

RUNNING HEAD: PHYSICAL EDUCATION TEACHER EDUCATION

Physical Education Teacher Education (PETE) at the University of Alberta:
Students' Experiences as they relate to ACDE's *Accord on Initial Teacher Education*

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Introduction

Many Canadian universities' teacher education programs have recently completed, or are soon to be undergoing, their own internal reviews (Wimmer & Walker as cited in Foster & Nocente, 2007). Such self-initiated reviews have likely, in part, been in response to those institutions' goals of bettering the teacher education experiences of their own university students. Furthermore, as an increasing body of research capable of informing teacher education practice becomes available (see Cochran-Smith & Zeichner, 2005; Darling-Hammond & Baratz-Snowden, 2005; Levine, 2006), universities are perhaps now, more than ever, able to address their perceived programs' shortcomings with research-supported reforms or initiatives. As such, Liston, Whitcomb, and Borko (2006) have urged teacher education programs to engage in critical assessments of their own existing programs while investigating the merits of others.

Though many degree-granting teacher education programs may be undergoing such reviews independently, their concerns, observations, and reactions often suggest that more similarities than differences exist between institutions. Indeed, given the commonalities among the various universities' teacher education programs, a recent *collective* accord has allowed for Canada's education faculties and schools of education to set forth guidelines for their own idealized teacher education programs. As a constituent association of the Canadian Society for the Study of Education (CSSE), the Association of Canadian Deans of Education (ACDE) includes deans and directors from most Canadian degree-granting education programs. Given that CSSE is the "largest organization of professors, students, researchers and practitioners in education in Canada" (CSSE, 2007, ¶1), ACDE has ample opportunity to reach an eager and plentiful audience. ACDE's recent *Accord on Initial Teacher Education* (2007) explicitly recognizes that the articulation of guiding principles ought to be partly dependent on the context

of the individual member institutions. Perhaps equally important however is ACDE's view that certain broad characteristics must nonetheless be evidenced in *all* initial teacher education programs, *regardless* of context. For example:

It is ACDE's view that programs of initial teacher education should involve the development of situated practical knowledge, pedagogical knowledge, and academic content knowledge, as well as an introduction to research and scholarship in education. Essential to that development is a form of induction into the profession as well as ongoing communication with professional peers (ACDE, 2007, ¶5).

With such goals related to practical, pedagogical, and academic content knowledge, in addition to an induction process supported by professional peers, ACDE (2007) further outlines twelve principles related to initial teacher education programs. Included within this list are three principles that were especially focused on as part of our recent study of the University of Alberta's physical education teacher education (PETE) program. These principles include:

- An effective initial teacher education program involves partnerships between the university and schools, interweaving theory, research, and practice and providing opportunities for teacher candidates to collaborate with teachers to develop effective teaching practices....
- An effective initial teacher education program promotes diversity, inclusion, understanding, acceptance, and social responsibility in continuing dialogue with local, national, and global communities....
- An effective teacher education program ensures that beginning teachers have sound knowledge of subject matter, literacies, ways of knowing, and pedagogical expertise (ACDE, 2007, ¶8).

This paper presents the findings from this investigation; the study was a single stage of a larger research project aimed at gaining a deeper understanding of PETE programs within Bachelor of Education (BEd) degree-granting institutions throughout Canada. Though the larger research project included data gathered from faculty, documents, graduates, and students from university and college institutions throughout the entire country, this paper presents the findings from a mixed-methods case study of the experiences of *one* university's PETE students.

As the “publication of teacher preparation practices in physical education teacher education has been scarce” (Strand, 1992, p. 104) and the reality that these PETE students are recent graduates of an especially large Canadian university that, like others, is considering structural changes due to its own recent undergraduate program review, we believe that their insights deserve special attention. Indeed, such a focus on the insights of beginning teachers is not new; an increasing number of teacher educators and researchers are rightfully concerned about and are taking notice of beginning teachers’ observations and experiences (see Barrett Kutcy & Schulz, 2006; Goddard & Foster, 2001; Hobson, 2002; Marable & Raimondi, 2007).

Purpose of the Study

The aim of the large-scale study was to investigate PETE programs across Canada, with a focus on understanding similarities and differences with respect to issues such as course requirements and offerings, program structures and rationales, privileged discourses, and the organization of student teaching field experiences. The purpose of this particular study, with PETE students as the subjects of interest, was to gather the perspectives of pre-service physical education teachers themselves, understanding that their experiences and observations might prove to be especially helpful when program reforms or initiatives are under consideration. While it was possible for the student teacher responses to have shared little with, or even to have contradicted, recent research-based conclusions about idealized teacher education programs (see Cochran-Smith & Zeichner, 2005; Darling-Hammond & Baratz-Snowden, 2005; Levine, 2006), we believed that their perspectives must nonetheless be considered.

Using the ACDE *Accord on Initial Teacher Education* (2007) as a framework for considering the students’ perceived experiences within their PETE program, the following general research questions guided this phase of our investigation:

- How do PETE student teachers experience partnerships between the university and schools and how do these partnerships allow student teachers to interweave theory and practice while also collaborating with teachers to develop effective teaching practices?
- How do university teacher education programs promote PETE students' awareness of diversity, inclusion, understanding, and social responsibility?
- How do university teacher education programs prepare PETE students to gain sound knowledge of subject matter and pedagogical expertise?

By focusing on research questions such as these, it was believed that it would be possible to understand how successful the University of Alberta's current teacher education program's structure has been in its efforts toward supporting the "development of [PETE students'] situated practical knowledge, pedagogical knowledge, and academic content knowledge" (ACDE, 2007, ¶8).

It is no coincidence that in addition to their relation to ACDE's (2007) accord these research questions are also similarly related to Darling-Hammond and Baratz-Snowden's (2005) conclusions about what beginning teachers ought to know. In fact, in Darling-Hammond and Baratz-Snowden's vision of professional practice, knowledge of learners and their development in social contexts, knowledge of subject matter and curriculum goals, and knowledge of teaching are essential to their framework for understanding teaching and learning. Indeed, it is not difficult to recognize how ACDE's *Accord on Initial Teacher Education* (2007) often parallels Darling-Hammond and Baratz-Snowden's (2005) position; a position that is further sponsored by the National Academy of Education.

Literature Review

Undoubtedly, many beginning physical education teachers likely envision themselves teaching and learning within their subject areas for long and rewarding careers. However, like many of their Canadian and American counterparts, several of Alberta's education graduates do not enter, or remain, teaching soon after graduation. With 30% of beginning American teachers

and 10% of beginning Canadian teachers leaving the profession within three years of certification (Bullough, Knowles, & Crow, 1992; King & Pert as cited in Cole, 1994), beginning teacher attrition rates are rightfully garnering the attention of both recruitment personnel and policy makers within many school jurisdictions and teacher education programs. While the reality that 10% of beginning Canadian teachers are leaving the profession within three years of certification is in itself worrisome, consider that when such teachers are tracked for a five year period, a more troubling 30-50% leave teaching (College of Alberta School Superintendents, 2007). Furthermore, in a recent Canadian Teachers' Federation (CTF, 2000) nation-wide survey of school districts, supervisors' responses regarding the perceived contributors to an upcoming teacher shortage included having fewer graduates from faculties of education coupled with a high turnover of beginning teachers. To these happenings, Boreen, Johnson, Niday, and Potts (2000) recognize that the "low numbers of beginning teachers who remain in the profession do seem daunting. Despite their initial enthusiasm, far too many abandon the profession, depressed and discouraged" (Boreen et al., 2000, p. 6). As physical education teachers enter into what is at times somewhat aptly labelled the sink-or-swim profession that "eats its young" (Halford, 1998, p. 33), they too are not immune to such attrition. Because large numbers of beginning teachers are leaving the classroom within five years of graduation, it is especially important to look at their teacher training programs. For indeed it is possible that their programs might not be preparing them for the "real" world of teaching.

