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FACULTY OF GRADUATE AND
POSTDOCTORAL STUDIES

Diane Mary CULVER

AUTEUR DE LA THÈSE - AUTHOR OF THESIS

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P. Trudel

DIRECTEUR DE LA THÈSE - THESIS SUPERVISOR

CO-DIRECTEUR DE LA THÈSE - THESIS CO-SUPERVISOR

EXAMINATEURS DE LA THÈSE - THESIS EXAMINERS

M. Bourassa

J. Côté

R. Lablanc

T. Orlick

J.-M. De Koninck, Ph.D.

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A Collaborative Approach Between Sport Coaches and a Consultant/Facilitator

by
Diane M. Culver

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Abstract

The purpose of this research project was to explore how knowledge can be enriched when a sport pedagogy and psychology consultant/facilitator collaborated with sport coaches to help them learn through their everyday coaching experiences. A collaborative inquiry approach was used. As the initiating researcher, I acted as a consultant/facilitator, working with coaches of two sports, athletics and alpine skiing. Data were mostly generated using interviews (semi-structured and on-going informal), participant observation, my journal, and, in Study Two, group meetings. In Study One, I made myself available as a consultant to six coaches from one athletics club, if they wanted to share any coaching issues with me. For six months I visited the coaches while they worked. The coaches mostly shared issues relating to sport psychology. Interactions among these coaches were mostly one-on-one, with little sharing of coaching issues between themselves. My work with them was of the same individual nature. The first two parts of Study Two involved two contexts in which I acted as a facilitator with groups of ski coaches (Part One, seven coaches and Part Two, six coaches). My role was to nourish knowledge creation within the coaches' community of practice (CoP). A series of round table meetings were the site for much of the negotiation of meaning that was the result of coaches sharing knowledge about coaching issues. The coaches found they learned a lot, that communication between them was improved, they enjoyed the process, and that their athletes benefited from all of this. In Part Three of this study, I stepped back and observed what happened to the CoPs without a facilitator. Two groups were involved in this study. One group was partially successful but found it difficult to keep up the learning in the CoP without a person responsible for coordinating the process. The other group had leadership problems and never met with the purpose of learning through negotiation of issues relating to their practice. Knowledge sharing in this

group was mostly one-on-one. Recommendations are made concerning coach education, especially in relation to how this approach to learning through participation can compliment existing formal education.

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Introduction

“If you keep too busy learning the tricks of the trade, you may never learn the trade”

John Wooden

Millions of Canadian youth are involved in organized sport. The sporting experiences of these youth can provide valuable lessons for their development as athletes, and healthy, well-adjusted citizens (Telama, 1994). Because sport coaches are ideally placed to facilitate athlete development, formal coach education programs (e.g., National Coaching Certification Program, in Canada) have developed considerably over the years. In a discussion of practitioner's knowledge, Jarvis (1999) described process knowledge as knowledge how and content knowledge as knowledge why. Taken together, he called these two types of knowledge ‘mediated’ because they are gained through secondary experience. In terms of the type of coaching knowledge promoted through formal coaching education programs, this mediated knowledge might include certain scientific subdisciplines related to sport performance, as well as sport-specific technical and tactical knowledge (Lyle, 2002). Another essential type of knowledge for practitioners, “learning to be able to do is... [developed] from primary (firsthand) experience” (Jarvis, p. 37). To paraphrase Jarvis, coaches can learn from others *about* coaching practice, but ultimately they must develop coaching competence also through primary experiences (i.e., by actually coaching).

Similar to other practices, the importance of the time spend in the field to develop competence in coaching has been emphasized (Cushion, 2001; Fleurance & Cotteaux, 1999; Gilbert & Trudel, 2001; Salmela, 1996). In fact coaches tend to say that contribution of formal education courses to their development as a coach is minimal compared with what they learn in the field (Gilbert & Trudel, 1999; Woodman, 1993). Learning based on practical experience, often referred to as experiential learning, finds support in andragogy, which has emerged over

the last half century to specifically address a theory of adult learning. Also, recent approaches in the social sciences have come to recognize the input of Vygotsky (1986), especially concerning the importance of social processes to development (Lave & Wenger, 1991) and the collaborative nature of learning. It has been stated “Much of what a new coach learns is through ongoing interactions in the practical coaching contexts’ (Cushion, Armour, & Jones, 2003, p. 217). Despite this, coach education has done very little to address the coaching process as a social one (Cushion et al., 2003).

The shift from learning as an individual process to a collaborative one has also impacted the research process by eroding the myth of the lone researcher, with more emphasis being put on the social components of the interpretive process (i. e., the researcher-participant(s) relationship) (Wasser & Bresler, 1996). Collaboration, which is grounded in on-going communication, is a powerful mode to advance learning and promote professional growth (Cole & Knowles, 2000), for participants and researchers alike. According to Jarvis (1999), “practitioner-researchers have arrived, and they are a symbol of the knowledge society” (p. xii) in which the work place, rather than the university, has become an important venue for research.

The word collaboration is used to describe different sorts of research relationships including action research, researchers working with other academic researchers, researchers working with practitioners, and researchers-as-participants. Collaborative inquiry has been defined as “a process consisting of repeated episodes of reflection and action through which a group of peers strives to answer a question of importance to them” (Bray, Lee, Smith, & Yorks, 2000, p. 6). The present research is in line with collaborative inquiry in which I, the researcher, worked with sport coaches, as a consultant/facilitator to foster reflection in an attempt to enrich their learning through practical experience. The inquiry has sought to document the co-construction of the most effective approach to use in such a situation.

Research Purpose

As we believe that a part of coaches' learning occurs through interaction with others, the purpose of this research project was to explore and document what happened to learning when a sport pedagogy/psychology consultant/facilitator made herself available to a group of coaches.

The Overall Picture

In a first study, my coparticipants were six coaches of an athletics club. I offered to act as a consultant, and they interacted with me on an individual basis, discussing issues raised from their practice. In my role, I acted as a sounding board and, at times, a collaborator, in their reflections. While this proved to be a useful role, in the end we felt that the coaches' learning from their practical experience could be further enriched if there were more interactions between the coaches (learning with other coaches). Certain contextual factors that limited such interactions in this first study are discussed. Based on the lessons from the first study a second study was conducted in a different context, an alpine ski club. Here I presented myself as a facilitator, seeking to promote learning by helping the coaches share coaching issues and knowledge within a group of their colleagues. The group included six coaches and the head coach of the club. Using the framework of a 'community of practice' (Lave & Wenger, 1991), I sought to increase the interactions between the coaches and introduce some structure to optimise the learning opportunities. This second study had three phases, a first winter, a summer camp, and the following winter. The findings revealed the value of this approach to learning from practical experience. The role of the facilitator was deemed to be important, especially for helping the community of coaches manage their opportunities for learning.

Literature

Any study is conducted based on the accumulated knowledge and traditions, explicit or implicit that define the research field within which the project falls. This research project is about sport coaches' learning as a social process and it will help the reader to situate the study if a general picture of the research field, sport science, is provided.

What is Sport Science?

Haag (1994) in a position paper presented a conceptual model of sport science (see Figure 1). For this author, sport science is composed of theory fields and theme fields. A theory field "refers to a subdiscipline of sport science that is clearly linked to a so-called mother science (e.g., sport pedagogy - pedagogy). The theory fields are related to the mother science; they also can be characterised as applied science in relation to the mother science" (p. 1). At the moment, there are seven well-established theory fields and five new ones; others could be added in the future (e.g., sport management). The studies conducted by the researchers in these theory fields are on certain themes. Haag has suggested an open list composed of two groups of theme fields; sport related and general. Research results of all theory fields can contribute to a better understanding of a theme field although some better affinities do exist.

Sport Science

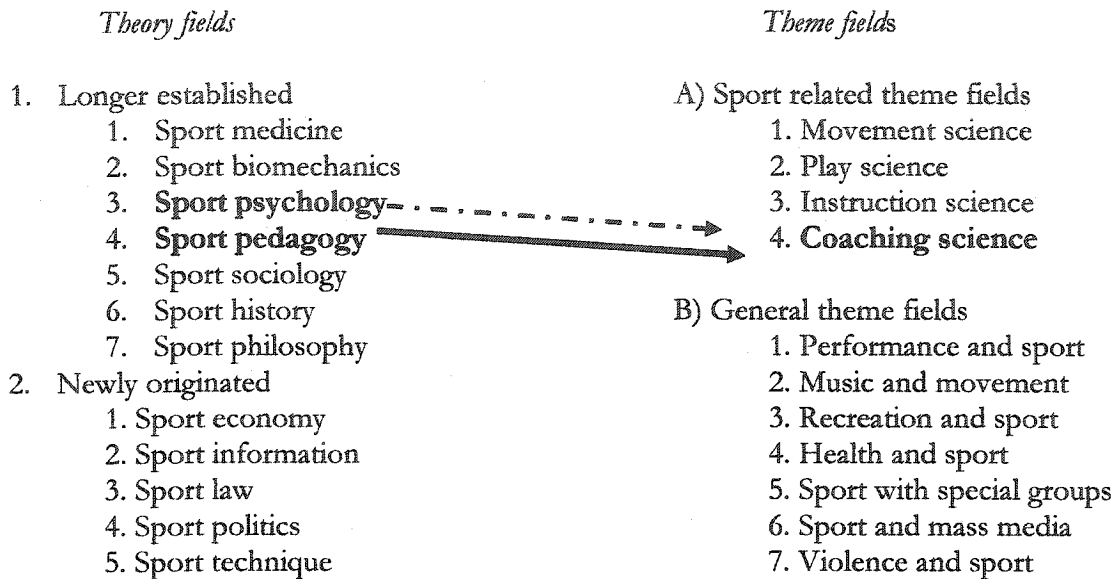


Figure 1. Conceptual model of sport science (based on Haag, 1994)

To illustrate where the present study fits into sport science we have added arrows and bolded words. This study is about how coaches learn to coach and therefore could contribute to a better understanding of the theme field called the science of coaching (Seagrave & Ciancio, 1990; Woodman, 1993). The two theory fields that will be used to guide the study are sport pedagogy and, to a less extend, sport psychology. Siedentop (1990) told us what he believes the term sport pedagogy means and why.

I believe sport pedagogy to be a practice which encompasses the scientific study of teaching and coaching, the preparation of teacher and coaches, and the content of what is taught by those teachers and coaches. I like the label 'sport pedagogy' particularly well because it is parsimonious and provides, for me, the clear linkages that are most important for our future. It clearly allies us with the world of sport. It clearly allies us with education. (p. 274)

Although sport pedagogy will at times study the learners, in most of the research on teaching in physical education researchers did not look at the effect of teaching on students (Silverman & Skonie, 1997). The emphasis put on the teacher/coach in sport pedagogy is also

apparent when we look at the large number of studies on how to prepare teachers and coaches. In fact, an important branch of sport pedagogy is called Physical Education Teacher Education (PETE) and Tinning's article (2001) "A review of research on physical education teacher and coach education (1998-2001)" is a good example of the importance attributed to the preparation of teachers and coaches.

Contrary to sport pedagogy, the literature relating to sport psychology interventions deals mostly with consultants working with athletes (e.g., Danish, Petitpas, & Hale, 1993; Kerr, 1993). Cox, Qui, and Liu (1993) clearly delineated the clinical/counselling sport psychologist as the profession prepared to help athletes, and the educational sport psychologist as being primarily involved in the dissemination of sport psychology knowledge with no reference being made to coaches. In a recent brief history of research in sport psychology (Singer, Hausenblas, & Janelle, 2001) there is also no mention of sport psychologist working with coaches to improve the coaches' performance. In most instances, coaches are mentioned as the persons who refer athletes to a sport psychology consultant. Many coaches view sport psychology as 'something to offer to the athletes', through a consultant, rather than a tool for the coaches to use (Culver & Trudel, 2000). There is evidence however in the literature that there is a role for sport psychologists to work directly with coaches. Partington and Orlick (1987) found that coaches appreciated sport psychology consultants who were "Directly assisting the coach by serving as a sounding board ideas and by giving feedback about the effects of his or her coaching behaviours, together with suggestions about how to change any negative behaviours" (p. 98). LaRose (1988) proposed that sport psychology consultants should work with coaches, helping to facilitate the coaching process, as a means for athletes, coaches, and sport psychologists to reach their full potential.

Now that we have situated our research in the domain of sport sciences the literature that informs our conceptual framework will be presented. This review of the literature will start with a presentation of the four main approaches used to teach coaches how to coach: formal coach education programs, mentoring, behaviour modification through specific intervention strategies, and supervision. In the second section we then remark on the limits of these approaches. The literature on learning through experience comprises the third section followed by a section on collective learning. The last section addresses the issue of the best methodology to use in a study aimed at exploring how a consultant/facilitator can help coaches learn from their coaching experience.

Teaching Coaches How to Coach

Formal coach education programs

Founded in 1970, the Coaching Association of Canada has been involved in the delivery of a coach education program to more than 875,000 coaches since 1974 (CAC, 2003a). The program, originally named the National Coaching Development Program (NCDP) is a joint effort of the Government of Canada, provincial/territorial government, the national/provincial/territorial sport federations, and the Coaching Association of Canada. In 1977 the National Coaching Certification Council (NCCC) was formed to supervise the NCDP. In 1988 the program became known as the 3M National Coaching Certification program when 3M became the corporate sponsor of the program. The present system is “A knowledge- and course-based program with five levels of certification” (CAC, 2003b). Levels I to III each have three components: theory, technical, and practical. Levels IV and V, designed for coaches of high performance athletes, are applied study programs made up of 20 tasks. The objectives of the program are to prepare “coaches to (a) better meet the needs of all participants in sport, (b)

provide a positive sport experience to participants and, (c) provide opportunities for participants to achieve their full potential in and through sport” (CAC, 2003b, p. 1).

Haslam (1990) conducted a study in which experts in coach education assessed the revised theory component of the NCCP (Levels I, II, and III) to ascertain if the program represented the skills needed to be an effective coach. The sample of 75 experts comprised Master course conductors ($n = 35$) and provincial coaching coordinators ($n = 40$). The opinions of these experts were solicited using the Delphi technique that involves successive questioning (without face-to-face interaction) interspersed with feedback of the group's responses. This method has been used for consensus research (Murray & Jarman, 1987); it involves the analysis of both quantitative and qualitative feedback. In the case of all three levels, the revised theory committee selected planning (planning a practice, a macro-cycle, and a yearly plan) as the main focus for the courses. The course educator participants in this study, however, did not rank planning as an objective very high in importance relative to other objectives. Instead, the participants felt that it was essential for coaches to know how to teach skills and make sport programs enjoyable and interesting. For Levels I and II, the participants deemed more time should be spent on the socio-psychological aspect of the course as opposed to the biophysical modules. At Level III a more equitable balance between these two aspects was recommended. Haslam suggested that rather than having separate modules on planning, for example, a more holistic approach could be taken that integrates objectives such as planning with psychology, physiology, and safety objectives into one module. He felt that such an approach would more closely resemble the field of study. The author also thought that it would be interesting to replicate the study with a group of coaches, rather than course leaders. While it appears that no such replication has been conducted, other studies have shown that these formal programs lean towards theoretical content. Coaches, and coach conductors in some cases, have stated that

information regarding the application of knowledge is lacking (Culver & Trudel, 2000a; Gilbert & Trudel, 1999).

Australia also has a national coaching certification program, the National Coaching Accreditation Scheme (NCAS). Founded in 1983, the program seeks to provide a national focus of the development of coaches. At the end of 2001, more than 93,000 coaches were accredited with 90 national sporting bodies (Dickson, 2001). A pilot project (Dickson, 2001), focusing on rugby coaches, used qualitative methods to examine the effectiveness of the NCAS through the following four research questions:

1. Why do coaches undertake NCAS accreditation?
2. What are the main benefits of undertaking NCAS accreditation?
3. Do respondents perceive that the NCAS has led to improvements in coaching?
4. How can the NCAS be improved?

Interviews were conducted with coach consultants ($n = 5$), coach educators ($n = 2$), and coaches ($n = 12$) with Levels 1, 2, and 3 accreditation. The pool of accredited rugby coaches at the time of the study was 4,159, which qualifies rugby as a major sport in Australia.

In response to the first question about why coaches seek accreditation, mostly the reasons were extrinsic, having to do with needing accreditation to secure coaching positions. The primarily extrinsic reasons that coaches gave for accreditation point to the status value of the accreditation program. Some coaches cited intrinsic reasons such as wanting to gain game knowledge.

The main benefits of the program (question 2) were seen differently by the different subgroups. Coaches mentioned learning specific coaching skills as benefits, but a closer look at

the data revealed other, less tangible benefits such as the opportunity to interact with other coaches during courses. Coach consultants and educators tended to focus on more general aspects of benefits such as, organisations using levels of accreditation to hire qualified coaches for specific positions. Two general issues raised by all subgroup were, again, the status that accreditation gave coaches, and the usefulness of the General Coaching Principles Content. In relation to this latter variable, Dickson explained that this component, as part of the Level 1 and 2 accreditation, included such information as the role of the coach, sport psychology, and principles of training. Two models are used by different sport organizations to address this material. The first presents the course material in discrete modules, and the second integrates the material with sport-specific content. Rugby, in Australia, used the increasingly popular second model. While no one content area component was rated as a clear 'most important', sport psychology was mentioned frequently by coaches and coach educators. More generally, coach consultants and educators felt that information on how to coach is very beneficial to coaching. However, on this subject, the coaches interviewed underlined the importance of this sport pedagogy information being related to their specific coaching practice. The coach consultants supported this finding and recommended individual sports should be responsible for assessing the specific coaching needs for their sport so that the general principles content could be tailored to meet these needs. In the discussion of this section Dickson remarked on the significance to coaches of their interactions with each other and the possibilities of establishing networks through the courses. He recommended that a framework to offer this opportunity for exchange to coaches on an on-going basis could facilitate the continuing development of coaches.

Regarding the third question, all subgroups generally felt that the NCAS led to improvements in coaching. Coaches were the most explicit about this, stating that they gained

new skills and knowledge at all levels of accreditation. Coaches also valued updating courses. The coach consultants were more measured than coaches in their responses to this question. Dickson felt that this was because they have a broader view as they work with many different sports, which do not all have the same level of resources available for coach development. The author concluded from this response by consultants that the effectiveness of the NCAS varies across different sporting contexts in relation to the quality of the programs and the candidates.

In response to the fourth question three issues relating to how to improve the NCAS were raised across all subgroup. These concerned assessment, mentoring practices, and “a re-focussing on the ‘art of coaching’” (Dickson). The thrust of the first concern is that there is no way of being sure that coaches take the new knowledge and techniques offered in the accreditation courses and implement them into their coaching practice. Some thought that a mentor was the way to check on this. Others simply wished to have the feedback of a mentor on their coaching. In terms of the ‘art of coaching’, the respondents felt that the NCAS had become too focused on the scientific aspects of coaching to the detriment of skills such as those relating to communication and pedagogy; this was especially true for Levels 1 and 2. Again, coaches expressed a desire for the provision of more sport-specific technical content and more opportunity for interaction with other coaches. This latter issue relates back to responses to Dickson’s second research question, in which coaches cited interaction with other coaches as one of the main benefits of attending accreditation courses.

Considering the similarities between the NCCP and the NCAS, the information from Dickson’s (2001) pilot study should be viewed carefully by those interested in improving coaching education in Canada. This would be appropriate since, in 1996, the Planning and Evaluation Committee of the NCCC carried out an evaluation of the NCCP and recommended that it become a competency-based training program. According to the CAC Web site (n.d.), the

new 3M NCCP, which is gradually being brought in, distinguishes between coach training and coach certification. Just how this is so is not evident from the Web site but it is stated that coaches will be trained in relation to the particular context in which they wish to coach.

In the United States, there is no national certification program such as those in Canada, Australia, and Great Britain. However, various programs run by public and private organisations come and go. One such program, the National Youth Sports Coaches Association, aims to help volunteer youth coaches “understand the important psychological, physical, and emotional impact they have on children” (Mills & Dunlevy, 1997). In 1990, Houseworth, David, and Dobbs (1990), surveyed athletic directors and high school coaches in the state of Illinois, to assess their perceptions of coaches' knowledge strengths and weaknesses, as well as their topic and format preferences for coaching education programs. Both athletic directors and coaches indicated that coaches were most knowledgeable about sport-specifics and teaching methods (most high school coaches are also teachers). Coaching principles relating to psychology, physiology, injuries, and administration were found to be lacking. Participants also supported coaching education programs and mandatory certification, but felt that logistically this would be difficult because of such things as time and cost to coaches and schools, disparate administrations in different school districts, and opposition from long-time coaches. But the demographics of America's interscholastic coaches were changing.

The introduction of girls' athletics combined with the reduction in teaching positions over the last two decades resulted in a shortage of available full-time teacher/coaches (Mills & Dunlevy, 1997). The necessity of employing part-time coaches increased the need for programs to address the needs of these interscholastic coaches. The Program for Athletic Coaches Education (PACE) is one of these. In an early review of PACE, Seefeldt and Milligan (1992) found that the authors of PACE at the Institute for the Study of Youth Sports (ISYS) at

Michigan State University have worked at staying abreast of the needs of coaches by, for example, trying to increase learner involvement and better delivery systems including using the Web. A look at the most recent document on the PACE website, however, seems to indicate that the use of web delivery is not yet a fact (ISYS, 2004). Malete and Feltz (2000) used the Coaching Efficacy Scale to examine the effects of PACE on coaching efficacy. A comparison was made between PACE participants ($n = 36$) and a control group of high school coaches with no prior formal coaching education ($n = 24$). Both groups completed pre- and post-tests. Participants in the PACE program were tested before the first of two weekend sessions and one week later at the end of the program, before the program tests. The time between the pre- and post-tests for the control group ranged between two and twelve weeks. The authors found a moderate effect; coaches exposed to the PACE program showed an increase in the level of their perceived coaching efficacy. The authors noted most participants tested rather high in coaching efficacy at the pre-test, thereby implying that the effect might have been greater if pre-test scores had been lower. Interestingly, unsolicited comments from the coaches revealed that experienced coaches felt the PACE program confirmed many of their existing coaching beliefs. It was also interesting to note that this program offers the opportunity for “peer interaction in the learning of coaching/teaching techniques and strategies in addition to the in-depth instruction on these components of coaching” (p. 414).

Although not yet the subject of any studies that we know of, the International Council for Coach Education (ICCE) “is a not-for-profit, international organization with the mission of promoting coaching as an internationally accepted profession. ICCE members seek to enhance the quality of coaching at every level of sport” (ICCE, n.d.). Established in 1997, this organisation aims, among other things, to promote coaching as a profession, to encourage the exchange of coaching knowledge, to publish a professional journal, and to assist countries in the

field of coach education. To date they have organised a series of conferences that should have served as good vehicles for the exchange of coaching knowledge. Hopefully this council will continue with their aims because they have the potential to make a difference in coach education, and consequently in sport experiences for athletes and coaches.

Mentoring

As a complement to the training courses, mentoring opportunities are often provided. The importance of mentoring for coach and athlete development was demonstrated in a qualitative study of expert Canadian coaches of team sports (Bloom, Durand-Bush, Schinke, & Salmela, 1998). The coaches in this study were mentored by more experienced coaches while they were athletes and again when they were novice coaches. Furthermore, these coaches carried on the practice by eventually mentoring athletes and novice coaches themselves. Although no standard format for mentoring surfaced in the findings, the expert coach participants recommended that structured mentoring programs should be promoted.

The Coaching Association of Canada (CAC) has recently implemented for women coaches a National Team Coaching Apprenticeship Program and an Online Mentor Program (CAC, 2001). Specific sport associations are also going in this direction. For example, a recommendation of the Molson Open Ice Summit held in August 1999 by Hockey Canada (known at the time as the Canadian Hockey Association) was the implementation of a national coach mentorship program “to foster the future growth of coaching and player development in Canada” (Hockey Canada, 2003a). This mentorship program is supposed to help the “individual growth necessary to support coaching performance in the delivery programs beyond the present levels of delivery” (Hockey Canada). The program is administered by the provincial hockey associations. A search of the Web found evidence of the program in Newfoundland and Labrador, Québec, Manitoba, and B. C. In principle, the concept seems to be good, but in

practice, its implementation is problematic. Indeed, it is questionable whether any of the programs in existence thus far merit the use of the label 'mentoring'.

According to the Hockey Canada Web page on the National Coach Mentorship Program, a mentor is

A wise and trusted teacher, advisor, counsellor, instructor, tutor, trainer. Mentoring is a relationship between a guide (mentor) and a coach which enables the coach to become more successful in all aspects of his/her coaching skills, [which] involves... Stimulating and managing the individual growth necessary to support coaching performance in the delivery programs beyond the present levels of delivery within the Canadian hockey system. (Hockey Canada, 2003a)

In December 2002 Hockey Québec (2002) named two coaches to provide mentoring for the coaches of 31 teams in the four leagues Midget Espoirs. One wonders how two individual mentors/consultants can provide mentorship for such a large group of coaches? What is the preparation of these mentors? At first the main characteristic seems to be their experience as coaches. In fact, this is a program that just offers coaches the possibility of contacting a consultant if they need it truly a mentoring program? Other associations such as those mentioned have appointed mentors in a similar fashion, but even though the description of the mentoring task is correctly stated it is unclear how these programs can lead to the establishment of true mentoring possibilities.

In addition to the appointment of mentors by the hockey associations Hockey Canada provides several other opportunities for learning that they describe as mentoring. Their on-line 'Learn from the Best' e-mentoring series (Hockey Canada, 2003b) is nothing other than a series of verbal presentations, with accompanying workbooks, by 'expert' coaches on topics such as skills, creative thinking, and goals. There is no interaction involved in this series, therefore no possibility of a relationship forming between mentor and mentoree. In order to benefit from this e-mentoring a coach has to be a member of the Folgers Coaches' Club (Hockey Canada, 2003c).

Another possibility for coaches who are members is to post questions and have them answered by members or non-members, who have no obligation to identify themselves. This form of advice giving also does not qualify as mentoring.

While mentoring “has been used as a vehicle for handing down knowledge, maintaining culture, supporting talent, and securing future leadership” (Darwin, 2000, p. 197) for centuries, the recent trend towards competency-based training and education has placed new demands on organisations to provide guidance. The human resources development field has been particularly active in promoting mentoring in recent years. More broadly, Darwin located mentoring as clearly in the domain of adult education, pointing to the works of Daloz (1986), Merriam (1983) and Knowles (1980). In the field of coaching science, the CAC, which is following the wider trend of moving to competency-based education and training (CBET) is realising the necessity of mentoring programs, as indicated by this response of a CAC coaching consultant when asked about the CAC and mentoring:

In transitioning their coach training and certification programs toward a competency-based program, many sports will likely be thinking about including mentoring/apprenticeship type interactions.... It is not clear yet the exact form this will take, but the idea is that the concept of apprenticing is a good one for coaching, which involves much human interaction and is therefore quite complex. (E-mail, AJ Woodman, CAC, June 9th, 2003)

It is not surprising that the sports organisations have not yet determined what form mentoring will take in their contexts. According to Nicholls (2002), despite the fact that work-based learning has become an accepted means for learning in the workforce “there is no consensus as to what mentoring or the role of mentor are” (p. 133). Nicholls suggests three models of mentoring, the apprenticeship model, the competency model, and the reflective model. The apprenticeship model, which is well suited to complex contexts such as coaching, has the mentoree work alongside the mentor in order to gain experience in real-life work situations. This

appears to be the type of situation being offered by the CAC's Women in Sport National Team Coaching Apprenticeship Program (CAC, 2001) in which female apprentice coaches are matched with national team and/or mentor coaches to pursue a two year learning plan jointly developed by the coaches involved in consultation with the CAC. In the competency model of mentoring the mentor is a systematic trainer who acts like a supervisor, "observing the trainee, with a pre-determined observation schedule and then provides feedback" (p. 138). In this model, a clear set of competencies needs to be established. A CBET program such as that proposed by the CAC would need to have mentors or trainers serving in this role to ensure that competencies are attained. The Hockey Canada and Hockey Québec programs seem to be somewhat based on this model, however, in addition to the problems discussed above, it is not clear that the competencies have been well defined. The reflective model of mentoring requires the mentor to become a facilitator and co-enquirer in a mentor/mentoree relationship that is more equal and open. At this stage, we do not see evidence of this type of mentoring occurring in coaching education in Canada.

In sum, there seems to remain some problems in how mentoring is being applied to coaching education in Canada and, at times, it looks more like pure transmission of information, or a supervision process which "brings to mind other concepts and roles for those in educational settings (Nicholls, p. 133). Later in this chapter we will present the literature about supervision.

Research on mentoring programs in coaching is scarce. An American study examined the affective experiences and perceptions of ability of female coaches ($n = 28$) following a hands-on internship (Weiss, Barber, Sisley, & Ebbeck, 1991). After a 1-week intensive workshop on sport sciences and sport-specific information, the participants assisted a coach, for a season, at the middle, high school, or college level. The qualitative data collected for this study focused on the

“feelings of competence associated with different coaching roles and the mentoring relationship with the cooperating coach” (p. 340). Participants in this study felt their internship experience was worthwhile. Positive aspects raised were interactions with the athletes, development of coaching skills, and fun. On the negative side, they often found the relationship with the mentoring coach difficult and also found administrative support to be lacking. They realised that coaching is often associated with high time demands. Interestingly, in a country in which a national coaching certification program does not exist, the results of this study found these female coaching interns were more confident regarding the more socio-psychological aspects of coaching (communication, motivation, and teaching skills). By contrast, these women perceived their weaknesses to be related to coaching skills of a sport-specific and planning nature. It could be that formal courses are useful for delivering this type of information, as indicated by studies of the NCCP (Haslam, 1990) and the NCAS (Dickson, 2001), and mentoring/apprenticeship programs are better for developing the softer skills that comprise the socio-psychological aspects of coaching.

Studies on the modification of specific coaching behaviours

On the assumption that coaches adopting appropriate coaching behaviour would result in improved athlete responses, researchers have developed specific interventions aimed at changing coaches' behaviours. A selection of these attempts is presented. Rushall and Smith (1979) used the Coach Observation Schedule to assess a swimming coach's total behaviour pattern during practice sessions. Following this pre-experimental testing, the researchers consulted with the coach and they decided on a strategy to alter the coach's behaviours categorised as 'reward', 'feedback', and 'reward followed by feedback'. A multiple-baseline design was used. Self-recording/prompting conditions increased the frequency of the three target behaviours. However, it was noted that while the target behaviours increased other behaviours

such as, directing, explaining, and informing, decreased because there is only so much time for the coach to communicate with the athletes during a swimming practice. The authors correctly noted that other conditions in the environment of competitive swimming, besides the coach's reward and feedback behaviours, operate to control the situation.

Based on over 20 years of research about how coaching behaviours effect youth sport participants, the Coach Effectiveness Training (CET) had been developed. According to the one of the authors, it is:

The only scientifically validated coaching-education workshop that has been shown to have the following effects:

Teaches coaches how to foster positive coach-athlete relations and greater mutual respect. Increases the amount of fun that athletes experience. Creates greater team cohesion and a more supportive athletic setting. Increases athletes' self-esteem and reduces performance-destroying anxiety and fear of failure. Significantly reduces dropout rates in youth sport programs. (Smoll, n.d.)

The research that led to the CET was founded on a mediational model of coach-athlete interactions; that is, the "model stipulates that the ultimate effects of coaching behaviours are mediated by the meaning that athletes attribute to them.... What athletes remember about their coach's behaviours and how they interpret these actions affects the way athletes evaluate their sport experiences" (Smoll & Smith, 1998, p. 42). Following are two examples of studies that have tested the CET program. Using behavioural guidelines developed in a previous study (Smith, Smoll, & Curtis, 1978), Smith, Smoll, and Curtis (1979) attempted to train and then assess youth baseball coaches ($n = 18$, in the experimental group and, $n = 13$ in the no-treatment control group). The training package included verbal and written materials, self-monitoring, modelling, and behavioural feedback. The effects of the training program on coaches' behaviours and player' perceptions, attitudes, and self-esteem were assessed. This encompassing study stands out in this category of research because it included measures relating to the players as well as the coach. The findings suggest that training programs can result in positive changes in

coaches' behaviours, resulting in a more positive and supportive environment in which children participating can develop in a positive manner. Children who played for the trained coaches in this study had higher self-esteem scores after the season compared to the previous year. Children with low self-esteem demonstrated the greatest difference in attitudes toward trained and untrained coaches. Compared to children who played for untrained coaches, the children on the teams of the trained coaches did not differ in their liking of the sport, but they indicated greater enjoyment playing for their coaches and felt that their coaches were better teachers of baseball than the untrained coaches. They also rated the relationships they had with their team-mates more positively. In a similar study conducted some 15 years later (Smith, Smoll, & Barnett, 1995) the CET was presented to 152 Little League Baseball coaches during a 2.5 hour pre-season workshop, which was delivered by the second author. Behavioural guidelines that emphasized four desirable coaching behaviours (reinforcement for effort and performance, mistake-contingent encouragement, corrective instruction, and technical instruction) and discouraged four undesirable behaviours (nonreinforcement, punishment, punitive instruction, and regimenting behaviours aimed at maintaining control) were presented during the workshop. Using an experimental design, the effects of the CET were assessed by comparing the experimental and control groups of boy baseball players on their perceptions of the coaches' behaviours, their attitudes towards the coaches and other elements of their participation, and their levels of competitive trait anxiety. The results support the success of the CET in assisting in the reduction of anxiety for boys who played for trained coaches.

