Nancy Melnychuk University of Alberta

A Cohort Practicum Model: Physical Education Student Teachers' Experience

The Faculty of Education at the University of Alberta has recently moved to a cohort practicum policy that encompasses a reflective practitioner model, encouraging whole-school experiences while maintaining positive one-on-one mentorships. The intent of this case study was to investigate the lived world of 10 physical education student teachers who were placed together in groups of five at two secondary school sites for their final eight-week field experience. Specifically, the benefits of the cohort experience were explored through a continual process of triangulation, employing a variety of data-collecting techniques: observing and recording field notes, conversing, journal-writing, and interviewing. Findings revealed overwhelmingly positive responses to the cohort field experience, as expressed by the participating student teachers and cooperating teachers through the emergent themes: Collegial Support, Multiple Ways of Knowing and Doing, Lifelong Learning, Time to Talk, Whole-School Experiences, and Becoming Critically Reflective. At the two school sites a supportive learning environment that valued trust, openness, and mutual respect allowed professional growth to occur. What began as a mentorship of a student teacher with a cooperating teacher evolved into a collaboration of "experts." Having several student teachers in one department was advantageous in many ways, fostering reflective practice, joint thought, and collaborative action. Insights from this study have implications for the preservice education of physical education teachers and other teacher education programs.

La faculté d'éducation de la University of Alberta vient d'adopter une politique sur les stages qui se caractérise par une politique de collaboration, l'inclusion de la réflexion professionnelle et l'appui des expériences tenant compte de l'école dans son intégralité, tout en conservant l'encadrement individuel avec un mentor. Le but de cette étude de cas était d'évaluer le vécu de 10 stagiaires en éducation physique que l'on avait placés dans deux écoles secondaires pendant huit semaines (en deux groupes de cinq) pour leurs derniers stages. Plus précisément, on a étudié les avantages de l'expérience collaboratrice par le biais d'un processus continu de validation reposant sur diverses techniques de cueillette de données: l'observation et la prise de notes en milieu scolaire, la conversation, la tenue d'un journal et l'entrevue. Une très grande proportion des commentaires des stagiaires et des enseignants coopérants sont des plus positifs quant à l'expérience de collaboration. Les résultats peuvent être regroupés selon les thèmes suivants: «l'appui des collègues», «diverses façons de savoir et de faire», «l'apprentissage continu», «temps à la discussion», «des expériences englobant toute l'école» et «la réflexion critique». Les deux écoles ont fournit un encadrement à l'apprentissage qui valorisait la confiance, l'ouverture et le respect mutuel, permettant ainsi l'épanouissement professionnel. L'expérience qui a débuté comme un stage dirigé par un mentor s'est développée en une collaboration entre «experts». Le fait d'avoir plusieurs stagiaires dans un même département s'est avéré avantageux sur plusieurs plans et a encouragé la pratique réfléchie, le partage d'idées et les démarches collaboratrices.

Introduction

Based on the findings of ongoing research, the preservice field experience program at the University of Alberta, Edmonton, Canada, is continually in-

Nancy Melnychuk is an assistant professor in the Department of Secondary Education and Coordinator of Secondary School Physical Education. Her research program focuses on teacher education and physical education.

volved in the evolution of effective student teacher school placement practices. Prior to 1992, secondary school physical education (PE) student teachers were placed in junior and senior high schools for their final eight-week field experience by their Advanced Professional Term (APT)¹ curriculum and instruction course instructor. Based on an apprenticeship model, the primary intent of the instructor was to place each student teacher appropriately with one experienced cooperating teacher at a school site. This traditional model views the preservice teacher as a technician learning a craft (Beauchamp et al., 1989) and the tricks of the trade (Carson, 1997). It has often been referred to as teacher training, where experts in the university teach the required, preexisting body of knowledge and competences to the preservice teachers. These student teachers are then expected to implement this knowledge during their practicum through trial and error and guidance by the wisdom of an assigned veteran teacher (Korthagen & Kessels, 1999; Zeichner & Liston, 1987). The cooperating teacher is expected to be an appropriate role model, provide ongoing feedback, and evaluate the student teacher's performance. Duquette and Cook (1999) suggest that this traditional one-on-one field experience placement structure based on the apprenticeship model does not allow for the conditions necessary for professional growth as it provides little opportunity for peer support and discussion among student teachers.