With the widespread recognition that teachers are central to the success or failure of students, increased attention is being placed both on teaching and teacher education programs (Cochran-Smith, 2006). As Cochran-Smith suggests, "as a nation, we have finally acknowledged the incredible importance of teachers' work for the achievement and life chances

of the students they teach” (2006, p. 98). Recognizing that “teacher quality makes a significant difference in student learning” (2006, p. 19), Levine further contends that calls for reform in teacher education suggest that there exists a current need to improve the quality of the teacher force. As various groups debate over teaching being conceptualized as a profession or a craft, proposed models of teacher education include traditional and alternative programs (Levine, 2006). With educational criticisms coming from both outside of and within the education field, there is no shortage of emotion or attention to issues related to the education of pre-service teachers. The observations and conclusions by prominent scholars in concert with arguably reputable educational authorities, such as the Committee on Teacher Education (CTE), the American Educational Research Association (AERA), and the National Research Council (NRC), though informative, still nonetheless reveal, “both the research on and the practice within teacher preparation require further attention” (Borko, Liston, & Whitcomb, 2006, p. 202). Such a suggestion, however, does not imply that there is a want of relevant educational research in this area, but rather, that increased attention ought to be afforded to the growing body of contemporary research that exists.

Darling-Hammond (2006) suggests lay observers’ disdain for the profession as one which requires limited formal study ought to be refuted, especially since we currently have an improved understanding about what constitutes a strong and effective teacher education program. From this body of research, Darling-Hammond (2006) suggests that quality teacher education programs feature a tight coherence and integration among courses and between coursework and field experiences, extensively and intensely supervised field experiences linked with coursework, and proactive school relationships that serve diverse learners and develop and model good teaching. Nonetheless, despite the wealth of information about idealized teacher education

programs, and the “heroic work...going on to transform teacher education [as a] growing number of powerful programs are being created” (Darling-Hammond, 2006, p. 310), watered down teacher preparation programs continue to graduate unqualified teachers into schools. Such questionable programs might include provisions for emergency teaching permits, alternative pathways to certification, or waivers for any teacher training at all (Darling-Hammond, 2006).

One might wonder if it is only these “watered down” teacher education programs that are being referred to when frustrated beginning teachers point “to their teacher education programs, saying that these had not prepared them for the ‘real’ world of teaching” (Barrett Kutcy & Schulz, 2006, p. 39). Barrett Kutcy and Schulz (2006) suggest that teacher educators ought to closely consider these beginning teachers’ observations, and in turn should strive to work “more actively to bridge the divide between theory and practice” (p. 38). Furthermore, such an approach need not necessarily end at graduation; Barrett Kutcy and Schulz further propose:

To support the growth and development of new teachers, faculties of education must extend their presence beyond the pre-service program to in-service teaching by providing specific ongoing support to student teachers after graduation (2006, p. 38).

So as to not suggest an idealized structure without the benefit of a practical example in place, Barrett Kutcy and Schulz (2006) propose models like that at the University of Nottingham in England; included with that university’s partnership system is a year-long induction period characterized by a decreased teaching load, in-school mentorship, and continued university meetings with a cohort and university instructor. As the first year of teaching can be one that is especially challenging, such an induction process might allow beginning teachers to make connections between their coursework’s theoretical grounding and their “real-world” classrooms. Furthermore, supportive induction programs might also rightly allow for neophyte teachers to address the emotional intensity of teaching while they receive adequate support for their own

learning (Liston, Whitcomb, & Borko, 2006). Clement, Enz, and Pawals (1999) also recognize the importance of quality induction programs. To be successful, they suggest induction programs ought to be “immediate, based on the developmental needs of the apprentice teachers, and comprehensively woven into the fabric of the school system” (Clement et al., 1999, p. 51).

Unarguably, such induction and mentorship programs come with considerable expense. Nonetheless, Liston et al. (2006) acknowledge that requiring beginning teachers to bear the financial burden of such an experience is not just and they “urge schools of education to work with districts to develop new funding models that redirect resources spent on student teaching supervision, hiring, and induction coaching to support internships and to develop strong partnerships” (p. 356).

Mentorship opportunities for beginning teachers ought to pair them with mentors who have proven to be skilled and effective. Mentor teachers need to recognize that their roles require them to do much more than advise and/or evaluate; they must be capable of listening, questioning, and encouraging reflection (Boreen et al., 2000). In addition to having these developed skills, Boreen et al. (2000) also suggest mentor teachers have three to five years successful teaching experience, teach in the same content area or grade level, teach near the beginning teacher, be older, and be aware of gender differences.

In addition to the previously outlined ideal teacher education program at the University of Nottingham in England, Levine (2006) found that one quarter of American teacher education programs embraced practice and practitioners and were worthy of being labelled excellent programs as well. Levine (2006) recently profiled four of these excellent teacher education programs (Alverno College, Emporia State University, Stanford University, and University of Virginia), acknowledging that each institution has its own unique qualities:

These institutions differ in the types of teacher education programs they offer: four-year undergraduate programs, five year undergraduate/graduate programs, and a 15-month master's program. They are small and they are large. They are less selective and highly selective. They are public and private, religious and nonsectarian. They are located in different regions of the country at baccalaureate colleges, master's granting universities, and research universities. (2006, p. 81).

Given this variety in structure, Levin (2006) was nonetheless able to identify a number of shared characteristics within exemplary programs: clearly defined knowledge and skill objectives for teaching excellence, an early and sustained field experience providing the immediate application of theory into classroom practice, a close connection between the teacher education program and the school sites for field placements, and high graduation standards.

Although the development of general pedagogical expertise may be a familiar intention of many teacher education programs, such efforts are not always strongly supported by the literature. For example, Goldhaber has noted that “teachers with higher levels of academic proficiency [as opposed to pedagogical expertise] are more effective” (2004, p. 91). That is, Goldhaber (2004) proposes teaching effectiveness to be more related to one's academic content knowledge than to one's pedagogical knowledge. Suggestions such as this, in which mastery of “what” to teach is held in higher esteem than mastery of “how” to teach, welcome questions about the value of teacher education programs that focus on pedagogical development. To this, Stotsky (2006) offers that this might partly be an obvious matter of common sense, rhetorically asking “how can a teacher teach what she or he does not know – or know well?” (p. 258).

Furthermore, Stotsky further believes:

there seems to be no body of sound empirical research showing clear effectiveness in favor of traditionally prepared and licensed teachers (who have by definition taken courses in pedagogy) in contrast to those who have come into teaching via an accelerated route (who by definition have taken little or no initial course work in pedagogy) (2004, p. 259).

Nonetheless, despite Stotsky's (2006) favouring of academic content knowledge in this manner, she also clearly suggests that generic and subject-specific pedagogical knowledge also include essential knowledge and skills for the successful beginning teacher. Furthermore, she holds that subject-specific pedagogical skills "are far more important than most of the generic, or standard, pedagogical skills" (Stotsky, 2006, p. 260). Her argument then is not one for eliminating pedagogical training from teacher education programs, but rather, is one that supports the need for privileging *subject-specific* pedagogy.

Despite research-based claims regarding the issue of teacher effectiveness, others suggest that research has failed to support such suggestions. For example, although Levine (2006) identifies a number of exemplary programs (and their shared characteristics), he also recognizes that there is currently a lack of consensus about teacher effectiveness and ideal teacher training programs. Furthermore, Glickman, Gordon, and Ross-Gordon (2004) propose that "issues of school and teaching effectiveness are *not* [emphasis added] clearly answered by research, but instead must be resolved by human judgments about goals and purposes" (p. 105). Hammerness et al. (2005) offer a framework for teacher learning, suggesting:

new teachers learn to teach in a community that enables them to develop a *vision* for their practice; a set of *understandings* about teaching, learning, and children; *dispositions* about how to use this knowledge; *practices* that allow them to act on their intentions and beliefs; and *tools* that support their efforts (p. 385).

Considering Glickman et al.'s (2004) position, it is possible to appreciate how developing attributes related to a vision and a set of dispositions might be resolved "by human judgments about goals and purposes" (p. 105) rather than by educational research. Nonetheless, despite Glickman et al.'s (2004) observed research limitations, there nonetheless exists a considerable body of research-based knowledge that has the potential to inform teacher education practice. Perhaps of the previously cited literature, *A Good Teacher in Every Classroom* (Darling-

Hammond & Baratz-Snowden, 2005), *Studying Teacher Education* (Cochran-Smith & Zeichner, 2005) and *Educating Teachers* (Levine, 2006) have been some of the most influential in shaping current teacher education practice and continued research.