Cloes, Hilbert, and Pieron (1995) examined whether using an error identification video to train coaches would affect subsequent feedback given by the coaches. A control group and two experimental groups were involved in this study of seven male physical education majors in a semi-controlled volleyball unit. A multidimensional analysis of the feedback used by the

subjects provided information on the rate of feedback, the referent of the feedback, and the appropriateness of the feedback. The results indicated that coaches who received the training could improve the quantity and quality of sport skill analysis, but the researchers warned these improvements could have been affected by the individual characteristics of the subjects and the environment. More importantly, it was found that an improvement in error detection did not lead to an improvement in the appropriateness of feedback emitted. In other words, it cannot be assumed that diagnosis and prescription, the two sub-processes involved in feedback emission, are linked.

Boudreau and Tousignant (1991) used the *Système d'Évaluation du Temps d'Apprentissage (SÉTA)* (Brunelle, Tousignant, & Spallanzani, 1987), the French version of Academic Learning Time-Physical Education (ALT-PE) (Siedentop, Tousignant, & Parker, 1982) in a study to influence the teaching-learning conditions offered by volunteer coaches conducting soccer training sessions. The coaches had taken part in three theoretical training sessions of two hours each prior to being observed during a practical session. The observer sought to determine if the coach applied the principles promoted during the theoretical sessions, and also provided comments and suggestions to the coach. The results supported the efficiency of the training program and provided the course conductors with specific ideas to improve both the content and strategy of the training course.

Some researchers have used computerized systematic observation systems to study coaching behaviours (Briggs, 1991; Franks, Johnson, & Sinclair, 1988; More & Franks, 1996). More and Franks used a computer-aided coaching analysis instrument (CAI) in a study of four male soccer coaches (three experimental, one control). Over 12 practice sessions observers collected data using the CAI, coaches' journal and audiotaped recordings, to test an intervention strategy aimed at modifying coaches' verbal behaviour. They concluded that the CAI proved to

be a useful instrument for the objective analysis of verbal coaching behaviour, but that consistent results were not achieved and that the CAI, as used in this study, had limitations. Despite the attempt to understand the complexities of the human factors, the coaching context influenced the results of the intervention. Even though the researchers attempted to use a 'natural setting', in that the practices observed were regular practices for the teams, the session contents were dictated by the researchers. This could have had the effect of lowering their importance in the eyes of the coaches, which would affect the incentive for the coaches' to improve. Furthermore, since four different themes were used for different sessions, each session was likely somewhat unique, making comparisons from data somewhat unreliable.

In sum, these types of studies show that coaching behaviours can be modified through certain types of training. However, the influence of contextual factors including individual differences and the other variables that interact to make each coaching situation unique, make it difficult to arrive at consistent results that show lasting changes in coaching behaviours. Furthermore, most of these studies do not consider the athletes' perspective. The CET studies of Smith and Smoll are an exception to this because they do consider the athlete's perspective and the program seems to show consistently effects for positive coach-athlete interactions.

Supervision

The supervision of physical education teachers (by extension coaches) has been classified into three categories: classical, self-supervision, and clinical (Brunelle, Drouin, Godbout, & Tousignant, 1988). Classical supervision is the most economical and consists of establishing a checklist, which if met, is seen to 'deliver the goods'. Within this type of supervision the supervisor plays the role of 'expert' and the teacher is seen primarily as the enforcer of the program (Boudreau & Tousignant, 1991). Self-supervision, by contrast, promotes pedagogical autonomy. One of the fundamental assumptions underlying the self-supervision model is the

idea that teachers, or coaches, are the closest to their practice and therefore most attuned to the 'ecology' of this setting (Tousignant, Brunelle, Spallanzani, & Trudel, 1988). The supervisor in this model explains the conditions of the teaching-learning process most likely to achieve the goals set by the teacher. Following this the supervisor instructs the teacher in the techniques of self-observation, self-criticism, and the formulation of a subsequent plan of action. Then the teacher assesses by himself or herself the quality of his or her teaching. In coaching, there is a group of studies by researchers from Laval University that explore the use of self-supervision as a means to improve learning conditions (Brunelle, Spallanzani, Tousignant, Martel, & Gagnon, 1989; Tousignant, Brunelle, et al., 1988; Trudel, 1986, 1987; Trudel, Bernard, Boileau, & Marcotte, 2000). Trudel (1986, 1987), in his study of amateur youth ice hockey coaches, introduced a strategy to help coaches become aware of the learning opportunities offered to their athletes. The strategy involved two stages: the first including the preparation and supervision of the coach (two meetings), and the second, the cycle of self-supervision of the coach (a third meeting). Another self-supervision study with Brunelle, Spallanzani, et al., (1989) established that it is possible to raise the awareness of coaches concerning the relative importance of different elements of learning time. In this study, two volleyball and three taekwondo coaches were introduced to the concepts of self-supervision, guided by a resource person who was part of the research team. The dependant variables were learner's (athletes of the participating coaches) time spent in preparation, knowledge acquisition, and motor development as well as their levels of motor engagement in their respective sports. Finally, Trudel et al. (2000) used a self-supervision intervention with ice hockey coaches to try to affect the number of legal body checks per game, the type and frequency of penalties, and the number of injuries. Despite the fact the intervention failed to produce the desired effects, the coaches

indicated in a questionnaire that they believed their knowledge on how to address body checking had improved. They also stated they would use the strategy again.

Researchers in these studies noted that changing the behaviours of learners by working on the behaviours of teachers/coaches is difficult (Brunelle, Spallanzani, et al., 1989; Trudel, 1986). For example, as coaches augmented the time devoted to explanations, learners increased their cognitive involvement, which had the effect of diminishing the time of their motor engagement. They also remarked that self-supervision is a highly personal process and that qualitative methods would be advantageous in the evaluation of the product and the process of such an intervention strategy.

Important limitations of these types of studies, as compared to the proposed research, are first, the studies did not begin with a pedagogical problem raised by the coaches, and secondly, the researchers structured their studies on only one element of teaching/coaching (e.g., the learning time). Both of these features raise the issue of relevancy to practice.

Between the classical and self-supervision approaches lies clinical supervision, in which the supervisor helps the teacher resolve his or her own pedagogical problems. This approach respects the application of research findings relative to the ecology of the teaching situation. In other words, the clinical approach addresses the relevancy issue by helping teachers deal with problems that arise in the course of their teaching practice. According to Cogan (1973) the clinical supervisor is concerned directly with the behaviour she or he observes. After the teacher and supervisor plan a lesson, the supervisor (or someone appointed to observe in place of the supervisor) goes into the classroom and collects data on the teacher's implementation of the plan. Following the observation the teacher and the supervisor meet for a conference in which the supervisor makes the observation data available to the teacher. As such, a clinical supervisor

is a facilitator for behavioural change, and the target of clinical supervision of a coach would be the coach's coaching behaviours. This approach has not been widely used in particular because of the high costs, both financially and in time. In fact, self-supervision was introduced as a compromise approach (Trudel, 1987).

Of the three types of supervision (classical, self-supervision, and clinical), the closest to the role I wanted to play in my study is clinical supervision, although, a major difference existed up front. In my Study One I was not interested in changing the behaviours but in influencing the reflective process of coaches. In the dual role of the initiating researcher and consultant, I collaborated with coaches, proposing to help them learn from their coaching experience. Sometimes acting as a sounding board, and at other times jointly facing the coaching issues they wanted to share with me. In Study Two I became more pro-active, acting as a facilitator in the experiential learning process of groups of coaches, striving to engender learning through sharing.

Although there was an important difference between clinical supervision and what we worked on, similarities existed in terms of procedures. These include the research relationship, the idea of attacking a shared problem, and the ultimate objective of moving teachers or coaches toward autonomy. The recommended teacher-supervisor relationship in clinical supervision is one of mutual support and collegueship (Cogan, 1973). Bound together by a common purpose the two parties work together as associates and equals. This same type of relationship is the basis of a productive collaborative inquiry, which the present project is. In this case, the initiating researcher worked with groups of coaches, the coparticipants. Finally, rather than creating a dependence, both clinical supervision and the collaborative consulting approach of this study strive to help teachers and coaches respectively develop the tools to become efficient, autonomous practitioners.

An appeal for collaboration between coaches and researchers has been made by Gould, Giannini, Krane, and Hodge (1990) in a study which assessed the educational needs of 130 U.S. elite coaches. An important finding was that “the coaches have had considerable experience in working with athletes but do not have an organized knowledge system” (p. 342). These authors suggested that “a major task for coaching educators and sport pedagogical researchers would be to employ collaborative coach/researcher models that would help identify the key principles used by successful coaches” (p. 342). These principles, the authors declared, could then be used for coach education. It is questionable, however, whether it is appropriate to use successful elite coaches to build models for coaches of all levels of athletes (Trudel, 2000). It is conceivable to be an expert coach of novice level athletes and the context-specific principles that guide this coach’s work would be more appropriate for developing novice level coaches. Furthermore, the idea of identifying key principles and then using them in coach education programs falls into the category of those prescriptive approaches to teaching that are rooted in behaviourist theories of learning. Such approaches evaluate learning based on measurable behavioural responses, but, as one group of authors had noted (Jarvis, Holford, & Griffin, 1998), “Human beings are more complex than the sum of their behaviours” (p. 28).

The Limits of Existing Approaches for Teaching Coaches How to Coach in the View of Andragogy
Andragogy.

The concept of andragogy, an integrated framework for adult learning, was first developed in Europe, and did not appear in North America until 1967 when a Yugoslav adult educator named Dusan Savicevic introduced it. The label andragogy was used in order to differentiate it from the theory of youth learning, *pedagogy* (Knowles, Holton, & Swanson, 1998).

We must now advise the reader of the existence of a new meaning of the concept pedagogy. Earlier in this document we defined the field of sport pedagogy, which refers to “the

scientific study of teaching and coaching, the preparation of teacher and coaches, and the content of what is taught by those teachers and coaches” (Siedentop, 1990, p. 274). Thus sport pedagogy is not limited to the teaching-learning process of youth but includes adults as well. However, authors in adult education will often contrast adult learning, labeled andragogy, with youth learning, labeled pedagogy (Jarvis et al., 1998).

Prior to the emergence of andragogy, the theories that were applied to adult learning were those that had been developed from research with animals and children¹, hence the word pedagogy, which means “the art and science of teaching children” (p. 61). For Knowles et al. (1998) the pedagogical model is very teacher-directed with the teacher making all the decisions relating to what the learner needs to know and when they need to know it. This model cultivates a dependent self-concept in the learner, is very subject-matter oriented, and depends on learners being extrinsically motivated to acquire the necessary knowledge to get passing grades. Again according to Knowles et al. andragogy is defined by current Dutch literature as “any intentional and professionally guided activity that aims at a change in adult persons”(p. 60). Of the four possible definitions of *adult*, being biological, legal, social, and psychological, the latter is considered the most pertinent in andragogy. An individual is considered to be psychologically an adult when they “arrive at a self-concept of being responsible for our own lives, of being self-directing” (p. 64).

Assumptions specific to the andragogical model (Knowles et al., 1998).

Over the years from the time when Knowles first wrote about andragogy for the American audience, in 1968, he formulated six assumptions that he considered specific to andragogy as opposed to pedagogy. These six assumptions are: (a) adults need to know the

¹ See Knowles, Holton, and Swanson (1998) for a review of these theories.

reason for learning something, (b) adult learners have a self-concept of being responsible for their own decisions and lives, (c) the quantity and quality of experience possessed by adult learners needs to be addressed in learning strategies, (d) adults are ready to learn when they are at the appropriate level of task development and when they sense a real-life need to know, (e) adults are life-centred in their learning orientation, and, (f) internal motivators are the most potent for adult learners. Knowles originally presented four assumptions (b through e), adding the other two later, in 1984 and 1989 (Knowles et al., 1998).

Jarvis et al. (1998) claimed that Knowles was much criticized for the distinction he made between adult and children. In fact, they say that he later accepted that children are sometimes taught using student-centred methods, and equally, adults are the recipients of teacher-centred methods. Indeed, in the fifth edition of *The Adult Learner* (Knowles et al., 1998), conceded that the idea of the pedagogical and andragogical models being antithetical, no longer held. The authors acknowledged that certain features of the andragogical model might apply to the teaching of children, while the use of the andragogical model did not suit all situations in which adults were learners. Thus, the decision between which assumptions should apply in which contexts should depend not on the distinction between the adult and child learner, but on specific details of the learning context such as the particular learner and the learning goal. Further criticism of Knowles' assumptions about adult learners was raised by feminist scholars who believed that Knowles assumed the masculine norm was the adult norm (Jarvis et al.). Admittedly, the feminist movement was just beginning to emerge when Knowles first wrote about andragogy. Since then, however, authors such as Gilligan (1982) who researched developmental psychology from a feminist perspective, and Belenky, Clinchy, Goldberger, & Tarule (1996), who extended Gilligan's argument, have claimed that women (and some men)

have a more relational orientation, and that their ways of knowing are fundamentally different to those of most men.

Still, Knowles et al. (1998), in the fifth edition of their book, which claims to be “The definitive classic in adult education and human resources development” (title page), made no reference to these criticisms. What they did say is, “Learning is a complex phenomenon that defies description in any one model” (p. 152). In their approach they have tried, they claim, to “define what is most characteristic of adult learners”, and then develop core principles to match these characteristics, and suggest how to vary these principles to fit various learning situations. Above all andragogy, according to Knowles et al., should be flexible and should be viewed as a system of different elements that may or may not be applicable, and may need modification, depending on individual and situational conditions, and the goals of the learner (p. 183).

Despite the critiques, the principles of andragogy would seem to provide some guidelines for the education of sport coaches. Knowles et al. (1998) pointed to the implications of the assumptions underlying andragogy for facilitators of adult learning (see Table 1).

In response to the learner’s need to know, a primary task for the facilitator of adult learning is to raise the awareness of the learner regarding their ‘need to know’. The most accessible way to accomplish this is by highlighting the value of learning in making learners more effective performers, in their practice and/or their personal lives. To help learners move from being dependent learners to self-directed learners, facilitators need to

Table 1.

The Andragogical Model (adapted from Knowles et al., 1998)

Assumption	Consequences for facilitator
The need to know	Make learners aware of the relevance of the learning
Learners' self-concept of being responsible for own lives	Create learning environments that encourage learners to move from dependence to self-direction
The role of learners' experience	Recognise individual differences Emphasise experiential techniques Help learners examine their biases Recognise that adults' experiences are who they are, therefore do not ignore their experiences
Readiness to learn	Time learning activities to coincide with developmental tasks
Life-centred orientation to learning	New knowledge should be presented as applicable to real-life situations
Motivation to keep developing	Remove barriers by designing programs according to principles of adult learning

create learning situations that promote a gradual move towards autonomy for all. Because of past experiences, any group of adults will be more diversified than a group of children. It is therefore important for facilitators of adult learning to be aware of individual experiences, as these are part of an adult's identity, and to promote learning by using these experiences as resources. The adult's need to feel ready to learn something can be facilitated by organizing learning activities to correspond with the learners' real-life stage of development.

Furthermore, the facilitator of adult learning must design learning activities that are applicable to the real-life contexts of learners. Activities should be related to tasks and problems that learners experience in their ordinary lives. Finally those who coordinate and facilitate adult learning must design learning activities that encourage adults' natural motivation to continue developing. This means that programs must remove any barriers to learning, such as time constraints, affronts to learners' self-concepts, or lack of resources. In general, the principles of adult learning need to be taken into consideration (Knowles et al., 1998).

Andragogy versus what is out there for coach education.

This section will take a look at whether existing approaches to coach education respect the principles of andragogy. To date, designers of programs to educate coaches do not appear to have respected the six assumptions concerning the adult learner. For example, courses were nearly always removed from real-life coaching contexts; even getting to the location of a course could present a physical and financial barrier. The learning activity was the transmission of knowledge, largely through an expert presenting material in a classroom. Even the practical aspects of the courses, while involving physical demonstrations, did not usually involve real coaching situations. But as the program is in the process of changing it is worth reviewing the six assumptions with the intentions of the Competency Based Education and Training (CBET)

model. The move from the 'NCCP alone' to the 'NCCP within a CBET model' seems to be a move in the right direction as far as addressing the principles of andragogy. According to Knowles et al. (1998) the first assumption of andragogy is, the adult learners need to know why they need to learn something before undertaking to learn it. In the old NCCP all coaches were exposed to the same content, regardless of the pertinence to their practice (CAC, 2002). In the new approach content will be used only if it is related to outcomes in the specific coaching context and coaching stream (e.g., community sport, competition, instruction), which should make it easier for coaches to see the relevance. The second assumption is that learners have a self-concept of being responsible for their lives, which is facilitated when learning environments encourage learners to move toward self-direction. It is not entirely clear how much the new approach will encourage this but with an emphasis on helping coaches "become better at what they do in their own context" (CAC), it seems likely that self-direction would be an objective. The third assumption, that learners' experience should be taken into consideration, is clearly addressed in the '3M NCCP in a CBET model'. Whereas before there was little or no recognition of prior experiences and certification required attendance to courses in almost every instance, now candidates with the skills and knowledge can move straight to the evaluation stage (CAC). The fourth assumption that adults learn when they are ready to learn appears, at first glance, to be somewhat better recognised within the CBET model because education and training will be based on the coaching context including type of sport and level of athletes. With the emphasis stretching beyond 'what', to 'what... for whom', the 'how to', and the 'how to... when' (CAC), there appears to be a greater chance of new knowledge being presented as applicable to real-life situations, which addresses the fifth assumption. The last of the six assumptions of andragogy is that adults are naturally inclined toward continuing development and self-improvement, given favourable conditions. The CBET model seems to address this

assumption to a certain degree in that a more integrated problem-based approach is envisioned, which will focus on responses that are appropriate to the coaching situation. However, the important thing to note is that much of the new CBET approach is still to be delivered out of the coaching context, and based on a type of curriculum, which uses generic problems to stimulate coaches' reflection. On paper, the '3M NCCP in a CBET model' moves towards recognising coaches as adult learners, according to the principles of andragogy, at least, more than the 'current 3M NCCP'. However, the program does not go far enough in structuring the learning experience to truly consider the learner's actual coaching experience. In order for coaches, as adult learners, to really feel the need to know, and a sense of being self-directed, education needs to start with their specific practical problems.

The opportunity to work with a mentor can be a useful means to enhance coaches' learning. Such an apprenticeship model of mentoring (Nicholls, 2002), respects many of the main assumptions of andragogy described earlier. If the Women in Sport programme delivered by the Coaching Association of Canada seems to have good potential as long as the mentor plays his/her role adequately, this is not the case for other so-called mentoring programmes publicised by some sport associations. The three different mentoring programmes offered by Hockey Canada look more like information transmission or question and answer opportunities. The appointment of coaching mentors by some associations, such as Hockey Québec, and the Newfoundland Labrador Hockey Association is a step forward in that at least these mentors will work, at times, in the learning coach's context. However, the low number of mentors appointed and the need for mentors to spend time in the coaches' contexts raises doubt about the feasibility of this approach.

The relationship between the use of mentors and the CBET approach is not, at present, clear. Two of the challenges occupying those in charge of implementing the CBET approach are

supervision and evaluation. The use of mentoring, whether it is more supervisory, like in the competency model of mentoring (Nicholls, 2002), or more like the apprenticeship model, seem to be hinted at as partial solutions to these challenges. Both of these types of mentoring have the potential to enrich coaches' learning, especially if the mentors are aware of the assumptions guiding andragogy and the consequences of these for facilitators of adult learning. However, at the moment, this does not seem to be the case for those mentoring programs currently in place.

One of the aspects of the andragogical assumption concerning the role of the learner's experience is that facilitators should help learners examine their biases. Doing this is part of the reflective model of mentoring, an approach that does not appear to be used in current coach education. It is possible that an examining of biases could be encouraged within the apprenticeship model of mentoring, like the 'Women in Sport' program. Whether or not this assumption is to be addressed in the CBET approach is likely to depend very much on the types of trainer/trainee relationships that are afforded.

Summary

Thus coaches, as adult learners, need to know the relevance of what they are learning, to feel autonomous, to have their prior experiences taken into consideration, and to participate in learning activities in real-life situations. Based on this, it is not surprising that coaches have said they learn mostly through watching and working with other coaches in the field (Fleurance & Cotteaux, 1999; Gould et al., 1990; Salmela, 1996). It is also not surprising that coaches are not entirely satisfied with the formal education programs of the current system, in which coaches are expected to transfer knowledge from the context-free courses to their respective practices. Such a principle reflects an information processing learning theory, the essence of which is that "knowledge as an entity is acquired in one task setting and conveyed to other task settings" (Cobb & Bowers, 1999, p. 5). Not only is knowledge presented out of real-life working

situations, but also the coaches experience, and therefore identity, is ignored. In short, the learning model upon which the current NCCP is based does not reflect the andragogical model. However, the new '3m NCCP in a CBET model' attempts to consider more learning related to specific coaching contexts but it stops short of promoting learning in real-life situations.

In order to provide a foundation for studying how coaches can learn from their work-placed experience, we will now review some of the literature relating to learning through experience.

Learning Through Experience

The recognition of human experience as a basis for learning, then, is nothing new. As the mystique of scientific experiment declines, however, it is possible to remove learning research from the laboratory and return it to its original basis in human experience. (Jarvis et al., 1998, p. 58)

The evidence that coaches learn most about coaching from their experience (Fleurance & Cotteaux, 1999; Salmela, 1996) and that they may lack an organised knowledge system (Gould et al., 1990) raises the doubt that a system of education based mostly on cognitive learning theories and de-contextualized knowledge acquisition is adequate. An alternative paradigm for coaches' learning is one that recognises the importance of experience, thereby adhering more closely to the andragogical model. During the 1930's, Vygotsky (1987) in Russia, and Dewey (1938/1963) in America suggested a substitute for the traditional view of objective de-contextualized knowledge acquisition. More recently a number of theorists have retaken the ideas of these earlier scholars and developed an account for how individuals construct knowledge through experience (e.g., Argyris & Schön, 1978; Brookfield, 1987; Kolb, 1984; Lave, 1988; Lewin, 1951; Mezirow, 1981; Schön, 1983). This section attempts to (a) introduce the major authors related to experiential learning and its essential component, reflection, (b) to present three types of practice-based collective learning, (c) to introduce learning theories that are based on a social approach, and finally (d) to explain the model of Gilbert and Trudel (2001)

on the reflective conversation of youth sport coaches, upon which the first part of the current study is directly founded.

Experiential learning and reflection.

Dewey, who is viewed today by many as the foremost promoter of experience for learning, stated, “experience is a slippery word” (1925, p. 1). Although a seemingly simply concept, involving action and thought, which underlies many learning theories, experience is in fact quite complex. Experience involves the interaction between the self and the environment. It is complicated, however, by “the fact that previous experiences and a consideration of the experience alter the interpretation of the event and therefore the experience itself” (Beard & Wilson, 2002, p. 15). In other words, learning from experience is personal because it is influenced by our unique background, as we use existing “knowledge (itself built from experience) to bring new meanings to an interaction” (p. 18).

The link between experience and learning is well established and while the term ‘experiential learning’ “has recently become something of an ideology in education” (Jarvis et al., 1998, p. 46), the concept is not new. Indeed, as Jarvis et al. pointed out, the stories of Christ include instances of learning from experience. Beard and Wilson (2002) have defined experiential learning as: “The insight gained through the conscious or unconscious internalisation of our own or observed interactions, which build upon our past experiences and knowledge” (p. 16). Jarvis et al. (1998) defined experiential learning as “the process of creating and transforming experience into knowledge, skills, attitudes, values, emotions, beliefs and senses. It is the process through which individuals become themselves” (p. 46).

According to Jarvis et al., (1998; p. 47) most recent literature on experiential learning is likely to refer to Dewey (1938), Lewin (1951), and Kolb (1984). Other writers that have used experience as the basis of learning include Mezirow (1981, 2000), who referred to transformative

learning, Schön (1983), who referred to reflection-in-action and on-action, Brookfield (1987) who used the term critical reflection, and Lave and Wenger (1991) who spoke about situated learning.

We will briefly present the works of Kolb, Mezirow, and Schön, three authors whose writings are important to our approach. The first author, Kolb, is presented because of the ubiquity of his experiential learning cycle (see next section) and because he himself based his work partially on Lewin, who is credited with introducing “the term ‘action research’ as a label for a revolutionary way of conducting social science that linked the generation of theory to changing a social system through action” (Bray et al., 2000, p. 32). The collaborative inquiry approach used in this research project is one of many action-oriented types of inquiry that were influenced by Lewin. Mezirow’s theory of transformative learning has been selected among other theories because in the two decades since it “emerged as an area of study in adult education it has received more attention than any other adult learning theory, and it continues to be of interest” (Taylor, 2000, p. 285). Furthermore, recent literature has moved beyond traditional adult learning theory, including transformative learning theory, which has focused on the individual, to focus on “the idea that groups can learn as entities in a way that transcends individual learning within a group” (Yorks & Marsick, 2000, p. 253). Collaborative inquiry has been suggested as a strategy that can effectively “produce transformative learning for individuals, groups, and/or organizations” (p. 255). And, Bray et al. made a direct link between Mezirow’s conditions for rational discourse (or dialogue) and collaborative inquiry. They stated, “One can quickly see how the conditions for effective dialogue and the criteria we chose for operationalizing collaborative inquiry parallel each other” (p. 96). Finally, Schön’s (1983) model of the reflective conversation is central to this research project. As the reader will see in a subsequent section, his model was used to study experiential learning in youth sport coaches

(Gilbert & Trudel, 2001) and it is that study which provided the starting point for the first study in the present research project.

Kolb's experiential learning cycle.

Kolb (1984) was influenced by the work of Dewey, Piaget, and Lewin. In particular, he believed that "Lewin's description of the learning process is relatively similar to that of Dewey, which involved observation, knowledge, and judgement" (Beard & Wilson, 2002). Lewin's feedback process began with concrete experience, followed by observations and reflections, formation of abstract concepts and generalisations, and testing implications of concepts in new situations. This cycle is similar to Kolb's learning cycle.

According to Jarvis et al. (1998) Kolb's experiential learning cycle "has probably become known as the most well known of all illustrations about learning" (p. 48). For Kolb (1984) learning is: "The process whereby knowledge is created through transformation of experience" (p. 38). His model laid out four steps in experiential learning cycle, (a) experiencing/noticing, (b) interpreting/reflecting, (c) generalizing/judging, and (d) applying/testing. Critics say that the model is simplistic (Beard & Wilson, 2002) and fails to include important aspects such as feelings and emotions (Boud, Keogh, & Walker, 1985, p. 36). Holman, Pavlica, and Thorpe (1997) also wondered about the role of emotions and the effects on individual differences. They raised the issue that the model takes a cognitive approach, which separates people from the historical, cultural, and social aspects of themselves and their lives. Furthermore, they felt that rather than progressing sequentially through the cycle,

Learning can be considered as a process of argumentation in which thinking, reflecting, experiencing and action are different aspects of the same process. It is practical argumentation with oneself and in collaboration with others that actually forms the basis for learning (Holman et al., 1997, p. 145).

Miettinen (2000) also criticized the model for removing experience and reflection from the social context. This is considered a weakness because it is through interaction with other humans and the environment that learning is enhanced.

Further criticism of Kolb's cycle is raised because not all experience leads to learning. Jarvis (1987, 1992) formulated three categories of response to experience: Non-learning, non-reflective learning, and reflective learning. Experiential learning falls into the last category, and it is realised when theory is tested in practice with the result of creating new forms of knowledge that capture social reality. Beard and Wilson (2002) concluded that Kolb's learning cycle "can be regarded as a minimalist interpretation of the complex operations of the brain and therefore it is not surprising that this model is somewhat limited in describing the learning process" (p. 38-39).

Despite this, it is also not surprising that experiential learning has "become something of a new orthodoxy" (Jarvis et al., 1998, p. 55), and that the influence of Kolb's model is so ubiquitous. The strength of experiential learning comes from the fact that it underpins learning theories that can be behavioural, action-based, cognitive, or social. It involves activities that can be cognitive, social, and/or affective (Miller & Boud, 1996).

Mezirow: Transformative learning.

For Mezirow, "The human condition may best be understood as a continuous effort to negotiate contested meanings" (p. 3). He connected learning and experience: "Learning is understood as the process of using a prior interpretation to construe a new or revised interpretation of the meaning of one's experience as a guide to future action" (p. 5). For Mezirow (2000), the context (biographical, historical, and cultural) influences what we know and believe. He referred to Kitchener's (1983) three levels of cognitive processing. At the first level we read, memorise, compute, and comprehend. The second level, known as metacognition, involves our monitoring of first-order cognitive tasks. The third level, called epistemic cognition,

relates to the reflection that we engage in when faced with ill-structured problems. It is this epistemic cognition that pushes the limits of our knowledge, and results in transformative learning.

Mezirow (2000) defined transformative learning as:

The process by which we transform our taken-for-granted frames of reference (meaning perspectives, habits of mind, mind sets) to make them more inclusive, discriminating, open, emotionally capable of change, and reflective so that they may generate beliefs and opinions that will prove more true or justified to guide action. (p. 8)

For Mezirow (2000), a frame of reference is a 'meaning perspective' (p. 16). They come about through our interpretations of experience. They are influenced by the culture in which we live and by the elements of our own idiosyncratic lives, such as our families. Our frames of reference include two dimensions: our habits of mind (the assumptions that guide our interpretations of experience) and the points of view (clusters of meaning schemes) that result from these.

Transformative learning has both individual and social dimensions and implications. It involves participants in constructive discourse, through which the experience of others is used to evaluate assumptions; the resulting insight is then used to plan actions. Thus for Mezirow, reflective discourse is essential to critically analyse assumptions. During this discourse there is a "tapping of collective experience" (p. 11) which leads learners to a best tentative judgement; that is until further evidence is available. For reflective discourse to function effectively, participants must suspend judgement, employing what the Greek Skeptics called *epoche*, until a determination is made. While reflective discourse is always an active dialogue in which the meaning of experience is negotiated, it may involve interaction in a group, or between two people. It may even include the dialogue that a reader might have with a writer or a viewer with an artist.

Taylor (2000) analysed what has been written on transformative learning and found two currents; the first being theoretically critical published papers, and the second being more than

forty-five unpublished empirical studies, largely produced by graduate students. These empirical studies, some of which support the theory and others that dispute it or parts of it, “reveal a picture of transformative learning that is more complex and multifaceted than originally understood” (p. 287). Taylor suggested four foci for future research on transformative learning, (a) theoretical comparisons, (b) in-depth component analysis, (c) strategies for fostering transformative learning, and (d) the use of alternative methodologies. He also surmised that support and encouragement was needed by the adult education academy so that “future researchers can publish their work and much can still be learned about this illusive but informative theory of adult learning” (p. 323).

Schön and reflective practice.

In the varied topography of professional practice, there is a high, hard ground overlooking a swamp. On the high ground, manageable problems lend themselves to solution through the use of research-based theory and technique. In the swampy lowlands, problems are messy and confusing and incapable of technical solution. The irony of this situation is that the problems of the high ground tend to be relatively unimportant to individuals or to society at large, however great their technical interest may be, while in the swamp lie the problems of greatest human concern. The practitioner is confronted with a choice. Shall he [sic] remain on the high ground where he can solve relatively unimportant problems according to his standards of rigor, or shall he descend to the swamp of important problems where he cannot be rigorous in any way he knows how to describe? (Schön, 1995, p. 28).

The concept of reflective practice has become very prominent as a goal in professional development. Although others have interpreted this concept in broader and in some cases, perhaps, richer fashions than Schön, “It is largely his writings that have initiated the wide interest in reflection” (Moon, 1999, p. 77).

Schön’s (1983) “knowing-in-action” involves acting somewhat automatically in the midst of action, guided by existing mental schemata. “Reflection-in-action” occurs when the practitioner faces problems that challenge existing mental schemata. Like thinking on one’s feet, reflection-in-action, which occurs in the midst of action, is “a reflection on the adequacy of our

‘knowing-in-action’” (Ghaye & Ghaye, 1998, p. 5). When faced with schemata that are not effective in dealing with the current situation, the effective practitioner adjusts them. Thus reflection-in-action and double-loop learning are characteristics of effective practitioners (Knowles et al., 1998). Schön’s use of these terms is not without controversy. According to Moon (1999), Schön himself was not clear on the time for reflection-in-action. The question is whether it is always in the midst of action, or “stop and think”. Furthermore, as Moon suggests, it appears difficult, at least in some situations, to separate knowing-in-action and reflection-in-action. To use sport example, something that Schön himself did, an athlete engages in an interaction between action and correction. The prospect of making a separation between knowing-in-action (performing the original action), and reflection-in-action (correcting), and then knowing-in-action (performing corrected action) could be daunting.

