professional development was not valuable: “[The university] didn’t have to bring some highfalutin professor in and pay him \$5,000 to teach me this. I learned from the school of hard knocks.”

The intent of the curriculum reform project was to improve the PE curriculum progressively in a way that is reflective of the National Physical Education Standards (AAHPERD, 2013). When asked about his philosophy, Terry said his priority was to

get [students] into an activity... where they are yelling and they are screaming... they are getting worn out so when they go back to English, science, math, etc., they sit in their seats and they listen and they learn.

The emphasis on free play and unstructured activity was noted in field notes throughout the duration of this study. These philosophical differences may have been a barrier to the adoption of responsibility-based teaching strategies.

Strategic Compliance

Although all four teachers agreed to participate in the CPD protocol, in my field notes, I recorded frequent occasions when the observations made teachers feel uncomfortable. However, the benefits of the large federal grant may have made the teachers more likely to comply with the data collection. For example, each teacher completed a lesson plan to accommodate a TARE observation. As recorded in the field notes, these lessons were not preceded by or followed by similar lessons. They had been designed specifically to accommodate my requests. The following field note excerpt explains my perception following the final TARE observation:

I think this was interesting because I have not observed hands-on teaching like Sarah did today, or Ashley last week, or like Derek and Terry when I observed them. So this process... facilitates some change. I think it is superficial in nature because the teachers immediately revert back to their old ways. They are very kind to me, kind enough to let me come and collect this data, even though they are very reluctant to be in the spotlight. I don't think we are going to see any sustainability in terms of using these strategies or even playing an up-front role in a classroom as teachers do. At the very least, this process puts them in a direct teaching situation.

To accommodate the TARE observations, however, each teacher planned one lesson based on his or her knowledge of the TPSR model and responsibility-based teaching strategy. The lessons followed the basic lesson format suggested by Hellison (2011) including awareness talks, a physical activity lesson with integrated responsibility, and a group meeting. During this lesson, each teacher demonstrated

the ability to use most of the responsibility-based teaching strategies. Over a 40-min lesson, each teacher was observed modeling respect, setting expectations, providing opportunities for success, fostering social interaction, and assigning tasks. With the exception of modeling respect, those teaching strategies were rarely observed before or after each teacher's single lesson.

Students as Barriers to Teaching Responsibility

Each teacher suggested that the socioeconomic and demographic characteristics of the students were inhibitors to using empowering teaching strategies such as leadership. The teachers described demographic shifts in the community that have occurred throughout their professional careers that have limited the potential of their teaching. Derek explained, "Every neighborhood has a community watchdog, and they are taking the community back from these delinquents, well they are the ones we are dealing with every day." Derek attributed students' "delinquent" behavior to "single parents [with] a different set of values." Terry seemed to concur with this sentiment: "Most of [the students] live with one parent. It is just different. They don't get it because they have never been taught how to get it." In regard to dealing with these socioeconomic barriers, Terry argued that the university researchers "don't have a clue what's going on when they are dealing with that."

The female teachers took a different tone when describing students. Ashley suggested that students are disrespectful "more than [she] would like to see it," but the "majority of kids are on task and are very helpful and very polite." Sarah admitted that some of the students are disrespectful, but the problems seemed manageable. She gave one example: "In my last hour class, I hope to get them to not be talking when I am talking" before the end of the semester.

Although the male and female teachers offered different perspectives, both female teachers seemed just as reluctant to empower students to take on advanced levels of responsibility. For example, Sarah noted that the students were surprisingly good at assigned tasks such as keeping score during a volleyball game, but commented, "I don't think they can handle the self-directed stuff," referring to self-directed physical activity. According to Ashley, it is hard to trust the students to take on responsibility: "I don't want to say that we can't trust [the students], but we can't trust them."

Girls, Boys, and Athletes

Given that the PE classes were segregated according to gender, it was not surprising that gender-specific issues arose. For the male teachers, who also coached male sports, the student-athletes were best positioned to take on responsibility. According to Terry, his position as a football coach had earned him the respect of the student body:

You get these football players... that's about 10% of the school. You get 10% of the kids and it doesn't matter whether they are Black, whether they are Hispanic, whether they are White, when you say "I want this done now." It will be "yes sir," and the other kids see that and they fall right in line with it.

Terry went on to suggest that when he took a year off from coaching that he "found out that if you don't coach and all you do is teach, the way [the students] look at you is completely different."

Derek suggested that it is hard to trust students with responsibility, but on the other hand, he said he has "given responsibility to the kids that played soccer, the kids that have played football, I let them be captains and things like that." Terry echoed this sentiment and elaborated, "I don't know if [students] learn leadership skills in [physical education], but they do on the football team."

The female experience in PE was characterized as lacking effort, interest, and engagement. Ashley explained that the girls "don't want to be very good at this age level... they don't want to show too much skill." Earlier in their teaching careers, the teachers had tried integrated flag football activities. Ashley explained, "It got to a point where the boys were throwing the ball so hard that the girls couldn't catch it... we decided to keep them separate." However, Sarah explained that they continue to play flag football:

We do try to play flag football even though they are not interested... it is something they can play when they get to college intramurals, when they attend a picnic at church, so we try to expose them to that even though they don't buy into it.

When asked to elaborate on why the girls seemed to be disinterested in PE, Ashley suggested,

They don't want to be very good at this age level... I don't think they want to be singled out as higher-up athletically. They want everybody to see how smart they are, but physically they just don't want to show it. I think it's a hormonal thing.