Theoretical Framework

Bogdan and Biklen (1998) suggest, “when we refer to a ‘theoretical orientation’ or ‘theoretical perspective,’ we are talking about a way of looking at the world, the assumptions about what people have about what is important and what makes the world work” (p. 22).

Denzin and Lincoln (2003) explain that, “the net that contains the researcher’s epistemological, ontological, and methodological premises may be termed a *paradigm*, or an interpretive framework” (p. 33). Similarly, Lincoln and Guba (1985) propose that a paradigm can be explained as a “systematic set of beliefs, together with their accompanying methods” (p. 15).

With such notions, these research authors suggest that these types of personal assumptions are notably related to one’s epistemological and/or ontological outlook.

Whether such a concept is labelled as an interpretive framework, paradigm, or theoretical orientation, it is important that the researcher be aware of any personal epistemological and ontological assumptions. For not only do researchers have such epistemological and ontological beliefs and assumptions but, more importantly, these beliefs and assumptions shape the way they view, and go about, their own work. That is, even in the absence of explicit efforts to align appropriate research methodologies within a theoretical framework, the researcher must nonetheless, at the very least, be aware of his or her theoretical stance, as it impacts the research process. Recognizing that in this sense *all* research is theoretical, a researcher’s worldview “affects the entire research process – from conceptualizing a problem, to collecting and analyzing data, to interpreting the findings” (Merriam, 1988, p. 53). Merriam (1998) adds that a

researcher's theoretical perspective "affects the nature of the questions raised, which in turn determines the research design, which in turn influences the conclusions drawn" (p. 54). Rothe explains, "research methods are never atheoretical or neutral in presenting the world 'out there.' Different methods act as filters through which researchers select the part of reality they wish to experience" (2000, p. 23). Bogdan and Biklen (1998) further clarify this point:

Whether stated or not, whether written in what we come to think of as theoretical language, or not, all research is guided by some theoretical orientation. Good researchers are aware of their theoretical base and use it to help collect and analyze data (p. 22).

Accepting the task of considering a theoretical framework, of making a "paradigm declaration" (Hatch, 2002, p. 39), personal epistemological and ontological assumptions framing this study can be understood to be social constructivist, or constructionist, in nature. Although the use of terminology associated with constructivism and constructionism is far from consistent within the literature (Crotty, 2005; Geelan, 2004), it is nonetheless important to make some distinctions here. Therefore, herein social constructivism is the view that:

all knowledge, and therefore all meaningful reality as such, is contingent upon human practices, being constructed in and out of interaction between human beings and their world, and developed and transmitted within an essentially social context (Crotty, 2005, p. 42).

Furthermore, Geelan (2004) identifies that among the many qualified constructivist terms (such as radical, personal, critical, and social constructivism) the common element of all constructivist perspectives is the "belief that knowledge is actively constructed by learners on the basis of their existing knowledge (with the corollary that knowledge is *not* transmitted directly from teacher to learner)" (p. 1). Crotty (2005) borrows from Heidegger and Merleau-Ponty when he explains that humans then, do not create the natural world, but "have to make sense of a 'world always already there'" (p. 55).

In such a view, social engagement is a large part of the experiential context, and thus is intimately involved in the consciousness of individuals. In this manner, social constructivists take:

their primary field of interest to be precisely that subjective and intersubjective social knowledge and the active construction and cocreation of such knowledge by human agents that is produced by human consciousness” (Lincoln & Guba, 2003, p. 271).

Within such an outlook, social constructivists might proclaim:

We do not believe that criteria for judging either ‘reality’ or validity are absolutist, but rather are derived from community consensus regarding what is ‘real,’ what is useful, and what has meaning (especially meaning for action and further steps). We believe that a goodly portion of social phenomena consists of meaning-making activities of groups and individuals around those phenomena. The meaning-making activities themselves are of central interest to social constructionists/constructivist, simply because it is the meaning-making/sense-making/attributional activities that shape action (or inaction) (Lincoln & Guba, 2003, p. 264).

A social constructivist paradigm is often adopted (or perhaps more aptly, pre-assumed) by many qualitative researchers who “stress the socially constructed nature of reality, the intimate relationship between the researcher and what is studied, and the situational constraints that shape inquiry” (Denzin & Lincoln, 2003, p. 13). Neuman similarly suggests that “most researchers who use an interpretive approach adopt a version of the constructionist view of social reality” (1997, p. 43). With such a methodological tradition, a value-laden nature of inquiry is supposed as researchers “seek answers to questions that stress *how* social experience is created and given meaning” (Denzin & Lincoln, 2003, p. 13). It is in this spirit that a qualitative methodology is privileged over a quantitative methodology for this research study.

With our social constructivist framework, we accept that the perspectives of the PETE students provide knowledge that is especially meaningful to the subjects themselves, and further believe that through our shared contexts, we might be able to gain further understandings in light

of a consideration of the PETE students' observations and experiences. As such, we are also aware that PETE students' accounts are not necessarily the "way things are," but rather, are the "way things are to them." We believe that an understanding of this distinction is paramount to our writing, and the readers' reading, of the results of this study.

Method

Participants

Currently, secondary education students at the University of Alberta complete two separate field experiences, a five-week Introductory Professional Term (IPT) and a nine-week Advanced Professional Term (APT). Students *generally* teach in their minor subject area during their IPT term and teach in their major subject area during their APT term. Though there is no current policy with respect to junior high (grades 7 through 9) or senior high (grades 10 through 12) placement, students are often afforded the opportunity to complete one field experience opportunity in each setting. In a typical academic year, there are usually three sections of classes for physical education majors; students from one fall session class and two winter session classes were invited to participate in this study.

All of the PETE students who participated in this study had either completed, or had almost completed their final nine-week field experience. Furthermore, the PETE student participants in this study were secondary physical education "majors"; they completed the majority of their content and subject-specific pedagogy courses in classes related to, or associated with, physical education. Moreover, the majority, if not all, of each PETE student's APT field experience was spent teaching physical education. Presumably upon graduation these PETE students would be most ideally suited to teach physical education in Alberta's division III (grades 7 through 9) or division IV (grades 10 through 12) schools.

Of the 64 physical education majors who were invited to participate, 57 students voluntarily consented and were consequently invited to complete online surveys and participate in focus group interviews related to their experiences and observations while in their PETE programs. The 89% response rate for the online survey was considerably high; we believe that informing students that their feedback would be used to guide future practice was one of the reasons why the response rates were so favourable. Further, by approaching the students as they were *completing* their university programs, we also found that they were especially able and eager to share their perspectives.

84% of the respondents intended to remain in Alberta to teach. Interestingly, 36% had completed part of their Bachelor of Education (BEd) degree at a (non-degree-granting) college and had transferred to the University of Alberta to complete their final two or three years of study (of four or five year degree programs). Of the respondents, 18% were completing a BEd degree only; 14% were completing a BEd after having completed a Bachelor of Physical Education (BPE) or Bachelor of Kinesiology (BKin) degree while 61% were in a combined BPE/BEd combined degree program.

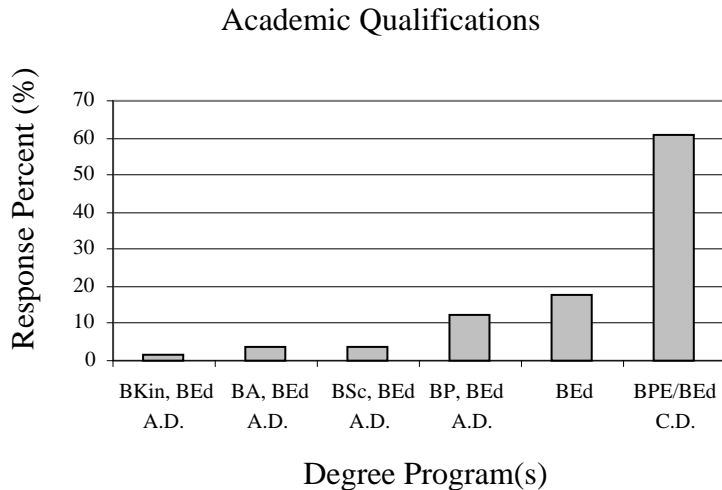


Figure 1. Responses to PETE questionnaire question 11: ‘What undergraduate degree best represents your academic qualifications?’