Schön (1983) described another type of reflection called “reflection-on-action”, which involves a looking back on action, or a “time-out reflection” (Eraut, 1995). Schön (1987) described this as reflecting on reflection-in-action or the results of the action. This type of reflection is a “deliberate, conscious and public activity designed principally to improve future actions” (Ghaye & Ghaye, 1998, p. 5). This is the type of reflection we see in Kolb’s experiential learning cycle. Again though there is confusion because the act of stopping-and-thinking is mentioned by Schön as part of reflection-on-action (1987) and reflection-in-action (1992). Beard and Wilson (2002) relate reflection-in-action to what they call concurrent learning; that is, learning that happens during on-going, real-time action. Reflection-on-action, which they call retrospective learning, is removed from on-going action. This is when the learner looks back at past experiences in an effort to generate personal theories of action. Seibert (1999) was clear on the distinction between these two concepts. He referred to reflection-in-action as unstructured, unplanned, informal, spontaneous mental activity, being conducted by the learner alone, in the

midst of a challenging experience. He calls reflection-on-action coached reflection, because it often includes the participation of a coach or facilitator. Coached reflection is more formal, often planned, and occurs when the learner is physically apart from the experience. Generally, there is less contention about the concept of reflection-on-action as there is about reflection-in-action.

Usher, Bryant, & Johnston (1997) criticized Schön's work because it was not 'critical' enough. They found fault with Schön because the texts, which have embodied his formal theory, in the very same traditional, academic mode that he criticizes, are reflective but not reflexive. What is missing in Schön's analysis of practitioners' reflecting-in-action is "a questioning of its own situatedness" (p. 150). The use by Schön of transcripts of practitioners reflecting-in-action, without any comments on the context (such as, 'How did the evidence get to this point?') demonstrates an assumption that texts can be neutral. In the epistemology of practice that Schön seeks to develop, the concept of neutral texts is a misfit, being instead a feature of positivist technical rationality. Usher et al. noted that without reflexivity, it is difficult for readers to trace the work of reality-construction that is implicated by texts. According to these authors, Schön's evidence appears to be a text that he has constructed with the purpose of showing reflection-in-action, without reference to cultural and historical context. They concluded, "In not being reflexive, Schön's methodology does not exemplify the critical promise of his theory" (p. 169).

Usher et al.'s (1997) criticism regarding the manner in which Schön presented his evidence is justified. He demonstrated no reflection on his practice of writing. In terms of criteria for judging qualitative research, Schön provided no audit trail. As readers, we have no way of following the practitioners in their knowledge building based on the process of reflection-in-action. It needs to be noted, however, that at the time Schön's "Reflective Practitioner" was published, in 1983, very little had been written about qualitative research and

textual analysis. Usher et al. had the advantage of critiquing Schön's work, 14 years later from the perspective of postmodernism, a paradigm far removed from that in which Schön operated in the early nineteen eighties. It is unlikely that Schön set out to describe reflection in detail. Rather, he, along with Argyris, succeeded in developing important ideas, and initiating debate, concerning how theory and practice work together in professional practice.

Experience is without doubt important in learning. The importance of addressing the adult learner's experience when designing learning strategies is one of the six basic assumptions specific to andragogy (Knowles et al., 1998). However, the role played by reflection in experiential learning is not as clear as it may seem. While talking about learning through experience by focusing on reflection we might think that learning is an individual process, starting with a concrete experience. When the andragogical model acknowledges social learning, the focus remains the psychological aspects of learning. Here, the reference is to Bandura (1977) with "the emphasis on interpersonal relations involving imitation and modelling, and... on the study of cognitive processes by which observation can become a source of learning" (Wenger, 1998, p. 280). The six assumptions (see Table 1) appear to describe an adult learner who is motivated and ready to get the 'goods' that correspond to his or her needs. Others, however, suggest that learning can also be analysed from a collective point of view.

Collective Learning

Raelin (2000) referred to three types of collective work-based learning: Action learning, action science, and communities of practice. All of these approaches involve a learning team; that is, a team that may be interested in solving work-related problems but is primarily interested in learning. The first two, action learning and action science are discussed in the next section. Communities of practice will be introduced here, but will also be covered in much more detail in the literature review for the second phase of this research.

Action learning.

Developed by Revans (1982), “Action learning is a not dissimilar process to that of reflective practice. The main difference is that action learning is generally located in the workplace” (Beard & Wilson, 2002, p. 204). Using an evolutionary model, Revans stated that learning (individual or organisational) needed to be equal to or greater than surrounding change ($\text{Learning} \geq \text{Change}$). According to the International Foundation for Action Learning (IFAL)

Action learning is a process of inquiry, beginning with the experience of not knowing ‘what to do next’, and finding that answers are not available through current expertise. When expertise fails to provide an answer, collaborative inquiry with fellow learners who are undergoing the same questioning experience is always available. To be effective, this partnership in learning needs to be both supportive and at the same time challenging, deeply caring yet questioning. This is a profound shift: from dependence on available expertise and pride in the steady accumulation of knowledge to learning with and from fellow learners, honestly disclosing doubts and admitting ignorance. Action learning is based on a radical concept: $L = P + Q$. Learning requires Programmed knowledge (routine knowledge in use) and Questioning insight. The process integrates research on what is obscure with action to resolve a problem, and personal and communal reflection. (IFAL, 2003)

Rather than engaging learners in simulated exercises, as in certain types of experiential learning, action learning “Seeks to generate learning from human interaction arising from engagement in the solution of real-time (not simulated) work problems” (Raelin, 2000, p. 66). One of the objectives of this approach is to contextualise learning. Revan developed the action learning cycle, which is very similar to Kolb’s learning cycle. Beard and Wilson (2002) indicate that Kolb was likely influenced by Revan’s work.

The focus of action learning is on the perceptions of individuals but this is achieved through working in groups, called sets, in which five to seven participants use collective reflection to “help each other make sense of their action learning project experiences in light of relevant theory” (Raelin, 2000, p. 71). An action learning set meets on a regular basis and focuses on specific problems. It is through this process of sharing and receiving feedback that learning

occurs. Thus, “solving the problem is fine, but it isn’t as critical that there be problem resolution as much as that there be learning from the experience” (p. 68). Furthermore, since analysing the problem is an important part of the action learning process, participants are just as likely to change the context, or nature of the system in which the problem resides, as actually solve the problem.

Action learning has been used in widely different contexts including business, academia, government, and the service sector for half a century. A recent review of the publicly available journal articles during the period 1994-2000 (Smith & O’Neil) found case reviews and research related pieces were the top category of articles deemed to represent action learning practice, which was itself the most active of all publication categories. An article considered by Smith and O’Neil to be influential in this category of published articles describes how a researcher and city council representative used an action learning approach to lessen antagonism between members of the council (Carson, 1997). While the researcher stated her disappointment in the few members who joined the action learning team, the data revealed that the team learned the importance of genuine listening and relationship building to cultivate trust and respect between council members with diverse backgrounds and divergent views.

Most action learning projects are related to training and development activities. Among the organisations in Canada that have used action learning are TD Bank and the CIBC, Imperial Oil, Northern Telecom, Ikea, Sears, Glaxo Wellcome, and in the academia, York and McGill Universities (Smith & Peters, 1997). To summarise, action learning encourages three levels of learning, (a) about the problem, (b) about oneself and, (c) about the learning process and ‘learning to learn’. Reflective practice (Schön, 1983, 1987) and action learning are very similar. Experience is common to both approaches to learning. Problems are used to promote learning and change. Finally, many theorists in this domain have drawn from each other.

Action science.

In their graduate seminars at Harvard and MIT, Argyris and Schön sought to develop researcher-interventionists, teaching them the skills needed to “conduct research that draws on the data from organizational interventions and at the same time provides information and insights that are immediately useful in such interventions” (1974/1992, p. xvii). In a book called *Action Science*, Argyris and his students explained the process described above (Argyris, Putnam, & Smith, 1985) in which learners are encouraged to be more effective in social situations by using deliberate questioning of their interpretations and approaches to problems, with the goal of making them aware of their assumptions (Raelin, 2000). Action science was founded upon the ideas of Dewey and Lewin who were “both interested in adding to fundamental knowledge while solving practical problems” (Argyris et al., p. xi). Further developing the concept of action science, Argyris et al. distinguished it from action research because of two factors. The first of these factors had to do with the goal of action research, solving a practical problem, being seen as separate from theory building and testing. The second factor related to methodology. Action researchers tended to use standard scientific methodology in order to produce rigorous studies, but this methodology had the potential of disconnecting “from the reality it is designed to understand” (p. x) thereby rendering it of little utility.

Action science, according to Argyris et al. (1985), aims to help learners be more effective in social situations by using deliberate questioning of their interpretations and approaches to problems, with the goal of making them aware of their assumptions (Raelin, 2000). Argyris and Schön (1974) called this process ‘double-loop’ learning. Through it, learners’ fundamental values are subjected to critical reflection. Raelin explained that Schön (1983) used the term reflection-in-action for the rethinking process of action science (p. 90). According to Raelin, a practitioner within a group might share his or her frame of a problem situation, allowing the group to reflect

on how they see the situation and then provide feedback to the practitioner. This process of questioning underlying assumptions would be aimed at reducing inconsistencies between espoused theories (what people say they do) and theories-in-use (what they actually do). Ultimately “the goal of action science is to uncover theories-in-use, in particular to distinguish between those that inhibit and those that promote learning” (Raelin, 2000, p. 90). Unlike other traditional forms of work teams, action science permits and indeed, encourages participants to discover underlying emotions, such as defensive reactions, or embarrassment that can block effective interactions (Raelin, 2000, p. 91). Action science groups are often assisted by a facilitator, who helps plan learning sessions, perhaps using various tools such as concepts mapping, and the ladder of inference (Argyris, 1983). While considered a work-based intervention, action science uses problems or cases from participants’ lives but “action science decontextualizes practice so that learners can become more critical of their behavior and explore the very premises of their beliefs” (Raelin, 2000, p. 93).

Whereas Schön’s (1983) *Reflective Practitioner*, and Seibert’s (1999) coached reflection really focus on the individual practitioner, action science operates at the organisational level. Thus action science, as pedagogy, focuses on individual learning, but as individuals become more effective in their social interactions, organisations come to benefit from a higher level of public discourse (Raelin, 2000).

Communities of practice.

Communities of practice (CoP) are defined as “Groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interaction on an ongoing basis” (Wenger, McDermott, & Snyder, 2002, p. 4). In his development of this concept, Wenger (1998) proposed a social theory of learning that integrates elements of theories of social structure, situated experience, practice, and identity. Wenger

described the components of such a social theory of learning as (a) meaning, both individual and collective learning as experience, (b) practice, learning as doing, (c) community, learning as belonging and, (d) identity, learning as becoming. As humans, we engage in the pursuit of enterprises, interacting with others and the world. In so doing, we learn. The sustained pursuit of a shared enterprise creates a community of practice (CoP). The members of communities of practice learn through their mutual engagement in a common enterprise, as they negotiate meanings around their practice, become accountable to each other, and develop a shared repertoire. Through this process a CoP is formed that has a shared history including certain values, beliefs, and ways of doing things and talking. Wenger et al. (2002) and Raelin (2000) reported various examples of CoPs from such diverse domains as business, the military, and the arts.

Similar to action learning and action science, in that all three involve learning through interaction with others, communities of practice differ from the other two because the focus is on the negotiation of meanings; a process that defines their practice. As such, communities of practice fall into an approach to learning that is very much social and situated.

The Social Approach

Recently learning theorists have been moving beyond a theoretical focus on either the behavioural or the cognitive processes of individuals (Greeno & MMAP, 1998) towards an approach that considers the interaction of these processes with the social, material, and informational environments. Despite the number of well-known advocates of this latter approach in the psychological literature dating back to the early part of the last century (e.g., Bateson, 1972; Dewey, 1925; Lewin, 1946; Vygotsky, 1934/1987), the move towards a social approach has been slow (Greeno & MMAP).

According to Jarvis et al. (1998), various kinds of social learning theories can be seen to have their roots in the sociological approach, which stresses “socialization, culture, role and structure, to notions of the mind and the self as themselves social constructs” (p. 44). Subsequent psychological and educational approaches to social learning theories are related, with a specific focus “on situating content in authentic learner activities” (Barab & Duffy, 2000, p. 26). But the turn toward the social nature of cognition and meaning, with the emphasis particularly on the reciprocal nature of the interaction between individuals and the social context, was led by anthropologists (Lave, 1988; Lave, 1993; Lemke, 1997; Walkerdine, 1997; Wenger, 1998). In these situative theories identities as well as meanings are produced through interactions with the world. The focus of these theorists is on “communities and what it means to learn as a function of being part of a community” (Barab & Duffy, 2000, p. 26). The unit of analysis shifts from the individual context (the focus of andragogy) to the community context. Learning is about becoming a knowledgeable member of a community and developing an identity commensurate with this. Developing skills and understandings are part of this process.

In terms of research, Greeno and the Middle School Mathematics Through Applications Project Group (MMAP) (1998) proposed interactive research and design, being a synthetic approach that subsumes the “strengths and values of behaviourism and cognitivity”(p. 21). This approach involves collaboration between researchers and practitioners in an effort to understand the activities of a practice domain and eventually support changes that would strengthen that practice. Within such a research approach, other goals could include trying to understand the behavioural skills and cognitive concepts involved in effective participation in the practice. Greeno and the MMAP made a connection here to reflective practice, mentioning Brown (1991) and Schön (1983). Coming to understand the assumptions that guide communities of practice

would be an important part of such research because it is through these understandings that communities could support the changes they wish to make.

Sfard (1998) also joined the debate about theories of learning. Using metaphors as a tool she analyzed some of the basic assumptions underlying the two major approaches to learning that she deemed to be at the centre of the current discussions. The first of these she called the acquisition metaphor (AM). This is the metaphor that she said has dominated views of human learning since the beginning of civilized times. This is the same view that underpins what Freire (1970) called the 'banking system' of education, the view that knowledge is a commodity to be acquired, and subsequently owned, by the learner. This idea of learning underlies numerous frameworks for learning concepts, "from moderate to radical constructivism and then to interactionism and sociocultural theories" (Sfard, 1998, p. 6). The andragogical model's emphasis on the psychological aspects of learning seems to indicate that this approach also adheres to the AM. Advocates of these approaches have explained the mechanisms of learning in differing ways, beginning with the learner as a passive recipient, then an active constructor, then a self-regulated individual in interaction with teachers, peers, and even texts. Despite the wide-ranging mechanics, all of these researchers examined learning as the 'development of concepts' and the 'acquisition of knowledge'.

The second metaphor is the participation metaphor (PM) in which, for example, some researchers see learning as legitimate peripheral participation (Lave & Wenger, 1991), and others, as apprenticeship in thinking (e.g., Rogoff, 1990). Here the focus shifts from the idea that 'knowledge' and 'concept' are somehow permanent entities, unchanging over contexts, to the idea of action implied by the terms 'knowing' and 'becoming'. Learning is less about *having* and more about *doing*. Learning-as-participation implies that the learner is becoming part of something, a community. As Sfard put it,

The AM stresses the individual mind, and what goes 'into it', the PM shifts the focus to the evolving bonds between the individual and others... AM stresses the way in which possession determines the identity of the possessor, the PM implies that the identity of an individual, like an identity of a living organ, is a function of his or her being (or becoming) a part of a greater entity. (p. 6).

Having said this, Sfard (1998) makes the very important point that in terms of learning, the difference between acquisition and participation should not be viewed as the difference between individual and social. When it comes to the ontological question, "What is learning?", the AM and the PM have completely different answers. The individual - social issue, though, is not an ontological one; it is a mechanical one. As Sfard said, "Whereas the social dimension is salient in the PM, it is not necessarily absent from the theories dominated by the AM" (p. 7). In other words, it is possible to use an approach to teaching that involves the individual interacting with others, that nonetheless is focused on the individual gaining knowledge (e.g., Argyris, Putnam, & Smith, 1985; Schön, 1983, 1987; Seibert, 1999).

We do not need to look very far to see how much the acquisition metaphor has shaped our Western society. Driven by the notion of knowledge being something to own, the AM-based approach has created a competitive atmosphere that rewards individuals for developing new ideas, but also grants them ownership of these ideas. Just as Raelin (2000) noted that our society presses business managers to be action oriented, rather than reflection oriented, our AM-based learning approaches encourage individual intellectual property above the collaborative, democratic approaches of the PM (Sfard, 1998). Still, Sfard correctly pointed out the shortcomings of both metaphors, and recommended that the choice between which approaches to use as a framework should be related to what the individual researcher wants to accomplish.

There can be a tendency to adopt one of these approaches and to discredit the other ones. Sfard (1998), however, cautions, "Too great a devotion to one particular metaphor and rejection of all the others can lead to theoretical distortions and to undesirable practical

consequences” (p. 5). In fact, this is what coaches are living, a training programme with three components, theoretical, sport specific technical, and practical, each of which is presently being approached primarily through the acquisition metaphor. That is, in a manner not adapted to the principles related to acquisition according to andragogy (taking into consideration how an individual’s experience will effect his or her interpretation of the information provided) and little cognisant of learning through experience, either individual or collective.

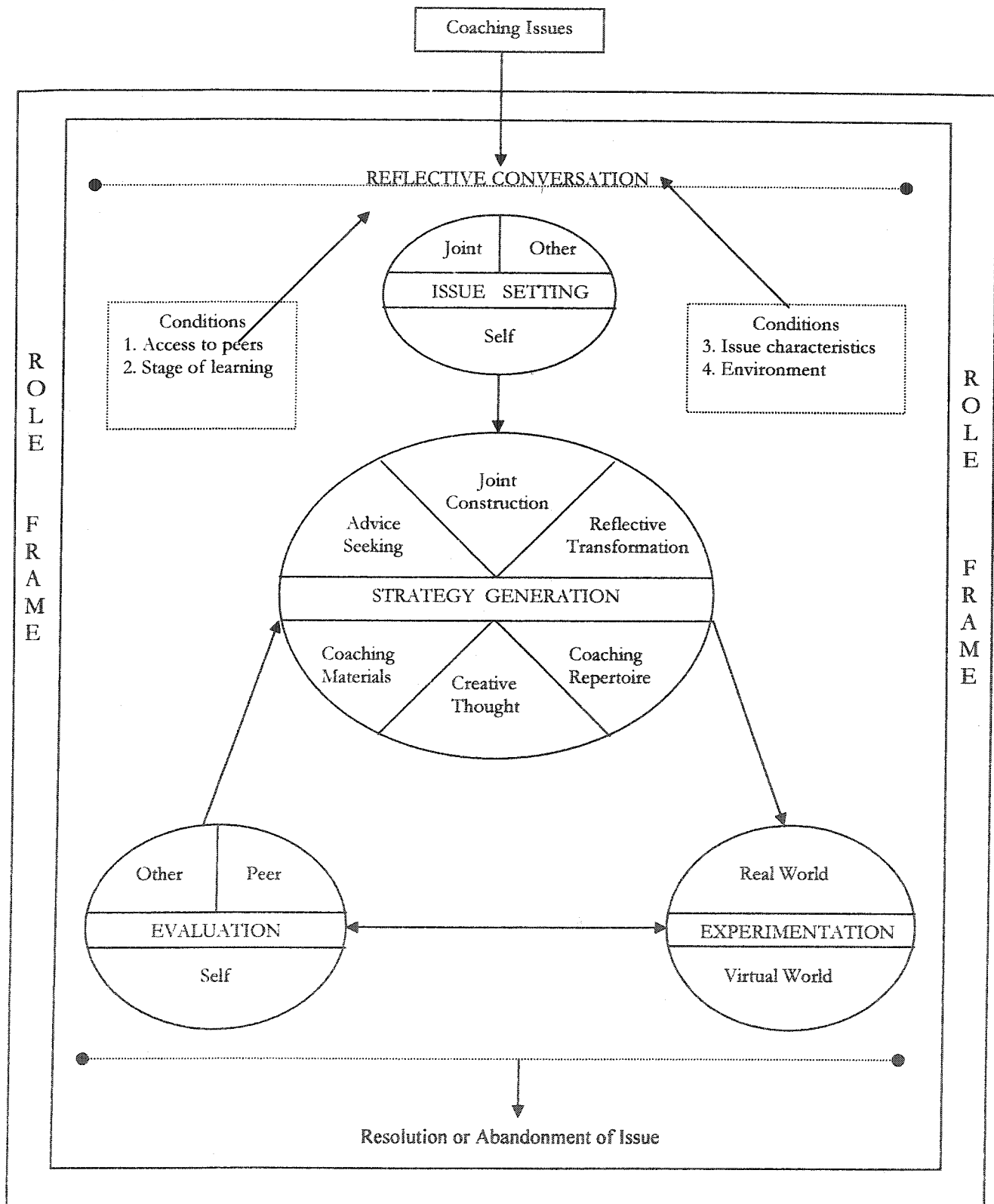
The Model of Gilbert and Trudel

Gilbert & Trudel (2001) used Schön’s (1983) theory as the foundation for a study of youth sport coaches in the field. They constructed a model (see Figure 2), which traces the experiential learning process and the reflective conversation of youth sport coaches. Affecting the reflective conversations that coaches might have are their belief systems, or role frames, because these provide the basis on which coaches interpret situations. Briefly, in their day-to-day activities, coaches were faced with coaching issues and the reflective cycle was typically initiated when an issue was set. At this point, the coaches proceeded to generate a strategy to deal with the issue, experiment with, and then evaluate the strategy. The reflective conversation cycled between the stages of issue setting, strategy generation, experimentation, and evaluation. At each of these stages, the coaches had the option of reflecting individually or in conjunction with a peer or less frequently, with other persons such as parents, players, and administrators. If a peer, an assistant coach for example, was accessible, coaches often engaged this person in a dialogue as part of the reflective conversation, thereby stretching their resources to include this person’s experience.

Practitioners, in Schön’s view, operate using implicit theories, which Schön referred to as tacit ‘knowing-in-action’. Such theories are adjusted when practitioners are faced with perplexing situations, engage in reflection-in-action, and thereby become researchers in the context of their

practice. Gilbert and Trudel (2001), for the purposes of their study, defined three types of reflection. The first, reflection-in-action, refers only to reflection that occurs within the midst of action (during competitions or practices). The second type, reflection-on-action, also occurs within the action-present, but not in the midst of activity

Figure 2. Gilbert and Trudel's model: The experiential learning process and reflective conversation



(between competitions or practices). This second type can still effect the present action whereas a third type, retrospective reflection-on-action, refers to a looking back on action (at the end of a season). A coach who engages in retrospective reflection-on-action is no longer in a position in to influence the situation upon which he or she is reflecting. In terms of how reflection operates within experiential learning, "The first two types can be considered modes of learning *through* experience, while the third type of reflection can be considered a method of learning *from* experience" (p. 31). In this study the second type, reflection-on-action was the most frequently documented type of reflection, but the authors noted their methodology favoured the documenting of this type of reflection.

A number of conditions were found to influence the reflection of the youth coaches. The accessibility of peers with coaching experience had an important effect on whether coaches would select peer-related options in the reflective conversation. However, accessibility alone did not lead coaches to use others as peer-sounding boards. Peers also had to be respected and trusted for their coaching knowledge before coaches would seek their advice. Gilbert and Trudel (in press-a) recommended two strategies for increasing coaches' access to peers, discussion groups and coaching pods. Discussion groups would be regular coaches' meetings in which coaches would be encouraged to discuss coaching issues with the other coaches. Coaching pods would involve a group of coaches who work with a similar population of athletes in the same association, getting together to form a peer network for sharing ideas.

Another factor found to influence youth coaches' use of reflection was their stage of learning. More experienced coaches relied less on coaching materials and more on construction types of strategy generation options such as joint construction and creative thought. Coaches with more experience construct new solutions to coaching issues by using a combination of different inputs.

The type of issue and the degree of challenge were further influences on the reflective conversation of youth coaches. Issues relating to performance, such as technical and tactical issues, were often resolved by the coaches' referral to coaching materials. Strategies for dealing with other types of issues such as those relating to team organisation and parental influence were not generated by referral to coaching materials. The more challenging the issue the more likely it would be to find youth sport coaches looking to others for help. According to Gilbert and Trudel (in press-a) coaching issues were important triggers for coach reflection and they recommended that time be designated during coaching courses for coaches to discuss coaching issues, thereby allowing coaches' a greater degree of ownership of the learning process. Discussions of issues that relate to coaches' actual working experiences would be more authentic and meaningful.

Finally Gilbert and Trudel (in press-a) found that the coaching environment exercised an influence on the reflective conversation of coaches. Factors such as parental pressure, the support of associations, the level of competition, the age of the athletes, and the profile of the community all contributed to the profile of reflection. In line with Schön (1983), it was noted, "environments that were open, cooperative, and nurtured creativity would be conducive to reflective practice" (p. 10). The authors recommended that sport associations or clubs engage a research-practice facilitator to meet regularly with each coach to discuss current coaching dilemmas with the goal of facilitating reflection.

Gilbert and Trudel (2001, in press-a) clearly showed that a coach involved in a reflexive process (Schön, 1983, 1987) often interacts with peers, given the appropriate conditions, to resolve an issue. Indeed, most of the authors reviewed agree that reflection in the company of others or an 'other' is very productive (Argyris & Schön, 1978; Mezirow, 2000; Moon, 1999; Schön, 1983). With this in mind, and given the notion that coaches learn from actually coaching

(Gilbert & Trudel, 1999; Woodman, 1993), we sought a methodology that could serve our research purpose (investigating what happened to learning when a sport pedagogy/psychology consultant/facilitator made herself available to a group of coaches). Our search led us to collaborative inquiry, “A paradigm for adult learning through research” (Bray et al., 2000, p. 1). The following section examines this type of inquiry in detail.

Best Methodology to Study the Facilitation of Coaches’ Learning Through Experience: A Collaborative Approach

Collaborative inquiry.

The notion that learning is situated in certain forms of social coparticipation is an integral piece of the design of this research. It is particularly fitting that the study used a collaborative inquiry approach, within the participatory paradigm (Lincoln & Guba, 2000). This approach overlaps with action science and reaches beyond it (Heron, 1996a). Like the constructivist view, the participatory worldview does not believe in an absolute account of what is ‘out there’, but this approach goes further and acknowledges “experiential knowing; that is, knowing by acquaintance, by meeting, and by felt participation in the presence of what is there” (Heron & Reason, 1997, p. 277). Within the participatory paradigm, knowledge is accumulated “in communities of inquiry embedded in communities of practice” (Heron & Reason, 1997, p. 290), and knowing is integrated with action. As a practice of inquiry, collaborative inquiry in practice provides “a framework for those interested in initiating this kind of inquiry as both a method of research and a way of structuring adult learning experiences” (Bray et al., 2000, p. xvi). Indeed, participatory research answers the call for stakeholder involvement in research about adult education (Tandon, 1988).

Inquiry within this paradigm rests on the assumption that individuals are self-determining (Heron, 1996a). Heron described this type of inquiry, which he called cooperative

inquiry, as research *with* people and not *on* them. He further articulated on the paradigm by comparing it to traditional qualitative research of the interpretive kind common in the social sciences such as grounded theory, ethnography, and case studies. These latter types he classified as research *about* people. Philosophically this type of inquiry is aligned with hermeneutic phenomenology, which holds that “researchers are not able to get outside of their human condition; they can learn only through their own embodiment of it” (Bray et al., 2000, p. 4). Through dialogue on shared experiences, “the meaning of experience is derived from the inside out” (p. 5). Participation in the research process is seen to transform practice, bringing benefit to all participants including the researcher. Participatory research is essentially transformative and it leads to a reflective action, praxis.

The term ‘collaborative inquiry’ is used by Bray et al. (2000) as an umbrella term for describing this new paradigm research. Although research in this paradigm is defined by certain parameters, there is no dogmatic way to conduct this type of inquiry. Indeed, the methods are flexible and often invented as the research project progresses. Thus while the collaborative inquiry of Bray et al. was heavily influenced by Heron’s (1996a) vision of cooperative inquiry, the use of the more general term ‘collaborative inquiry’ allowed them the freedom to practice a type of participatory human inquiry without being called upon to follow Heron exactly. For Bray et al. the defining characteristics of collaborative inquiry are “a group of peers, engaging in repeated cycles of action, and reflecting on a question of importance to all of them” (p. 12). This description seemed to suit our needs, thus we opted for the more flexible collaborative inquiry, rather than cooperative inquiry, which seemed to focus more on interpersonal inquiry into some aspect of the human condition.

The word collaboration is used to describe different sorts of research relationships including participatory research, researchers working with other academic researchers,

researchers working with practitioners, and researchers-as-participants. Despite the call, over the last 10 years, for more studies in the field of physical education in which the researcher collaborates with teachers (Siedentop & Locke, 1997) there remain very few examples of researcher-practitioner collaboration (Rovegno & Bandhauer, 1998). Rovegno and Bandhauer, who collaborated in a physical education context, noted that such research is presumed to encourage learning through reflective practice, allow for the identification of problems by the teachers which would ensure relevancy, and improve the quality of research by giving teachers' voices a greater opportunity to be heard. The purpose of their collaboration was to explore how an experienced physical education teacher adopted, modified, and expanded a constructivist approach (Rovegno & Bandhauer, 1997a; Rovegno & Bandhauer, 1997b). Rovegno, as the researcher, used participant-observation methods as well as interviews with the teacher, Bandhauer, both formal and informal, and kept a researcher journal in which she recorded salient themes that she discussed with the teacher. Rather than beginning as a true participatory inquiry, the collaboration in this study seems to have grown out of the member-checking process in which the researcher met with the participant to gather data about the integrity of the findings. Across three years of fieldwork, the investigator found that the teacher began to assume the role of co-investigator, identifying themes and initiating reflections. In the end, the researcher and the teacher described the collaborative research process as one of shared privilege and shared empowerment. As the researcher studied the teacher's practice the former benefited from the teacher's privilege of spending long periods of time with the children she was teaching. The teacher also shared with the researcher her detailed pedagogical content knowledge, which was situated in the school context. In addition, through the collaboration the teacher became an investigator, accessing the researcher's theoretical perspectives.

One limit of Rovegno and Bandhauer's study could be that although the teacher learned, the approach is somewhat unrealistic because of the impracticality and the expense of pairing a researcher with a teacher over such a long period of time. A possible solution might be offering to the teacher (or in our case, the coach) access to a researcher. Gilbert and Trudel (2001) have shown that coaches consult their peers to solve coaching issues. According to this model, a sport pedagogy/psychology consultant (coach of coaches) might work with the coaches to help them solve their issues, in a role similar to that played by the peers in their study. According to this model (see Figure 2) coaches, at times, consult with peers when setting an issue (joint option) and when generating a strategy (joint construction and advice seeking). Other times, coaches try a strategy that they have seen used by other coaches in the past (reflective transformation). Thus a sport pedagogy/psychology consultant (coach of coaches) might work with the coaches to help them solve their issues, in a role similar to that played by the peers in Gilbert and Trudel's model, without replacing the peers.

In the first part of this research (Study One), I acted as a consultant, collaborating with coaches and acting as a sounding board, jointly facing the coaching issues they wanted to share with me. Within such a relationship I was not there to prescribe what to do but to work with the coaches as a resource, developing their abilities to 'see-as' and then reflect-in-action (Schön, 1983). This aimed at expanding their coaching repertoire (Gilbert & Trudel, 2001) and strengthening the network connections between coaching course activities (e.g., NCCP), other sources of knowledge (e.g., coaching materials, past experiences, modelling), and real-time coaching activities.

Important concepts of situated learning theory were behind such a consulting approach. Situated learning focuses on "the relationship between learning and the social situations in which it occurs" (Hanks, 1991, p. 14). More than 'learning in doing' or 'learning *in situ*', Lave and

Wenger (1991) have come to view “learning as an integral and inseparable aspect of social practice” (p. 31). In our study, there were no requirements of any kind on the coaches. They were engaged in their usual day-to-day activities, with the knowledge that a consultant would be present at times and available for discussion.

Research roles.

Collaborative inquiry is characterised by the blending of the roles of researcher and subject (Bray et al., 2000). The methodology consists of inquirers moving through cycles of reflection, during which they act as coresearchers, and of action, during which they act as coparticipants. Most collaborative inquiry involves a group of persons, engaged by an initiating researcher, to coparticipate in an authentic activity. As the consultant, I was aware of the need to explain to the coaches that I would neither be acting as an assistant coach nor as a consultant to the athletes. The consulting literature is clear that coaches do not appreciate consultants that try to take over the role of the coach (Halliwell, Orlick, Ravizza, & Rotella, 1999). Acting as a consultant to the coaches precludes establishing a consulting relationship with the athletes, since confidentiality and conflict of interest issues would be certain to arise. In the role of consultant to the coaches, I would either help the coach deal with issues including those relating to specific athletes’ problems, providing suggestions and perhaps materials, or ultimately, if necessary recommending another mental training consultant to work with the athlete.

It should be noted here that the purpose of the inquiry was not to encourage coaches to depend on a consultant to solve their problems. Instead, through the process of participatory inquiry, I set out to help the coaches think through their dilemmas, teasing out tacit knowledge and expanding the coaches’ repertoires (Gilbert & Trudel, 2001).

Heron (1996a) noted that there are two complementary types of participation in co-operative inquiry; political participation, having to do with the degree of involvement in research

thinking and decision-making, and epistemic participation, having to do with involvement in the experience and action being researched. According to the degree of participation by the researcher and the participants in each of these forms of participation, co-operative inquiry can be classified as full or partial. This study involved a partial form of collaborative inquiry with both the researcher and the coparticipants involved in the reflections and decisions that were part of the consulting process, but only the coparticipants fully involved in the coaching action.