Discussion

In theory, the responsibility-based CPD protocol that was used in this study aligns closely with some of the best practices for CPD (Birman et al., 2000; Borko, 2004) and more specifically with effective CPD methods for teaching personal and social responsibility (Doolittle, 2011). The protocol was designed to initiate a sustained focus on responsibility-based teaching throughout an academic semester through periodic TARE observation experiences, reflection, discussion, and collaboration among colleagues and periodic visits by the investigator. However, the protocol failed to adhere to the key findings of Bechtel and O'Sullivan (2007). Findings indicate that a belief system that does not align with responsibility-based CPD is a significant hindrance to its implementation.

Many positive outcomes have been associated with teaching personal and social responsibility in PE (Hellison & Martinek, 2006). Focusing on such potential may have promoted a greater interest in responsibility-based teaching strategies. For example, the TPSR model has been cited as a student-centered instructional model with the potential to promote gender equity in PE (Wright, Stockton, & Hays, 2008). Other research has demonstrated that responsibility-based PE programs promote effort and enjoyment (Wright & Li, 2009). CPD program providers could look to find creative ways to link this research to practice in an effort to combat teachers' perceptions that inhibit the potential of CPD, such as the perception of girls being disinterested in sport and PE (Cooky, 2009).

A second failed assumption of this CPD protocol was that the PE program included opportunities for students to be successful, which is foundational to responsibility-based teaching (Hellison, 2011). Terry argued, "100% of the kids get involved with dodgeball." However, the National Association for Sport and Physical Education (2006) concluded that dodgeball "provides limited opportunities for everyone in the class" to participate. Observations reveal that the structure of free play often privileged the kids who were able to obtain a basketball. These findings are unfortunate, but such

information was available before the inception of the CPD protocol. A better understanding of the challenges and opportunities available at Tuscola may have facilitated a CPD protocol designed to meet the most urgent needs of the school.

This study was focused on the responsibility-based CPD protocol, and the flaws in the protocol draw attention to underlying issues in PE. Sabo and Veliz (2008) reported that girls spent less time in PE class than boys. The multisite study ($N = 2,379$) showed a precipitous decline in physical activity associated with the lack of PE among adolescent girls, and this decline increased significantly through their teen years. In the current study, the boys and girls received equal amounts of PE, but the girls' experience, interests, and engagement in PE was markedly different. Previous research indicates that some girls prefer a participation model of PE that emphasizes cooperative play over competitive sports (Cooky, 2009; Ennis, 1999). This suggests that the female teachers' perception that the girls preferred not to demonstrate physical skills may be misguided. With a more effective CPD protocol, these types of assumptions can be identified and challenged.

Teachers' values have a significant effect on their curricular decisions and their willingness to engage in curriculum development through CPD (Ennis, 1994). For example, students' disruptive behavior in class tends to impact teachers' willingness to teach personal and social responsibility (Ennis, Ross, & Chen, 1992). In CPD programs, the congruence of teachers' values and curriculum should be emphasized, and those factors should be linked with the relevant PE standards. Prior to the initiation of this study, teachers' values were not considered. It was assumed that the teachers would be interested in updating their teaching to align with the National Physical Education Standards (AAHPERD, 2013). However, the interviews and observations reveal that the teachers' values inhibited the success of the CPD. Hellison (2011) suggested that core values of values-based programs should be acknowledged from the outset. Values implicit in this CPD protocol include empowering students to have a voice in their program, to set and strive for internal goals, and to have frequent opportunities to experience leadership roles. The data in this study demonstrate how those values prohibited the success of the CPD protocol.

The university collaboration with the school corporation was beneficial as the school received a federal grant that provided significant facility upgrades, CPD for PE teachers, and opportunities to conduct research. These factors may often facilitate positive collab-

orations between teachers and researchers, but in this case, it facilitated strategic compliance. Recognizing the considerable benefits of the partnership, the teachers may have felt pressure to comply with requests for research even when given options to opt out of them. Linking universities with community schools has been a successful strategy for teaching personal and social responsibility (Hellison et al., 2000) and for CPD in PE (Ward, 1999). This specific responsibility-based CPD protocol did not meet the objectives for the school (professional development) or the university (research on professional development).

The findings of this study raise important implications. Successful collaborations between universities and school PE programs have often included PE researchers providing in-service workshops and other support for CPD (Ward, 1999). This was the case for the current study. This approach has proven useful in many cases, but it was inadequate for this particular setting. This raises the question, is professional development in this particular setting doomed to failure, or were there other options that may have been more successful? Finally, how could the CPD provider predict that this protocol would be unsuccessful even after it had been successful in a similar setting?

It is true, as the teachers in this study indicated, that schools are faced with challenges related to social stratification (Lawson, 1998). For late career teachers, the changing demographics may create different working contexts than those of earlier career stages. Perhaps the university collaboration could be expanded to address these issues. Doing so would require the CPD provider to rethink some of the initial assumptions about professional development, perhaps through a needs assessment. In this study, that might have revealed some of the barriers to the teachers' perceptions of students' potential to take personal and social responsibility.

Rethinking CPD to address these issues would have required CPD providers to consider how to challenge Terry's assumption that dodgeball is an appropriate sport in which 100% of students participate. CPD providers would also have been required to challenge the perception that girls do not want to appear to be skilled in a PE class. Most large universities have experts in areas that can address issues beyond pedagogy, such as the gender issues illustrated in this study. Equally important, PE classes can provide relevant venues for research on topics beyond PE pedagogy and professional development. There is a potential for a broader partnership to address issues

such as those in this study that prohibited successful professional development, but more important, that may limit the value of PE for students.

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