Of the 57 students who participated in the on-line survey, 14 also agreed to participate in audio-recorded individual interviews while nine agreed to participate in audio-recorded focus group interviews. Four of these nine volunteers were invited to participate in a single focus group session; two females and two males. The two female focus group participants were completing their final term of five-year combined BPE/BEd degrees. One of the male participants was also completing his final term of a combined degree program and the second was completing his final term of a four-year BEd degree. All four participants had physical education as their ‘major’ while their ‘minor’ designations differed. Although many (36%) education students within this university’s PETE program transferred in from other collegiate institutions, all four focus group participants completed their entire degree programs at the University of Alberta.

Data Sources and Data Collection

While Goddard and Foster (2001) suggest “the ‘lived experiences’ of beginning teachers cannot be represented and understood merely through an examination of responses to a Likert-

type scale” (p. 351), we agree that such a quantitative measure, alone, has limited value with respect to interpretation or analysis. Indeed, while the inclusion of open-ended survey questions within our survey instrument helped to address this issue, we believed that further “rich” data was required to fully understand and appreciate the experiences of PETE students.

Consequently, our mixed methods study included quantitative data collection as a means to achieve two important ends; the identification of data to be reported largely in descriptive terms, and more importantly, for the identification of important information requiring further “unpacking” through deliberate qualitative open-ended survey questions *and* focus group interviews.

Data was collected between December 2006 and March 2007 through procedures that were pre-approved by the Faculties of Education, Extension and Augustana Research Ethics Board (EEA REB). The 24 fall term PETE students were invited to participate in the survey after they completed their entire APT experience; this marked the end of university for some students while most others returned to complete a final semester of coursework. The 40 winter term PETE students were from two separate classes who were, for the most part, team-taught by their two instructors for the entire term. Unlike their fall term peers, the winter term students completed their online surveys in a computer lab during a call-back day (after they completed the majority of their final APT experience). Also unlike the fall term students, almost all winter term PETE students were also graduating university with the completion of their APT field experience. That is, they had no courses remaining after they finished their final field experience.

The survey was made through use of a popular online survey instrument. The first section of the survey included 35 multiple choice questions while the second section of the

survey allowed respondents to answer a small number of open-ended questions. The open-ended questions included:

1. What do you think should be the primary aim/objective of a PETE program?
2. In your opinion, within a PETE program, what types of courses must be included? What could be eliminated? What should be emphasized? Was there anything “missing” from your PETE program?
3. What should be the structure of a PETE program field experience? For example, 16 weeks of practicum in total, with 8 weeks as a specialist in an elementary school when in 3rd year of program and the other 8 weeks as PE teacher in a secondary school when in 4th/final year of the PETE program?
4. Do you have any other comments about Physical Education Teacher Education at your institution?

During semi-structured focus group interviews a list of guiding questions was used with the understanding that the participants could take the interview in many directions. The questions provided some focus for the discussions while enabling the focus group participants to speak to their experiences as they wished. The guiding questions for these interviews are included in Appendix A.

Results and Discussion

The quantitative data collected from the online survey was analyzed using SPSS 15.0 software. With our relatively small sample size (and purposeful privileging of soon-to-follow qualitative data collection), the quantitative data was especially useful in providing descriptive information including, for example, information about PETE student teachers’ profiles and observations. From our analyses of PETE students’ survey responses, a number of observations proved to be insightful.

When asked about their degree of enjoyment with the field experience, physical education curriculum and instruction courses, sport science courses, and physical activity courses, students reported that the field experience was the most enjoyable (followed closely by participation in physical activity courses). As the physical education field experience pairs

student teachers with mentor teachers, this is a particularly positive result. For if one accepts the inclusion of mentorship opportunities as imperative during initial teacher training (Hobson, 2002; Marable & Raimondi, 2007), that the experience itself was one of the most enjoyable for PETE students at least recognizes that the environment was likely positive.

Table 1

Likert-type responses to PETE questionnaire question 15: 'Please indicate your degree of agreement with the following statements regarding your physical education teacher education (PETE) program.'

I enjoyed participating in...	SA	A	N	D	SD
a physical education field experience	69%	24%	5%	0%	2%
physical education curriculum and instruction courses	33%	53%	9%	5%	0%
sport science courses	40%	42%	13%	4%	2%
physical activity courses	65%	27%	7%	0%	0%

Furthermore, when asked about their levels of preparedness, enjoyment, and confidence in teaching physical education, the PETE students' revealed that they perceived these levels to be considerably high. To further clarify this point, consider the information presented in Table 2.

Table 2

Likert-type responses to PETE questionnaire question 18: 'Please indicate your perceptions about teaching physical education as they relate to the statements listed below.'

	My level of preparedness to teach PE is...	My level of enjoyment in teaching PE is	My level of confidence in teaching PE is...
High	40%	62%	51%
Considerable	45%	35%	36%
Medium/Adequate	9%	2%	11%
Minimal/Very Little	5%	2%	2%
Not at all/None	0%	0%	0%

Interestingly, when these responses are considered on a 5-point scale in which 1 = not at all/none and 5 = high, the PETE students responses reveal that they feel more prepared to teach physical education (4.20) than do Alberta's *current* division III (3.42) and division IV (3.50) teachers (Thompson et al., 2001). Furthermore, when compared to current teachers, the PETE students revealed that their enjoyment in teaching physical education (4.56) is comparable to the responses of division III (4.44) and division IV (4.61) teachers. Though the PETE students "measured up" to in-service teachers in these two categories, their shared level of confidence

was lower (4.36) than current teachers in division III and division IV (4.69 and 4.77, respectively) (Thompson et al., 2001).

From the survey and focus group responses we found that a small number of themes emerged. That is, the PETE students revealed a number of common perspectives and ideas, common not only to one another, but often to academic research, the *ACDE Accord on Initial Teacher Education* (2007), and the University of Alberta's own *Undergraduate Program Review Report* (Foster & Nocente, 2007). These themes included:

1. Reconsidering the Focus on Knowledge of Subject-Specific Content
2. Improving a Focus on Knowledge of Diverse Learners and Contexts
3. Supporting Collegial Interactions and Addressing the Theory-Practice Gap
4. Increasing and Improving the Field Experience

Reconsidering the Focus on Knowledge of Subject-Specific Content

A majority of the PETE students (82%) either strongly agreed or agreed they enjoyed participating in their sport science courses. Understanding that enjoyment alone is not reason enough to support a continued focus on knowledge of subject matter, the majority of students also believed that human anatomy (91%), exercise physiology (83%), biomechanics (85%), motor learning and control (85%), and psychology of physical activity (85%) *ought* to be required in disciplinary content in a PETE program.

More importantly, when students' required courses were compared to their beliefs about what courses ought to be included in their PETE programs, students believed that *more* disciplinary content should be required. Because students in BPE/BEd combined degree programs, BPE/BEd after degree programs, and BEd degree programs have different (yet similar) course requirements, many students evidently "miss out" on courses that their peers are

required to take. For example, while only 65% of students were required to take a course on exercise physiology and only 69% were required to take a course on psychology of human activity, considerably more students believed these courses ought to be mandatory (83% and 85% respectively).