A few words need to be said about the role of the initiator in collaborative inquiry. Bray et al. (2000) emphasise the significance of experience for the participants, "Since collaborative inquiry is a process of learning from experience, the initiator needs to ground the original question in his or her experience" (p. 52). Revans (1982) writes that the initiator is motivated by a need to rectify an imbalance that is part of their experience. Out of curiosity and the desire to bring equilibrium to one's practice, the initiator embarks on a process of collaborative inquiry. It is easy to see how, in such a situation, the initiating researcher brings passion to the inquiry process.

The initiating researcher: My experience.

It is important that the person who will be the research instrument begin the project with a heightened awareness of the biases and implicit theories that he or she holds. The major influencing experiences of the initiating researcher, myself, are stated here to provide the reader with some background. Issues relating to the initiation of the coresearchers are addressed in the methodology section. As the initiating researcher, I bring to this inquiry extensive sport experience as an athlete, a coach, a consultant, and a researcher. Having competed and coached in alpine skiing at all levels from club to international, I have experienced the practice of coaching from both the athlete's and the coach's perspectives. As a member of the national team, I competed at the world level for four years. Although relatively young at the time (16-20

years old), I had some success ranking in the top 15 in the world. I stopped competing at 20, largely because of negative experiences with the coaching approach of the team. Not surprisingly, these experiences related to the psychological and pedagogical aspects of coaching. My coaching career began immediately after I retired from competition and lasted about 20 years. I coached with clubs, divisions, national teams, and the Olympic Games. I am certified Level III NCCP and Level IV CSIA (Canadian Ski Instructor's Alliance). My coaching experiences were all positive, with the exception of when I worked for a national team and was not given the time and resources to really work with the athletes. This job felt more like a team manager than a coach because there was very little time for training. I have also supervised other coaches (skiing) in their work and their training programs, both as a boss and a course conductor. From the point of view of the consulting practice, I have done mental training consulting with athletes of various sports (skiing, golf, swimming, ice hockey, snowboarding) and ski coaches, over the seven years since I began my Masters. As a researcher, I have conducted various research projects including a qualitative Master's thesis on the subject of coach-athlete communication (Culver, 1999). As a student and teacher of courses at the undergraduate and graduate level, I have been exposed to the scientific knowledge relating to sport pedagogy/psychology. In all of these roles, I have experienced what Revans (1982) referred to as imbalance; that is, experiences within those practices that planted the seeds of passion that I bring to this inquiry.

Data Generation.

The term 'data generation' is used because it is the preferred term of Heron (1996a). Rather than seeing data waiting in some "ready-made form" (p. 18) to be collected, Heron sees inquirers generating data as they shape their experience of the world. Schwandt (2001) also advocated for the use of data generation rather than data collection because "data are generated

or constructed within conceptual schemes and by various means that are deemed appropriate to serving particular purposes and answering particular questions” (p. 108).

Data in a collaborative inquiry are generated in the action phases. Most of the standard techniques for qualitative data generation may be employed, depending on the activity and the context (Heron, 1996a). In this research we were interested in generating data on the influence of a consultant/facilitator working with coaches to help them learn from their everyday coaching experiences. The following techniques were used in this research: Interviews, participant-observation, round table meetings, journals, and e-mail messages (see Table 2). The general approach to data generation is given here. More specific methods for each study are detailed in the respective section.

Table 2.

Data Generation Techniques and Purpose

Technique	Purpose	Study One	Study Two
Cultural interview	Experience and role frame	x	x
Participant-observation	Understand culture, establish trust and keep abreast of context	x	x
	Check role frame components		
Informal process interviews	Keep in touch with coaching issues	x	x
	Encourage coaches to reflect		
Post-season interviews	Assess collaborative process and judge inquiry outcomes	x	x
Coaches' e-mails	Share issues with consultant	x	x
	Respond to consultant		
Consultant's journal	Document process and reflections	x	x
Meetings with supervisor	Peer debriefing	x	x
Knowledge sharing maps	Describe coaching interactions	x	
Round table meetings	Learning as social coparticipation		x
Summaries (collaboration, interviews, and RT meetings)	Condense data for ease of coaches	x	x
Letter from Coach Leader (Study Two, Part One)	Introduce process to coparticipants of Study Two, Part Two)		x
Other documents by initiating researcher	Reflection and analysis	x	x

Interviews and round table meetings were the primary construction site for knowledge, in this research project. In line with Kvale's (1996) traveller metaphor the consultant and the coaches, through dialogue, engaged in a process of reflection that lead to new ways of understanding. A first set of interviews, of the cultural type (Rubin & Rubin, 1995) were used so that the consultant could learn about the coaches' experience and philosophy. Questions in these interviews also tried to discover whom the coaches approach when they encounter a coaching issue (Gilbert, 1999). The second set of interviews with the coaches focused on whether their practice had changed through the collaborative inquiry. These interviews served in part to judge the outcome of the inquiry. Coaches were asked how, when, and, why they might feel that the collaboration was useful. Informal process interviews were conducted over the period of collaboration, in each context, to keep in touch with the issues that comprised the coaches' work. Occasional coaches' e-mails and the consultant's journal entries (electronic or other) provided discussion points for these interviews, which were an integral part of the action/reflection cycle, providing opportunities for the coaches and the consultant to reflect back on observations and interpretations of their work together. These informal interviews are referred to as conversational interviews or dialogue (Patton, 1980), and implicit in their definition is the concept of cooperative sharing (Moustakas, 1994).

Participant-observation, in which the initiating researcher (in the role of consultant/facilitator) was a full and active participant (Wolcott, 1995), was intertwined with the other data generation procedures. Schein (2001), in a discussion about clinical inquiry/research, created a typology of researcher/consultant/subject/client relationships in which he described eight types based on the relative degree of research/client involvement. The eighth type, called process consulting and clinical inquiry, is defined by high involvement of both the researcher/consultant and the subject/client. Even though Schein saw this type of inquiry as

client initiated (which is not the case in this research project) his description of this type of observation is appropriate for the current project. He said, "In most consulting situations there are extensive opportunities to hang around and observe what is going on, allowing the helper/researcher to combine some of the best elements of the clinical and the participant observer ethnographic models" (p. 233). Another form of collaborative research, community-based ethnography makes use of this type of participant observation (Stringer et al., 1997). Through participant-observation I was able to better understand the local cultures, to establish trust with my coparticipants, and to keep up to date on what was happening in the different contexts. Also related to the type of participant-observation used in this project, is a description of data collection techniques used in action science whereby "Observations are... combined with interviews or with intervention activity, so that the action scientist can get data on participants' reactions" (Argyris et al., 1985, p. 241). My journal, which served as a record of these observations as well as my reflections, was therefore a very important tool for both data generation and analysis. The meetings in which I met with my supervisor, many of which were recorded, were another source of data. Throughout the research various data were generated as a result of my collaboration with the coaches. These included knowledge sharing maps, the round table (RT) meetings, summaries of collaborative relationships, interviews, and meetings, a letter by one coach to other coaches in Study Two, and several other documents based on my reflections as the initiating researcher.

The Inquiry Outcomes

Constructing new meaning through exploration, research, and individual and group change is the prime concern of collaborative inquiry. (Bray et al., 2000, p. 88)

In line with the primary purpose of collaborative inquiry, this research project had a practical goal: helping coaches learn from their everyday work experience. Thus the outcomes

are not solely for the sake of the research, or the researcher, but also for the participants and their practice (Heron, 1996b). The overall goal of the research is transformative, in which the primary outcomes are the practical skills developed and the resulting changes that these bring to the participants' practice. Secondary outcomes of this type of methodology are the informative propositions, which report the practical, and provide descriptions of the contexts in which the practical skills were applied, this report being one of these.

Data Analysis

The goal of the analysis for this research project was the description of the collaborative work and the settings, with individual coaches in Study One and groups of coaches in Study Two. Meaning making is ongoing and change is a constant part of the collaborative inquiry process (Bray et al., 2000). In this light, analysis in collaborative inquiry occurs throughout the duration of the inquiry group's existence. Participants learn from experience within and outside the group, but it is the collaborative meaning making that adds value to this process. This is accomplished by enriching the insights gleaned from participants sharing their experiences, and having these interpretations validated within the group. In order to understand the experience of the participants, the analysis must lead to a capturing of the participants' experiences within the collaborative inquiry.

The overall analysis remained my responsibility, as the initiating researcher. In this light, the analysis has a multi-layered aspect to it, with each layer relating to my different activities as the initiating researcher. Such activities included a) being a co-participant with each individual coach in the process of learning from experience and reflective conversations, b) examining the role of a consultant/facilitator working with coaches, and c) fulfilling the role of graduate student undertaking a doctoral dissertation using collaborative inquiry methodology.

As the initiating researcher I took responsibility for documenting the process. This was accomplished through my journal and the records of my meetings with the coaches. In keeping with the tradition of the participatory paradigm, the analysis and subsequent displays of data should before all else be tangible and useful for the participants (Kelly, Mock, & Tandon, 2001). In the present research the knowledge sharing maps and summary notes are examples of tangible and useful data analysis and displays.

Within these various activities the inductive analysis invoked both the strategies of categorical aggregation and direct interpretation seeking patterns and comparisons (Stake, 1995). Throughout the duration of the project, the analysis process was discussed in the peer debriefing sessions. As well the coparticipants contributed to the analysis by their comments on the data displays. The most significant feature of data analysis was its on-going nature. Analysis of one phase of the project guided the way for the next phase.

Study One

Coaching Context

The study took place over six months from May until October (2001) in a nationally renowned athletics club. My coparticipants in Study One were five coaches plus the head coach. The club rented small spaces at the track for the administration office, a weight room, and equipment storage. However there was no clubhouse and no coaches' room. As is common for athletics coaches in Canada, all were volunteer coaches, although two coaches, the head one and the one in charge of youth camps were paid for administrative duties within the club.

Research Questions

Mason (1996) stated that the research questions are the “backbone of your research design” (p. 15), because they are “the formal expression of your intellectual puzzle” (p. 16), in other words, they are: “What you want to understand” (Maxwell, 1996, p. 49). In qualitative research, the research questions are considered initial questions. Somewhat general in nature, they should help bring focus to the study without unduly limiting the possibilities of exploration (Marshall & Rossman, 1999).

Assuming that first, coaching knowledge and coaching competence are developed through actual field experience, and second, there is a place for a consultant, acting as an ‘other’ as in the manner of the model of Gilbert and Trudel (2001), to help coaches learn from their everyday coaching experiences, the following question was the initial research question for Study One: What are the dynamics (“the pattern or history of growth, change,

or development” (Stein & Urdang, 1966, p. 445)) of the collaboration of a consultant working with individual athletics coaches to help them solve their everyday coaching issues?

Secondary questions that might further illuminate this interaction were (a) What type of issues do the coaches discuss with the consultant? (b) With whom else do the coaches interact in relation to their coaching practice? And, (c) What role does the consultant play in such collaboration?

Methods

Coparticipants

The head coach of an athletics club was approached by me regarding the project. Presenting myself as a consultant, I emphasised that I would be making myself accessible to the coaches to help them learn from their everyday coaching experiences. Using the model of Gilbert and Trudel (2001), I pointed out how a consultant could be useful to coaches who were facing various coaching issues or challenges. The head coach expressed enthusiasm for the project and gave me the go-ahead to proceed.

Due to the amount of time needed to carry out this type of research, I set out to collaborate with four to six coaches. The coaches were part of total team of about 17 coaches working with this club. The coaches who participated in this study were selected based on the suggestion of the head coach, and on my ability to establish a relationship with them. They included two distance coaches, three power and speed coaches, and one development coach. One of the power and speed coaches was the club head coach and was nearing the end of the second year with the club. Another speed coach was responsible for the youth camp coaches. Their coaching experience ranged from 2 years to 30 years at levels from club to world class. The hours that the different coaches worked varied but there were

many occasions when they overlapped. The number of athletes working with each coach varied between 4 and 24.

Data Generation

Interviews and participant-observation were the principal forms of data generation in this study. As the researcher/consultant I conducted two formal interviews with the coaches (see Appendix A), one at the start of the collaboration and one after the season. The first interviews were of the cultural type (Rubin & Rubin, 1995) in which I sought information regarding the coaches' background experience and their coaching philosophy. The second interviews, at the end of the collaboration, aimed to gather the coaches' perceptions regarding my analysis concerning knowledge sharing and the collaborative process. As well, in my role as consultant, I was engaged in the collaborative process as a coparticipant and observer. During these times, data was generated through on-going process interviews as I worked with the coaches over the duration of the season. The use of the term 'interview' in this latter incident might be misleading since these process interviews were more correctly informal dialogue that was part of the collaborative process rather than designated interviews. These mostly took place during the observations, at the training site and several competition sites. Other forms of data generated include my journal, e-mail inter-changes between the collaborators, and the knowledge sharing maps created by the researcher/consultant and commented on by the coaches at the end of the season (see Table 2, on p. 63).

Findings

No standard format is suggested for reporting qualitative research, therefore researchers are left with the task of writing in the manner they believe will best portray the richness of their research (Merriam & Associates, 2002). The findings in a research project such as this one involve a description of the collaborative process, a telling of the story (see Barab, Barnett, & Squire, 2002 and Grossman, Wineberg, & Woolworth, 2001 for examples). As such, this is the story of my collaboration with the athletics coaches. The narrative form, including the use of excerpts from my journal, allows the reader to follow the meaning-making process as well as the thinking of the group. Throughout the findings sections of this dissertation, you, the reader, will come across parentheses which link parts of the findings to numbered notes in the discussion. We felt it important to tell the story in a fluid manner, aiming to portray the lived experience of the collaboration, in such a way that would respect my coparticipants by making the story accessible to them. However, we also saw the sense in linking certain comments directly with the relevant parts of the story in discussion notes. We suggest that you read these notes as you proceed through the reading of the findings, moving back and forth between the two sections. The purpose of these notes is to deepen the reader's comprehension of our interpretations of the collaborative process and how these relate to the theoretical concepts upon which this research is founded. Following the discussion note section, there is also a general discussion for each study in the research project. These general discussions bridge the central themes in relation to the research questions. Finally, there is an overall discussion at the end of the thesis.

The Beginning: First Contact

Through an acquaintance at the university, I was put in contact with Jerry, the head coach of the track and field club. I called him and we agreed to meet to discuss the project. In our introductory conversation, I discovered that he was an ex-high schoolteacher and councillor. I had prepared a document to explain the project to him (see Appendix B). The meeting went well and he was interested in the project but I did learn some lessons from this first encounter. (See Study One Discussion 1) This extract from my journal written after this meeting explains these lessons.

Be careful about using the term 'reflective'. Do not assume that the coaches will know what it means. He asked what it meant. I need to say it in everyday coaching language that they can understand and relate to. I need to sell the project to the coaches. Do a "What's in it for you" to get their attention. This I feel fine about since I have gone through this spiel but did not do so with him, because I followed my info sheet which launches into the theoretical background; a little too much for the coaches. (My journal, May 7th, 2001)

After the head coach had given his approval for the project, I asked when might be a good time to meet the coaches and see which ones were interested in participating in the study. Since the groups were split into two different training schedules the head coach suggested that I show up at both times and try to catch the coaches after their sessions. An announcement (see Appendix C) was e-mailed to the head coach and he agreed to circulate it. This proved to be ineffective. I went to the track on different days, during the different training times, but I never succeeded in gathering the coaches together. I then asked Jerry if it would be better if I e-mailed the coaches directly and he said, "Yes". I did this and sent a note to Jerry confirming so. Here is that e-mail:

Hi Jerry

Just so that you are aware, I have e-mailed Scott, Colin, Andrew, Ron, Van, and Ellen. I could not find an address for Darron. Good luck this weekend and I will call you early next week.

Thanks, Diane

Hello Coach XXXX

I have been talking to Jerry and he suggested I contact you to see if you would be interested in participating in a project on developing coaching excellence through learning from experience. I would like to meet you for a few minutes and explain what it is about. Please give me a call or send an e-mail. I am free Saturday morning and anytime Mon., Tues., or Wed. next week. This is an interesting project and addresses knowledge construction in a quite different way than do coaching courses.

Thank you,

Diane Culver

University of Ottawa

Following this I got replies from three coaches (Van, Ellen, and Ron) and arranged to meet them to do the first interview. Eventually I met individually with two more coaches (Scott and Colin) as well as Jerry. Due to scheduling problems Andrew did not partake in the study. Before conducting the interviews, I provided each of them with an information sheet (see Appendix D) and discussed the project. Briefly, I explained my background, the Gilbert and Trudel (2001) model, and the concept of collaborative inquiry. I stated,

In the proposed study, I want to act as a facilitator in the reflective processes that coaches frequently use to promote excellent practice in sport coaching. This means I will be a participant in your muddling through certain coaching challenges. I will act like a sounding board for you. (Appendix C)

Each coach approached agreed to participate (see Study One Discussion 2) and signed a consent form (see Appendix E). At this time the first interviews were conducted to gather information on the coaches' background experience with coaching and their philosophy of coaching.

Knowing the Coaches

Coaches' background experience.

Information regarding the coaches' background experience is presented in Table 3. All of the coaches had experiences as an athlete in track and field. Two had been national level athletes as teenagers (Ellen and Colin), for two others (Jerry and Scott), track and field

was one of several sports they did in high school, but was not their focus, thus their experience was limited. The two distance coaches (Ron and Van) had run for a number of years as adults. Most of them also had many years of experience as coaches. It might be important to note that two were high school teachers (Jerry and Scott) who became involved in coaching athletics at their schools; therefore teaching and coaching were part of their full-time jobs. In the present study, the coach with the least coaching experience, Ellen with 6 years, had in fact been an international athlete. Altogether, this was a group of coaches with extensive experience. Their experiences as athletes and coaches are factors to consider in this study because they can influence how coaches learn. **(See Study One Discussion 3)**

The reflective conversation process starts with a coaching issue (Gilbert & Trudel, 2001). When the coaches in the present study were asked in the first interview to give an example of a coaching issue or challenge, one replied, "Every day is a challenge" (Scott, interview 1). Another said, "Well there are so many" (Ron, interview 1). The indication

Table 3

Study One Coaches' Background

Coach name	Ex-athlete ^a	Years coaching	Level of athletes
Van	Yes ø	30 +	Club to national (juniors)
Ron	Yes ø	14	Club to international (seniors)
Ellen	Yes +	6	Development
Jerry	Yes -	10-15	Club to international
Colin	Yes +	25+	Club to international
Scott	Yes -	28	Club to international (juniors)

^a Extent of experience as an athlete: (-) = limited, (ø) = medium, (+) = extensive

from the first interviews was that these coaches believed there are many issues that might trigger a reflective conversation. (See Study One Discussion 4)

Coaches' role frames.

Gilbert and Trudel (in press-a) are saying that not all coaching issues pass through the reflective conversation. The role frame of a coach (i.e., his/her coaching philosophy) will filter coaching issues affecting how practitioners view problems and develop strategies. Coaches, like other practitioners have complex belief systems that guide the decisions they arrive at in their practice. Role frames are the set of beliefs that are used to interpret situations. According to Gilbert and Trudel, boundary role frame components are objective conditions of the coaching environment such as, athlete age, competitive level, and gender. Internal role frame components are personal views of coaching, which are framed by the boundary components. In the present study, interview questions relating to coaches'

philosophies and what they consider as important in their job helped to determine coaches' role frames. Participant observation and informal interviews were used to check these.

In terms of boundary role frame components, the coaches in the present study believed that the age and competitive level were two components that influenced their approach. With the younger athletes, the coaches seemed to believe that it was important not to push too hard, but at the same time they felt it was okay to coddle them, when necessary. It was clear that athletes who were considered by the coaches to be more competitive were treated differently, especially in relation to the degree of intensity in training. Here is what one coach of juniors (aged 14 to 19 years old) said.

[With junior athletes] I have a very loose philosophy. I believe that if they want to come they will come. I do not put any requirements on them to attend workouts. If they are not attending workouts during a certain period I am not going to chase them down to ask whether or not there are going to meets.

If I were coaching senior athletes I would I think develop a different attitude towards senior athletes. For them it would be, either do it or don't do it. Be serious about it or don't waste my time.

There is always a group within the larger group... a core of more serious athletes who are there almost all the time. And to them, I let them know that I want to hear from them if they are going to miss more than one workout. I want to know what's happening. (Van, interview 1)

Also, from a coach working with even younger athletes, "We only really work on a handful of them... The more intense ones... there are about four or five of them that we have to be single on in terms of what we think they should be doing" (Ellen, interview 1).

Another coach who worked with juniors and seniors, including Olympians discussed how he would not push too hard with a young, very talented athlete.

I have a 16-year-old kid right now who is busting up the track. I have to look at a four year plan... five or six, and keep him interested and not burn him out. How many times have I seen kids that age come and coaches just run then into the ground?... So this year all I am doing is setting the hook....I want him to go out and have a good experience. (Colin, interview 1)

This idea of not pushing too hard with juniors was supported by one of the junior coaches when he said that what was important was “To provide an atmosphere where the junior athletes want to keep up at the sport” (Van, interview 1). The following comment about goals and motivation by another coach also points to the use of different approaches for juniors than for seniors.

I ask them to post them [goals] up, in their bedroom or bathroom, somewhere they see them every day, and I have a copy of them. So, yeah, I revisit them. Or I would say, “Don’t forget this, or...” If they seem to be wondering, I try to get them to focus. But senior athletes that I coach at the higher levels, they are so motivated, I mean you have to get them to go the other way! You have to back them off sometimes. No... they are motivated as hell. (Ron, interview 1)

A third boundary component was gender. All of the coaches coached both genders, although some had more females than males and others the opposite. Van, who worked mostly with junior women, indicated that this was a challenge.

The most interesting coaching challenge that I face on a relatively constant basis is the psychological side. My group is primarily been young women.... Dealing with young women, I find it amazing that so many of them lack confidence. These are bright, attractive, accomplished young women and yet their biggest problem is their confidence problem. That’s been a challenge at varying levels, and I have not found a way... there is no absolute successful way of dealing with it. It is trying to work with each individual. (Van, interview 1)

In my journal I noted that one of the coaches who worked primarily with senior athletes, and mostly men, expressed dismay when the coach of the juniors prodded, very gently, some of the junior women. I wrote,

Van has three young girls that cruised a run that was supposed to be hard and when he spoke, very calmly and not angrily to them, one started crying. Ron made some denigrating comments, to no one in particular about this.... Girls’ crying is an issue for these male coaches. No news there! (My journal, June 27th, 2001)

Although the training methods for women did not seem to differ from those for the men, gender seemed to be a boundary role frame for some of the coaches, particularly in terms of the psychology of coaching.

Internal role frame components that surfaced with these coaches were similar to those of the youth coaches in the Gilbert and Trudel (2004). Fun, personal and sport specific development, discipline, and fostering a love of sport were all evident role frame components. The head coach emphasised fun and personal development, especially with the development level children (aged 8 to 13 years old).

We keep things in fun mode. It's good to compete as a youngster but not for the sake of the competition itself. There are so many other things that you can get out of it. And winning and losing is totally de-emphasised. The important thing is the experience. (Jerry, interview 1)

One of the development coaches reinforced this view; "The other issue is coming up with the right kind of programming for those kids that are the more intense, without making it too serious. Because they are still 12, they want to have fun... and developing some leadership" (Ellen, interview 1). There was a definite awareness among the coaches of the importance of the social development of the children.

If they were not enjoying the social part of it plus the physical part of it, the progression, they are not going to be here.... Well especially in the young ones, the fact that all of them come from different schools, so they interact... that is important for a lot of them who will never be great athletes. That they learn a lot just from the group. (Ron, interview 1)

Two coaches spoke of both skill and personal development. One said, "To get out what the athlete has inside of them... Getting the performance out of them.... And part of my job is to educate them; teach them how they can get it out themselves, with my guidance" (Jerry, interview 1). Another spoke of providing "them with a good foundation and a love of the sport so that they want to continue training" (Van, interview 1).

As for discipline, two coaches mentioned that discipline had only been an issue when an athlete was disrupting the group by being late or very irregular in their training.

After six months of spending an average of 10.5 hours per week at the track observing them and conversing with them, during practice and meets, I came to the conclusion that not only did the coaches possess sound coaching philosophies, but also they actually did what they said they do. In the first interviews the coaches revealed themselves to be athlete-centred. They all professed that communication with their athletes was very important because without good communication the athletes do not develop. For example, one coach said, “Every work-out we try to make a point to talk to everybody, you know, when they are stretching and that, we’ll come over and try to have a chat with everyone, see how they are going” (Ron, interview 1). Even with over twenty athletes per group, this was nearly always so. (See Study One Discussion 2)

Based on Gilbert and Trudel’s model, once a coaching issue is identified as important according to the role frame, coaches will elaborate a strategy to solve it. In that effort coaches will often work with other people. When faced with certain issues, the coaches in this study indicated that they would consult with peers as part of a reflective conversation. For example,

I have just bounced ideas off and it always comes down to making your own decision as to what your style and whatever approach you feel you are going to use. Yeah, if there are difficult situations then definitely, I have to go with those who have experienced what I am going through. (Colin, interview 1)

A coach said that he believed there was more interchange between the coaches in this club than in any other club that he had seen. Another referred to interchanges with coaches from outside the club, “Other coaches in the same field as I am... I think you do a lot of discussing of the issues when you are at meets and when you’re at clinics and things

like that” (Scott, interview 1). Thus while some coaches may not have access to peers, those in the present study did. (See Study One Discussion 9)

The analysis of the first interviews with the coaches indicated that these coaches were ‘valid’ participants in a study looking at the dynamics of the collaboration of a consultant working with individual athletics coaches to help them solve their everyday coaching issues. Our coaches were in a general sense reflective practitioners because when they were faced with a coaching issue, this issue was first judged using their coaching philosophy (role frame) (see Study One Discussion 7) and then when developing a strategy to solve the issue they often consulted other people.

The Collaborative Process

As I worked with coaches individually (see Study One Discussion 8) I continued to act as a participant-observer, going to the track during practices and meets. But the process was far from routine and did not appear to be following any particular pattern of collaborative research. The following excerpts from my journal are typical of the ambiguity of my feelings.

Feeling very refreshed after the trip and energised that this project is really something unique that should contribute substantially to the coaching literature. Also feeling apprehensive about the process of the cycles of reflection and action and hoping that the coaches will really come to the party. (My journal, June 14th, 2001)

I wonder if 6 coaches is too much. Can I spend enough time with them all. But then the cycles may not eventuate with all of them. In fact at this stage I wonder if there will in fact be any cycles, as described in the proposal???????????????? (My journal, June 25th, 2001)

Still feel apprehensive regarding what the data is going to look like and how the cycles are going to go. I am glad that I have at least 6 coaches to start, as I feel certain that they will all give a different flavour to the process. This is as it should be, I think. (My journal, June 28th, 2001)

As the study progressed I reflected continually on the research process, both on my own and in collaboration with my supervisor and peers. What was clear was that while I had initiated the project, making myself available to the coaches as a consultant, the form of the consultation followed the context. Driven by the situative approach, we wanted to avoid the expert consultant role, in which I would prescribe solutions to the coaches' problems. Instead, we sought to describe what role I could play in the development of coaching knowledge.

As discussed above, the coaches in this study were highly experienced and this had repercussions for both the types of collaboration that ensued, and the issues raised between the coaches, and myself, as consultant. Essentially, in my role as participant-observer, I spent my time hanging around the different coaches (see Study One Discussion 9). As they raised coaching issues, we would discuss them. At times I suggested that the coach seek help elsewhere, for example, with other coaches or the head coach. A sport psychology consultant was working with the club so the coaches and athletes were exposed to performance enhancement strategies (for athletes) and had access to this person for consultation on these strategies.

The collaborative relationships between the coaches and me were each negotiated individually over the first part of the season. Here is an example of the establishment of one collaborative relationship. In this excerpt from my journal K is my original contact with the club.

Monday, June 25, 2001 Practice (5-7:30 p.m.)

Spoke to K quite a while and she filled me in on some of the groups etc. She encouraged me to pursue Colin, so I did and when I asked him if he was interested in the research, he said, "Sure, I've got nothing against what you are doing", which meant 'yes'. Interesting way to say so. He is the one who said at the start, when I described the project (he was the first coach other than Jerry that I described it to), "I don't see a problem if that is all it is". Should be an interesting one. To meet for interview on Thursday between 3-4 p.m. (My journal, June 25th, 2001)

In the original plan for this study the coaches were asked to keep a journal and if they chose to they could communicate with me via e-mail. Only one coach shared any journal entries with me but four of the six coaches communicated with me via e-mail, sometimes copying me on e-mail exchanges that they had with others. The negotiation of my relationships with each coach included a process of establishing how each coach liked to interact with me. For instance, it became clear that some coaches did not want to use e-mail at all.

Another thing that we talked about was that since I discovered last night that Colin is not an e-mail person, it will be very important for me to spend the time with him at the track because I am unlikely to get any other contact with him. Although, I feel that he is open and he is good while I am there, so I definitely need to be around for that. (My journal, June 28th)

Regardless of my having come to the conclusion that I needed to be around Colin in order to collaborate with him, several weeks went by before I really spent time with him. During this time I was at the track a lot, but spending time with the other coaches, and only seeing Colin in passing. I wondered if six coaches might be too many. Then Colin actually commented.

"You look busy. You seem to be working with a lot of people". I wondered if this comment indicated that perhaps I might spend a little more time with him, that is, if I want to really collaborate! So I made it a point to ask him when he was going to be there yesterday and I went for 3 p.m. He didn't actually arrive until closer to four. Some of his athletes were there and had started warming up. I watched him for several hours and it was very interesting (see My journal July 17th).

At the end of the session he said that as far as our work together went there were a couple of issues to discuss. (My journal, July 18th)

Whereas, in the planning stages of this study, I did not think that the bulk of my collaboration with the coaches would be during their actually coaching work, it soon became clear that indeed, this was how the collaborations would work. The use, or not, of e-mail to communicate with me was not a function of the individual coach's familiarity with the technology. I originally thought this might be the case, so after I sent the first e-mail message to the coaches inviting them to participate in the study, I checked with those from whom I did not get a reply. I asked Colin, "Are you not an e-mail person?" and he laughed and said, "Nope!" Later in the study he actually got his e-mail up and running, but we did not communicate via it. Jerry, on the other hand, was a very active e-mail person, answering my 'housekeeping' messages promptly. But when it came to our collaboration, he did not want to use e-mail.

With Jerry, a little bit after the interview, I said that the journal thing and the e-mail was important but he said that he preferred to do it in person... I said that it really didn't matter, I would be around and that if he wanted to just do it like that that would be fine too. That's part of my process of negotiating with each person, and also being fair and fitting into their plans. (My journal, July 7th)

Even for those coaches that used e-mail, they only used it with me to supplement our time spent together when I was a participant-observer. In other words, the relationship established through hours of personal contact acted as the foundation for these e-mail communications (see Study One Discussion 10). The following is an example of a coach using e-mail to invite me into his reflective conversation.

After sharing a series of e-mail exchanges that Van had had with one of his athletes, his final note to me on this interchange is worth presenting for two reasons. Firstly, this sharing is an excellent example of the level of trust and collaboration that existed between

the coach and me. Second, because it is a glimpse into the reasons why these coaches (as do many others) devote so much time and energy to their coaching. In reading this excerpt it is important to remember again that these athletics coaches are volunteers, who work full-time at other jobs and still coach about 10 to 30 hours a week.

Diane, as you can well imagine, to see that you play as important a role as this in a young person's life is far more rewarding than anything I would ever do in my real job. (Van, e-mail, June 22, 2001)

Coaching Issues: The Nature of Our Collaboration in the Coaching Process

Although coaches showed a desire to collaborate I was not contacted that often. I reflected on the reason for this. In general, I felt the coaches' knowledge was extensive both in terms of the science of coaching athletics, and pedagogy, as indicated in this journal entry.

The issues that were presented to me were mostly related to sport psychology. Why? The coaches view me as a sport psychology consultant... Their pedagogy, in general, is very strong. These are experienced coaches that are very good at delivering their product. (My journal, end of athletics season, 2001)

Access to peers has been considered to influence the reflective conversation therefore by putting an 'other', myself, as consultant, into the coaching context, we were changing the conditions that influence the reflective process. This section tells the story of the types of coaching issues that the coaches shared with me, and also the nature of our interaction in relation to the stages of the reflective conversation (issue setting, strategy generation, experimentation, and evaluation). (See Study One Discussion 11)

Although we tried to make it explicit that I was not there in the role of sport psychologist, these coaches tended to see me in this role; that is as someone to help them with the problems of their athletes (see Study One Discussion 12). It was through my being there and asking them questions about the day-to-day coaching that they came to view my role of consultant as one that could serve them directly. While there were not many issues

raised the ones the coaches did discuss with me related to either the mental preparation of certain athletes, athletes dealing with injuries, athletes not coming to training, and coaches' personal concerns about club politics.

An example of the first type, mental preparation of an athlete, was one in which an athlete was having problems with focus and consequently, perseverance in training and racing. This issue was on-going and the coach brought it up, on and off, over most of the season. The following excerpt from a conversation I had with the coach indicates that some of these issues are never really resolved (see Study One Discussion 13).

Ron: With other, more psychological training, I don't know that you ever leave it.

Diane: I think you are right.

Ron: It is part of the process of training. You go to the next level and I think in her case she will go to the next level mentally and physically.