A Faculty of Education task force, under the leadership of Larry Beauchamp—which explored the questions What does it mean to teach? and How does one learn to teach?—recommended that the Faculty of Education adopt a reflective practitioner model of teacher education. This model prepares teachers to perceive themselves as active participants in their own professional development and to be disposed to becoming lifelong learners of teaching (Beauchamp et al., 1989; Britzman, 1991; Zeichner & Liston, 1987). With a reflection-in-action approach, that is, reflection during and after the teaching experience, it is hoped that the student teachers will learn to reflect on more than utilitarian or technical concerns and to deal critically with their reality to improve the learning environment. Another outcome is that the preservice teachers will perceive teaching as a moral and political endeavor as well as mastery of the skills and knowledge of what to teach and how to teach it. It was hoped that implementing a cohort field experience placement policy of assigning several student teachers to one school site would enhance the opportunities to engage in all phases of reflectivity. Van Manen (1977) refers to these levels of reflective thought as the technical, practical, and critical levels, which assist in developing teachers as moral craftspersons who, for example, consider the moral and ethical implications of their teaching practices. Hargreaves (1994) suggests that encouraging an openness and rigor of moral and political questioning in collaborative environments of continual learning and working with critical friends can enhance a teacher's development.

In 1993 a Faculty of Education undergraduate teacher education program survey indicated that 90% of the student teachers preferred being assigned with a peer to the same school for their final practicum (Melnychuk, 1993). Thus the Faculty of Education began gradually to move toward a cohort (group) field experience placement policy that represents a reflective practitioner model that encourages whole-school experiences for the student teach-

ers while maintaining positive one-on-one mentorships. According to Goodlad (1990), this type of cohort experience can be described as a group of people who stay together from the beginning to the end of a program and grow through the process, experiencing essentially the same stimulus material and challenges of the work environment.

According to the Field Experiences (1997) Advanced Professional Term Handbook,

The whole school focus for the field experience is intended as an opportunity for the student teachers to be exposed to a variety of teaching styles and techniques, while at the same time raise their awareness of a teacher's full professional life. A whole school experience allows the student teachers and school staff to extend beyond the walls of the individual classroom. (p. v)

The nature of the whole-school experience differs from school to school, but the following general principles are to be considered in extending and enriching the program for student teachers:

- Student teachers working with more than one cooperating teacher
- Enriching experiences outside of the student teacher's area of expertise
- Student teacher's workload not to exceed 75-80% of a full time teacher's load and to be phased in and out
- Opportunities for reflective practice that are built into the field experience (e.g., designated time during the school day). (Field Experiences, 1997, p. 2)

To structure such a cohort field experience, at least two APT student teachers from the same or different subject areas are placed in each secondary school. In some of the large urban high schools as many as 25 student teachers may be assigned. Additional support for this type of field experience placement practice is evident in the most recent *Policy Position Paper* of Alberta Education (1996) and from the findings of Melnychuk (1991), Sigurdson and Olson (1993), Evans (1997), and Bullough, Kauchak, Crow, Hobbs, and Stokes (1997). A teacher education program at Utrecht University developed structural methods, known as intercollegially supported learning, to supervise their student teachers together at a school site and to engage them in individual self-reflection as well as small-group discussions according to a prestructured format. This leads to a report to which the teacher educator can respond during the meetings with the cohort as a whole. Korthagen and Kessels (1999) claim that this method of practicum supervision prepares student teachers for intercollegial supported learning for the remainder of their careers.

Recent research in teacher education (Koskela & Ganser, 1995; Wilson, 1996) reported a dearth of research studies examining student teacher and cooperating teacher relationships. Yet some studies suggest that students consider the student teaching experience to be the most valuable component of their entire teacher education program (Britzman, 1991; Koskela & Ganser, 1995; Stallings, 1991; Watts, 1987). Other studies indicate that many student teachers experience feelings of isolation during their practicum (Roebuck, Green, McMahan, & Buck, 1994). Deal and Chatman (1989) discovered that regular discussions with a group of student teachers helped to reduce feelings of isolation. Similar findings regarding isolation have occurred with studies of first-year teachers and rural teachers (Koerner, 1992; Russell, Williams, & Gold, 1994). To date,

only a few investigations have examined the effects of placing more than one student teacher at a school site for student practicum experiences (Duquette & Cook, 1999; Roebuck et al., 1994; Stallings, 1991; Weinstein, 1998). Duquette and Cook (1999) found that when two or more secondary school student teachers were placed at a professional development school, "an immediate support group" was provided. The student teachers in their study perceived personal reflection as the most important learning that resulted from their cohort school experiences. In a study by Weinstein (1998), clustering student teachers facilitated opportunities for mutual exchange where students shared perceptions and discussed the relevance of their shared experience. Many master teachers and educational reform experts (Collay, Dunlap, Enloe, & Gagnon, 1998; Hargreaves & Evans, 1997; Kwo, 1998) also believe that the most successful professional development occurs in supportive communities of learners.

Purpose

The intent of this study was to investigate the lived world experiences of 10 physical education student teachers who were placed together in groups of five at two secondary schools for their final eight-week APT field experience. Specifically, the benefits of the cohort field experience as perceived and experienced by the student teachers and cooperating teachers were explored.

The following section describes the participants involved in the study and the schools where the investigation took place. A description of the research methodology that was employed is then presented, followed by a discussion of six themes: Collegial Support, Multiple Ways of Knowing and Doing, Lifelong Learning, Time to Talk, Whole-School Experiences and Becoming Critically Reflective.