The students' suggestion to continue with a focus on the subject-specific content courses of the PETE program (such as biomechanics, physiology, anatomy, etc.) is not without similar support from other available research. For example, in all four of Levine's (2006) identified excellent teacher education programs, pre-service teachers are expected to acquire a defined knowledge set in the content field in which they will teach. Similarly, in Stotsky's (2006) opinion, teacher effectiveness is especially dependent on mastery of academic content knowledge. In fact, not only does Stotsky (2006) suggest that beginning teachers need to know in-depth subject-specific content knowledge, but she also makes further recommendations regarding the importance of such knowledge. For example she suggests that other academic departments (i.e. other than departments of education) ought to be given the responsibility and, in turn, the accountability for providing pre-service teachers with the requisite academic content knowledge. She further posits that such an initiative might result in more highly qualified teachers so that higher expectations for teaching wages and standards might be realized. Recognizing the importance of content knowledge, as is supported by both PETE students and recent related research, the University of Alberta's PETE program should endeavour to identify the content knowledge required to teach physical education, and should in turn make certain that all PETE students complete such courses. Also, it is also important to recognize that the PETE students who participated in this study made up one half of all secondary PETE students; there is also a stream of physical education "minors." Within the current program, physical education

“minors” complete one half as many subject-specific content courses as do the physical education “majors.” Consequently, within the current structure at the University of Alberta, the prerequisite content knowledge that “minors” learn is considerably less than what is expected of their peers who are “majors.”

Students within all of the degree streams must also complete a number of physical activity (PAC) courses as part of their programs. However, as PAC classes are offered by the Faculty of Physical Education (rather than by the Faculty of Education), the teaching and learning in those courses is not intended exclusively for future physical education teachers. Because PETE students only make up a minority of some sections of some PAC classes, the courses currently cannot be expected to purposely meet the needs of future physical education teachers. Student surveys revealed that they were very much aware of such a necessity for their PAC courses to meet their own career needs. Students’ open-ended survey responses included:

- Sport classes like the PAC classes should be included but they should have an educational twist to them...how to teach, progressions, and inclusion strategies.
- Personally I think PAC 160 should be taken out of the program. The skills you learn have nothing to do with what you will be teaching students, simply because of the equipment and liability issue....In saying this, however, I believe that the secondary physical education route could greatly be enhanced by offering an educational gymnastics class instead. I feel this would educate future teachers and give them the appropriate tools to teach gymnastics.
- Take out PAC 160 and do stuntnastics instead. We need more courses on how to teach in a gym setting.
- PAC courses should place more emphasis on how to teach and develop the skills of individuals than being solely based on one’s performance in the class. Just because you can do a skill doesn’t mean you can explain how to do it to someone else effectively.

Not only have students revealed such perspectives through their responses on the open-ended survey questions, but within the focus group session, the same issue arose:

- The major problem is that in the Faculty of Physical Education they are not dealing with straight physical education students. A lot of time the education viewpoint is not really applicable to everyone in the class and I think that is why

they are not presented that way. If there was some way we could be taking those classes with other education students, I think that would greatly change how our teacher, our coach, would present that class to us. They might say, “If you’re working with a certain age group you might want to present this in this way” or they could give us their lesson plans or something like that. Something that would be a little more applicable to educators. As it is now I think it would be really difficult to teach PAC classes from an educational viewpoint since only half of the class are education students. (Stephanie: Interview)

Furthermore, as students are often graded in PAC classes on their abilities in performing and applying game or activity skills rather than on their ability to teach others how to perform and apply those same skills, PETE students have shared a frustration with assessment in PAC classes:

- I strongly believe that PAC classes of sports that are very popular at junior high and senior high schools, such as volleyball, basketball, soccer, badminton, et cetera should be mandatory to take. However, I also feel strongly that no mark should be given in these classes, only credit. The reason is that I felt unprepared to teach basketball in my field experience, and would never coach it because I will never take the PAC basketball class. I know that I will receive a poor mark in this class because I have never played this sport before. There will be varsity athletes and others who are very proficient in this basketball PAC class and the “curve” is going to ensure that I don’t receive a very good mark. Although I really do want to take this class in order to gain some skill and ability to teach this in my classroom, I am not willing to risk getting a bad mark on my transcript and possibly losing out on a job opportunity because of it.
- I also dislike the way we are assessed purely on skill in our PAC classes. This goes against everything we have been taught in our assessment courses. I feel that the way we are assessed has a great deal to do with why many people do not chose to take certain PAC classes which may be useful in our teaching careers.

While “science-related” content-specific courses ought to be required by all PETE students, there also exists a need to address the nature of PETE students’ other required classes, particularly the physical activity (PAC) courses. Although most students both enjoyed and recognized the importance of PAC courses to their development as physical education teachers, they were more importantly also discouraged by the structure of them. Acknowledging that PAC courses might be conceptualized as subject-specific content courses for PETE pre-service

teachers; their current structure prevents many PETE students from realizing the potential to make links with teaching practice. From the students' perspectives, two changes ought to be considered with respect to PAC courses; there should be PAC sections purposely available to education students only and within those sections students ought to be assessed more on a diverse array of applicable knowledge, skills, and attributes. By allowing PETE students to participate in PAC classes which are structured for pre-service teachers, the content might be presented in a manner much more applicable to their perspectives and career aspirations.

Furthermore, continued assessment in PAC classes which focuses predominately on students' skills and application of skills will continue to encourage PETE students to avoid PAC classes in which they do not believe themselves to be proficient. From the students' responses we have learned that current PAC assessment practices prevent some students from selecting courses that might expand their subject-specific content mastery. By encouraging such alternative assessment practices with these types of courses, PETE students might be more inclined to enrol in classes so that they might *broaden* their content knowledge rather than reinforce their limited activity strengths.

Improving a Focus on Knowledge of Diverse Learners and Contexts

Although the PETE students have maintained that they believe that subject-specific content knowledge ought to have a privileged role in their programs, they are also somewhat aware that other types of knowledge require an increased focus. Included here would be knowledge of diverse learners and contexts. Although only 78% of the students were required to complete a course on special populations in physical education, a more promising 91% thought that such a course should be mandatory. Similarly, when given the open-ended question, "In your opinion, within a PETE program, what types of courses must be included? What could be

eliminated? What should be emphasized? Was there anything ‘missing’ from your PETE program?” some respondents were also evidently aware of this need:

- An adapted or special needs physical education class that includes hands-on training or a lab in which you get to work with students with special needs.
- Practical special education experience.
- A course that was missing from the PETE program was a native studies course.
- Particular emphasis needs to be placed on both working with students with special needs as well as sociology of sporty classes.

Responding to a question about the primary aim/objective of a PETE program, another student also recognized the importance of such a focus:

- Have potential teachers understand the diversity of the classroom. Teach student teachers how to make the physical education class enjoyable for all students...and how to create an environment where everyone is involved but not singled out but has a chance to shine.

In our focus group discussions, the PETE students were asked about their educational experiences with issues related to diverse learners and contexts. Specifically, the students were asked, “How did your PETE degree help you develop knowledge of diverse learners and contexts (i.e. students with various abilities and from various ethnic backgrounds)?” and “Could your PETE program have better prepared you in these areas?” To these questions, the students’ responses indicated that an increased or improved effort was indeed required in this area.

- It seems like every course we take nowadays the professor seems obligated to mention it [diverse learners] in some sort of way. That being said, it seems like more of a brush over than anything and kind of a, just, you know, another, “Oh, you need to think of this” but not really going into any depth. Unless you go into an education option or a sociology class or something like that you don’t get that kind of exposure to those topics. I don’t think we get enough of that. There could definitely easily be a whole other course dedicated to that during our IPT.
(Robert: Interview)
- All of my experiences with diverse populations specifically, like from different socioeconomic backgrounds or different cultural backgrounds have been either in my IPT or APT [field experiences] or my job or my volunteer experiences outside of my PETE program. Or even teaching students in my experience that are refugee students that this might be one of their first interactions with a classroom

environment where they are separated from their siblings. It's huge, that culture shock that we are dealing with. It goes way beyond just trying to educate students. We don't really address refugee students or immigrants in our program. (Amber: Interview)

- I think we don't need more courses. I just think we need quality courses in the ones we are taking. I think that everything we take can be tailored to discussing diverse cultures or just anything really. Even in management [EDPS 310: Managing the Learning Environment], that class could be tailored. You could talk about so many different types of backgrounds of students. It should talk about First Nations students. It should talk about different things we are going to meet in the field. So it's not, I don't think, a case of including more, different types of sociology courses or anything like that. It is just taking the ones we do have and making them more applicable to what we are going to be doing. (Stephanie: Interview)

Consequently, from the students' responses, we suggest that there is a need to improve students' opportunities to learn about diverse learners and contexts within a PETE program.