Diane: Then somewhere down the road she'll meet another challenge.

Ron: That's right. But it's teaching them how to deal with these things and overcome. Realising that they can overcome them. Sometimes they just get overwhelmed, the younger ones, they just get totally overwhelmed. You know with exams, with parents. And it's teaching them the mental gymnastics that we wish to give them applies to life, it can apply to an exam, to a work situation. (Process interview, July 16th, with Ron)

At times in our interactions concerning this issue, I was involved in the generation of specific strategies for the coach to help the athlete. However, as indicated by this quotation, in a more general way I acted as a sounding board for the coach, in a virtual world where he experimented with the more global, long-term nature of the issue.

Injuries also are on-going phenomenon in athletics as in other sports and the coaches and I did discuss what to do about certain injured athletes, but again in most cases I served as a sounding board. Other psychology related issues that were raised were self-esteem and confidence issues. In one such instance the coach copied me on a number of e-mail exchanges with an athlete who was asking him for advice. He in turn asked for

comments from me. While the coach had spoken to me about this athlete a few times, by the time he shared the e-mail exchange with me, he had set the issue and generated a strategy.

Diane,
You will remember the young woman, Sally, to whom I was speaking on Wednesday night. Here is our correspondence....
Any advice or comments would be appreciated.
(Van, e-mail, June 22, 2001)

Clearly, the coach in this interaction is asking me for advice, although it was clear from his correspondence with the athlete (part of which I have included in Appendix F) that he had generated and executed a strategy. Therefore, he asked me to help him evaluate his strategy and comment on further strategies that might be useful. In relation to the reflective conversation, the coach was cycling between strategy generation, experimentation, and evaluation and using me as a source of evaluation and advice.

In another instance Colin raised the issue of a senior athlete not showing up for training. He told me that when he addressed the issue with the athlete, the athlete had asked the coach why he hadn't called him. The coach said he told the athlete, "I'm not going to call you". He said he doesn't believe in chasing after the athletes. Upon reflection I thought that it might be possible that an athlete, even at age 26 needs to be called and that, in fact the athlete asking the coach why he hadn't called might be a declaration of the athlete's need to have the coach call. On this premise I asked the coach, a few days later, if he thought that some athletes might need to be called he said that in fact an Olympic gold medallist that he had coached had needed to be called every day! My asking the right question helped him remember something that he already knew but had apparently forgotten. In this way I helped him reset the issue by challenging his assumption that senior athletes should not need to be called to get them to come to training. By helping him realise that indeed in the past he had

done the very thing that he now was telling the athlete that he would not do, I helped him open the door to generating an alternate strategy to deal with the issue.

Apart from issues directly related to the coaching process, there were issues of a more political nature that were shared with me. Over the course of the season I learned that the club was about to make some major changes in how it was administered. These politics surrounding these changes became an important issue for the coaches. The changes were being directed by the board and although there existed a coaches' representative on the board, there did not appear to be much consultation with the coaches in this regard. In the case of the head coach and one other coach, this issue was the cause of greatest concern for them.

Ellen copied me on a series of e-mail messages between herself, the head coach, the coaches' representative on the board, and the president of the club. She expressed dismay and frustration at being left out of the discussions about the new structure of the club.

Well, this sounds like a done deal. I feel like we are being consulted after the fact. I am sitting here at work reading this message and I am feeling upset because I thought we had a better system than this at the Club. What do parents think? What about what the athletes' think/want/need? What has been communicated and why do I feel like we are the last to know? (Ellen, July 16th)

The coaches' representative replied, with apologies for not having been able to contact the coach, that the input of the coaches was important. Finally the coach asked me what I thought.

Hi Diane, I tried to put these in chronological order but this is an issue I was dealing with yesterday. In a nutshell there is a proposal to change the whole structure of the membership of the organisation, and the coaches disproportionately affected, I believe, appear to be last to know. I have a copy of the proposal if you would like to see it as part of your research. It should be treated as confidential at this moment until it is passed by the Board. But it is an important issue that the coaches have to deal with and I would welcome your views on this situation as an objective eye on the organisation. I have my own as well. Maybe we can discuss next time you are at the track. I can fax the proposal to you if you send me your fax number. Thanks. (Ellen, July 17th, 2001)

Ellen was looking to me for support in the setting of this issue. She clearly stated her belief that the coaches who were to be the most affected by the changes were being left out of the discussion. We discussed this issue at length and she was comforted to be able to do so with “an objective eye”. Through our discussion we jointly constructed a plan for her to push for a meeting with the coach representative on the board.

All the coaches were more or less concerned with this issue and it became a major disruption for the coaching staff, especially as it became clear that the club’s leadership was in question. Early in the summer the head coach had been excited about the changes, but as the season progressed the head coach began to get more and more uncomfortable with the situation. Information continued to be lacking and he found out through rumours that his position might be in jeopardy. During this time, which was very difficult for him, I served as a sounding board, talking to him about what was happening and helping him stay clear about how much of this issue he could control and what strategies would best serve his ultimate goal. In the end, after a two-month extension to his contract, another person was appointed to lead the club. Thus the potential to really develop learning collaboratively among the coaches in this club was never fulfilled. The concern of the coaches regarding the uncertainty of the club leadership was a factor in this.

An Example of a Non-issue

The following instance concerning the coaching of women is an example of an issue that I saw but that was not set as an issue by the coach. All of the coaches worked with both male and female athletes. Two of the male coaches said that the only difference in coaching women was learning to deal with their emotions. This appeared to be something that was not always easy for them. When one female athlete started crying at a practice, after being spoken to gently by her coach (not one of the two here mentioned) about not putting out in a run, one of the above two coaches made some denigrating comments, to no one in particular. This is an issue that might have been discussed but the coach making the comment did not bring it up, probably because it did not concern one of his athletes. In my role as consultant I was not there to evaluate their coaching and prescribe behaviour changes. I felt that it was not my role to raise the issue, even if it might have been an opportunity to challenge the coach's reaction (see Study One Discussion 14).

An Example of No Collaboration

There is one example in this study of a collaborative relationship that never got off the ground. This coach (Scott), when first spoken to about the project, expressed interest. The first interview went well. I explained that I would be around the track and watching him work and that I hoped this would not bother him. He said that was fine. However, I never really felt comfortable standing with this coach. Despite that fact that Scott was at the track nearly every time I went there he never shared anything with me. He was always polite, and would nod his head to say hello, but I definitely did not feel the same openness toward the project as I did with the others. He was the coach directly responsible for the camps run by the club for young athletes interested in getting a start with the club. I thought that he might be interested in working with me to improve the coaching of the camps.

Since Scott had mentioned that teaching the camp coaches to deliver the session plans he gave them was the most difficult part of his task as camp supervisor, I saw the possibility of working with Scott and the camp coaches to foster learning. Most of the camp coaches were athletes with little coaching experience, therefore the idea of learning about coaching practice through sharing and reflecting seemed appropriate. In order for the coaches to benefit from the potential for knowledge sharing within the club, the notion of communities of practice became more interesting (see Study One Discussion 15).

I spoke to Scott and developed a set of questions to encourage the camp coaches to reflect on knowledge sharing (Appendix G). I also presented the head coach with a document defining communities of practice and setting out the guidelines and tools for promoting this type of learning (Appendix H). The portion of the data below supports the decision to attempt to work on this issue with Scott. It also demonstrates the frustrations of non-collaboration.

Tuesday, August 07, 2001

Last Tuesday (the 31st of July) I met with Scott at the track and we discussed the issues of concern for him. Here is a segment from my journal:

Spoke with Scott regarding the camp and working with the coaches. He showed me his daily plans regarding activities, skill development etc. He seems pretty satisfied that these are quite well developed. He also said that he had the coaches spend a little time with Jerry, and other specialised coaches in the programme to learn about all the different areas of track and field, since the camps are supposed to be a combination of exposure to all events, fitness, and games. I asked him about issues regarding these camps... he said that the toughest thing was the actual teaching of the material. I asked how he supervises this and he said that he does spend some time each day with the coaches and helps them.

I asked him if he could ask the coaches to write down one thing that they learned at the end of each coaching day. We will discuss these next week, I hope, with each other and with the coaches.

Then on August 1st I sent him an e-mail reminding him to ask the coaches to do this. Today, when I got to the track, Scott was busy so I asked a camp coach if Scott had mentioned the coaching lesson to them and she said "No".

I waited about 30 minutes until I got Scott's ear and he said that he had not seen the e-mail and had forgotten to ask the coaches. Maybe he was just not sure about what to ask them.

I sat for a while and thought about the negotiations involved in any partnership. I decided that I would ask him if he preferred that I give him a sheet to give to the coaches regarding what they learned each day. He was happy about that and we agreed to meet tomorrow at 11:15 am when I would show him the sheet and we could talk to a few of the coaches.

Negotiating the meaning of our collaboration!

I have done this form (Appendix G). (Scott Issues, August & My journal, August 7th)

August 8th

I spent a total of 3 hours and 45 minutes at the track today. VERY HOT!!! I showed Scott the questions and we discussed them. He seemed a little unsure or perplexed, but went ahead and made some copies. I left the original with him, stating that he could make copies if the coaches needed more.

I made sure that he understood that I was not just consulting with the camp coaches, but instead working with him; that when I was not there it was up to him to remind the coaches to answer the questions. He seemed to get that. I also mentioned having a debriefing meeting at the end of the second camp and also in September for all the coaches that had worked on the camps.

I gave one copy of questions to Diana [one of the coaches] and she seemed keen to do it. Tomorrow I will go at 8 a.m. and talk to the other coaches and then again one day next week, I hope.

August 23rd, 2001, 1 hour at TF.

Spoke first to Louise who has been coaching the camp this week and last. She told me that Scott has been away all last week and most of this week. She also said that Edith had gone for lunch, Paul was in Europe, which I knew, and that Ben had left for university. Sooooo... I realised that collecting the answers to those questions was going to be tough. She had one sheet done and asked if that was what I wanted or did I want daily answers. I said to try and look back and fill out the questions for 'Ah ha' type of moments. I am due to see her next week.

The problems of data collection and how to get collaboration on this.

I went to see Scott and really tried to take a no-pressure type approach as I was aware he had been away and that there might be pressures relating to the structure changes in the club that were on his mind. As it happens, I mentioned this and it doesn't appear to be bothering him too much. He is not too sure that he has to re-apply.

We chatted about the Canada Games and how well Lindsay and others did.

I suggested that we get together the first week in September and decide on a time to get the camp coaches together, those that are here, have done camps and might do so in the future; especially the fall camp ones. At the meeting with him, I said that we needed to set some dates for two or three get togethers with the coaches. I spoke about how a lot of learning takes place in the context of informal conversations. He agreed and said that not enough time is given to this type of learning. I also spoke about the need to ask the right questions in order to promote learning. Scott seems keen for all of this to happen. That was positive, I thought. I will contact him on the 5th. (My journal)

Wednesday, September 05, 2001, TF, 6:15 p.m. until 7:30 p.m.

I was unable to get to Scott, but left a message that I would contact him on Monday. Jerry gave me the report (on the questions) that Louise had left on Scott's desk for me. Good stuff! (My journal)

September 20th, TF, 5-7 p.m.

I arrived at 5 and caught Scott in the gym, supervising athletes doing weights. He asked me, after about 10 minutes, if I would go down and meet the camp coaches at the entrance. Unfortunately they did not arrive until just before the session. It was Miranda, Sacha, Steven, and K. I managed to follow them around and give them the intro to the project and the questions, asking them to please fill them out, and saying that we would meet later in the camp, once or twice. I asked K to give the questions to the other coaches that were doing the Saturday session as they switch around.

Frustrations getting Scott to participate. He did say that he was really occupied with getting ready to go to S. A. and all the rest. I try to keep him in it, but without much of his participation so far! (My journal)

This coach was very accomplished and had two athletes who were involved in a number of top international events during the summer and fall of 2001, when this study took place. It would be fair to say that he was preoccupied with his coaching. Despite his expression of interest in the project with the camp coaches, he did not make it a priority. In the end, this initiative was not successful. Without the support of their boss, Scott, only two of the camp coaches answered the reflective questions.

In my journal, I recorded reflections on this topic after a discussion with my supervisor.

Vis-à-vis camp coaches. I had said that the problem was that Scott had not had the time to buy into the process and that I didn't feel that it was appropriate for me to be the one telling the coaches to do the work and meet. In discussion, we decided that because these coaches were actually athletes that Scott had commandeered (with pay) to do the job it is unlikely that they are on a trajectory towards becoming a coach. Therefore they are not really interested in doing the reflective exercises. (My journal, October 12th, 2001)

In the end, there was never any real collaboration between this coach and myself. As for the questions one experienced camp coach responded with this e-mail.

Hi Diane,

Sorry it's taken me so long to get back to you. I keep reading your questions over and over they don't really apply to me (they would have 7-8 years ago). I used to run the camps when I was in university; I worked for the club for 3 summer seasons. I was also involved in initiating the spring camps which has now lead to year round camps. I've worked with a lot of kids over the years and my teaching progressions are pretty much set, with modifications when needed. My husband also coaches and in addition to track he has had several contracts for speed training with other sports (rugby, soccer, football - all ages) and I have often helped him with this.

As for discussing my coaching with anyone else, I haven't really, I'm farther ahead technically than the people I work with. I don't want to step on any toes but I will correct things that are blatantly wrong. The only time I really discuss things with Scott is when I look over what he has planned and if I don't recognise the name used I'll ask him what he means.

I don't want to sound like a "know it all" but our training group in the past has prided itself on having excellent technique. We worked with Gerard Mach (the man who invented all the drills we do) in an advisory fashion for about two years.

If you want to talk to me about any areas of coaching feel free to call or email. I'm coming into a really busy 3-4 weeks at work but after that I should have lots of time.

(Miranda, e-mail October 23, 2001)

The two camp coaches who answered the questions found them useful as a tool for reflection. These were athletes that had tapered off in their career and were starting coaches. Their boss, Scott, never asked to see them and in fact never spoke about these questions with them. During the second interview, after the season, I explained to Scott that such projects needed to have the participation and support of the people in positions of authority.

Without blaming him and saying that I understood that he had been otherwise much occupied, I stated frankly that this support on his part had not been there. He agreed with this (see Study One Discussion 16).

On Knowledge Sharing

Earlier in the findings of Study One, we indicated that the coaches, in the first interviews, said that they shared information with other coaches. At that time, we pointed out (see Study One Discussion 17) that this should be confirmed because the literature says that in sports like ice hockey and soccer, coaches do not share information with all other coaches; they tend to be selective. Also, in this study, I did not want to impose myself to the point that the coaches might stop interacting with other coaches. I simply wanted to be there as one other possibility for interaction. We felt that to complete this study, a look at the interactions between the coaches would bring more light. Could the small number of interactions between the coaches and myself, regarding coaching issues, be explained by the fact that these coaches already had a good system of knowledge sharing whereby they used each other to solve their own coaching issues?

Through the interviews and my observations, I attempted to describe the athletics club as an organism and how it might support learning, with particular attention to the concept of communities of practice. I recognised that there was however some knowledge sharing between individual coaches. In order to describe what this activity looked like, I will first present an analysis of the coaches' beliefs on sharing knowledge and then a summary of how knowledge was shared among the club coaches.

On the basis of the interviews, the coaches seemed to believe that knowledge sharing between club coaches was prevalent. They recognised that the club was unique in having coaches for all levels and all disciplines of athletes. One very experienced coach said, "If

anybody asks me, how I did something, or why I did something, I am more than willing to help them out... If anybody asks me technical questions, I would sit down for hours with them if they wanted" (Ron, interview 2). But when I asked this coach if this was the way it was for him when he was beginning he said,

Ron: You know at one time it was "It is my program, why should I talk to you about my program?" But I think the coaches nowadays, there are a lot of the younger ones in there and they have no hang-ups about talking to anybody about what they do and why they do it. I see that as a very positive step. There shouldn't be any secrets out there. Why is one coach more successful than the other? Usually it is not the squares and triangles; it is the how you deliver the squares and the triangles.

Diane: Right. So you are finding that it is more open than when you started?

Ron: Yeah, much more. And even among the older coaches, whom I have met over the years, I have a good relationship with all of them, across Canada.

Diane: What about young coaches that come in, do you think they get the same open reception?

Ron: I think, yeah, if they ask. Most of them, I guess... you could say the there is an inner circle, and the outer circle and you have to penetrate the inner circle, I am sure it is like that in any sport. And once you are in the inner circle, everybody talks to you, and if you are not in the inner circle then you sort of poke at it. Then like at any sport, in track and field, if you start producing athletes that get on the national team, well obviously, that kind of wakes people up. And that took me a long time. I was essentially like an outsider, but that's fine. I understood that. (Ron, interview 1)

Another coach echoed these same thoughts.

Diane: Thinking back to those earlier years, do you think it was as easy then for you to get the kind of information we were talking about?

Colin: No, because I was always the new kid. I always had the ideas. I was always an aggressive kind of coach. So usually the coaches are not going to talk to the young guys, and pass that stuff on. But you find that as soon as you put that first person on a national or international team, then they start watching, then all of a sudden you have got two and three, in different disciplines, and everything else. So it just becomes...

Diane: So they are interested in talking to you as much as you are to them?

Colin: Yeah. There is a level of respect I guess that they see what is going on. And yeah, we get into conversation and start passing ideas I guess. (Colin, interview 1)

Producing national athletes gets a coach recognised, and accepted to the inner circle.

Then when the coach goes to national or international meets and sees other coaches in the

circle, they talk about athletes, Athletics Canada, and so on. This is what might be considered a normal process of learning from experience, over time, and finally making it ~~see again~~

~~Study One Discussion 17~~. There is an interesting nuance in the first coach's comment above. He said, "There shouldn't be any secrets out there. Why is one coach more successful than the other? Usually it is not the squares and triangles, it is the how you deliver the squares and the triangles". He has made the distinction between what might be labelled 'coaching information' and 'coaching knowledge' ~~(see Study One Discussion 18)~~.

As far as courses, clinics, or conferences are concerned, these coaches stressed the fact that these were an occasion to get together with other coaches and talk about coaching. One coach said, "Coaching conferences are always good. Not only, there's usually good valuable information but you also get to talk with other coaches so you can learn a lot there" (Scott, interview 1). Another said after participating in a Level III technical,

What it did was reinforce, you coach for that long and you do not realise the amount of accumulated knowledge you have. To sit in a forum like that, and have these people ask you, then you realise how much knowledge, experience you have. So it was good. (Ron, interview 2)

Even if this coach did not learn anything new, technically, he learned that he had a lot of knowledge. Colin's answer about participating in the NCCP provides a different view:

Coaches learn not from taking courses but mainly from other coaches.

Diane: Did you do your NCCP or any of that stuff?

Colin: I am doing all that, I have my level III and working on Level IV, but I don't, [sighs]... I am finding it very hard to see the use of having Level IV and Level V other than making, being on a national team... because they are not paid positions, so each one of those courses that we take are pretty well university courses. It is time consuming and I am successful now, and I learn from top coaches, and I talk to top coaches, and that's how, you end up stealing everything from everybody anyway. Not stealing, but you know...

Diane: Yeah, yeah. Well I was going to ask you about that too.

Colin: To me, that's how the knowledge is passed on from coach to coach anyway. It is not sitting there and taking courses, it is sitting around listening and watching, and experimenting and experiencing.

Diane: On the side of the track when there are meets on or whatever?

Colin: Yeah, and picking their brains about what do you do in this situation, what do you do in that situation and why, and... (Colin, interview 1)

See Study One Discussion 19

Learning Within the Club

These coaches were talking mostly about learning from coaches outside of the club, when they were at track meets or coaching courses. Because this research project was about helping coaches learn from their everyday coaching experiences, it was important to examine the possibilities of the coaches learning through their interactions with the other coaches within their club. Furthermore, the model of Gilbert and Trudel (2001), upon which this study was based showed that access to peers was a condition that influenced the experimental learning process of coaches. Although the coaches in the present study felt the potential for sharing knowledge within the club, and indeed some sharing did occur, it was limited. The sharing that did take place was mostly on a one-to-one basis. Furthermore, it seemed to happen much more between the experienced coaches than between newcomers and these experienced coaches, as is shown in this excerpt from my journal.

Then I went and spent the rest of the time with Colin who was working with about nine athletes. Very interesting. I find it relaxed with Colin. He was imparting a lot of technical information, to one athlete in particular... We spoke afterwards and I asked if any of the less experienced coaches ever sat and watched work. He said, 'No'. I said that this seemed an amazing way for coaches to gather up knowledge from more experienced coaches. He said the top javelin coach the country had come by and spoken to him about doing some speed and power stuff with his throwers. We spoke about how if a top coach like that recognised the benefits of such an interaction with another coach, it was a shame that younger coaches didn't access such information. (My journal, July 17th)

Indeed this seemed to be the pattern. The coaches in this study tended to send their athletes to another coach if they felt that they would benefit from that coach's expertise. It is a fact that this club was unusual in that it is one of the only clubs in the country that has

athletes training in most of the track and field disciplines. Most clubs specialise in one discipline; in distance, or sprints and hurdles, or throws, and so on. Because the club in this study included the different disciplines, the coaches could seek help from another coach with a different area of specialisation than theirs. In the following example, the distance coaches sent one of their athletes to one of the strength coaches.

I noticed that Sue, one of Van's athletes was training with Colin so after a bit I went and asked him about that. He said to walk with him to the other end of the track. Colin explained that a couple of weeks ago Van (and maybe Ron?) approached him about working with her to develop better core strength and bio-mechanics because her speed was not increasing. The analysis of the situation revealed that due to her body shape... was causing problems with her gait and technique. So she now comes once a week to work on building more core strength to attain better running posture. This is definitely a coaching issue! (My journal, June 26th)

As the end of the fall season drew near I reviewed all the data and made summaries of our work together for three of the six coaches. I also approached them about the second interviews. As a tool for analysing the sharing of knowledge between the club coaches, according to what I had witnessed over the six months, I prepared a knowledge sharing map (see Figure 3) in order to verify my analysis with the coaches. This figure depicted my perception of the coaches' interactions about sharing knowledge. At the same time, with a view towards other ways a consultant could help coaches learn from their everyday coaching experiences, I prepared a document for the head coach that described the concept of communities of practice. This document described how I saw the club in relation to this concept, particularly with regard to knowledge sharing and creating between club coaches. Thus, the knowledge sharing map served the purpose of describing the existing interactions between the coaches, and answering in part the research question about whom the coaches interact with in relation to their coaching practice, and demonstrated the lack of a learning community within the club.

The map included nearly all the coaches working at the club, even if they were not directly involved in this study, and me. This first map I showed to the head coach and asked him to add to or change it as he saw fit. He made a few minor changes (see Appendix I). I went through the same procedure with three other coaches; the first of which made a few more minor changes. The other two felt that the map was accurate. The picture of knowledge sharing as described by these maps is one of individuals sharing on a one-to-one basis. Other than the two distance coaches (Van and Ron) who worked together, the coaches did not get together and discuss coaching issues. Here is part of an interview in which Ellen remarked on a connection between her and one of the distance coaches.

Diane: So lots of times it's two way obviously and in fact, Ron... said he'll go with you sometimes, talk to you about some things, maybe it's about athletes?

Ellen: Yeah, it's usually about athletes. It never has to do with coaching. Not that I can recollect, but it's usually "How is so-and-so doing? How did they do in X, what are they running now". It's more like, "How old are they, when are they coming to my group?" (Interview 2, Ellen)

Other than conversations relating to the status of athletes, and sending athletes to other coaches for specialised training, the coaches engaged in very little sharing of coaching knowledge with each other (see Study One Discussion 20).

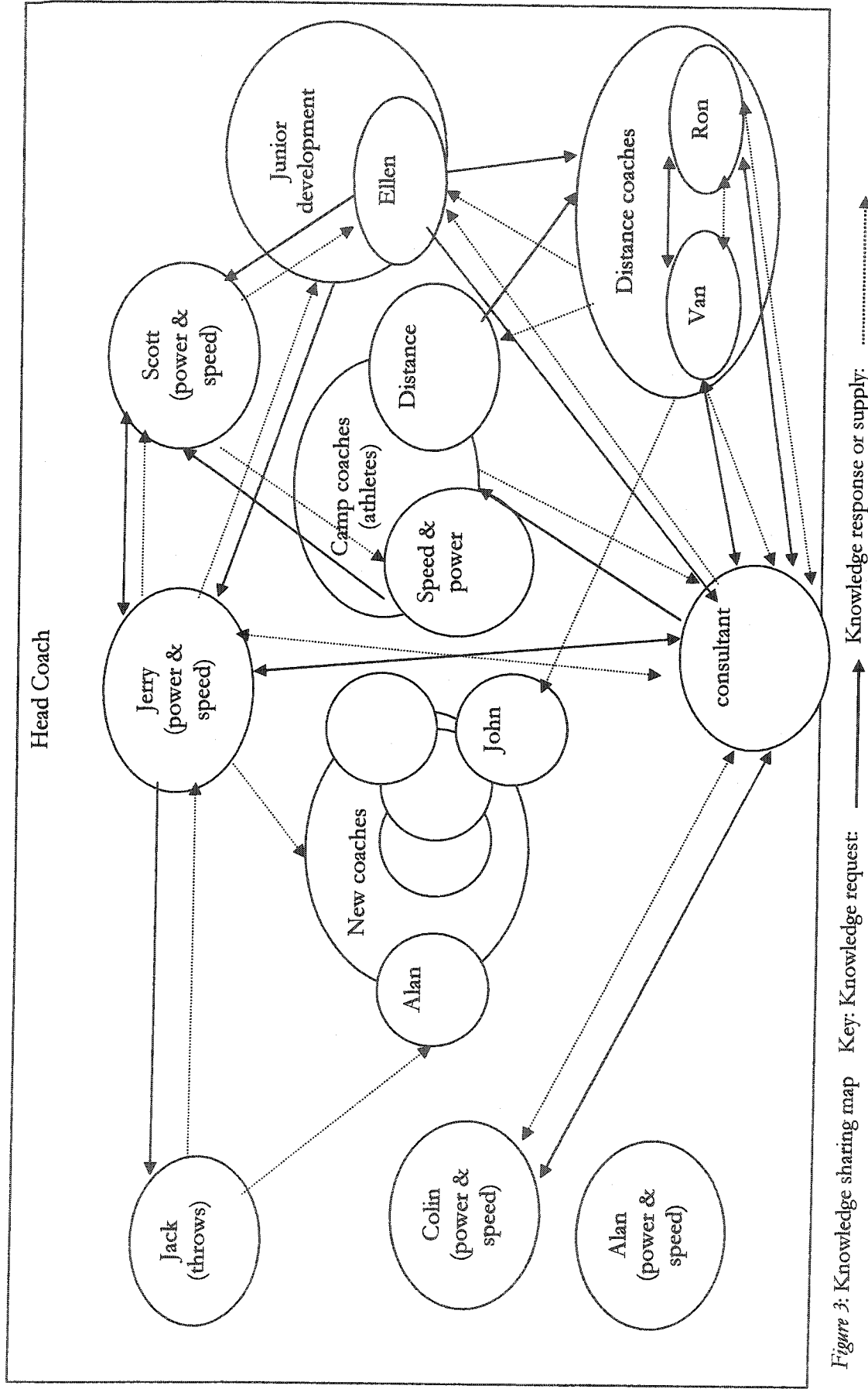


Figure 3: Knowledge sharing map

My Role as a Consultant in This Context

My principal role with these coaches was that of a sounding board; someone off whom they could bounce ideas relating to coaching issues. By being there on a consistent basis over a six month period, I became more than a familiar face. With regard to the coaches' reflective conversations, I served as a partner for their reflections, and, at times my presence likely stirred them to reflect in order to express what was happening in their practice. Four of the six coaches verified, in the second interviews, that I acted as a sounding board for them. In the case of the head coach, this role went beyond sounding board to therapeutic listening. He said, "That other than his girlfriend, I was the only person with whom he could really let all this stuff out (regarding the job)" (Summary interview 2 Jerry, November 7th, 2001). Two other coaches verified my role as that of a sounding board or outside perspective for them (see Study One Discussion 21). It needs to be recognised that this situation, having a consultant available for them to talk to about their work, was new to the coaches. It is important to judge the effects of our collaboration by the coaches actions and not solely on their comments about the process. The fact that three of the coaches (Jerry, Van, and Ellen) directly sought advice from me through e-mail and our conversations (these instances have been previously documented in this report) is proof that I indeed was a sounding board for them. In addition, two and half years after the end of this study, one of the coaches continues to contact me regarding his coaching work.

Discussion

Due to the special nature of participatory research, and the importance of telling the tale of this research collaboration, the first part of the discussion is a series of numbered notes that refer to specific points (page numbers indicated) in the findings of Study One. A general discussion that brings together the central themes of this study follows.

1 The Difficulty with the Terms: Reflective, Reflection, Reflexive

As portrayed by my journal entry about this first meeting with Jerry, the head coach, I discovered that I needed to be careful about making assumptions concerning what the coaches might understand. Even though Jerry had about 15 years high school teaching experience, and was also a guidance councillor, he did not understand what I meant by the word *reflective*. Moon (1999) elaborated on the difficulty of defining reflection, or reflective practice. Within the literature, she found many interpretations of the word. In the first place, many practitioners have a common-sense view of what reflection is. Mostly, this common-sense meaning involves a process of “thinking something over” for a purpose. This view however, is coloured by local practices. People attribute to reflection the meaning that serves their purpose. After an extensive review of the literature and the construction of a model that speculates on the role of reflection in learning, Moon provided the following definition of reflection:

Reflection is a mental process with purpose and/or outcome in which manipulation of meaning is applied to relatively complicated or unstructured ideas in learning or to problems for which there is no obvious solution.... The forms of reflection... can differ... because they exploit reflection at different stages of learning and the representation of learning with the objective of reaching appropriate outcomes for the matter at hand. In effect, reflection makes deeper and better considered knowledge available to us. (p. 155)

Even if Jerry had been familiar with the term, as perhaps in the sense of the reflective practitioner (he *was* a teacher), we could not have assumed that his understanding was the same as ours. While the process of reflection is not complicated, it becomes complicated by the diversity of ways in which the process is used or guided. Instead of just talking about reflection I could have referred to some of the possible purposes or outcomes of reflection that might apply to the coaches taking part in the study (Moon, 1999). For the coaches, the role of reflection in this research project was to encourage learning from their everyday experiences. Reflection could also have led to action, reflection on the process of learning, decisions or resolutions, and the ability to be reflective.

Reflexive is an adjective that means to refer back to the subject of a sentence but it in qualitative research reflexive can mean to a kind of self-inspection (Schwandt, 2001). This type of reflexivity can be engaged in by participants in collaborative inquiry.

2 Time and Collaborative Inquiry (p. 76)

One of major challenges of a collaborative research project is persuading practitioners to devote so much time to the research process. While the coaches in this study were not being asked to add anything to their normal coaching, they had to agree to do the interviews and to devote time to collaborating with me. Despite the time required for the on-going negotiation of the collaborative process, the potential for knowledge production, through dialogue, is great within such a design. Roĳegno and Bandhauer (1997) collaborated for three years, after which they both declared a sense of shared privilege and empowerment.

3 Coaches Who were Elite Athletes (p. 77)

Many elite level coaches have had experience as athletes (Salmela, 1996). The same does not appear to be so with non-elite coaches, especially in youth sports where parents often step in to fulfil the role of coach for a team on which their child is playing (Lemyre,

2003). In the eyes of many, however, the criterion of having been an accomplished athlete rates higher than official certification (Lyle, 2002).

Gilbert and Trudel (in press-a) found that for youth sport coaches a coach's stage of learning influenced how he/she solved a coaching issue. As coaches became more experienced they tended to rely less on acquisition types of strategy generation options (e.g., coaching materials and advice seeking) and more on constructive types of strategy generation options (e.g., creative thought and joint construction). Salmela (1996) found that this was also true with elite coaches. It is important to consider that an ex-athlete who becomes a coach has their experience as an athlete as well as their coaching experience (Gilbert & Trudel, in press-a). When assessing coaches' stages of learning, both types of experience must be counted.

4 Issues that Might Trigger the Reflective Conversation Process **(p. 78)**

In Gilbert, Gilbert and Trudel (2001a, 2001b) the main coaching issues of soccer and ice hockey coaches were athlete behaviour, athlete performance, personal characteristics of coaches and athletes, parental influence, and team organisation. However, considering the different context of this study (individual sport with athletes competing at more elite levels) it will be interesting to see if the issues are different.

5 What Coaches Say They Do Versus What They Actually Do **(p. 82)**

This point contrasts the coaches in this study with the participants of other studies regarding the congruence between their stated beliefs and their actions. Coaches, similar to other practitioners, often behave in ways that are incongruous with the manner in which they believe they behave (Argyris & Schön, 1974). Coaches may be unaware of the way they behave (Gilbert & Trudel, 2004), or of the effect of how they behave (Culver & Trudel, 2000a). This is explained as a difference between a person's espoused theories and their

theories in use. As much of the literature on reflection, critical thinking, and transformational learning indicated, a goal of these types of learning is to challenge this discrepancy by helping people become aware of their often unconscious espoused theories, and then change them.

When it came to the practice of coaching, the coaches in this study seemed to be what Argyris and Schön (1974) would call double-loop learners. They mostly practised what they preached, when actually coaching. It was therefore not a priority for me to challenge them about their espoused theories.