Methodology

The Schools, Student Teachers, Cooperating Teachers, and Administrators
The student teacher cohort at each school comprised one woman and four men ranging in age from 22 to 34 years. At Oxford Senior High (pseudonym), all the student teachers were in their last term of the Bachelor of Education degree with physical education as their major. At McKenzie Catholic Senior High (pseudonym), two of the four men had completed a Bachelor of Physical Education degree before entering the Faculty of Education and had one remaining term of senior education courses to follow their APT.

Each student was assigned by their APT instructor, who was also the principal investigator in this study, to a particular experienced physical education teacher. At both schools one male student teacher was assigned to two male cooperating teachers as each taught physical education only part time. Teachers varied in age from 32 to 54 years and had 5-25 years of teaching experience. The physical education department at these schools had one female teacher and five male teachers, one of whom was the department head. However, at McKenzie, with a student population of 600, the teachers shared one crowded room as an office whereas at Oxford, with a population of 1,800, the teachers were housed in three offices some distance apart. McKenzie school incorporated one small and one large gymnasium, and the Oxford complex included three large gymnasia.

I was familiar with each of the cooperating teachers as professional colleagues before starting this research project. Over the years they had established trust, respect, and open communication with one another. One week before the beginning of the practicum, I facilitated an orientation session for the cooperating teachers at each school. Concerns, expectations, procedures, and responsibilities regarding the practicum experience and the research project were discussed and clarified.

The female principal at Oxford High and the male principal at McKenzie High were supporters of the APT field experience program and were pleased with the opportunity to have a cohort placement of student teachers at their schools. The administrators were visible in their schools and could frequently be seen in conversation with students in the halls. Both principals were noticeably involved in helping to create positive and meaningful learning experiences for the student teachers by occasionally participating in group luncheons and providing mock interview situations, for example.

The University Facilitator/Faculty Consultant

Assigned by the Field Experience office, the university facilitator (formerly known as the faculty consultant) for these two cohorts of student teachers was expected to

Visit the school on a regular basis to help establish optimal conditions for the field experience. Responsibilities may include assisting the cooperating teacher in planning experiences for the student teacher, observing the student teacher present prepared lessons and regularly conferencing with the student teacher and cooperating teacher during the field experience. The university facilitator provides assistance and support to both the student teacher and the cooperating teacher as well as communicates progress to field experience coordinators at the University. (Field Experiences, 1997, p. iv)

With respect to student evaluation, as the university facilitator I was expected to provide ongoing feedback and support to each student and to collaborate with students and teachers in completing midpoint and final evaluation reports, but was not expected to determine the student teacher's final pass/fail grade; this was the responsibility of the teacher. At Oxford High I was the facilitator for only the five physical education student teachers, but at McKenzie High my responsibility also included six from other subject areas.

As a facilitator I was expected to create a positive link between the university and the school and to develop awareness of the Field Experience program. So I spent two days per week at each school, observing the student teachers, providing feedback, assisting the student teachers in self-reflection, and sharing and comparing insights with each cooperating teacher in private and group conferences. I also helped to facilitate one-hour weekly cohort sessions to discuss pertinent issues with all the student teachers and those of the teachers who wished to attend. At Oxford High the sessions were held over an extended lunch hour every Thursday, whereas at McKenzie they were conducted every Thursday afternoon for 60 minutes following early dismissal.

At the outset the focus for each cohort session was determined by the cooperating teachers in consultation with the student teachers and the facilitator. Reflective discussions and group problem-solving activities centered on the major underlying question proposed by Hellison and Templin (1991) to practitioners, "What's worth doing? and Is what I am doing working?" (p. 3). Student teachers engaged in self- and group reflective thought and participated in ongoing planning for future lessons.

Soon the student teachers, instead of the facilitator, accepted primary responsibility for planning and facilitating these sessions. The weekly planned cohort experiences were perceived as learning circles, defined by Collay et al. (1998) as "small communities of learners among teachers and others who come together intentionally for the purpose of supporting each other in the process of learning" (p. ix). Although not the main presenter for each session, I frequently initiated discussion. Some sessions took the form of a workshop. For example, an Alberta Teachers' Association representative presented one session on classroom management and another on the beginning teacher; a student teacher presented several new line dances; a school counselor talked about conflict management; a cooperating teacher engaged all participants in a wrestling workshop; and the facilitator provided an educational gymnastics session involving a class of 20 PE 10 male students. Other sessions focused on assisting the student teachers to become more critically reflective and to become more aware of who they were becoming as teachers. We discussed the tensions and linkages that exist between competing chronologies of negotiating a teaching identity (Britzman, 1991). The student teachers, therefore, considered the impact of schooling and family life on their beliefs and practices in becoming a teacher. We also discussed pertinent professional issues such as gender equity and multiculturalism in physical education, coeducational classes, the recess versus the competitive sport versus the wellness curriculum models of physical education, teacher versus coach, and inclusion of physically awkward or unmotivated students.