Darling-Hammond (2006) would likely also support such an initiative; she suggests that close and proactive relationships with schools that serve *diverse* learners are key components to effective teacher education programs. An effort to address the students' identified need to improve upon their opportunities to learn about diverse learners and contexts is also further supported by the ACDE *Accord on Initial Teacher Education* (2006):

Canadian society is increasingly diverse. Schools contain students with a broad range of abilities, from different backgrounds and ethnicities, with emotional and social differences, and with widely varied approaches to learning, home lives, and out-of-school experiences Canada's teachers must be equipped to prepare all students for their roles in this diverse world (p. 1).

The ACDE accord also further outlines the importance of educating pre-service teachers about the importance of diverse learners and contexts through some of the other principles; particularly the sixth which maintains that effective teacher education programs ought to promote "diversity, inclusion, understanding, acceptance, and social responsibility" (cited in Foster & Nocente, 2007, p. 8). Similarly, the University of Alberta's undergraduate program review suggests that additional compulsory components to address issues such as inclusion of

special needs, Aboriginal education, and English as a second Language (ESL) should be included in a teacher education program.

Supporting Collegial Interactions and Addressing the Theory-Practice Gap

When the focus group participants were asked to discuss the most enjoyable aspect of the PETE program, they revealed that the APT term was their most enjoyable and rewarding experience. Furthermore, they also were quick to indicate that by identifying their APT terms, they were also explicitly including their intense six-week class sessions with their APT “cohort.” That is, before students complete their APT in their “major” subject areas, they complete the equivalent of nine credits (three concurrent courses) of pedagogy coursework in the six weeks leading up to their final field experience placement:

- My APT was the most enjoyable. We got to do stuff before we went into the school that was hands-on, applicable. Some things that we could use right away. I was in classes with people with similar goals and similar ideas. It was by far the most beneficial part of my program. By far. (Amber: Interview)
- It’s true. In an ideal world all our education would be like our APT instruction where we would be with one class of 24 people every day, five days a week taking like-minded material and learning from our peers and having the opportunity to teach and then going out and doing our practicum and being able to immediately apply the skills we learned in the previous six weeks. That’s what all our teaching should be like and that’s why I think most of us found it so enjoyable. Aside from the fact that it was sort of a culmination of our interests and really get down to what we really wanted to do with our lives. (Stephanie: Interview)
- Definitely in the six weeks that we are in class [APT term] there is an opportunity even as students, as a class, that you build that which, if you want to call it a hidden curriculum, because it is not listed as something you learn out of a textbook. But really you use those interpersonal skills, how to do any number of things, whether it is a group project or even taking part in an activity. Again, you are learning some of the things that I found to be a foundation of my teaching. (Matt: Interview)

Their APT coursework provided PETE students with their first opportunity to engage in classroom discussions, presentations, and projects with their “like-minded” peers. Such “cohort” grouping might allow students to begin working earlier at making some connections between

their subject-specific content knowledge and the related subject-specific pedagogical knowledge, especially if their shared pedagogical courses were more frequent.

As it is now, the PETE students have suggested that there is a great disconnect between theories and practice in their PETE programs. Students have been clear about their observations that the problem is not that there is necessarily a shortage of theory within their coursework, but rather, it is often difficult to make connections with practice. When asked about how their mentor teachers or professors could help them make some connections between theory and practice, the focus group session provided insightful information:

- I think consistency of placements is so varied between us. I have talked to people in our class who didn't even form one unit plan. And they got through their APT. And I know that I did about eight and there are some of us that are up all night long and some of us already know their teachers coming into their APT and they say, "Here is my lesson book, just use my lessons." So the quality of APT students coming out are totally different and I think there has to be a better way to gauge what we're doing out there because I know I've had one UF [University Facilitator] that is consistently on the students in my school, checking our unit plans, checking everything and then I had one who showed up once to watch and I know that if not everyone is doing their job, the quality of the students coming out, the student teachers, are not the same like they are not comparable. So if someone is not using the lesson that we learned about in the six weeks before, if you're not actually practicing them in your APT, you're probably not going to use them in real life. So I think it is really important that people actually practice what they have been learning. People who love volleyball and basketball can just be teaching those subjects when they are out. They still need to look at everything else, so I think all the different types of sports need to be looked at too. But that is also affected by your mentor teacher if they don't give you the opportunities to try using, you know, the stability balls, or you don't get those chances. (Stephanie: Interview)
- It would have helped a lot to have more communication between all the different sorts of powers that be (like the UF, Mentor Teacher, my professor). I could have got from my Mentor Teacher, "This is what you are going to be teaching." Then, as I was taking classes with my professors I could have said, "This is what I am teaching. How would you, you just discussed this, how could I apply this when I go into the classroom? This is what I am going to be teaching." If the UF understood more of the standards my Mentor Teacher expected then he would be able to support me better in meeting those standards. I think that I felt I was communicated with my UF and Mentor Teachers separately, whereas I had a set of expectations for my UF and a separate set for my Mentor Teacher. So when

my UF visited the class I would give him his set of things that he wanted and then my Mentor Teacher who would be evaluating me, I would give him a separate version that he expected of me. So, it would have been nice to have a bit more continuity I think. (Amber: Interview)

- Further to that, it would be nice if the teachers had a connection to what we're learning these days. A lot of them are a long way detached from what their education was. They just have no idea what we're coming in with. If I said we learned a lot of social dance [in university], the teachers are like, "Right, why does that matter?" They don't really have an idea of what we do. If they were a little bit more cognizant of that, it would be helpful (Matt: Interview)

While these observations provide valuable insight into PETE students' perceived barriers to making connections between the theory from their university coursework and practice during their field experience, Stephanie and Amber also shared a poignant example of when they were forbidden to introduce activities that were taught within their nine-credit physical education curriculum and learning course:

- I tried to do the gymnastics lesson that we did [in a university PE curriculum class] and they were just like, "Absolutely not!" And then I showed them the safety guidelines and I said that we could and they said, "Well, we don't do this in our school." They don't allow any gymnastics with the bars and stuff. There is zero gymnastics there. And I think that it is unfair, the amount of people who want to do it and keep asking me every day, "Can we do gymnastics?" (Stephanie: Interview)
- I was told not to use stability balls at all [despite also being taught their application in a university PE curriculum class]. He said, "No, that is a safety hazard, we don't use them at all." (Amber: Interview)

From the students' responses, we are reminded that at issue is not whether or not students are receiving instruction in theory (teaching, learning, developmental, etc.), but rather how students are afforded opportunities to make connections between coursework theory and "real life" practice. Within the current PETE program at the University of Alberta students learn theory with minimal opportunities to construct meaning in experiential contexts. While other universities' teacher education programs may require prospective students to accumulate experience working with youngsters *before* acceptance into their programs, this is currently not

the case at the University of Alberta. Without these pre-experiences, and a field experience that might *follow* three (or four) years of coursework, opportunities for making these important connections are almost non-existent. While coursework could include case studies in which PETE students would be required to make such connections within a community context, improving the field experience might provide the ideal milieu for such engagement to occur.

Increasing and Improving the Field Experience

The majority of the PETE students felt that their nine weeks in a physical education field experience was not enough. Only 24% were satisfied with the nine-week model, and when asked “How many total weeks of PE practicum/field experience, do you believe, should your PETE program require students to complete?” 66% responded with periods ranging between 12 and more than 20 weeks. In fact, 16.4% idealized a 20-week APT and another 14.5% preferred an APT that exceeded 20 weeks. Furthermore, when asked what they believed should be the primary aim/objective of a PETE program, a number of responses were also related to the field experience:

- To provide the future teachers with as much experience as possible. I think more time should be spent on practicums and less on classes that teach teaching strategies and classroom management.
- Set up teachers for success in their first year of teaching. This can be done by allowing us to teach longer and get real experience in school rather than university lecture halls.
- To give the most amount of experience (not University classroom time) possible.
- Our on-site training is too short. It needs to be longer, and especially to learn how to start a year.
- Teaching in school, real life experiences.
- To give students a foundation for teaching in physical education, and providing ample time for practical experience.
- Develop a sense of how you would like to run your own classroom, find mentors and networking, get more ideas for and be familiar with the class setting.
- More practicum throughout the degree, not just in the last two years.