6 Interactions with Other Coaches (p. 82)

Given these comments made by the coaches regarding their interactions with other coaches and my role as an additional support that was not aimed at replacing their existing support network, it seemed important to examine the nature and extent of such interactions. Studies with youth sport coaches have indicated that coaches are reluctant to exchange knowledge with coaches who are their rivals (Lemyre, 2003; Trudel and Gilbert, 2004).

7 Awareness of Role Frames (p. 83)

Even though the coaches acted in this manner there is no saying whether the coaches were aware of this process and specifically their role frame. In my role as a non-prescriptive consultant I had no call to question the coaches about this but it should be noted that according to Schön (1983) role frames are often tacit. Furthermore Gilbert and Trudel (2004) found that none of the youth sport coaches in their study were fully aware of their role frames.

8 Working Individually (p. 83)

As it was evident that I could not regroup the coaches to meet and discuss their practice, any of the collective learning approaches (action learning, action science, and

communities of practice) presented in the review of literature could not have been used. However, it was still possible to make myself available to the coaches individually.

9 The Establishment of Trust and the Situated Nature of Coaching Issues

The necessity of establishing a strong relationship to engender trust is common to most consulting situations in sport psychology (Halliwell et al., 1999) and more generally (Ivey, 1994). For the coaches in this study, my willingness to spend hours at the track, while they coached, probably helped build a sense of confidence in the relationship. The nature of research in the participatory paradigm, such as this, requires an extended period of time during which the coparticipants establish strong collaborative relationships with trust as a foundation. In this study, in which the collaboration between the coaches and myself was primarily one-on-one, my immersion in their field of practice was similar to what is involved in a good ethnographic study. Ethnography and participatory inquiry both require long hours of trust building in order to ensure authentic data.

Schein (2001) created a typology of the different forms of research based on the respective amount of researcher/consultant and subject/client involvement. The type with high involvement of both the researcher and the client is labelled clinical research (CR) or process consultation (a form of participatory inquiry). The big difference between CR and action research is that CR is driven by the client's agenda rather than the researcher's. According to Schein, "the clearest form of CR occurs when the client and helper work together to decipher what is going on in the context of some problem that the client is trying to solve" (p. 233). The current research project had an agenda that was shared by myself, being the consultant, and the coaches, but our interactions on coaching issues always started with a problem that was raised by the coach and that was embedded in his or her practice. Like CR, this research provided the same opportunities to hang around and observe that

Schein remarked upon. He went so far as to hypothesise that becoming helpful improves that quality of data collected through good participant observation and ethnography.

It is inevitable that the insiders will not want someone to hang around who is not at least fun to talk to, to trade points of view with, and even to get advice from. In other words, good participant observation and ethnography inevitably become CR though that aspect is often not written about or even admitted because we are so wedded to discrediting clinically derived data. (p. 235).

No doubt, the person-to-person contact that I had with the coaches enabled our collaboration, but another reason likely influenced the coaches' choice to collaborate 'live'. This has to do with the situated nature of their issues, the complexity of their work, and time. Coaching is a very complex practice, involving the physical, mental, and moral development of individual athletes. The types of issues the coaches faced were multifarious and very situated. Explaining such complexities on the Internet would be complicated and time consuming. It should be remembered that these coaches were volunteers, who despite the 20 to 30 hours they spent a week at the track, had other jobs as well as families, in most cases. My being there allowed our collaboration to take place during their regular coaching time. Furthermore, being there meant that the coaches knew I had an understanding of the context in which the issues were being played out. Sport psychology consultants, working with teams and individual athletes, have found that it is necessary to fit into athletes' schedules, and take advantage of the 'teachable moments' that occur within the regular pattern of the athletes' activities (Halliwell et al., 1999).

10 *The Internet and Consulting*

In terms of using the Internet to consult, the establishment of trust takes on a whole new dimension. In fact, on-line interactions are impoverished compared to face-to-face ones since there are no non-verbal cues. This can impact in particular, the building of trusting

interpersonal relationships, a process that depends upon the exchange of socio-emotional information. This is why even successful virtual communities of learning benefit from face to face encounters early in the group's history, and periodically thereafter (Raelin, 2000). These face-to-face meetings enable trusting relationships to be established, opening the door for effective on-line collaborations to take place. As one consultant put it, "No one yet has invented a technology that replaces a pitcher of beer" (Stamps, 1997).

With the growing importance of the Internet, sport associations are looking for ways to help coaches on-line. An example of this is the 'Learn from the Best' e-mentoring series (Hockey Canada, 2003b). However, this program offers no opportunity for interaction between the mentor and the coaches. Based on the findings of the current study, an important role for the consultant/mentor in such a program would be the establishment of a relationship through face-to-face contact with coaches, which would lay the foundation for subsequent on-line interactions.

11 Access to Peers

Gilbert and Trudel (2001, in-press a) found a number of conditions that influence the reflection of the youth coaches. One of these, the accessibility of peers with coaching experience, had an important effect on whether coaches would select peer-related options in the reflective conversation.

12 Coaches and Sport Psychology Consultants

It is not surprising that these coaches viewed a sport psychology consultant as someone to whom they could send their athletes when they had psychological problems to do with performing. In fact, at the time of this study their club was working with a sport psychology consultant, who worked with the coaches regarding getting athletes to set goals,

but was not involved directly with the coaches. As we previously mentioned the literature relating to sport psychology interventions deals mostly with consultants working with athletes (e.g., Danish, Petitpas, & Hale, 1993; Kerr, 1993). Cox, Qui, and Liu (1993), in the first *Handbook of Sport Psychology* clearly delineated the clinical/counselling sport psychologist as the professional prepared to help athletes, and the educational sport psychologist as being primarily involved in the dissemination of sport psychology knowledge with no reference being made to coaches. A recent brief history of research in sport psychology (Singer, Hausenblas, & Janelle, 2001) has no mention of sport psychologists working with coaches to improve the coaches' performance. In most instances, sport psychology consultants have not been viewed as a tool for the coaches to use (Culver & Trudel, 2000b).

With regard to the initial research question concerning the dynamics of the collaboration between a consultant and coaches, and also the third secondary question about the role of the consultant in such a collaboration, one of the first challenges that I faced was that of educating the coaches about my role as a resource for them regarding their coaching.

13 The On-going Nature of Coaching

This coach was reaffirming a belief through our interaction. He said that many of the issues involved in the psychological side of coaching are on-going issues. Gilbert and Trudel (2001) also found this to be a characteristic of the coaching process. Rather than the reflective conversation cycling through the six stages and terminating, often coaching issues are cycled through the stages of strategy generation, experimentation, and evaluation and then recycled back to strategy generation, and so on. Having someone to talk this over with allowed the coach to represent his reflection in words, which is one of the roles of reflection in the learning process (Moon, 1991).

14 Why a Would-be Issue is not an Issue?

With regard to the coaches' reflective conversations and my role within these, it is worth examining why a potential issue never developed. When looking for the reasons why this issue never became an issue it would be important to look at the situation from both sides; that is, from Ron's perspective and from mine. Not actually having discussed this situation with Ron, I can only speculate on his reasons for not raising this as an issue. Ron had indicated to me in a process interview that dealing with the emotions of female athletes was something that he found challenging. This instance of Ron's under-his-breath comment when the female athlete began crying showed that the display of emotions bothered him. Perhaps because it did bother him he was not willing, or unable, to set it as an issue.

From my point of view, I was very conscious during this study of using a collaborative rather than a prescriptive approach. As explained earlier, my role was not that of a supervisor who was there to pick out problems and say how to solve them. Unlike a clinical supervisor I was not interested in changing the behaviours. As Ron did not raise this issue, I said nothing about it. Such an examination helps to understand the dynamics of my collaboration with this coach.

15 The Possibility of Learning in a Community of Practice

True to the situated and reflexive nature of the participatory research paradigm (Reason & Bradbury, 2001), the project evolved along with the context within which I was operating; and that context involved the athletics club and the six coaches, and my research group, particularly my supervisor. Our research group was holding regular meetings during which we would discuss the data and the process of my study. At the same time, we became increasingly interested in the concept of communities of practice (Lave & Wenger, 1991), as a framework for educating coaches. We re-read Wenger's (1998) book on communities of

practice and also his new one about cultivating communities of practice (Wenger, McDermott, & Snyder, 2002). In relation to Scott's concern about helping the camp coaches learn from their experience and share knowledge, we thought that it would be interesting to try and push the camp coaches learning by promoting reflection and sharing, within a CoP. It is for this reason that during the latter part of the summer, in addition to playing the role of consultant as an 'other' as per the model of Gilbert and Trudel (2001), I was also trying to analyse the club as a community of practice. As for the consultation context, the fact that I was unable to bring even some of the coaches together to start the project seems to have set the course for the type of collaboration that I engaged in with the athletics coaches.

16 Camp Coaches' Life Trajectories and Sponsorship

In our analysis of why this incentive was largely unsuccessful, we found Wenger's (1998) concept of life "trajectory" useful. A trajectory, rather than being a charted path, is a continuous motion that has "a coherence through time that connects the past, the present, and the future" (p. 154). The older coach clearly stated in the e-mail that she no longer considered herself in a learning phase, when it came to coaching. Furthermore, she felt that she could not participate in the type of interchanges with the other coaches, which might have led to learning. She declared, "As for discussing my coaching with anyone else, I haven't really, I'm farther ahead technically than the people I work with" (e-mail, camp coach A). Becoming a coach was no longer a part of her trajectory. The two that did respond to the questions were beginning coaching and clearly felt that the questions could help them become better coaches. The other group of coaches that received the questions but did not respond were all active athletes. For these coaches, the camps were a way to make some money, but their principal trajectory did not include a priority to become a better coach. Instead, it was becoming a better athlete.

To further sabotage this incentive, there was a lack of leadership in that Scott, the director of the camps, did not sponsor this effort. While he said that he thought it would be good, his actions did not indicate that it was a priority for him, during what was without doubt a very busy and somewhat unsettling time. Nonetheless, according to the U. S. Navy's CoP practitioner's guide (2001), "Every community must have a Functional Sponsor.... A community's sponsor believes in the value of knowledge sharing and commends participation in community activities" (p. 17). Communities of practice in the discipline of education have also needed the support of sponsors and/or leaders (Barab, Barnett, & Squire, 2002; Palincsar, Magnusson, Marano, Ford, & Brown, 1998).

17 Knowledge Sharing: A Case of Discrepancy Between Espoused Theories and Theories in Use (p. 97)

If a new coach has no access to experienced coaches, or is not the "poking" type, this might never occur. Earlier we said that the coaches mostly seemed to coach according to their stated philosophies. This might not be true when it comes to knowledge sharing. It is interesting to note that Ron, in discussing knowledge sharing, apparently does not see the discrepancy between his statement that he is open to talk to any coach that asks him a question, and how it was for him when he was beginning.

18 Knowing About and Knowing How, Part One (p. 97)

Ron is talking about his interactions with other coaches over the years of his development from club coach to international coach, a period of approximately 15 years. His comment that it is knowing how to apply the "squares and triangles", not just knowing about them, that makes a successful coach implies that asking other coaches for information is useful but does not mean that the acquirer of this knowledge knows how to use it. We are clearly in the acquisition metaphor here (Sfard, 1998), referring to "knowing about", "know that", or "learning about". Brown and Duguid (2000) explained the relationship between

know that and “know how”: “Learning about involves the accumulation of ‘know that’: principally data, facts, or information. Learning about does not, however, produce the ability to put ‘know that’ into use” (p. 128). In order to use know that the learner needs know how, which is developed through practice. The coaches went on to give a rich description of how this occurs.

19 Knowing About and Knowing How, Part Two

Ron’s earlier description of the inner and outer circles of coaches is extremely interesting, and begins to hint at the possibility of “learning how”. In response to the question about attending certification courses, two issues will be discussed here: the expense and the possibilities for interacting.

First, Colin stated that the courses were expensive, time consuming, and above all not where he gained knowledge. Instead, he explained how he learns through an experiential cycle.

I learn from top coaches, and I talk to top coaches, and that’s how, you end up stealing everything from everybody anyway. Not stealing, but you know... To me, that’s how the knowledge is passed on from coach to coach anyway. It is not sitting there and taking courses, it is sitting around listening and watching, and experimenting and experiencing. (Colin, interview 1)

Thus, for Colin, what’s important for becoming a better coach is talking to other coaches, observing, and then putting new knowledge to test in his practice. Indeed, one of the possibilities for generating strategies in the reflective conversation of youth coaches (Gilbert & Trudel, 2001) is reflective transformation, which is defined as the observation (visual and/or auditory) of another coach’s strategy. Lemyre (2003) also found that youth sport coaches engage in this type of learning where they spy on other coaches to get ideas that they then try out in their practice.

The second issue has to do with the opportunity to interact with other coaches during such courses. Scott felt that he learned a lot through these exchanges. Ron expressed that such interactions reinforced much of what he knew and even more important, perhaps, endorsed his concept of himself as a knowledgeable and experienced coach. The coaches who were interviewed about the Australian coaching certification program (NCAS) also endorsed such interactions, stating they were one of the principal benefits of attending accreditation courses (Dickson, 2001). It was a major recommendation of that study that a framework be set up for coaches to interact on an on-going basis. Lemyre (2003) also found that the youth sport coaches said they benefited from the contact with other coaches at courses.

Some coaches have stated that they do acquire “know that” at certification courses, including Scott in this study, and many of the Australian participants in the Dickson (2001) study. Other coaches have been more of the opinion of Colin, believing that courses were not the place that they gained knowledge (Gilbert & Trudel, 1999; Lemyre, 2003). It appears that some coaches with more experience can gain from the more theoretical, less practical content of most coaching courses (Lemyre). Their experience seems to allow them to know what information is useful to them and how they can use it. Less experienced coaches go to courses looking for very practical information. They do not have the experience to know how to apply theoretical information.

Whether or not the interactions with other coaches, so clearly identified as beneficial by the coaches themselves, contribute to the coaches learning how is less clear, but seems to be hinted at. The idea that coaches benefit from participating in courses because of their interactions with other coaches seems to support the participation metaphor. The know how of a practice is impregnated with tacit knowledge, which is by definition much less tangible

than the more explicit knowing about. The coaches in this study seem to appreciate the difference between these two dimensions of knowledge (Polanyi, 1996).

20 Explaining the Limited Knowledge Sharing (p. 102)

This point of discussion concerns the reasons for the limited knowledge sharing that occurred between the coaches in this study. It has been shown in education that setting aside a specific time period and space in which teachers can meet to focus exclusively on teaching and learning is a key element in convincing teachers to give up their time for meetings, which are usually taken up by organizational issues (Loughran & Gunstone, 1997). Many exchanges in this study also involved organizational rather than learning issues. Specific times and a space for coaches in this study to meet for sharing knowledge were absent. There could also be more personal reasons for the coaches. Potrac, Jones, and Armour (2002) found that an expert coach deliberately used an authoritarian style of delivery, asking no questions so as to avoid embarrassment and appearing, to athletes and administrators, to be lacking in coaching knowledge. Without the establishment of trusting relationships, the coaches in Study One might have been reluctant to go beyond interacting with the other coaches only when they needed to have specific help with an athlete. Potrac et al. found there “is the apparent interdependent relationship that exists between the concepts of social role, power, and Goffman’s (1959) ‘presentation of the self in everyday life’” (p. 26). The data from the present study indicate that the club was undergoing a period of transition in which certain power struggles were at play. Thus the atmosphere was not conducive to the sense of trust that coaches might need in order to feel really comfortable with each other. Perhaps also, the coaches saw themselves as experts in their specific domain, and did not conceive of the possible benefits of interacting with coaches from another specific domain of expertise.

21 My Role and the Model of Gilbert and Trudel

This study tested the model of Gilbert and Trudel (2001). In their model, one of the conditions affecting the reflective conversations of coaches is their access to peers because peers and others were found to be important contacts during the issues setting, strategy generation, and evaluation stages of the reflective conversation. As a consultant I could qualify as a peer (I am a coach) and/or an 'other'. When a coach presented an issue to me, I questioned the coach, sometimes challenging their philosophy or role frame, in an effort to strengthen the issue setting stage of their reflective conversation. In the strategy generation stage, we discussed possible actions. Sometimes I responded to their request for advice; other times we jointly formed a strategy. Other times my role included being a sounding board for virtual experimentation. Still other times they had already acted on a strategy that they had formed. In these cases I either questioned them regarding the results (the evaluation stage) or merely lent an ear of support.

Indeed our work followed somewhat the description provided by the coaches in Partington and Orlick's (1987) study. These coaches said they appreciated sport psychology consultants who assisted "the coach by serving as a sounding board for ideas and by giving feedback about the effects of his or her coaching behaviours, together with suggestions about how to change any negative behaviours" (p. 98). I definitely served as a sounding board, but the second aspect described, regarding changing behaviours, was not an element of this study.

General Discussion

This discussion will bring together the themes of this study under three headings relating to (a) my role in the collaborative effort to help the coaches learn through experience, (b) the issues that were the basis for my interactions with the coaches (through which learning was pursued), and (c) the means used for promoting these interactions. The discussion of these themes will address the research questions. In particular, the first theme addresses specifically the question; what role does the consultant play in such collaboration? The second theme addresses the questions relating to the types of issues raised by the coaches and the interactions that coaches have with others. Finally, the third theme relates to the more general question about the dynamics of the collaboration.

My role.

Despite my role being framed from the start by certain specifics, such as that of an 'other' in the model of Gilbert and Trudel (2001), taking a non-prescriptive, non-supervisory stance, the nature of collaborative inquiry (research with people) was the most important feature of my role. In order to respect the democratic nature of collaborative inquiry I had to proceed with a high level of ambiguity and remain open and flexible to the context. On this topic, Bray et al. (2000) declared, "Often experienced as random, messy, and divergent, the ambiguity experienced is intrinsic to an inquiry conducted by equals" (p. 62).

At the start of the study I hoped to get the coaches together as a group but this proved difficult so I had to adjust my approach to the context, negotiating my relationship with each individual coach in the study. This was accomplished through long hours of interacting with my coparticipants. As has been documented elsewhere, in this study and others, collaborative inquiry takes substantial time (Kelly et al., 2001; Rovegno & Bandhauer, 1998).

One of my early roles in this study was to make the coaches aware of how I might work with them to help them learn through their coaching practice. At first the coaches connected me with the common perception of a sport psychology consultant being someone to whom they could send their athletes to deal with psychological problems. Thus while the precise form of the collaboration had yet to be developed, I had a clear vision of my role as consultant and strove to help the coaches by way of whatever form the collaboration took.

My principal role was that of a sounding board, a resource for the coaches. This is a role that has been both suggested for sport psychologists (Gould et al., 1990; LaRose, 1988) and requested by Canadian Olympic coaches (Partington & Orlick, 1987). Despite the considerable time since the publication of these articles, to our knowledge this role has not been examined. In this role I participated in the coaches' reflective conversations and sometimes challenged their strategies. I also suggested other resources to them, such as recommending that they approach another person in their coaching context (coach, parent, or athlete) to deal with an issue. This aspect of my role was important for me because I was not there to replace their existing support network. Indeed, I worked with them to keep these other channels of support open.

Ultimately I was there to help them learn through their everyday coaching practice. My role as a sounding board and resource person achieved this, to a certain degree. However, based on what these and other coaches (Dickson, 2001) said about the benefits of interacting with other coaches at formal coach education programs and on the literature relating to a social theory of learning (Wenger, 1998), I felt I could play an important role in the coaches' learning if I could facilitate interactions between the coaches. As the reader will see, this is the direction my role was to take for the next study.

The issues.

According to the findings of Gilbert and Trudel (2001) youth coaches' interactions with others regarding coaching issues (part of the reflective conversation) were influenced by several factors including access to peers, stage of learning, the nature of issues, and the coaching environment. The overall low number of issues raised by the coaches in our interactions can be examined in relation to these factors. The athletics coaches in this study had access to peers, were mostly advanced in their stage of learning, seemed to have few issues relating to technique and pedagogy but more relating to sport psychology, and were working within an unsettled environment at the time of the study.

In terms of access to peers, these coaches all worked in the same place and at the same time a minimum of once a week but often more than this. There was, however, no formal structure to help coaches interact with each other regarding coaching issues. Gilbert and Trudel (2001) found that for peers to be consulted they needed to be not only available but also respected and regarded as knowledgeable. In terms of myself as a peer or an 'other' in this study, the findings suggest that I was respected by the coaches and seen as knowledgeable about matters relating to sport psychology and pedagogy.

Gilbert and Trudel studied youth team sport coaches, many of who had limited coaching experience. They found that coaches who were more advanced in their stage of learning tended to use a combination of resources, including consulting peers, to generate strategies in relation to coaching issues. Most of the coaches in this study were very experienced. While it is evident from the findings of this study (interviews, observations, and knowledge sharing maps) that the coaches did interact with their peers on certain technical matters, they did not interact with me or their coaching peers very often. It would seem that their experience led them to the relatively secure level of being able to handle most of their

coaching issues themselves. Furthermore, the coaching environment was not ideal for promoting interchanges between the coaches. The lack of leadership among the coaches and the unsettled atmosphere due to the restructuring being orchestrated by the board did not make for the secure, open, and cooperative context that Schön (1983) hailed as conducive to reflective practice.

This study confirmed the finding of Gilbert and Trudel (2001) relating to the on-going nature of many issues in the coaching process. This reflects the complexity of the process (Côté et al., 1995), which is centred on human interactions and involves the physical, mental, and moral development of athletes. The reflective conversation around these on-going issues cycled through the stages of strategy generation, experimentation, and evaluation. Rather than being solved, these issues develop and require layers upon layers of strategies. Considering that these on-going issues were the most common type found in this study, it is not surprising that my principal role was that of a sounding board, as the coaches discussed their strategies, tested them virtually, and/or evaluated them with me. This putting of reflections into words contributes to the important role that reflection plays in the learning process (Moon, 1999).

The means.

This section addresses the 'how' of the collaboration in this study. What were the means used to promote the discussions in my interactions with the coaches? Again, two familiar features of this type of research, time involvement and ambiguity, were significant parts of the answer to this question. Despite my preparedness to be open, democratic, and available, I did not anticipate that I would spend as much time as I did actually being with the coaches while they worked. In fact, nearly all of our collaboration, with the exception of the two formal interviews, took place during the practices and competitions. Because this

study involved no intervention other than making myself available to the coaches, the act of hanging around described by Schein (2001) and Halliwell et al. (1999) was the major means of promoting my interchanges with the coaches. As previously explained, my presence seemed to serve as a trigger not only for their reflection, but also for them to put their reflections into words. In addition, there were times when I would ask the coaches questions based on their comments, actions, or my observations. Dialogue is recognised as one of the main means of making meaning from experience and facilitating learning (Bray et al., 2000). At a conference in April 1998, at Teachers College, Columbia University, 150 scholars and practitioners were invited to participate in a process of collaborative inquiry on transformative learning. In a report of this process, Wiessner and Mezirow (2000) noted, with regard to the role of questioning in transformative learning, "Use of questions is effective in establishing an environment for participants to figure things out for themselves and to apply those insights to their own practices" (p. 337). This is the type of questioning that I engaged in with the coaches, in keeping with my non-prescriptive approach.

The example of the coach with whom I never truly collaborated provides a good negative example of the means used for our interactions. This coach, Scott, was approached in the same manner as the other participants. Indeed, with my effort to work with him and the camp coaches, I actually intervened more in his case than with the others. However, in terms of involving me in the reflective conversation, Scott never 'stepped up to the plate' as the others did. Sticking to the participatory research dictum, which states that participation is voluntary, I did not pry Scott for issues. The other coaches came forward to share their issues with me, when I was around, or even sometimes by e-mail. Without any of these means of interaction, there was no collaboration between Scott and myself.

My journal was another large piece of the meaning-making puzzle of this study. It served several purposes, including a place to record my observations, plans, and interactions with my coparticipants, a memory aid, and a vehicle for critical reflection and learning. My journal also acted as a record of the important reflections that came out of my peer review meetings. These reflections were very important because of the nature of collaborative inquiry, for which one can never be fully prepared because one never fully knows where it will lead. Thus the journal was not only a tool for data generation but also one for analysis. E-mail messages shared with me by several of the coaches provided yet another means of promoting discussions.

Summary: Learning as Situated but not Truly Social Coparticipation

In this study actions in context and coaching issues were the basis for learning. Elements of the context in this case include the physical environment, the people (coaches, consultant, athletes, and club directors) and the system (the club, the sport sub-culture, and athletics associations). By making a consultant available to the coaches as they worked we respected the belief that learning and cognition are situated; that they are embedded in authentic activity (Brown et al., 1989; Lave, 1988).

Certain contextual factors confined the potential of learning through social coparticipation (Lave & Wenger, 1991) in this club. There were physical and logistical barriers to social coparticipation. Firstly, there was no coaches' room or even clubroom that could serve as a central meeting place for the coaches. The coaches would arrive at the track, by car or bus, and go to their work with their athletes, and then leave. Once in a while they got together for a social beer at the local tavern. Sometimes organisational details were discussed at these gatherings. In fact, if you get a bunch of coaches together, they will likely

talk about coaching, considering that it is a passion for many of those who do it. These interactions may well result in some learning, because “learning is an integral part of our everyday lives” (Wenger, 1998, p. 8). However, despite this familiar experience, if we really want to support learning via social coparticipation in a practice, we need to be more systematic about it. A barrier to free interchange between the coaches was the different timing of training sessions. Each group managed their own training schedule; only the two distance coaches worked together. Most Saturday mornings all groups were at the track, but after training coaches went to other activities in their lives, as would be expected, especially for volunteers. Gilbert and Trudel (2001) found that environmental differences between ice hockey and soccer influenced the opportunity for coached to interact with their peers and thereby seek advice and jointly construct strategies to deal with coaching issues. Clearly, the opportunity for coaches to be in the same place with the time to interact is an important consideration for learning through and from experience.

The problem of strong leadership was another factor that worked against learning through social coparticipation. The restructuring of the club eventually led to the head coach not being re-hired. With Scott now being in charge of coaching in the whole club, I decided that the climate was inappropriate to begin working on the communities of practice project with this club. As it stood, the club was an organisation in which individual coaches established their own networks to assist them to get their jobs done more effectively. Knowledge sharing and learning was limited to one-on-one relationships. The lack of decisive leadership because of the politics of restructuring meant there to was no official support for group learning initiatives. A look at these coaches’ lives, in which they coached, voluntarily, about 12 to 30 hours a week, and held down another job, provides another insight into the type of collaboration that took place. As a normal part of the participatory

nature of this study, the coparticipants should democratically work out the logistics of the inquiry. Rather than being a community of inquiry, it was a collection of individuals engaged in reflecting on their practice, with my participation in this process. Although the coaches did not initiate the study, the data came voluntarily from them. As well, the coaches and I jointly owned decisions regarding interventions. While certain concepts relating to communities of practice have been productively applied to the analysis of this learning situation, the club was not a real community of practice because of the lack of on-going interactions resulting in the production of knowing. In a report for the APQC (2001) experts O'Dell, Hubert, and McDermott claimed that a CoP is a channel for knowledge to flow and a means to "strengthen the social fabric of an organization" (p. 7). Under the right conditions, this club could have benefited from a strengthening of its social fabric. Contextual factors were definitely a hindrance to this occurring in this study, but in order to promote learning through a community of practice, my approach, as the initiating researcher also required a shift.

Research Recommendations: Direction for the Next Study

As the athletics season came to an end and decisions were made about the new club structure, my thoughts moved to a second study to be carried out with the coaches of a ski club. The decision to promote learning through social coparticipation drove a change in the conception of my role. I decided that I needed to be more proactive; that rather than simply making myself available as a consultant, I needed to become a facilitator. This decision was based on the lessons learned from Study One and on the literature relating to communities of practice (McDermott, 1999; US Navy, 2001; Wenger, 1998). The non-prescriptive aspect of my role remained the same, but as a facilitator, there were definite tasks that I would need

to tackle. First, I would need to promote the concept of learning within a community, acting as a teacher/coach helping coordinate activities that would bring members to experience the power of learning through interaction. In this way, I was going to try and “guide development of community through community building activities with a focus on knowledge sharing” (Saint-Onge & Wallace, 2003, p. 277). Other tasks would include acting as a negotiator and evaluator. Heron (1996a) discussed the role of the facilitator, who is often the initiating researcher in collaborative inquiry projects, at length. He explained how the facilitator’s role would usually move from more supervisory at the start of a project to more on a par with other participants as the project progresses. On this issue he said,

It is a knife-edge business. When initiating researchers launch an inquiry it is the nature of the case that there can be no absolute parity of influence between them and their co-opted inquirers. They can move from appropriately strong and primary influence, to significant peer consultant influence; and on the way may degenerate into either over-control or under-control. It is a mistake to suppose that there can be a simple parity of influence and to try to achieve it. . . . What undoubtedly can be achieved as the inquiry proceeds is a sufficient degree of non-dependent collaborative reflection and management, for the research to be genuinely *with* people, and not about them or on them. (p. 65)

In Study One we set out to enrich the coaches learning through experience, using coaching issues to trigger reflection. In this study I collaborated with individual coaches as we explored ways in which they might use me, as a consultant to help them not only solve coaching issues but also learn from them. The next study sought to enrich coaching knowledge by facilitating group discussion in a type of community of practice. In Study Two, which was designed from the start to encourage the sharing of knowledge and the solving of coaching issues within the coaches’ community of practice, I became responsible for creating the conditions that would allow the coaches in another context to learn through their participation in a community of practice.

Study Two Part One

Introduction

In the first study we investigated learning through experience by considering how practitioners (coaches) learn when facing a problem and more specifically how that learning process is affected when a consultant is accessible to the coaches. In effect, by making a consultant available to the coaches we altered the conditions for engaging in the reflective conversation. Suggested by Gilbert and Trudel (2001), a consultation approach based on one-on-one interactions was chosen, as opposed to a collective learning approach. Thus, the consultation process was dependent on a coach raising a coaching issue to discuss with the consultant. As underlined at the end of Study One, this consulting initiative can contribute to the coaches' learning but like any other initiative there are limits. One way to overcome these limits would be to provide other, complementary initiatives.

In Study One the coaches said they also learn from other coaches, but unfortunately, it seems that these coaches were from outside rather than inside the club. We saw there an opportunity to extend our investigation of coaches learning by looking at the possibility of fostering collective learning among a group of coaches.

As we wanted to build on and extend Study One, we needed a conceptual framework to guide us. This conceptual framework needed to recognize the importance of learning through experience, especially relating to day-to-day actions, as well as learning, conscious or not, that happens through interaction with others. The works of Raelin (2000) and Bray et al. (2000) were instrumental in our selection. Bray et al. present and compare many action-based inquiry methods (participatory action inquiry, appreciative inquiry, action learning, action science, and action inquiry) for facilitating learning, initiating change, and conducting

research. Raelin, as we indicated earlier in this document, examined “the three principal collective learning types: action learning, communities of practice, and action science” (p. 66). Raelin highlighted the main differences between these three collective approaches.

Action learning... places theory into tacit use by having managers learn from their peers while they are all engaged in the solution of real-time problems. Community of practice... recognizes and encourages the development of tacit collective practices of individuals as they develop a common enterprise and shared ways of doing things. Action science seeks ways to illuminate our practices, especially our untested thoughts and assumptions.... (p. 63).

In terms of how to help people learn through experience Heron's (1999) model of facilitator styles includes the peer principle in which learning is facilitated by the support of autonomous people who are politically on the same level. This is not the acquisition metaphor in which an expert is brought in to teach learners. Instead this learning is within the participation metaphor, and involves peers working in learning communities. As the type of learning community promoted in this study was the community of practice (CoP), we will now take a closer look at some of the theory and assumptions of this approach and also, what the literature says about cultivating CoPs.

Literature

Communities of Practice

What is a CoP?

A context that fosters learning and development through individuals' participation in the activities of the community. Community members transform their understandings, roles, and responsibilities as they collaborate with knowledgeable others in carrying out activities that constitute the practices of the community. (Palincsar, Magnusson, Marano, Ford, & Brown, 1998, p.10).

The dominant writings on communities of practice belong to Wenger and colleagues (Wenger, 1998; Wenger et al., 2002). However, Wenger clearly stated that it was his

collaboration with Jean Lave (Lave & Wenger, 1991) that brought about his focus on the concept *community of practice* (CoP). It is in Lave's (1982) work studying the apprenticeship of tailors in Liberia that we see the emerging idea of learning through participation in practice. In comparing different forms of education, Lave decried the normative status of schooling that led to it being designated formal education and all other forms as informal. She felt that it was important to move away from the content-process distinction and her study of apprenticeship provided evidence of an educational form in which learning processes "are indivisible from the production processes being learned" (p. 186). Later, Lave and Wenger (1991) proposed that learning occurs through participation in communities of practice. Participation that is initially legitimately peripheral and gradually becomes more engaged. Membership in a community of practice implies "participation in an activity system about which participants share understandings concerning what they are doing and what that means in their lives and for their communities" (p. 98). Wenger (1998) explored in detail the implications of such participation for learning and identity. In addition to his work with Lave, Wenger used the findings of an ethnographic study of medical claims processors to give life to the theory he developed in the book. He began by presenting the following assumptions regarding learning and "the nature of knowledge, knowing, and knowers" (p. 4): (a) humans are social, (b) knowledge is competence in a valued enterprise, (c) knowing is active participation in that enterprise, and (d) meaning is the ultimate product of learning. Based on these assumptions, learning is social participation. Participation here means more than engagement in certain activities. It is the "process of being active participants in the *practices* of social communities and constructing *identities* in relation to these communities" (p.4).