Case Study

According to Merriam (1998), "A case study is employed to gain an in-depth understanding of the situation and meaning for those involved" (p. 19). A research study should not be recognized as a case study if the phenomenon being investigated is not intrinsically bound (Miles & Huberman, 1994). The case or entity in this investigative research was confined to two cohort groups of physical education student teachers who were experiencing their final teaching practicum in the context of the department of a senior high school. The insights gained from this case study are intended to influence future practice and research, thus fulfilling another representative criterion of case study research (Merriam, 1998).

The case study method used in this study adopted a variety of techniques and procedures. The following data-collecting techniques allowed the researcher to investigate the cohort experiences of the student teachers systematically: participatory and nonparticipatory observation, field note-taking, journal-writing, conversation, and individual and group interviews with varying degrees of structure. This process of triangulation that used a variety of data-collection techniques was employed to gain insights and understandings and to develop converging lines of inquiry (Miles & Huberman, 1994; Yin, 1994). Essentially, these multiple sources of evidence provided different perspectives of the same phenomenon, thus addressing the potential problem of

construct validity. The process of collecting, analyzing, and interpreting data was interdependent and interrelated and occurred as "simultaneous activity" (Merriam, 1988, p. 119). I would observe something, try to make sense of it, then go back to the student teachers and teachers for greater clarification and understanding. Further insights were analyzed and reflected on through the final interviews with the participants.

Observing and Recording Field Notes

My role as university facilitator allowed many opportunities to become a participant observer, to see situations first hand, and to use my knowledge and expertise as a teacher, subject area specialist, and teacher educator to interpret what I observed (Merriam, 1988). I systematically shared in the lived experiences of the student teachers and teachers. Slowly I came to understand when and how I should participate, and how to maintain a balance between being an insider and an outsider, between participant and observer. Occasionally, for example, I would join the lesson as a student or help instruct as a teaching assistant. These active situations, as well as the numerous opportunities for observations, conversations, and weekly seminars, enabled me to keep anecdotal records of the participants and situations.

Conversing

As a frequent visitor to the schools, I engaged in ongoing, informal conversation with student teachers and teachers whenever possible. Staffroom and lunchroom conversations provided insightful sources of data. According to Kvale (1997) and Bogdan and Biklen (1982), this open, face-to-face dialogue provides facts as well as opinions about events. I tried to remember that I was the expert in asking the questions and that the student teachers and teachers were the experts in answering. I attempted to remain neutral during the conversations.

Journal-Writing

To complement my field notes I kept a journal where I recorded my personal experiences and expanded my introspection by expressing my feelings, reactions, and ideas. I perceived the journal as a valuable integration and connection-making instrument and structured my writing on the "Intensive Journal" method proposed by Progoff (1975). This included rereading, reflecting, and rewriting.

I also encouraged student teachers to maintain a personal journal regularly, to write down their experiences and concretize their thoughts and feelings. Their journal-writing served to make conscious the unconscious (Aoki, 1984) and helped to prepare them for interactive collaborative evaluation sessions with their cooperating teachers.

Interviewing

Following Merriam's (1988) advice that "interviewing is a major source of qualitative data needed for understanding the phenomenon under study" (p. 86), during the final week of the field experience each student teacher voluntarily participated in a 30-minute one-on-one interview with me. Each semistructured interview followed a similar set of guided questions (Kvale, 1997), allowing fresh insights while probing for greater understanding of prevalent

recurring themes. The questions were structured around topics such as: enjoyment of being part of a cohort group; preference and rationale for being placed either by self or with others; benefits and disadvantages of being at a school with several student teachers and cooperating teachers; appropriate expectations of a cohort field experience; effectiveness and contributions to professional growth of the weekly cohort sessions; and suggestions for improvement regarding format and topics or activities. The five cooperating teachers at each school also engaged in a focused 45-minute group interview where similar questions were discussed. With the participant's consent, all conversations were audiotaped and transcribed using pseudonyms.

Making Sense of the Data

Throughout the study I engaged in ongoing analysis and interpretation as meaning was gradually uncovered. While collecting data from a variety of sources, I continually reviewed it, searching for key issues, similarities, differences, recurring ideas, clustering, patterns, and relationships in an attempt to capture the authentic nature of the cohort experience for the student teachers and teachers. As I coded and categorized the data according to methods outlined by Miles and Huberman (1994), several themes emerged: Collegial Support, Multiple Ways of Knowing and Doing, Lifelong Learning, Time to Talk, Whole-School Experiences, and Becoming Critically Reflective. The analysis of the final interviews led to further insights and understanding into the themes of lived experiences that evolved from the data and my analysis (Clandinin, 1986; Clandinin & Connelly, 1991).