When asked “In your opinion, within a PETE program, what types of courses must be included? What could be eliminated? What should be emphasized? Was there anything “missing” from your PETE program?” the PETE students again alluded to the need to address the field experiences:

- All the courses were good. We just need more practicum experiences.
- Longer practicum.
- We need more time in schools.
- Also, a full year of intern teaching should mark the beginning of the teacher’s career, where they have the opportunity to learn from master teachers and to apply university-learned concepts with the support of members of a real “school community.”
- I think the bases were covered but there should be more application throughout the program. Leaving the student teaching phase until the end sets the stage for shock. Knowing what to expect earlier on, on the other hand, would help pre-teachers focus on what they really need to know....Make them prepare for and teach a class in year two and three to actual students, not peers.
- Earlier practicum experience.
- More practical courses – hands-on learning. More in-school experiences (even just a week here and there).

Finally, when asked a question more directed to the field experience (What should be the structure of a PETE program field experience?), the PETE students almost unanimously suggested improved lengths and/or structures:

- The five week IPT does not seem long enough. There should be a seven or eight week IPT to help the students develop an initial feel for teaching. Also the APT at 9 weeks seems short. More time would allow and prepare for a successful teaching career.
- I think more practicums should be required, where the level of instruction by the student teacher increases with each.
- The more practical experience the better.
- I think that an ideal program would include a short (~4 week) practicum within the first year to help students realize if this is an area to which they are suited. Following this, an additional practicum in an elementary school environment and one in a secondary school. Of the last two practicums one could be slightly longer and students could choose an area in which they would like to spend more time.
- A whole semester length of practicum.
- I feel that the practicum should take place within both elementary and secondary.
- I believe it would be beneficial to teach within an elementary school.

- I think that you should have a practicum each year building up in week total as you get further into the program.
- Minimal class time with more experience during the practical portion.
- There should be as many weeks of practical experience as possible. You should be in the school as early as possible so you can learn how to set expectations and start a year. There should be a short practicum in the first couple years, so students can experience what teaching is like.
- To begin practicum teaching as early as the first year of the program. Perhaps, 8 weeks to observe/begin teaching in first year. In the second/third/fourth year there needs to be a minimum of at least 16 weeks of physical education teaching in a high school environment and 8 in a middle school or vice versa, depending on the individual's preferred assignment level. The idea of a full, paid intern should mark the beginning of the teacher's career.
- More time in practicum right off the start in order to give insight into whether or not it's the right career path for someone.
- Perhaps another 9 week practicum would be useful instead of some of the required courses. I honestly learned 90% of what I need in my two field experiences and 10% in 5+ years of university courses.

This long list of student responses does not include all of the responses; indeed many respondents had much to say regarding their field experiences. However, they do provide an accurate snapshot of their observations and suggestions. When considered together, many students' responses revealed two overwhelmingly present suggestions; field experiences should begin much earlier in a pre-service teacher's program and more time must be dedicated to student teaching throughout the program (though either longer field experiences or more of them). Equally important, most respondents revealed an awareness of the rationale for changing the length and/or timing of their field experiences; they suspected it would help them more easily make connections between in-class theory and "real world" practice. Furthermore, though not suggested as often as these two, a number of respondents also suggested that pre-service teachers ought to have some field experience in the elementary setting.

The PETE students' responses about the value of the field experiences echo those of other student teachers. For example, Hobson (2002) found that "student teachers consider mentoring to be, if not the, key aspect of school-based ITT [Initial Teacher Training]" (p. 5).

Similarly, Berson and Breault (2000) have also concluded “field experiences, whether in a partnership school or any other setting, are probably the most meaningful component of formal teacher education” (p. 39). While the initial open-ended survey responses focused predominately on the *length* of the practicum experience, it is arguably more important to ensure that those lengthened programs consider the quality of the experience, rather than just the quantity. To this Knowles, Cole, and Presswood (1994, p. 96) add “it is not enough to just have an experience or engage in activities; everything depends on the quality of the experience that is had.”

Conclusion and Recommendations

Given these emergent themes and their relation to current research, a small number of structural changes can be considered for introduction to the University of Alberta’s PETE program. Following with the previously identified thematic categories, such structural changes are related to: the subject-specific and subject-specific pedagogy courses within a PETE program, addressing the need to recognize and learn about diverse learners and contexts within a PETE program, supporting theory-practice understandings through cohort groupings which explicitly link content coursework with pedagogy courses and field experience, and increasing the quantity and improving the quality field experience.

All PETE students ought to complete compulsory subject-specific content courses so that they may be enabled to claim that they “know the subject matter they will teach” (Darling-Hammond & Baratz-Snowden, 2005, p. 14). Levine’s (2006) suggestion that teacher education programs ought to recruit students who already have a defined content knowledge in the field in which they will teach certainly merits serious consideration. For, not only are BEd students with physical education “majors” graduating without the same subject-specific content knowledge as those who also earn a BPE (through combined or after-degree programs), but BEd

students with physical education “minors” are graduating with *considerably less* content knowledge. In fact, their degree requirements for subject-specific content coursework is one half of that for their peers who are physical education “majors.” If the University of Alberta’s PETE graduates are to “understand the subject disciplines they teach” (Alberta Education, 1997, p. 2), we question the current structure in which content knowledge is enabled or limited by the program route selected by students, particularly if they are all to teach the same curriculum. Consequently, like Levine (2006) we suggest that completion of adequate subject-specific content ought to occur for all PETE students. Within the current program, we believe that such a goal can be achieved through two structures: the BPE/BEd combined degree program or the BPE, BEd after-degree program. Although the university’s program size has allowed for a number of other programs to exist (for example, BEd with physical education “major” or “minor”), these programs do not require the same degree of academic or scholarly rigour as do the dual degree programs.

Furthermore, as the PAC classes offer an ideal opportunity for education students to begin making pedagogical connections between theory and practice, we also suggest that these classes ought to be provided by either faculty from the Faculty of Education or instructors who are especially aware of the possible pedagogical connections that might be made when such a class is geared towards meeting the needs of future physical education teachers. PAC classes should be offered in sections that are restricted to education students (or students intending to enter education as an after-degree) so that teaching and learning might be able to address the unique needs of soon-to-be teachers. Furthermore, we strongly support our participants’ perspective regarding a need to assess them differently within these courses. PAC courses that are meant to teach pre-service teachers how to *teach* games or activities rather than teach them

how to *play* games or activities has an obvious potential benefit for future practice. With such a shift in goals of PAC courses, assessments should reflect such a shift, so that PETE students would be more inclined to take those courses they need most (with little fear of poor grades due to poor skill). We recognize that others might suggest PAC courses are unlike content-area courses in other disciplines, and as such, a shift toward an explicit focus on pedagogy does not make sense. However, two considerations make us question this position. Without a change, pre-service physical education teachers will continue to avoid those courses they admittedly need most, and more importantly, we believe that PAC courses offer a unique opportunity to for students to make connections between content and pedagogy, and between theory and practice.

Given the almost infinite number of diverse contexts affecting students and learning, one must be cautious about addressing this need by *adding* courses to students' programs. Indeed, when one begins adding courses related to inclusive education, Aboriginal education, ESL, et cetera, it becomes difficult to know where to stop. Nonetheless, this is obviously an issue and student observation that must not be ignored. So, while we recognize that requiring discrete courses focused on particular diverse groups or contexts has some value, we also suggest that such a focus ought to be infused throughout most, if not all, content and pedagogy driven courses that PETE students complete. Furthermore, although the varied array of learners and contexts might suggest that there are many diversities that ought to command equal representation, Alberta's shifting demographics (Royal Commission on Aboriginal Peoples, 1996), suggest that increased attention ought to be given to issues related to Aboriginal education. That is, as Alberta becomes home to considerably more Aboriginal students within the next twenty years, explicit attention must be afforded to this growing demographic. Whether such a change is implemented as a course on Aboriginal education or as a requirement

within all classes, this much is clear: the University of Alberta's PETE students must gain a greater awareness and appreciation of issues related to Aboriginal education.