For Wenger (1998), practice is doing in a social and historical context. It involves both explicit, or codified knowledge, and tacit, or unarticulated knowledge. It is “a process by which we can experience the world and our engagement with it as meaningful” (p. 51). Similar to Mezirow, Wenger wrote, “living is a process of negotiation of meaning” (p. 53). Negotiation is a continuous interaction that mixes what is pre-existing, or historical with what is dynamic, or contextual. Negotiation involves two constituent processes: participation and reification.

Participation is personal and social, and involves the whole person. It is an active process in which participants shape each other's experience of meaning. It is a source of identity. Participation can involve all kinds of relations, such as, collaborative and conflictual, political and intimate, co-operative and competitive. Participation in CoPs shapes our experience and CoPs are shaped by our participation in them.

Reification, which can refer to a process and its product, is the partner of participation. It is “the concept of giving form to our experience by producing objects that congeal this experience into ‘thingness’. In so doing we create points of focus around which the negotiation of meaning becomes organized” (Wenger, 1998, p. 58). In order to become meaningful, reification has to be appropriated into a local process. As a result of this appropriation, forms transform and take on significance beyond their context of origin. Thus “reification as a constituent of meaning is always incomplete, ongoing, potentially enriching, and potentially misleading” (p. 61-62).

Different forms of participation and reification come together and affect each other in moments of negotiation of meaning. Wenger (1998) provided a beautiful description of this coming together, which gives shape and meaning to people and things.

In this interplay, our experience and our world shape each other through a reciprocal relation that goes to the very essence of who we are. The world as we shape it, and our experience as the world shapes it, are like the mountain and the river. They shape each other, but they have their own existence, in their own realms. They fit around each other, but they remain distinct from each other. They cannot be transformed into each other, yet they transform each other. The river only carves and the mountain only guides, yet in their interaction, the carving becomes the guiding, and the guiding becomes the carving. (p. 71)

Meanings are negotiated within communities of practice, which are not the same as groups, teams, or networks. There are three dimensions of practice as the property of a community: mutual engagement, joint enterprise, and shared repertoire (Wenger, 1998). A practice exists because people are mutually engaged in negotiating the meanings of actions. Belonging to a community of practice is related to one's engagement in the practice, but each participant in the community engages in a unique manner. Mutual engagement is as much about the competence of others as it is about one's own competence; about knowing where in the community to go for help and how to give help to others. Harmony and homogeneity are not necessary features of mutual engagement. In fact, tensions and challenges are accepted types of participation. The second dimension, joint enterprise, as a characteristic of practice that brings together a community, implies that the enterprise is 'joint' because it is collectively negotiated, not because all participants agree on all things. The collective negotiation of meanings makes the enterprise always uniquely indigenous, "never fully determined by an outside mandate, by a prescription, or by any individual participant" (p. 80). Finally, the development of a shared repertoire is the third dimension of practice that acts as a source of community coherence. The repertoire of a community allows for the negotiation of meaning because it reflects the community's history of mutual engagement, while remaining ambiguous. The elements of a repertoire are heterogeneous. It is the pursuit of the enterprise that makes the repertoire coherent. The repertoire combines

participative and reificative aspects and can include tools, routines, words, actions, stories, ways of doing things, symbols, and so forth. When participants sustain mutual engagement in their enterprise long enough to share significant learning, a community of practice is the result. Thus “communities of practice can be thought of as shared histories of learning” (p. 86).

Learning within a community of practice involves the development of the practice. More than “the acquisition of memories, habits, and skills... [this learning is] the formation of an identity.... Learning is the engine of practice, and practice is the history of that learning” (Wenger, 1998, p. 96). As a practice develops, learning and change take place. Thus, no matter what form it may take, it is essential to assume learning within a community of practice. An example of this provided by Lave and Wenger (1991) is that of students being taught physics in high school. Communities, through their practice, reproduce themselves. The question about high school physics students has to do with what reproducing CoP is the context of their learning. When the “vast differences between the ways high school physics students participate in and give meaning to their activity and the way professional physicists do” are considered, it becomes clear that the students are participating in the community of schooled adults. They are learning how to get through high school physics, not how to be physicists.

The term *legitimate peripheral participation* (LPP) is used “to characterize the process by which newcomers become included in a community of practice” (Wenger, 1998, p. 100). Peripheral participation provides an approximation of full participation. The important point is that peripheral participation allows newcomers to be part of the actual practice. In so doing, it is inevitable that newcomers will make errors, or perform in a sub-standard way. If newcomers are to move toward fuller participation they need legitimacy in the form of being

sponsored, being useful, being the right type of person, and so on. Legitimate peripheral participation is used to describe the trajectory of individuals within a CoP as they progress from newcomers to some fuller form of participation.

Practice is not something to be handed down from one generation to the next. As a “shared history of learning” (Wenger, 1998, p. 102) practice is always evolving through the social interactions of its participants and the introduction of newcomers is a version of the normal activity of the practice. Communities of practice are nodes for the exchange and interpretation of information (Wenger, 1999). The shared understanding of members allows for important information such as practical tips and feedback to be dispersed across more conventional organizational boundaries. This type of tacit knowledge, usually not captured in formal learning systems, makes CoPs ideal for introducing newcomers into a practice. Communities of practice are alive with innovation as members seek to stay at the forefront of new developments in their practice. In this way, CoP members engage in a type of collaborative inquiry that ensures their membership is valuable because it is an investment in their professional identities. Communities of practice are neither intrinsically good nor bad. They are, instead:

A force to be reckoned with for better or for worse. As a locus of engagement in action, interpersonal relations, shared knowledge, and negotiation of enterprises, such communities hold the key to real transformation – the kind that has real effects on people’s lives” (Wenger, 1998, p. 85).

This section has provided an overview of how Wenger (1998) used his social theory of learning to systematically explore the concept of community of practice as a framework for understanding learning in social terms. Wenger developed this framework from studying existing communities; for example, the claims processors and the various crafts referred to in the book he wrote with Lave (Lave & Wenger, 1991). Indeed, the informal nature of CoPs,

as described by Wenger (1998), has led some authors to assume that CoPs cannot be mandated (Merriam, Courtenay, & Baumgartner, 2003). It is true that Wenger stated, "It is not so clear where they begin and end. They do not have launching and dismissal dates" (p. 96). This is due to the fact that rather than being based on reified tasks, CoPs are formed around joint learning, which has no clear time schedule. Merriam et al. examined learning in a marginalized community of witches. Like Wenger, they looked at how the community functioned in terms of the key components of social learning theory, that is participation, learning, and identity. Recently, Wenger has made it clear that CoPs can be cultivated. In fact, a number of groups have actively promoted learning through the purposeful development of communities of practice, in, for example, the military (U.S. Navy, 2001), education (Barab, Barnett, & Squire, 2002), and business (Saint-Onge & Wallace, 2003; Wenger, McDermott, & Snyder, 2002). The central point of the present study was to facilitate this type of learning. These publications have addressed this issue on the basis of practical experience. I will now review some of the major concepts about how the theory of CoPs can be applied and what it is that is involved in facilitating learning by cultivating communities of practice.

Cultivating communities of practice.

"If you put communities of practice in place, tacit knowledge will surface naturally and be shared with the people who really need to know it" (Saint-Onge & Wallace, 2003, p. 67).

Communities of practice have existed since the earliest years of human existence. They were the initial knowledge-based social structures (Wenger et al., 2002). Even though most people are not aware of the term, they likely have experienced being a member of at least one CoP. Despite these facts, it has only been recently that this concept has captured

the attention of various disciplines, notably business and education. In business the reason for this is the rapid development of technology that has altered the global landscape and made it necessary for organizations to manage knowledge more effectively in order to remain viable in the knowledge economy (Saint-Onge & Wallace, 2003; Wenger et al., 2002). The value of CoPs as loci for learning is easily understood when one considers the following. For Saint-Onge and Wallace, knowledge is “the ability to take effective action. Knowledge is information that has been placed in context and validated by others who have credibility. Information is turned into knowledge and inserted into one’s practice through learning” (p. 63-64). Lack of information is not a problem in the postmodern world. The trainers of managers, teachers, and coaches have an over-abundance of teaching materials that they must sift through to decide what is most appropriate to pass onto their students. But, as previously outlined, learning is less about *having* and more about *doing*, and CoPs, being closely linked to workplace action, are places where members can test out and validate information in the context of real experience. A look at how data is converted into information, and subsequently, knowledge is helpful here.

Communities of practice provide the opportunity for members to take raw data, compile these into the meaningful patterns that make up information, and finally, by negotiating the meaning of information, convert it into knowledge through validation accomplished by effective action.

Communities of practice are particularly effective at turning information into knowledge because they deal with information on the basis of experience. Tacit knowledge stems from someone’s experience. In a community, members give greater meaning to information by applying their tacit knowledge. This is why communities of practice are so effective at engendering learning. They give significant richness to learning by adding tacit knowledge to explicit knowledge that couldn’t otherwise be internalized - how would it be possible to read information (explicit knowledge) about something that someone really isn’t totally aware of (tacit knowledge)? (Saint-Onge & Wallace, 2003, p. 66).

Within CoPs it is the process of productive inquiry that provides the catalyst for engendering learning. Productive inquiry is “a dynamic questioning and validation process that draws out tacit knowledge to give meaning to explicit knowledge” (Saint-Onge & Wallace, 2003, p. 17). Driven by CoP members’ ‘need to know’, productive inquiry is carried out through quality conversations. Despite the fact that informal CoPs have been in existence for ages, it is rare for them to sustain themselves in any sort of systematic manner without assistance (Saint-Onge & Wallace; Wenger et al., 2002). In order to optimise success, the development of CoPs needs to be purposefully cultivated. The designation of a number of key roles is part of this cultivation.

The roles that help ensure success in CoPs include sponsors, community leaders, members, and facilitators or coordinators. Although Wenger et al. (2002) use the latter term, others have used *facilitator* to describe this role (Saint-Onge & Wallace, 2003; US Navy, 2001). In this study I will use the term facilitator. In addition to many of the general, aforementioned functions of a facilitator of adult learning, the literature on cultivating CoPs specifies a key role for facilitators. In fact, “the literature on communities of practice is clear that facilitation is key to a community’s success” (Saint-Onge & Wallace, p. 160).

According to Wenger et al. (2002) the most visible function of the facilitator is to plan and facilitate community events. Other functions include fostering the development of members, brokering knowledge assets, linking community members, managing the boundaries between the community and outside groups, helping to build the practice, and evaluating community health and contributions. Most often a member of the core or steering group, the facilitator should be knowledgeable and passionate about the domain of interest to the community, respected by community members, but not necessarily an expert in the practice (Wenger et al.). According to the US Navy (2001), the facilitator should be an

independent, CoP process expert who is responsible for ensuring that community forums are productive. The role of facilitator can also include being a liaison to sponsors and other stakeholders (Saint-Onge & Wallace, 2003).

While the facilitator's role is critical, so is that of the functional sponsor. For a community, having the sponsorship of the organisation means that managers and/or directors must recognise the value of the community and promote its cause (Saint-Onge & Wallace, 2003). Also important is the community leader, who is an active member of the community and usually an expert on the community's area of focus (US Navy, 2001). Selecting community leaders who are seen to be *thought leaders* in their domain will legitimize the community and act as an attractant (Wenger et al., 2002). Depending on the community, the role of the leader may overlap with that of the facilitator and include such functions as planning community activities, interfacing with sponsors and other communities, and managing day-to-day activities.

Finally there is no community without the members. While members may be selected by an organisation, the degree to which they participate is voluntary rather than prescribed. A balanced community will involve participants who have varying degrees of interest in the different elements of the practice, which leads to different levels of participation. Some of the roles attributed to members are (a) sparkers, who trigger debate; (b) synthesisers, who summarise; (c) sole contributors, who contribute information with a "take it or leave it" attitude; (d) witnesses, who use their experience to lend credence to certain ideas; (e) champions or cheerleaders, who have something to say about everything; and (f) lurkers, who are seen but not heard (Saint-Onge & Wallace, 2003). Wenger et al. (2002) described three degrees of community participation: the core group who make up the heart of the community (10 to 15 percent), the active group who attend regularly and

contribute occasionally (15 to 20 percent), and the peripheral group encompassing the remaining members who rarely participate. According to Wenger et al., movement between the levels of participation is a sign of good community health.

The key to good community participation and a healthy degree of movement between the levels is to design community activities that allow participants at all levels to feel like full members. Rather than force participation, successful communities 'build benches' for those on the sidelines. (p. 57)

According to Wenger et al, (2002), "Because communities of practice are voluntary, what makes them successful over time is their ability to generate excitement, relevance, and value to attract and engage members" (p. 50). These authors set out seven principles for cultivating CoPs with this sense of 'aliveness'. They cautioned that these should not be seen as a recipe for CoPs, but that keeping them in mind helps to make CoPs more flexible. CoPs should be designed for evolution; that is, with community development in mind. This is why it is better to start with a simple structure, such as weekly meetings, and add other elements as they develop. Communities of practice should be designed to allow for both internal and external perspectives. As discussed, CoP design should encourage different levels of participation. Opportunities should be provided for both private (one-on-one) exchanges and public ones. At the heart of any community is a network of relationships between members. In order to nurture these relationships, community events should be designed to allow time for informal networking. The facilitator should spend time between community meetings making contact with individual members because "these informal, 'back channel' discussions actually help orchestrate the public space and are key to successful meetings" (p. 58). A focus on the value of participating in a CoP is another important design principle. Initially members may find it difficult to be explicit about the value of their participation, even though they are likely to say it is of value. If, from the beginning, members are encouraged to identify specific examples of the value they get from participating in the

community, the positive energy derived from this will propel the community. Communities of practice need to provide members with a familiar, comfortable place where they can build relationships, speak candidly, and throw new ideas around, complemented by events that challenge accepted thinking and stir up excitement. Finally, attention should be given to the rhythm of community events because these will influence the tempo of the interactions between members. It is normal that the rhythm of a CoP will change as the community develops, and finding the right rhythm is key for successful community development. All of these principles, recommended by Wenger et al. for cultivating communities of practice, are aimed at energising participation, rather than prescribing precise structures for community design.

Saint-Onge and Wallace (2003) have written a book that is at once a case study of the development of a community of practice, the agent network of Clarica, one of Canada's largest life insurance companies, and a practitioner's guide. They outline a two-phase approach to leveraging communities of practice that are linked to a company's strategic vision. The first phase, labelled community design and launch, includes three steps: defining the community project, establishing the community components, and launching the community. Phase two, community implementation and growth, has four steps: establishing the community, checking progress and value (informal), growing the community, evaluating its purpose and direction (formal), and expanding it.

The U. S. Navy (2001) put out a community of practice practitioner's guide "designed to help emerging community's (*sic*) build and sustain evolving, meaningful forums for creating, storing, and transferring knowledge" (p. 2). Intended as a "how to" rather than "what is" approach, this guide is very practical and includes almost a step-by-step approach for developing CoPs. The general design concepts are similar to those presented by Wenger

et al. (2002) and Saint-Onge and Wallace (2003), but this guide includes actual exercises and tools that can be used to push learning in communities.

Summary

The goal of Study Two was to foster learning through a community of practice of coaches. The potential to create knowledge that is grounded in the coaches' participation in their practice was the incentive for this approach. The role of facilitator is a particularly critical one for cultivating CoPs. In this study I played the role of facilitator and initiating researcher. As such, I used a variety of facilitative methods to stimulate learning in the group. Using a collaborative approach, this participative study sought to explore and document how cultivating the CoP of a group of coaches can promote learning and develop their practice.

Coaching Context

This study took place over the six months of a winter ski season. The ski club that employed the coaches has a clubhouse at the foot of the major resort where it is located. In it the coaches have a locker room where they change before and after the day of coaching and where they can leave their equipment. The clubhouse also serves as a meeting place, both formal and informal, for coaches, club officials, and athletes. The ski season, in the northeast of North America, begins around the middle of November, if the weather is cold enough to make snow. Racing clubs usually get underway by the end of November, having about four weekends before the Christmas break. The Christmas camp, lasting from about the 21st of December until schools go back about the 6th of January, is the major pre-competition preparation period. Soon after the New Year, the competitions begin, with one being held approximately every other weekend. The season ends around the first or second

week of April. During the school months, most of the skiers only train on the weekends, although a small group of elite athletes also train on Fridays.

Research Questions

Based on the findings of Study One, the research questions for Study Two were adjusted. The initial main question of Study One was: What are the dynamics of the collaboration of a consultant working with individual athletics coaches to help them solve their everyday coaching issues? As explained, the type of collaboration under investigation in this study changed. Thus the question became: What are the dynamics of the collaboration of a facilitator working with a group of alpine ski coaches to help them to learn from their everyday coaching experiences?

The secondary questions were (a) What role does the facilitator play in such collaboration? (b) What role do the coaches play in such collaboration? And, relating to the effects of the collaboration, (c) How is learning enriched through social co-participation within a community of practice?

Methods

Coparticipants

Seven coaches, the head coach and six coaches of one age group, K1¹ (11 – 12 years), made up the coparticipants in this study. All coaches worked for the same ski club at a major resort in Eastern Canada. Although each coach had their own group of skiers, the

¹ K1 is the category “Kinder One”, age 11 and 12 as of January 1st of the current year, according to the Fédération Internationale de Ski (F.I.S.), which is the international governing body of ski racing.

groups often worked together on the hill. The head coach was well established, having been in the position for nine years. The coaching experience of the six others varied and is discussed in the findings section 'Knowing the Coaches'.

How to walk in another's moccasins without taking off your own: The role of facilitator

To facilitate work-based groups is to help them help themselves, to assist them with the lessons to be learned from their work experience. Each group is unique and exists in its own context (Raelin, 2000). The essence of the facilitator's role, instead of prescribing the right answers, is to empower group members to learn from their experience, both individual and communal. With this in mind, it seems clear why it is less important for a facilitator to be a subject expert in the group's practice than it is to be a good leader of group processes. Thus, "a facilitator works with a group as a process guide so that the group is able to achieve its purpose. A facilitator releases the group potential so that it can be the best it can be" (Hunter, Bailey, & Taylor, 1999, p. 119). The facilitator of group learning helps group members learn together and contribute to one another's learning. This is achieved by generating structure, data, time, and tools as well as the desire to learn and value learning as a life-long process. The following are among the qualities and actions recommended by Hunter et al. (1992, 1999) that a facilitator could be and do to help groups be productive (see Table 4). Right from the start, the facilitator should assist the group to establish its purpose, ensuring that they have ownership of it, and make certain that the group spells out, and reviews regularly, its culture; that is, the way the members will work together. Doing these actions addresses the issue of direction (purpose) and process (culture). According to Hunter et al., the quality that is at the essence of facilitation is 'being-with', defined as "a conscious act of connecting with others" (p. 34). This quality is about empathy and mindfulness, about active listening and full focus. Two other important issues to be addressed are safety and

Table 4

The Facilitator: Issues, Qualities, and Actions

Issue	Quality	Action
Direction and process	Intentionality	Help group establish purpose
	Being-with	Empower group
	Empathetic	Active listening
	Mindful	Full focus
	Adaptable	Help group spell out how they will work together
	Creative	
Safety and trust	Emotional intelligence	Ensure respect
	Intuition	Promote active listening
	Authenticity	Manage peer pressure
	Humble	
Ethics	Discernment	Follow rules of conduct

trust; making sure that everyone is respected and listened to, ensuring the group does not engage in peer pressure. In relation to these issues, the facilitator should encourage the group to speak powerfully by creating an atmosphere in which people really listen to one another. Intentionality is another quality of successful facilitators. It involves the alignment of the group's purpose, passion, vision, and commitment. Intentionality is an attitude, and it is the trademark of Olympians and other achievers. Emotional intelligence and intuition are two other qualities that benefit the facilitator. Facilitators also need to be aware of ethical issues and strive to act in accordance with certain rules of conduct. In order to be effective, the facilitator needs to be awake, adaptable, humble, authentic, discerning but not judgmental, creative, and culturally sensitive. The effective facilitator trusts the resources of the group, is

not determined to push his or her own interventions on the group, in fact, keeps intervention to a minimum, knows how to tap group energy, and honours each group member. Taking nothing for granted, an experienced facilitator checks for agreement and takes everything that is said or done as relevant, is good at questioning and suggesting, negotiating, acknowledging and affirming, working with conflict, and seeking feedback. Last but not least, a good facilitator has a good sense of humour. This list of facilitator qualities and actions is by no means complete but it covers a number of the main points addressed in the literature about facilitation. In sum, an effective facilitator is open and flexible, disclosing, non-threatening, reflective, and good at providing and receiving feedback, as well as uncovering hidden assumptions in their self and others. Using a non-prescriptive approach, the facilitator moves a group forward by creating an open, participative environment and paying attention to purpose and culture.

Myself as Facilitator

Having outlined both the importance and the complexity of the role of facilitator, it would seem appropriate to address my suitability for this role. My background as elite athlete, coach, educator, and consultant was presented earlier in this document in relation to my interest in the project. These same experiences, with the addition of being a mother, a student, and a researcher also combined to arm me for the role of facilitator. For example, consulting and motherhood have taught me the importance of active listening, empathy, adaptability, and mindfulness. Full focus and intentionality I learned early as an athlete, having to balance my sporting and school lives while striving for performance in both. Being a head coach and educator taught me the importance of being creative, authentic, humble, and discerning. These qualities served me well in as I set out to manage the learning environment for the coaches in my role as facilitator.

In addition to the above, my currency as a facilitator with the ski club was aided by my experience as a skier (ex-racer and coach), and my long acquaintance with several of the coaches. These attributes in particular helped the early establishment of a trusting, respectful atmosphere.

Data Generation Methods

As in Study One the main methods of data generation were interviews and participant observation. As the researcher/facilitator I conducted two interviews, one early and one late in the season, with six coaches including the head coach, and one interview (early season) with the seventh because he went back to university at the end of the season. The first interviews were to learn about each coach's background experience and coaching philosophy. In the second interviews the coaches were asked about their experience with the collaborative inquiry process. As well, I was engaged in participant-observation and on-going process interviews as I worked with the coaches over the duration of the season. During this time, the collaboration saw me observe several on-snow training sessions and one away competition. Most of the on-going process data were generated through eight "round table" (RT) meetings set up between the coaches and myself. The data from these RTs took the forms of summary notes and sometimes, complete transcriptions. In keeping with the open and flexible nature of collaborative inquiry methods, the exact forms of data generated developed with the process.

For the first four of these RTs (RT 1 – RT 4) I took notes and compiled summary reports. I did not record these meetings because the process was new to all of us and I wanted to establish trust and have my coparticipants feeling very comfortable and at ease to share with each other. When this appeared to be true, as indicated by the degree of their participation in the RTs, I realised the importance of capturing the words of my

coparticipants, especially for the purpose of documenting the process. Thus, I decided to tape record and transcribe the last four meetings (RT 5 – RT 8). The data for these last four took the form of complete transcriptions, except RT 7 that was badly recorded. As well, summary notes containing highlights of the meetings like those for the first four RTs were compiled. Thus the data (see Table 2, Study One) consist of these documents issuing from the RTs, produced by myself for the coaches and my research, my journal, and records of my peer debrief meetings. At the end of the season, a resume of all the meetings and the process was forwarded to the coaches by e-mail. These same documents were again sent to those coaches still working in the club (five of seven) at the start of the next winter season. Additional information regarding certain aspects of coaching, previously written by another consultant and myself, was also circulated to the coaches (see Appendices J, K, and L). Documents were distributed to the coaches in hard copy, and some electronically through e-mail. A last piece of data generated in this study was a letter, written by the coach leader of this group, to the coaches who were to partake in the second part of Study Two.

Findings

As in Study One, this findings section is the story of my collaboration with a group of coaches, this time ski coaches. Here too you will find throughout the findings section parentheses which link parts of the findings to numbered notes in the discussion. We suggest that you read these notes as you proceed through the reading of the findings, moving back and forth between the two sections. A general discussion, following the point form discussion, bridges the central themes in relation to the research questions.

The Beginning: First Contact

As my season with the athletics coaches in Study One came to a close, my supervisor and I spoke about the lessons from that experience. I drew up a document to guide my approach for Study Two (see Appendix M). The decision to actively promote learning through the cultivation of the coaches' CoP was the central initiative of the approach. I contacted Jean, the head coach, by telephone. We spoke about the individual coaches who would be working for the club and which age group each would be coaching. Jean was very interested in my working with the coaches and we set up a meeting for when the mountain opened.

After this telephone conversation I made several decisions. I concluded that there were some very experienced coaches in the group as well as others just beginning their coaching careers. With this mix of experience I knew that an important part of my role was going to be to facilitate the sharing of knowledge and I wanted to check out the interest of the more experienced coaches as far as this sharing was concerned. I felt that it would be important to enquire about the different coach's trajectories in the first interviews. I also knew that I needed to do a good presentation of the project for my meeting with Jean.

Jean is a friend and colleague whom I have known for 25 years. An incredible character who was voted the local personality of the year a few years ago, he is a man of action. I felt that our project was closely aligned with his goals for the club and I wanted to be able to present the concept of communities of practice to him in such a way that he would grasp the potential of it. My challenge was to have him understand without overwhelming him with theory. I adapted a document that I had prepared for Study One, which explains CoPs (see Appendix H). When I met Jean at lunch in the cafeteria, a few weeks after our telephone call, to explain the project I had this document with me but I never showed it to him. Instead, I explained the concept of CoPs as vehicles for promoting learning from everyday experiences, using the example of the Xerox copy machine technicians talking around the coffee pot that was used by Brown and Duguid (2001). As I spoke I drew some diagrams on a piece of scrap paper. This excerpt from my journal sums up the meeting.

Excellent meeting with Jean. He grasped the idea of CoPs right away and said that it strikes home with what he had in mind this year for the coaches. He was also excited by the idea that this type of learning is what is needed with the fire department, of which he is the chief. We decided to do the project with the K1 coaches (John, Gord, Sebastian, Chelsea, Ben, and Chris). He said that he would not always be available for the meetings with the coaches but would try to be there. We decided that we should wait until all the coaches were there to begin as Gord was coming back on the 16th. (My journal, December 2nd, 2001)

I was amazed at how quickly Jean latched onto the idea of CoPs as providing a framework for learning through participation. (See Study Two Part One Discussion 1) Jean and I decided that the next step was to meet with John, who, as the most experienced of the group, had already been designated by Jean as the leader of the K1 coaching team. Six days later I met with John and Jean, again at lunchtime in the cafeteria. Once more, I gave John no written documentation. Joined by Jean, I “just drew some diagrams and talked about the

CoP concept and how I would be a facilitator in their sharing of knowledge” (My journal, December 8th, 2001). John indicated he was very keen on the idea.

On December 21st I met all the K1 coaches together for the first time, after skiing, in the meeting room of the clubhouse. Using the diagram of the Gilbert and Trudel (2001) model (see Appendix B) and a diagram of the sources of coaching knowledge (see Appendix N), I explained the origin of the study and explained how we would work in a group, seeking to create and share knowledge related to their practice. Thus, I underlined the “other” options in Gilbert and Trudel model, and also my role as a facilitator. We discussed the information on the consent form and they all signed forms. We set up times for some of the individual interviews and our first three working meetings, the first to be on the 27th after training.

I had been thinking about and researching how I should ‘get the ball rolling’ with the group. Time was critical because the Christmas Camp, which provides the most intense period of training during the season, was beginning. I felt that it was important to get the coaches together at least three times before the end of this Christmas training period. I believed there were three important benefits from starting strongly with meetings every three of four days. First, I hoped it would get the coaches used to the concept of reflecting on their practice, and using the meetings to seek feedback and share knowledge; in other words, to get used to the process. Second, from a technical/tactical point of view, I knew from my experience that this was the critical time for athletes to benefit from training and any learning achieved by the group would likely be reflected in athlete progress. Finally, and related to the first two benefits, if the coaches could see and feel the results of this type of learning early on, it would make them enthusiastic about continuing on during the rest of the

season, which becomes quite hectic once the competitions begin. (See Study Two Part One)

Discussion 2

In terms of what method I might use to start the process, I combined concepts from sport pedagogy/psychology and business. I had previously studied and worked at enhancing the performance of athletes. One of the fundamental ways of improving one's performance is to reflect on each performance, asking oneself what lessons can be learned and taken to the subsequent performance (Orlick, 2000). This present research project was to do with the process of coaching. In order to help the coaches learn through their individual and collective experience I wanted to facilitate the coaches discussing their coaching practice. From knowledge management in business I had learned that some companies promote the sharing of knowledge through best practice teams who identify and make public examples of best practices (Raelin, 2000; Wenger et al., 2002). Based on these ideas from sport pedagogy/psychology and business, I asked the coaches to come to the next meeting with three lessons learned, if possible, which they had learned while coaching between this first meeting and the next one. I explained that these could be things that worked or did not work and that they would be asked to share these lessons with the others.

At the end of this first organisational meeting ended, we discussed John's plan of having all the groups free ski three runs on a certain trail to warm up every morning. The idea of this, as explained by John, was to use the athletes' warm-up time to give the coaches a chance to watch the skiers together. In this way the coaches could discuss technique and what they were, or could be working on with the skiers. (See Study Two Part One)

Discussion 3) I stated that I would try to be there for this morning session as often as possible.

Before turning to the story of the round table meetings, as the coaches christened them, I will provide an overview of the coaches' backgrounds and coaching philosophies or role frames, as described in their first individual interviews. The guide for these interviews was the same as that used in Study One (see Appendix A). According to this guide, questions about the coaches' philosophy were aimed at investigating their assumptions about coaching and their role frames. The coaches were also asked to think about a coaching challenge and how they had resolved it. These questions sought to describe their support system and their CoP. Ben, Gord, Sebastian, and Jean were all interviewed in the early part of the season. Chelsea, Chris, and John were interviewed in mid-season.

Knowing the Coaches

Learning in a CoP is through the negotiation of meaning and it should not be presumed that there will be agreement at all times. When people negotiate their standpoint, they do so from a mixture of previous experience, their trajectory, and their philosophy. Thus through the first interviews we asked the coaches information about their coaching background including their own competitive experience, and their coaching philosophy. We also investigated their support network by asking them whom they contact when facing a coaching problem.

Coaches' background.

Information regarding the coaches' background experience is presented in Table 5. All but one of the coaches, Gord, had ski-racing experience. One, John, had been on the National Team. The others had raced at the club and provincial level. Jean, the head coach had ski raced as an adolescent and had become an instructor and eventually a ski school director before moving into race coaching after 15 years of ski instructing. His coaching experience includes five years as the head coach of a major provincial team. At the time of

this study he had been the head coach of the ski club for nine years. He is highly respected and very popular with the coaches, the athletes, the club administrators, and the parents. The coaching experience of the other coparticipants was a mix of newcomers, somewhat experienced, and very experienced. The two newcomers were Chris and Ben, who had both been athletes in the club for five or more years. Two others, Chelsea and Sebastian, were in their eighth season of ski club coaching and/or instructing, however, they had come to the club only two years previous to this study. Gord had 25 years of ski instruction experience, including instructor training at the highest level, but was in his first year of ski club coaching since he had coached youngsters when he was just getting into ski instructing.

Table 5

Coaches' Background Experience

Coach name	Ex-ski racer	Years coaching	Coaching
John	Yes (+)	25	Club to World Cup
Gord	No	2(25) ^b	Club (<i>national</i>)
Sebastian	Yes (ø)	8	Club
Chelsea	Yes (ø)	4 (4)	Club
Ben	Yes (ø)	0	Club
Chris	Yes (ø)	0	Club
Jean	Yes (+)	17 (15)	Club to international

Key: Extent of experience as a ski racer: (ø) = medium, (+) = extensive

^b Italics in brackets denotes experience in ski instruction rather than coaching

Finally, the sixth coach, John, was the National Team alumnus who had been coaching for 25 years at all levels including club, provincial, national, and World Cup. He had recently returned to coaching in order to coach his daughter who was in the club. All of these coaches were paid, however, only the head coach was employed full-time by the club for the winter. Of the six others, when not working for the club, two were students, three instructed skiing, and one was a carpenter.

Coaches' role frames.

Again in this study, following the procedure in Study One, interview questions relating to coaches' philosophies and what they consider as important in their job helped to determine coaches' role frames. Two of the boundary role frame components for this set of coaches, age and gender, were constant; they all worked with mixed gender children ages 11 and 12 years old. There was however a difference in the level of competitiveness, with two groups being considered elite, two mid-level, and two closer to novice.