Results and Discussion

The participating student teachers and cooperating teachers of both schools expressed predominantly positive responses to the cohort field experience. The findings of Duquette and Cook (1999) reveal that the peer socialization process among colleagues can blot out any negative criticisms. In the two sites investigated in this study the excitement, energy, and enjoyment of meeting new colleagues and working together appeared to overshadow any negative insights despite my probing. A supportive learning environment evolved that valued trust, openness, and mutual respect, which allowed socialization and professional growth to occur. What began as a mentorship of a student teacher with a cooperating teacher evolved into a collaboration of experts. Having several student teachers in one department was advantageous in many ways as it fostered reflective practice, joint thought, and collaborative action. The results of this study concur with teacher educators and researchers (McAllister & Neubert, 1995; Roebuck et al., 1994), who concluded that placing student teachers in cohort groups for their practicum enhanced professional development.

Collegial Support

The student teachers continually talked about the "incredible support and confidence" they experienced, as also was noted in the findings of McAllister and Neubert (1995) and Duquette and Cook (1999). "The cohort was the best thing in my entire university career," reported several individuals. Others claimed that the real strength of the cohort experience was "establishing lasting friendships." A real bonding occurred among the student teachers in each

group. They experienced a good support system and appreciated "having others in similar situations to confide in." The research findings of Chamberlin and Vallance (1991) and Duquette and Cook (1999) indicate the need for structures for the development of peer support during the field experience.

A safe and supportive learning environment evolved where the student teachers felt safe to experiment. Similar results were reported by Stallings (1991) and Wilson (1996), who also investigated teacher/intern experiences. The student teacher "experienced acceptance by my peers and cooperating teachers as colleagues and collaborators." Even a cooperating teacher said, "Receiving a colleague's approval truly enhanced confidence in my own ideas." Neither cooperating teachers or student teachers were intimidated or offended by their colleagues, because trust, openness, and mutual respect were valued traits that Barnett and Muse (1993) said were essential to the effective functioning of a cohort group. The teachers became confident in defending their beliefs and practices, while remaining open to learning others' ways, and began to display an enhanced sense of self-worth as they, for example, selected and applied their own teaching style (Mosston & Ashworth, 1994) throughout several lessons.

The student teachers were encouraged to accept many diverse responsibilities and show initiative. For example, two of the student teachers were challenged with the task of coming to know and understand the needs of an autistic student and a wheelchair student, then share these insights and practical suggestions with the others. Another two were asked to prepare and deliver a 30-minute presentation on "Evaluation in Physical Education" at the Parent Council one evening. According to Roebuck et al. (1994), empowering teachers with tasks such as these highly motivates teacher interns involved in cohort groups.

Multiple Ways of Knowing and Doing

Several of the student teachers commented about the value "in being exposed to and working with so many great role models." As a part of the cohort, student teachers learned not only from one teacher, but several, and from other student teachers as well. The student teachers did not become the passive recipient of the teacher's way, as McAllister and Neubert's (1995) results indicated, but active participants in expanding their subject and teaching knowledge and understanding with several colleagues. Wilson (1996) refers to the collegial support of student teachers and cooperating teachers for one another as a reciprocity of mentoring wherein everyone becomes a learner. Graham (1993) suggests that this two-way communication has a potential for animating one another's teaching and engaging the student teacher and cooperating teacher in reflection on their shared work. The relationship is one of collaboration in which all participants benefit, according to Gibbs and Montoya (1994). Throughout this teaching practicum, several student teachers and cooperating teachers would discuss teaching styles and strategies that the students had been exposed to during their recent university curriculum and instruction courses (Hellison & Templin, 1991; Mosston & Ashworth, 1994; Pangrazi & Darst, 1997; Rink, 1998; Siedentop & Locke, 1997). They would share ideas and resources and help one another to plan lessons and units. In particular the student teachers enjoyed "bouncing ideas off the others." As a student teacher said, "The conflict was highly productive. It forced me to critically examine my beliefs and stand up for myself when we were trying to make a decision." Receiving a colleague's approval truly enhanced confidence in their own ideas and made them proud of themselves.

Multiple perspectives on ways of knowing and doing emerged. Through observation, reflective thought, joint discussion, and action, the student teachers soon realized that there were many different ways to accomplish similar purposes. "Dave and Ron [cooperating teachers] both suggested different ways to take attendance and told me what works best for them so they don't waste class time," a student teacher commented. Another said, "I never really knew what ALT-PE [academic learning time in physical education] meant. After watching Ms. Smith and Mrs. Stanowski, now I understand what I should be doing to keep the students active and on-task." "Was it ever neat when Jen [another student teacher] kept track of the amount of time that I spent talking. No wonder the kids started to bug each other!" claimed another. "I had no idea that all I said was 'good' and that I never gave the students anything specific or constructive about their performance." Another said, "I really appreciated Tom's [cooperating teacher's] suggestion to actually ask the students what they thought was best. I was surprised at how many good ideas they had." One student teacher was concerned that he seemed "dull" in comparison with his cooperating teacher, until he realized that there were many ways to be effective and that he had to be himself. As he said, "I don't have to go 'dashing' everywhere as long as I keep moving about while the students are practicing. I haven't seen Kyle or Bryan [cooperating teachers] jumping all over."