Students within the University of Alberta's PETE program currently have one nine-credit course with a cohort group before beginning their final field experience. We were not surprised to hear students' accounts that shared their praises of this model in which they were in class with "like-minded" peers. Moreover, while these PETE students were able to meet with their peers in this manner only after they had completed most of their degree programs, other teacher education programs purposely have students complete an entire academic year in cohort groupings. Such a model, we believe, would better meet the needs of the university's PETE students as they complete their degrees. Rather than only requiring such cohort groupings for subject-specific pedagogy courses, we suggest that other subject-specific content courses and general pedagogy courses ought to be cohort-based. Such groupings might allow for PETE students to approach these courses together in their shared context of being future physical education teachers. For example, although all University of Alberta students currently must complete a general pedagogy course *Educational Policy Studies 310: Managing the Learning Environment*, students are currently only separated by grade level stream (elementary or secondary). However, a common complaint of our PETE students has been that the course does not adequately address their shared milieu. For example, they have lamented that managing the learning environment within gymnasiums, outdoors, or within swimming pools had not been addressed; something that could obviously be explicitly addressed if PETE students were in a cohort group.

Cohort groupings might also allow students to address the theory-practice gap as well. If students were grouped in such a manner, they might then have opportunities *throughout* their

degree programs to make connections between their coursework and their own shared real-life experiences. Undoubtedly, such connections would be more easily facilitated if students had prior required experiences and concurrent required experiences. By requiring students to have some field experiences while they also have time to meet as a cohort, such opportunities for theory-practice understandings might be more easily afforded to them.

The suggestion that cohort groupings occur within classes during field experiences brings us to our final, and most important, recommendation. Not only should PETE student teachers be given more field experience, but the quality of them must also be improved. First, under the current structure, physical education “minors” complete a five week IPT while physical education “majors” complete a nine week APT. Similar to our earlier indication that we do not support a “minor” program that requires minimal subject-specific content and pedagogy courses, the five-week field experience is also an inadequate model for successful physical education teaching. Furthermore, we also suggest that the nine weeks afforded to current physical education majors does not provide future physical education teachers with ample opportunity to engage in a meaningful field experience. Students’ almost-unanimous suggestions regarding extended field experiences must be heeded, especially since their suggestions are supported by educational research (Darling-Hammond, 2006; Levine, 2006). Darling-Hammond’s (2006) observation that exemplary teacher education programs feature “extended clinical experiences – at least 30 weeks of supervised practicum and student teaching opportunities...-that are carefully chosen to support the ideas presented in simultaneous, closely interwoven coursework” (p. 305) reveals that the University of Alberta’s current 14-week model is falling well short. We consequently suggest that the university’s PETE students be given greater opportunities for in-the-field education.

Despite our suggestion that the quantity of field experience ought to be improved, we also strongly believe that there is also an opportunity to improve the quality as well. First, we believe that students should be given the opportunity to be placed in the field early in their degree programs (and ideally within their first year). Moreover, we also suggest that requiring students to have practical experience working with school-aged people *before* acceptance into the degree program would equip students with valuable contextual knowledge before their coursework begins. In addition to an early field experience, we believe that students should be afforded opportunities for field placement in each of their last two years of instruction. Moreover, we suggest that these field experiences need not occur between coursework but rather, at the same time. While some courses could still be completed before students enter a field experience, it is important that subject-specific pedagogy courses continue throughout (and after) the field experience. Within such an extended field experience, students can complete term-long field experiences with weekly sessions with their cohort and university instructor. Such a structure not only allows students to learn theory within their pedagogy course throughout their field experience, but more importantly, it might allow for connections with practice and through reflection to take place. By requiring students to again meet with their cohort after the field experience, the university instructor could facilitate further student reflection and theory-practice connections.

With these conclusions, we offer the following recommendations:

1. PETE programs should be two-year after degree programs (after a BPE/ or BKin) or five year combined degree (BPE/BEd) programs. Within either program, the final two years should be particularly focused on general and subject-specific pedagogy courses and field experiences.

2. PAC courses should be taught and evaluated in a manner that recognises the unique knowledge, skills, and attributes particular to future physical education teachers.
Therefore, PAC courses should be structured so that sections are intended for PETE students. Given the possibility for pedagogical development within these courses, they could occur early in a degree program, or within the final two years.
3. Diversity education, especially with respect to issues related to Aboriginal education must be addressed within PETE programs. While a single course (or collection of courses) might be one method of achieving this end, we suggest that institutional leadership could also consider facilitating the inclusion of such issues within all education courses.
4. PETE students should be given the opportunity to complete more courses in cohort groupings. While cohort groups might be advantageous for students early in their degree program, we suggest that cohort groupings within the final two years are essential.
5. PETE students need to have experiences in the field before university acceptance.
Furthermore, early formal field experiences need to occur early in pre-service teachers' education, possibly as early as their first year. The final two years should feature extensive field experience opportunities. Furthermore, term-long field experiences should also feature weekly meetings with larger subject cohorts and university instructors (rather than with small school-site cohorts and university facilitators).

Appendix A

Questions for PETE Student Teachers

1. State your first name and gender.
2. Briefly describe your formal educational teacher preparation by stating your degree qualifications and specializations.
3. Why did you want to become a PE teacher?
4. How effective was your Physical Education Teacher Education (PETE) program in helping you learn and develop as a PE teacher?
5. What do you think were the objectives of the PETE program at this university?
6. What types of courses formed your PETE program?
7. What did you find most enjoyable about your PE teacher preparation?
8. What did you find most useful about your PE teacher preparation?
9. What should be the nature of courses within a PETE program? What must be included? What could be eliminated? What should be emphasized?
10. How might the PETE program have better prepared you to have sound subject-specific knowledge required to be a PE teacher?
11. Looking at your subject-specific content courses (i.e. course like physiology, mechanics, activity) and your subject-specific pedagogy courses (i.e. ED 477), how were you able to learn about the nature or learning, ways of knowing, and expertise in what/how to teach PE?
12. Can you comment on the inclusion and relationship of performance-oriented discourses and participation discourses within the program (language and conversations)?

13. How did your PETE degree help you develop knowledge of diverse learners and contexts (i.e. students with various abilities and from various ethnic backgrounds)? Could your PETE program have better prepared you in these areas?
14. Respondents to the survey perceived a dominance of performance-oriented discourses (biomechanics, exercise physiology, sports psychology, tests and, measurement, sports medicine, fitness training) but idealized a privileging of participation discourses (inclusion, equity, involvement, enjoyment, social justice, cooperation, and movement) in their PETE programs. Which discourse ought to be privileged in the physical education classroom? Should there be an 'alignment' between the university's privileging of a discourse and the schools' privileging of a discourse? Why or why not?
15. What role did the performance and grading of motor skills play in your program?
16. Do you believe that physical activity courses ought to be graded differently?
17. How did Health Education fit into/relate to your PETE program?
18. What kinds of experiences should be an integral part of a PETE program?
19. What was the structure of your practicum experiences?
20. As a PE major, your APT was in your final year of your degree and it allowed you to student teach with a mentor's support for 9 weeks. If you could change the timing, length, and/or structure of the field experience, what would you do to improve the experience?
21. How did you experience a connection and/or disconnection between the theory learned through coursework and the practice experienced through the field experience?

22. How might PETE student teachers be more able to make important connections between theory and practice? For example, could the university's education program, mentor teachers, professors, or university facilitators better support this process?
23. What should a PE teacher be able to do, understand, & value having completed a BEd with a specialization in PE?
24. What is the most important quality, skill, or understanding that a pre-service teacher should develop as a result of his/her program?
25. How did your PETE program help you develop an understanding about youths' intellectual, physical, emotional, social, creative, spiritual, and moral development? How could your degree program have improved in preparing you in this way?

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