The teachers and the student teachers became enthusiastic and excited about sharing their expertise and began to look for effective ways of sharing. As Rink (1998) indicates, "Teachers who can establish a real team-teaching relationship tend to learn a great deal from each other. A productive interactive relationship with another professional tends to be growth producing and highly motivating" (p. 197). The cohort of student teachers at Oxford High planned, taught, and evaluated a two-week track and field unit for all the male and female PE 10 classes combined. At McKenzie High the five student teachers had a similar experience with implementing a successful social dance unit for grade 10s. Other means of sharing expertise also emerged. For example, at McKenzie High they ran their own curling workshop, followed by a social gathering at a restaurant, and at Oxford High the student teachers had the Northern Lights Wheelchair basketball team come to engage everyone in play. These types of inservicing became a regular event for the groups.

Lifelong Learning

The cooperating teachers at both schools stated that the eight-week experience left them "rejuvenated" and "invigorated" and feeling that they had been exposed to the "cutting edge" of their subject area. Similar findings have been reported in studies involving student and cooperating teachers (Gibbs & Montoya, 1994; Koskela & Ganser, 1995; Wilson, 1996) that reveal an increased repertoire of new methods and techniques. They were "excited about all the new stuff" and welcomed their "renewed interest in teaching physical education." "The student teachers restored my belief in teaching and made me reflect upon why I went into teaching," claimed one teacher. "They restored my

confidence in the profession and the future of the profession," added another. The student teachers boosted morale among the teachers. As one teacher commented, "Their optimism, idealism, enthusiasm, and energy was what we all needed." "I hadn't been to a HPEC [Health and Physical Education Specialist Council] drive-in workshop in years, and if it hadn't been for the student teachers' eagerness that we all attend, I would not have gone. But I'm sure glad that I went. I miss comparing notes and gossip, and finding out what's new," said another. At the end of the eight weeks, three of the cooperating teachers at McKenzie High had vowed to "get together for lunch once per month for a friendly but professional gathering—and not a meeting to talk about purchasing new uniforms." It was evident that the student teachers encouraged the cooperating teachers to invest in their own ongoing professional development. The experienced teachers were obviously excited at becoming involved in their own learning (Collay et al., 1998) while facilitating the professional growth of the student teachers.

It was not only the veteran teachers that experienced rejuvenation, however. A student teacher claimed that, "Despite the long hours of planning and lack of sleep, I look forward to every day. I can't believe how much energy Mr. Horne still has! I can hardly keep up to him." Another was impressed with the teachers' interest in what was new, "Mrs. Greene has such neat, innovative ideas which the kids love and she said that I could borrow them," and "Hal [cooperating teacher] is always on the Internet looking for new games. He says that he gets his kids to look for him too." "It was refreshing to see that some teachers still like teaching after all those years [referring to 11 years of teaching experience]. This really helped to keep me motivated," said another. The student teachers became more aware of the daily demands and stresses of teaching and of the "determination, motivation, and stamina required to remain being an effective teacher over the years," as another said.

Time to Talk

"Although having the student teachers in the department made life more hectic, having them there forced us to make time to get together more often and to discuss our ideas," commented a cooperating teacher. There appeared to be more time "just to talk." One teacher confided that he "never even knew what John [a colleague] thought about co-ed phys ed before." With a team of student teachers responsible for an entire unit, the teachers were often free at the same time allowing for visiting and "completing tasks that we never have time for—like, we never talk about what equipment we should order or what field trips we should go on ... or how we can increase enrollments in PE 20 AND 30 [coeducational physical education for grade 11 and 12 students]." As another teacher said, "It would be healthy for us to have some time together like this on a regular basis. It's so different than a meeting because we can talk about what we want to." A student teacher, a fanatical basketball enthusiast, was thrilled to discuss coaching strategies and their relationship to teaching with several interested colleagues. The passion and desire for teaching that Hargreaves (1994) speaks of as contributing to professional development was evident in these discussions.

Providing uninterrupted time for a group of student teachers by themselves for informal conversation over lunch or at the weekly cohort sessions, especial-

ly when the cooperating teachers were not present, also proved to be appreciated and extremely valued. Although trust, respect, and honesty were developing, some still had reservations regarding the evaluation process. "After all, my teacher has the final say of whether or not I pass," said one student teacher. Another said, "I was hesitant to let Ms. Smith know exactly how horrible I feel, but at least I can let down in here [lunch room conversation]." Having this time to talk enhanced the opportunities for the student teachers to come to know one another as friends as well as professionals. "We're going to the bar tonight. Do you want to come?" was a familiar invitation among the student teachers.

Whole-School Experiences

Having several student teachers in the physical education department had positive implications for the entire school, as well as for the department. Co-curricular and extracurricular responsibilities were shared, thus reducing the demands placed on the cooperating physical education teachers. Of course, coaching duties were shared, which provided yet another challenging learning environment for the student teachers. At both schools at least two student teachers had exceptional expertise in the current interscholastic sport, thus enabling the teachers and student teachers to learn from one another. The students thought that "the coaching environment provided a great chance to get to know the kids," and they also soon realized that "the team really seemed to like having me there to help out." The cooperating teachers tried to provide their new assistants with tips on how to sustain an entire season as an effective coach without burning out. In one situation, two of the student teachers helped a social studies teacher with noon-hour intramural activities in the gymnasium, and in another instance a teacher of student services required assistance in presenting a special evening session on Career Days.

Student teachers were exchanged within and outside the department to capitalize on expertise or to expose them to the unfamiliar. Often this meant interaction with teachers of other subject areas, thus leaving the isolated areas of the gymnasia. "Phys ed teachers are notorious for staying in their own space and then complaining that they never see anyone," said a student teacher. This movement about the school provided opportunities for the student teachers to become "more consciously aware of the culture of the entire school," to "meet teachers from other subject areas," and to "observe students in other areas doing different things." During the last week of the field experience when their teaching was to be phased out, at McKenzie the student teachers' names were drawn from a hat to indicate a different subject area and new cooperating teacher for two days. The student teachers' reactions were favourable. One said, "It was so much fun. I've never been in a biology lab before. Of course, they didn't let me do much but I learned a lot anyway ... like some of the safety rules." Another commented, "Math class will never change. It's always the same old thing—check homework, the teacher teaches a new concept on the board and then assigns some questions." One student expressed some fear about being incompetent: "I hope that I don't have to answer any questions in French. Or what if they ask me if learning French is a good idea?" At Oxford the student teachers were invited to shadow a teacher for two days. Their comments indicated positive and meaningful experiences. One's comment, "It

[teaching another subject] was a pleasant change," revealed the thoughts of many. Another discovered, "I didn't realize what an art teacher has to prepare to get ready for each class. Actually, it's a lot like being a phys ed teacher." These diverse experiences allowed the student teachers to gain a better understanding of professional relations and the complexities of networking.

Becoming Critically Reflective

I have fond memories of the two months that I spent at each school, sharing in the world of the student teachers and cooperating teachers. The schools and their inhabitants created a positive environment for my investigation. The principals greeted me with welcoming comments such as, "Make yourself at home." Members of the Physical Education Department and other teaching staff were pleasant and most willing to talk freely and openly. Comparing teaching stories with them invited me to recall vivid memories of my former role as school teacher.

I was pleased to be in the school environment, yet glad that I was participating in the roles of researcher and university facilitator. The student teacher's daily life world was too demanding and exhausting, and I have only to read my personal journal to experience the fatigue all over again:

This is the life world of a physical education teacher! Never mind worrying about the next lesson—when we are going to eat? We haven't had a minute since 8:00 am this morning. It is too bad that they can't schedule the same teacher for two classes in a row ... at the ice arena instead of having to go back and forth, back and forth! It is exhausting enough just to teach each class, organize and run intramurals without the added stresses of being a "student" teacher. Thank goodness that I don't have to stay to coach tonight!

I believed that to understand fully the experiences of the student, I had to visit the school sites regularly, yet I was worried that I was spending too much time at the schools. The cooperating teachers and the student teachers often reassured me that my presence was unobtrusive, that "In fact, we like having you here." The cooperating teachers said that they felt "important and appreciated that someone was interested in our teaching," and the student teachers felt "more confident" having me around.

As familiarity, trust, and respect increased among us, so did our capacity to reflect critically. We came to understand better our underlying perspectives, motives, rationalizations, and ideologies. Engagement by all participants in technical and practical levels of reflective thought was evident, whereas engaging in critical reflectivity was less frequent and less obvious (van Manen, 1977). In many situations a student teacher had merely to explain the selection of an effective teaching strategy, but there were also critical incidents that demanded an expression of one's beliefs, and these afforded opportunities to recognize one's biases in the broader context of a social, moral, and political world. One student was "shocked to discover that Justin [fellow student teacher] had no tolerance for cultural differences. I can't imagine being so ignorant and so insensitive. I mean, what's a kid supposed to do if he wears a turban and can't wear a hockey helmet?" Another heated discussion centered on religious and cultural beliefs and practices when several students were not allowed to participate in the dance unit. "I didn't see why Jen and Crystal [students] can't just

be in the gym and run the CD player," said a student teacher. Another reacted by saying, "But then they're not being active and how will we know if they're really not allowed to participate. I bet some of them just don't want to dance!" "I can't believe how much influence my upbringing has on my opinions. I don't really know if these are my beliefs or my parents'-or maybe some teacher's from the past," claimed another. Rigorous scrutiny of my own beliefs and values allowed me to grow both personally and professionally (Britzman, 1991). My encouragement, guidance, and probing assisted the student teachers and the cooperating teachers to do the same. According to the cooperating teachers, my presence, and thus the increased communication with colleagues, helped them to "seek out change and challenges in our teaching." My prompts helped the student teachers to feel confident in "trying the different teaching styles and techniques that we learned in university." However, several times I felt that I had not effectively facilitated the growth of critical reflective thought. Being among colleagues with similar interests and expertise, like the student teachers and cooperating teachers, I was energized and enlightened throughout the experience, but sometimes got caught up in the need for quick solutions to immediate problems. Hargreaves (1994) cautions against focusing on technical competences in isolation, which turns teacher development into a narrow utilitarian exercise that does not question the purpose and parameters of what teachers do. Some concerns and issues should have been discussed more than once and in greater depth at the weekly cohort sessions, because this approach appeared to enhance the opportunities for developing critical reflection. However, a cohort structure does not necessarily overcome aspects of the traditional apprenticeship model, nor does a traditional one-to-one relationship guarantee the professional growth of the student teacher as technician only. Chamberlin and Vallance (1991) point to this relationship between a student teacher and a cooperating teacher as significant in determining the amount and nature of professional growth of preservice teachers. Zeichner and Liston's (1987) findings suggest that an apprenticeship model inhibits self-directed growth of student teachers and fails to promote their full professional development. There was no doubt that all the cooperating teachers in the cohorts of this study were exemplary role models as expert technicians, but there was also unrealized potential for them to function as experts in critical reflective thought.

Educational Significance

Several insights that emerged from this study have implications for preservice education and field experience practices in teacher education programs. The supportive and stimulating learning environment produced by placing cohorts of subject specialist student teachers in a department of specialist cooperating teachers appeared to have many benefits. Teacher educators must recognize the potential of this practice to enhance the professional development of the participants. The results of this investigation, as well as the findings of Duquette and Cook (1999), Roebuck et al. (1994), and Stallings (1991), suggest that group placements lead to effective growth in student teachers. Ninety-three percent of the student teachers in Stallings' (1991) study and all the student teachers in this study liked and appreciated the time allocated for the groups of student teachers to discuss common problems and to analyze beliefs and practices. This type of weekly gathering should be a required and integral

component of a student teacher's field experience. Learning circles, as defined by Collay et al. (1998), could encourage specialist student teachers and cooperating teachers to come together regularly to create appropriate conditions for ongoing professional development. Although the student and cooperating teachers in this study indicated a preference for a cohort field experience, further research is needed to investigate why a cohort may offer a better experience than a traditional one-on-one mentorship.

As this study did not explore the role of the university facilitator and related responsibilities in a cohort triad relationship, the role as facilitator of professional growth rather than external evaluator needs further investigation and clarification. It is important that student teachers perceive this individual as a confidant and advocate, and that the cooperating teachers perceive the person as a colleague, working together to facilitate critical thinking among them. Cohorts of student teachers must meet and come to know one another and their university facilitator prior to the field experience. A community of student teachers could meet as a group, on campus or at the school, a few times prior to their practicum. As also noted by Roebuck et al. (1994), the student teachers in this study indicated that meeting one another even once helped to alleviate uncertainty and anxiety and to clarify expectations.

Cooperating teachers also need to be educated in their evolving roles and changing responsibilities as they learn how to participate as professionals in a cohort (Field Experiences, 1997). The role of cooperating teachers is expanding, according to Koskela and Ganser (1995). Koerner (1992) suggests that teachers need to discard the prevailing attitude that their student teachers must teach and behave as they themselves had to behave when they were student teachers. Exposure of a student teacher to more than one cooperating teacher may, therefore, be beneficial to the student teacher's professional growth toward becoming a critically reflective teacher.

During preservice education, student teachers should experience collaborative planning, teaching, and evaluating with peers. They need to have opportunities to engage in peer coaching. As McAllister and Neubert (1995) suggest, practice in raising questions and providing feedback, for example, in collaboration with their peers during micro-teaching episodes, will assist student teachers in their practicum. Engaging in self-reflection, complemented by peer analysis and group reflection, will help prepare the student teachers for a collaborative cohort practicum experience. Mather and Hanley (1999) discovered that cohort grouping of elementary preservice teachers during their teacher education program produced strong, early socializing effects, the emergence of collective beliefs, and the examination of personal beliefs about teaching.

Partly because of the positive results of this case study research, the Faculty of Education has begun to assign a minimum of two student teachers from the same or different subject areas to a secondary school for their final extended field experience. Further study is required to explore the implications of diverse subject area cohorts. Cohort field experiences have become an integral component of a provincially initiated Professional Development School research project. The University of Alberta and the Alberta Teachers' Association

have embarked on a two-year (1997-1999) collaborative project to create a Professional Development School model for Alberta.

Note

 The APT integrated program is characterized by the integration of three courses that focus on bridging theory and practice in a secondary school subject specialization. Students of the same major meet daily for five weeks with one instructor. Bachelor of Education students in this practicum have already completed two previous field experiences of shorter duration: one observational and the other teaching in a minor subject area for four weeks.

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