When asked about their coaching philosophy, the newcomers (Ben and Chris) both said that they tried to make it fun for the kids. Chris said,

HAVE FUN! It's number one. Let the kids rock and roll, let the kids, the first thing I say every morning is 'What do you guys want to do'? And then they'll say 'I want to do some one ski'. Most of the time it's that, one ski. (Chris, interview 1)

He hinted at personal and sport specific development when he added, "I like to work very much individually on the people, I don't like to do an overall exercise for everybody because then some people are like 'I don't get it'" (Chris, interview 1). While Ben did not feel that he really had his own coaching philosophy yet, he said, "Mon objectif c'est que les gens aient du fun". Apart from this he mentioned that he was influenced by the coaches he had had, supporting the importance of coaches' prior athletic experience (see Study One Discussion 3). These two coaches had their Level I and had come to coaching directly from

racing the previous year. In fact, Jean had approached them to become coaches with the club. Both of these coaches were college students with career aspirations other than coaching. As the season progressed, and these young coaches gained coaching experience, it was clear that they began to develop a concern for athlete development (see RT 3, Chris' lesson about "letting them live in fairyland"; also Ben's frustration about one athlete who only came occasionally to training).

With some years of coaching experience under their belts, the mid-year coaches (Sebastian and Chelsea) were more specific about their coaching philosophy. Fun was still an important role frame component, but these coaches had developed clearer ways to achieve a happy attitude with their skiers. About fun and fostering a love for sport Sebastian explained:

Je pense, qu'à la base, tous les jeunes ont besoin d'aimer ça. Oui, ils veulent gagner ou ils veulent s'améliorer, mais ils doivent aimer ça ou trouver ça le fun, parce que sinon ils vont perdre l'intérêt. Ça fait que j'essaie de leur montrer autant que je peux, mais tout en gardant le principe que les jeunes, ils arrivent le matin puis ils sont contents de s'entraîner et puis ils repartent le soir et ils veulent revenir le lendemain. (Sebastian, interview 1).

With this background philosophy that the kids must like ski racing, Sebastian also recognised the importance of the other life lessons, indicating the role frame components of personal development and positive team environment.

[Ma tâche] c'est d'enseigner le ski. C'est... non, c'est plus que le ski. C'est d'enseigner une manière d'être. Parce que, avec les jeunes on fait plus que juste le ski; c'est la manière de vivre en groupe, qu'est-ce qu'ils voient tous les jours à l'école. On sort, on a plus de liberté et puis c'est une manière de vivre et ils ont des choses à apprendre. Ça prend de la discipline et puis en même temps ils aiment ça. C'est de leur montrer tout ça et puis d'être capable d'harmoniser ça avec un groupe. Je pense que c'est ça la chose la plus importante que je leur apporte; plus que juste être des skieurs de compétition. (Sebastian, interview 1)

Chelsea demonstrated that she had a well-developed approach that was framed by concerns for sport specific development.

Trying to have the kids discover on their own. Be aware of where they stand physically, you know like... "What is your arm doing?" "What do you think your arm is doing?" "Now from this, bring it back up"... So it is more like a feel and understand what you are doing. Because I want these kids at the age of 15, 16, and 17, if they decide not to ski, to understand what they are doing, and not do things because they were told to do them.... Having the kids understand more what they are doing and why they are doing it. (Chelsea, interview 1)

Gord also was guided by concerns for sport specific development. It was clear that for him the important thing was to make the kids fundamentally good skiers and that he could best achieve this with good communication. For Gord, discipline was important and he raised it as a problem on several occasions. (See Study Two Part One Discussion 4)

Not surprisingly, the coaches with the most coaching experience, Jean and John, had the most developed philosophies. For Jean, good coaching means keeping it simple.

With imagery and things like that... keep it simple, like not have too much talking but very short and sweet explanation and "Ok, watch this, do it, try it" and let them experiment first then after that try to give them a feeling. "What you're doing is good. Now we'll try to make it better by adding small portion of thing", by always touching the priority, if it's position, balance, stance and balance or whatever. When we have the core, then we move to the little detail which is getting more inside, pick the edge a little earlier which is all a sequence. That's my philosophy. Step by step not mixing them all together. Spending time particularly in one field. (Jean, interview 1)

John said his coaching focus is athlete-centred, "My priority is always the athlete... not necessarily the winning athlete; it's all athletes. I try and treat each kid, athlete as the individual they are, regardless as to where they fit into the team structure" (John, interview 1). For John, equity, and sport specific and personal development were important role frame components.

I think my most important task is realizing the individual's personal best, getting them to realize their personal best, whatever that may be. For example, in a group this size, we have kids winning the races and kids that are coming in the 30's and 40's. But that 30th and 40th place can be equal to the one that is winning if they're normally coming in 60th, 70th place. So, to me, the biggest task is not losing sight of what a good performance is for each individual. And trying to drive towards reaching that personal best, all the time. (John, interview 1)

In sum, although competitive level as a boundary role frame component did not appear to influence the coaches' internal role frame components, it was evident that the more experienced coaches, who worked with the more elite athletes, had more explicit philosophies.

Coaches' support network.

When asked about coaching challenges and how they resolve them it was clear from the coaches' responses that they all have strong support networks of other coaches. Even a newcomer like Ben said, "À date j'ai eu de l'aide d'à peu près tout le monde" (Ben, interview 1). He went on to mention the other young coach, Chris, as well as the others in the K1 group and even another club coach who was his own coach when he raced. Chelsea and Sebastian both said that they went to the others in their K1 coaching group, especially John and Gord. Sebastian and Chelsea also had a network of other ski pros in the area with whom they had worked and continued to work during the weekdays. These two quotations, one by first year coach Ben and the second by Gord sum up the opinion of the coaches regarding coaching support: "On a tellement des bons entraîneurs ici, selon moi... même s'ils ne sont pas dans le club je peux leur en parler. Partout à Bowsky il y a des ressources incroyables" (Ben, interview 1). And, "We're surrounded by amazing coaches, just in the room downstairs there is a wealth of experience, Jean and Connor. There is no shortage of talent around and I'm not afraid to ask, big-time, John" (Gord, interview 1). Jean, as the head coach, also said

that he spoke to his coaches and others in the area about coaching issues. However, on issues to do with being the head coach, he said that he had little support. **(See Study Two**

Part One Discussion 5)

It's tough, I don't have too much support, personally I'm the one who makes all the decisions and I try to get support but it's tough sometimes because I'm the only one who pulls all the strings. The board of directors at the club also supports me in a lot of decisions I'm going to take, and they trust me which is good, so I'm basically on my own; all the time.
(Jean, interview 1)

Overall, the coaches described a coaching environment they recognised as rich in coaching knowledge. The younger coaches were much less explicit about their coaching philosophy than the older ones. At this early stage of their coaching careers they were influenced in their approach by their own experiences as athletes. When faced with coaching challenges, both new and experienced coaches described a community of coaches and other ski professionals to whom they would refer. The data helped to identify that there were in place certain elements of a community of practice. Thus my stated goal in this study, to engender learning in a CoP of ski coaches, was appropriate and my role as facilitator became a supporting one. **(See Study Two Part One Discussion 6)**

The next section picks up the story of this facilitative process, first with a description of how I continued to act as a consultant at times, and then with the first meeting of the coaches, to which they brought their individual lessons, as requested.

The Process

A consultant at times.

When I participated in the morning warm-up exercise, which involved the whole group of ski racers taking three runs on the same hill while the coaches watched in a group, I was occasionally asked my opinion about something by an individual coach. This might have

been relating to technique (as related earlier, I am a ski coach) or coaching delivery issues such as discipline. When I was present, this collaboration was an example of the coaches using me for individual learning as in Study One. Mostly what I observed in these morning sessions was the coaches making sure that they were 'on the same page' with each other in terms of what is good technique and how to describe it to the athletes. Although my role in this study was not to be an expert consultant, I felt that my presence on the mountain from time to time was an important part of being the facilitator. For one thing, it helped to establish trust. (See Study Two Part One Discussion 7)

Gord spoke to me about the discipline of his group.... We talked about discussing the kids' goals with them and trying to establish some accountability.... Gord also spoke about technique. He wanted my advice to see if he was on the right track. Gord and I go way back and we obviously have a lot of trust between us but I feel that Chelsea and in fact the others also trust me. (My journal, December 22nd, 2001)

As this quotation indicates, I served the role of the 'other' in the strategy generation phase of Gord's reflective conversation; giving advice and being involved with him in joint construction. Throughout the study I continued to also act as a consultant at times, as when a coach would approach me between the RTs to discuss an issue, or ask my opinion on a strategy (virtual experimentation). Even during the RTs I sometimes played the role of consultant.

Round table one: Starting to share lessons learned.

On the 27th of December, 2001, I met the coach participants of this study in the meeting room of the clubhouse, after training at about 3:30 p.m. Sebastian was not present as he had to represent the club at a division meeting. Jean was not there the whole time but was able to stick his head in the door a few times. John, the coach leader of the group, named the meeting a round table (RT) and this name stuck for the remainder of the study. I facilitated the RT, going around the table asking each coach for the lessons he or she had

learned since the last meeting. In my journal I wrote, “The lessons were good even though some of the coaches were unsure of what they ought to be sharing” (My journal, December 27th, 2001). Thus, the coaches had no problem sharing their *lessons learned* with the others, but they were not at first sure that what they were sharing was appropriate. I encouraged them by telling them that the lessons they brought were good. However, there was not much interaction at this time. I did not intervene at this point to make more interaction happen, but simply let the coaches get used to sharing. This time of floating, getting accustomed to sharing, was not ‘a mistake’; rather it was itself part of the learning process (see Study Two Part One Discussion 8).

The lessons learned, which the coaches brought to the meeting ranged from pedagogical (related to the delivery or application of coaching knowledge), to technical (to do with ski technique), and to psychological (involving mental preparation). These categories were made during the analysis and simply aid in the description of the topics of the coaches’ reflections. The important thing to remember when reading these lessons learned is that they stem from the coaches’ day-to-day, recently experienced, coaching practice.

Examples of pedagogical lessons included:

1. Even the best one in the group needs feedback too (Ben, RT 1 notes).
2. Keep working on same things but from different angle (John, RT 1 notes).
3. Using the skiers from other groups in the a.m. free-skiing session as models to see what is missing in her athletes (Chelsea, RT 1 notes).
4. Learning from seeing Nick (a more experienced coach) go beside an athlete and work with her showing and explaining what he wanted (Chris, RT 1 notes).

The third lesson here is an example of the coach using athletes to help her coach more effectively. The fourth one provides an instance of one coach learning from observing another more experienced coach. In cases like these, I would reinforce to the RT the type of learning to which the coach was referring.

A technical lesson was learned by Chris when he watched one of the better athletes skiing during the morning (a.m.) warm-up session: "The skiers need the confidence to balance on the edge. Seeing Marie Josée in the a.m. session, so patient at the top of her arc, helped Chris understand this" (notes meeting 1, December 27th, 2001).

Gord, who was experiencing discipline problems with his group brought three psycho-pedagogical lessons:

1. Need a K1 video to motivate the kids and use as a model (Gord, RT 1 notes).
2. Get the kids to look at their goals to make them more responsible for learning (Gord, RT 1 notes).
3. Mix in the fun! (Gord, RT 1 notes)

Gord's bringing of these lessons allowed him to bounce his ideas off the rest of us and to receive support for them. [\(See Study Two Part One Discussion 9\)](#)

As the meeting came to a close, we set the time and date for the next RT. The coaches asked me if they should do the same thing and come with three lessons learned and I replied that they should, once again reinforcing that what they had contributed to this first RT was good. Because this was the first one, the coaches were still unsure of the process and even though there was not much interaction, the process of reflecting, sharing, and providing support to each other had begun. All of the coaches present shared at least one lesson; one had four lessons. The newcomers contributed as well as the others. For everyone

it was a new experience; this may have contributed to there be no apparent ego or power problems among the group. (See Study Two Part One Discussion 10)

Round table two: Interaction begins.

Three days after this first meeting we had our second RT. This time the coach leader, John, was not present but the head coach, Jean was, along with the five others. Already, in this second RT, we see the process evolving. In my journal I wrote, “The lessons came out much quicker and easier this time, except for Sebastian who had missed the first round table” (My journal, December 30th, 2001). I noticed that Ben, Chris, and Gord had no problem coming up with three lessons. I noted that these were the three with the least coaching experience. The others participated fully, each bringing at least one issue to the table. This time there was an evolution in that the discussions following the presentation of the lessons were animated. The degree of interaction between the coaches increased as they began to feel more comfortable with the format of the meetings. I played the role of chairperson in these discussions, making sure that the discussion stayed on topic and that we continued to move around the table, giving everyone a chance to share his or her lessons. I also reinforced and linked concepts. Again the lessons ranged from pedagogical, to technical, to psychological. Some lessons were a combination of pedagogical and psychological, or pedagogical and technical. Examples of pedagogical lessons were:

1. Relate to things the kids know and can visualise, (e.g., “Press on the gas pedal gradually”). (Gord, RT 2, notes)
2. Use videotape and relate back to it. (Gord, RT 2, notes)
3. Don’t give too much info. Start at the base. (Gord, RT 2, notes)
4. Try to remember being 12 years old. Break up the session, like: warm-up, work, have fun. (Chelsea, RT 2, notes)

5. In the afternoon, fun in the woods at the Ridge. Balance the day. (Sebastian, RT 2, notes)
6. More success with a one on one approach. Taking them aside one by one and looking them in the eye. Focus on the individual. (Gord, RT 2, notes)
7. Be flexible - but don't push too hard. Be receptive to how they are. They don't all work the same. Remember this! (Ben, RT 2, notes)
8. Make them ski and have fun, playing in the snow and then watching a video because hill was too crowded. (Ben, RT 2, notes)

Pedagogical/technical lessons included:

1. Ski on different types of terrain; bumps etc., then groomed will feel easy. (Chris, RT 2, notes)
2. Exercises without poles, putting hands in different places. Doing the oogie boogie! The whole afternoon had fun playing in the woods at the Ridge. (Chris, RT 2, notes)
3. Speed to zero is good for seeing faults. Kids did not feel good. (Sebastian, RT 2, notes)

On a purely psychological level Sebastian pointed out, "Five days in a row is intense. Watch their concentration level". There were also two examples of coaches learning from another coach in the group.

1. Learning from seeing Gord tell Chelsea to be more precise, tell kids what part of body to move, like big toe, heel, etc. Precision! (Chris, RT 2, notes)
2. Learning this from Sebastian: "Put the kids in difficult situations to make the faults show" (Ben, RT 2, notes)

Chelsea raised the issue of parent pressure and Jean clarified that when it came to parent problems, first the coach should try to deal with it and then if necessary he would step in. This was the first example of a coach moving outside the lessons learned formula to raise a more general issue that was troubling her. As the coaches became more comfortable with the process, the RTs included more such issues. We set the next RT meeting for January 5th.

I was able to spend some more time on the hill observing the coaching. The snow conditions continued to be very limited, with little snow and many people on the hill. This amounted to the group being provided with very little training space. Despite this, I observed good work being done and reinforced this with the coaches at the meeting.

Round table three: Going beyond the lessons learned.

Here are some of my notes regarding this third RT meeting, which was held in the coaches' locker room because the meeting room was being used by the race committee. This change of milieu did not affect the flow of conversation at the meeting. With only two previous meetings, the coaches had become comfortable with the RT format, whether sitting around a table or their locker room.

The mood at the meetings is good. I feel that they are all getting something for the time they are investing and no one seems against the meetings. The trust is good and so is the collaboration. All six coaches were present but not Jean (race on).

The lessons learned came out even with more ease this time. As well there was more interaction around the lessons as the coaches discussed the various themes brought up by the others. Several issues outside of lessons were raised and discussed (My journal, January 5th, 2002).

As indicated, the coaches were ready to share their lessons; I did not have to ask them, but instead just directed who spoke when. Gord, Chelsea, and Ben brought four lessons each; John and Chris brought three each, and Sebastian one. This number of lessons

was more than in the previous RTs. Three more general issues were raised and discussed as well as plans for the upcoming race. It is interesting to note that as this was nearly the end of the two and a half week Christmas training period, there were more psychological and pedagogical issues in the lessons. The coaches seemed to be clearer in the lessons about what things help them do a better job. For example, some of the pedagogical lessons were:

1. Be careful to spend some time focussing on each individual in the group, each session. (Gord, RT 3, notes)
2. You have to work hard to change movement patterns of the kids. (Gord, RT 3, notes)
3. Try different things, even if sometimes they don't work. If you see something [an approach] is not working let it go. (Chelsea, RT 3, notes)
4. Ben's stated his assumptions were wrong as to how much they know and are capable of understanding. He said, "You can't count on them knowing things. It is necessary to start from scratch". (Ben, RT 3, notes)
5. Do not insist too much on one thing. If they are not getting it, try to trick them into doing the thing you want. (Ben, RT 3, notes) (See Study Two Part One Discussion 1)
6. Try to ski like the skier you are trying to change and feel what they feel and use this to help them change. (Ben, RT 3, notes)

Most of the psychological lessons were related to communication:

1. In order to motivate Annie (pseudonym) he took her aside and was pretty firm about the reality of her skiing. He felt badly but got some results. Also spoke to her Dad. "Letting them live in a fairyland will not result in much learning" (Chris, RT 3, notes).

2. Don't be afraid to be more encouraging. "That's a boy" type thing, but always related to a specific thing. Look them in the eye and say what you have to say. (Gord, RT 3, notes)
3. Check the kids' interpretation of what you say and do. This for the physical and psychological things. (Chelsea, RT 3, notes)
4. Cup² selection was hard. The kids seemed okay with it on the day but then the next day they were upset. So check these things over the days, not just once. (Chelsea, RT 3, notes)
5. Had to speak to Annie, one of my athletes, about her loud criticism of the race organisation. (Chelsea, RT 3, notes)
6. The virtues of optimism: Today the kids were not understanding what I was trying to do. I just wanted some knees and showed them but to no avail (no results). So... even if they weren't getting it try to find something positive that they were doing and point this out to them. (Ben, RT 3, notes)
7. Cup selection: Some disappointments. We must be able to look at this type of thing from the view of the kids and the parents. More time is needed in this type of issue and also better communication. (Chelsea said that she took aside the kids that were not going to forerun and told them first before announcing who would forerun - a good idea). (John, RT 3, notes)
8. Remember that the brain receives the message and sends the signals to the muscles so that if it doesn't work that way you want it to work you need to

² The Cup is a major competition for the K2 age group. A selection of K1 skiers are chosen to forerun this race.

look at two possibilities. Either the message you are sending is confusing or the skier's message from their brain to their body is not working. Find out which of these it is and act accordingly. (John, RT 3, notes)

There were three lessons related to pedagogy/psychology:

1. Work and play need to be combined but work needs to be fun too, especially when they are getting tired and burned out like now at the end of the Christmas camp. (Gord, RT 3, notes)
2. Kids are getting tired. Sometimes it is just luck that something works well, like this afternoon. The tight little course was not planned but ended up being challenging and fun. It was the hard for all of them so it brought the field to a somewhat level plane. So... in the face of adversity (dead batteries, no snow, etc.) and the kids expectations (they wanted to run a course) don't be afraid to change your plans. Read the mood of the kids and the coaches; listen to each other. (John, RT 3, notes)
3. When the kids seem to be skiing well and we think we have done a good job, we have to be careful not to get too cocky. When we feel cocky this should be combined with some reality like the tight course this afternoon.

(Sebastian, RT 3, notes)

Finally, there was one technical lesson:

At the transfer of the turn, have the skiers try kicking back to start on the tip, in order to work the front of the ski. Result: More movement, knees working better. This was quite hard for them to do but after about a half a run they began to feel the sweet spot (Chris, RT 3, notes).

As the meeting proceeded the conversation flowed easily and some more general issues were raised. The following notes demonstrate the nature of some of these discussions;

how a coach asked for advice and received advice from the others, and how the group negotiated their plans for the up-coming race.

1. Chris asked for help understanding why some kids are good at free-skiing and not in the course and others are the opposite. This was discussed and the main points here were:
 - a. Be patient. The kids have not done that many gates.
 - b. Teach line.
 - c. Remember that while free-skiing you turn where and when you want.
2. Gord pointed out that he felt that there is generally a big difference in maturity between the first and second year K1's.
3. Chris said he tries to be a friend and John said that he could balance that out by being the policeman at times.

With only two more days of training before the first race I asked what the plan was for the lead up to the race, including the practice of starts. John suggested the kids be taught a routine before the start of making three or four turns in the rhythm of the course to get the muscle memory tuned up. It was felt that this encourages going for specific feelings and not just words. As a result of this discussion, the coaches made the following plans for the actual race day.

1. Always have two coaches at the start (John said he did not want to be at start).
2. Every kid should hear something positive about their first run and get feedback for second run.
3. Manage stress and have some fun.
4. Help them to focus on the right things.

5. Brush the skis but no heavy waxing. John believes that this removes the focus from the things that make them ski their best.

The discussion around these issues enabled the coaches to plan how to help the racers focus on the right things on race day. (See Study Two Part One Discussion 12)

We did not set the date for the next meeting, but Jean and I discussed this at another moment and thought that two-week intervals during the rest of the winter would be good. We felt that every weekend was too much for the coaches. I promised to put the notes from the meetings in their mailboxes at the club the next morning. I did this including a copy for Jean and I asked the coaches to tell me if I had incorrectly recorded anything. When I saw John the next day he said that he had read the notes over.

On the following Saturday I wrote in my journal:

I feel very positive about the way the group is working. It really is a natural fit, with my expertise and reputation the trust is there. And the context is perfect with the six coaches and the clubhouse as a meeting point before and after skiing. Also the legitimacy is there as both Jean and John are so involved. Finally the coaches are feeling the effects of the knowledge sharing and thus it motivates them. Not only do I feel that they are learning but also they are getting the support that really helps them. (My journal, January 12th, 2002) (See Study Two Part One Discussion 13)

Round table four: The coaches begin to take the lead.

On the Saturday of the next weekend I went to watch the groups during training and we decided to meet after skiing. These notes indicate the coaches' had much to say.

The meeting went very well. In fact it lasted longer than I anticipated and at times I felt that I was pushing things along because I didn't want them to feel that they were spending too much time there. But, they were the ones that kept talking and discussing and did not seem to be in a hurry. Good sign. I began by asking how the race went the Sunday before (Mt Garnet). I went around the table on this and other lessons. (My journal, January 19th, 2002)

The first part of the meeting served as a debriefing of the race held on the previous Sunday. John began by saying that they were less organized than he would have wanted. He said that Sebastian seemed to do the best job organizing the kids to be race ready. Sebastian

felt that there was too much emphasis on expectations for certain racers and that next time he would focus on warming them up well technically to get the feeling for the race; to be moving and skiing well. John said they had to do a better job at getting the kids race ready by practising at race intensity. Others agreed with this: Chris mentioned that his old coach influenced him in his thinking on this: "He thinks that in training the racers should be encouraged to think of each run as the most important race to get them used to skiing under full pressure" (Chris, RT 4 notes). (See Study Two Part One Discussion 14) Sebastian summarised the day:

We learned at the race that we, as coaches, can be too cocky about how the kids are skiing. The race brought a big dose of reality. There are a lot of kids skiing well from other mountains.... We need to be like mums to the kids on race day. Be there for all their needs. (Sebastian, RT 4 notes)

Chris had been at the start of the second run of the race and he said that to motivate them he gave them the image of Tomba or Maier to inspire them and make them confident (Chris, RT 4, notes). To this I commented that, as pointed out by Sebastian, "The racers are individuals and that we need to get to know what helps each one perform. I suggested each coach should keep a few little notes on each of their racers concerning what helps them perform in races" (Diane, RT 4, notes). Gord said that he agreed with all the comments and said that as planned at the previous meeting he had practised starts with his group. This led to a discussion about having proper start and finish gates during training, with a start wand to make it as real as possible.

The two youngest coaches, Ben and Chris, both raised issues they were facing, and asked for advice from the others.

Sebastian had told Ben to stick with something even if they don't get it right away, but Ben, felt that some kids feel failure when they keep hearing the same feedback. Diane reminded everyone about John's comment in one of the previous meetings about finding different ways to get the kids to do the same thing, or correct the same error. John had said that sometimes you have to trick them and get them to do something without knowing they are doing it. (RT 4, notes)

In this exchange in which Ben raised an important issue about providing feedback, I tried to make a link to a lesson from a previous RT and John added support to this with his comment about tricking the athletes. After this Ben asked, "What to do when a kids says flatly, 'I can't?'" (Ben, RT 4, notes) and Chris asked, "What to do when they say, 'I'm tired?'" (Chris, RT 4, notes). There were several suggestions from the coaches, such as, "Ignore them!" Both Chelsea and Gord recommended working with their goals. Chelsea explained:

(See Study Two Part One Discussion 15)

When trying to really communicate with the kids she has had success by getting them to take off their skis and gather around her and really look at her, and she at them. She asks them about their goals and how they think they will get there. After that when they are doing exercises she reminds them that this is putting the goals into their skiing. (Chelsea, RT 4, notes)

It had been a cold day and two coaches suggested ideas to make going inside to warm-up a profitable time, thereby sharing some pedagogical lessons.

Today when it was cold and they wanted to go in he brought them to the club to watch some ski videos. This way they didn't waste the time in the Grand Manitou. (Sebastian, RT 4, notes)

When he took his group in to warm up he played a game with them on paper. He drew a series of curves representing turns and asked each of them to put an X where they thought the gate would be. He said that they were all over the place! He then showed them where it would be and this was a learning experience for them. (Gord, RT 4, notes)

At the mention of this last lesson Chris was reminded "of something that he learned from John who used his hand to explain the radius of a turn to a skier" (Chris, RT 4, notes).

This is another example of coach-to-coach modelling. **(See Study Two Part One Discussion**

The remainder of this RT was spent in discussion of more general issues. The coaches reconfirmed the morning warm-up as still working well even if some coaches were off setting training courses. A recurring issue was the question of getting a video to use as a technical model. I agreed to speak to Jean about this. The final minutes of the meeting were used to make plans for the upcoming race. As my note at the beginning of this section indicates, the coaches had become comfortable with the RT process and as they did so my role became less directive. I no longer went around the table asking for their lessons learned.

After the RT I spoke to Jean who excused himself for not being there. He said to be sure to give him the notes, as he liked being kept in the loop. I spoke also about doing some video to use as a model for all the coaches to look at together.

Round table five: The process is well-established.

Due to the race schedule and my being away one weekend the fifth RT took place three weeks later on February 9th, 2002, in the clubhouse meeting room. In my journal I wrote:

Had an excellent meeting with the coaches. The coaches seem very at ease with the process of debriefing and sharing. There was talk about the last race. Sebastian mentioned a sort of self-evaluation that he does mentally in the car on the way home. So I will give them a version of the coaches' PPE with the meeting notes. (My journal, February 9th, 2002)

The coaches' PPE mentioned here is an adaptation of Orlick's (1986) personal performance evaluation (see Appendix O). I planned to discuss this form with the coaches and perhaps give them a copy of it.

The K1's had had a second race, which I attended, since the last RT. We began our discussion talk with my asking how they felt this race went. The reply was that they did very well, winning 10 of 12 medals. I tried to get them to explore why it went so well by asking

them what they thought had made the difference between this one and the last one.

Sebastian said,

Preparation. The preparation was better. And I think the hard work we did with the technique and the base stuff is starting to take. The kids were shaky a little bit when we put them in the first few times in courses, but now, it's really starting to pay, the kids are skiing well. (Sebastian, RT 5)

John commented that the plan to focus on giant slalom (GS) and super G was paying off as the slalom (SL) seemed to have taken care of itself once the basic techniques were learned. There followed a period of negotiation about just how much SL they had done. It was agreed that the three days of SL training they had done were of a high quality. I asked them what was meant by 'good quality'. The reply was

A couple of things, the courses were in good shape, well maintained; the environment they were skiing in was good. And the courses were well planned in a lot of ways, sometimes straight, big, small [turns].... They were training right until 3 o'clock. And that wasn't because we were saying, "Stay, do another"... And the kids didn't want to leave.... Everyone was having a good training. (Coaches' conversation, RT 5)

After discussing the plans for the next race and the manner of the inspection in particular the coaches brought more lessons to the table. One of the young coaches, Chris, provided a technical trick he had discovered. He told the others about his "use of skiing backwards to help the kids develop the feeling of carving with the weight in the right place" (Chris, RT 5, notes). (See Study Two Part One Discussion 17) Some of the pedagogical and pedagogical/psychological lessons were:

1. Automaticity takes awhile so you have to stick on the same things. (Gord, RT 5, notes)
2. Introduce them to new things without them knowing it - trick them into learning new things. Put them in the situation where they have to make some changes (John, RT 5, notes)

3. Remember that what you tell them today might take weeks to really sink in. Just because you don't see it immediately you should not give up or think that they have not got it. Just change the approach but keep your goal in view. [Ask yourself] "What do I want them to look like???" (John, RT 5, notes)

It is interesting that these lessons come back to a previous theme. In order for the coaches to bring lessons to the RTs they had to be reflective about their work. Lessons like these that pertain to fundamental coaching principles are raised repeatedly as the coaches negotiate and re-negotiate their meaning both in the action of their practice and in the RTs. In fact, John's two lessons above were raised in relation to a comment by Sebastian that they had to be careful not to introduce too much new technique at the mid-season point when the skiers had important competitions. Given the contextual constraints (the need to have the skiers perform in competitions), the coaches negotiated at this point in the RT what was the best way to develop their young athletes, at that moment in the season. During this discussion I reminded the coaches to "assume that everyone has potential. Assume that some kind of learning will always be taking place.... [And that they should] ask what it is the kids are learning at any given moment" (Diane, RT 5, notes). I wanted the coaches to reflect on what the racers were learning because even if they were not taught new technique at this point in the season, some form of learning would be taking place.

At this RT there were some excellent cases of the power of situated learning. The following lessons are examples of good coaching principles that would be expected to be found in the material of coaching courses. But the fact that the coaches lived these lessons during their practice and then reflected on them and brought them to the RT makes the learning very powerful.

1. I realised that once Derek believed in himself he was more focused and did better. (Gord, RT 5, notes)
2. SIMPLE SIMPLE SIMPLE....POSITIVE POSITIVE POSITIVE!!!!!!!
(Ben, RT 5, notes)
3. From Jean the other day in session, instead of saying, for example, “you are side slipping”, say, “I’d rather see you....”, B realised that he made a mistake with Hugo, telling him what he is doing wrong. (Ben, RT 5, notes)
4. Fix individual things. (Ben, RT 5, notes)

Checking the pulse of the CoP.

By the fourth meeting I no longer went around the table asking each coach for three lessons. The coaches took the lead and brought up their lessons learned and issues. I chaired the RTs, making sure that everyone had a chance to speak and that only one person spoke at once. Sometimes I was able to point out a connection between something that one coach said and something another had said, perhaps at an earlier meeting. Even between RT meetings I tried to maintain my connection to the coaches by stopping by on the mountain when they were training or by passing by the clubhouse before or after skiing.

The weekend following the fifth meeting we had scheduled no RT but I continued to be present around the clubhouse. On Saturday I had a talk with Jean, the head coach. In my journal I noted,

Jean saw me and pulled me into this office to talk about the work with the K1 coaches. He is really excited and feels that my facilitating the group has really helped. He said that he was talking to the K2 coaches about it and wants to implement a similar thing for them next season. He said he told them that they are working too much on their own and not benefiting from interchanges with the other coaches. (My journal, February 16th, 2002)

He finished by saying that he wanted to talk more about next year. I continued to keep him informed by providing him with a copy of all the notes that I was giving to the coaches.

During the next week I was preparing for a conference and with that was immersed in the data from Study One and was able to reflect on the process of Study Two in comparison to Study One. I also met with my supervisor and discussed the research. Looking back over the first six weeks since we had begun the RT meetings, it was clear that the opportunity to facilitate knowledge sharing among the coaches, which did not exist in Study One, was there in Study Two.

With the Linx, I did do some work with individual coach's issues. I also looked at the CoP there but did not really have the opportunity to facilitate knowledge sharing in that CoP. The skiing context was different right from the start. First of all the K1 group was in existence and already had a group leader, John, as well as Jean, the head coach. As mentioned above, the clubhouse and the way the coaches' working day works (they even eat lunch together most days) makes the possibility for sharing eminently possible.

In fact the difference between the two contexts (Linx and Bowsky) is that at Bowsky I am working with the CoP, and most individual problems are shared with the group in our meetings, or at other times, where I may or may not be present. (My journal, February 18th, 2002)

A few days after this journal entry I spoke with my supervisor about this difference.

We talked about the difference between a traditional mentor model and what we are doing. In the first case, the mentor and the coach usually work one-on-one. The mentor comes in and does some observing or the coach goes to mentor for help. In our case I work right in the CoP, trying to add something to their interactions, precipitating reflection and knowledge exchange. Whereas the mentor model may speak to Wenger's ideas of identity and alignment, the approach we are using is related to the shared enterprise... Also the CoP keeps going after the facilitator leaves but when the mentor leaves there is no network left to support on-going learning from experience.

The round table meetings are a context for this sharing. First, I used the idea of each coach bringing lessons to the table. This got the ball rolling and is still on going with the coaches volunteering these lessons. The dialogue moves from these lessons to discussions surrounding the issues raised by the lessons (e.g., discipline, how much technique to teach at this time of year, race prep, etc.). (My journal, February 20th, 2002)

During this period I had the opportunity to check the progress of the project with John, as I interviewed him. **(See Study Two Part One Discussion 18)**

Diane: Let's talk a little about the winter, the process, how you think we're doing, any ideas you have.

John: To me, this is the best idea and I'll tell you why for a bunch of reasons. When I first agreed to do this through Jean, I had some different ideas, which were to bring this team more together as both a group of coaches and a group of kids. And I think we've been successful in doing that fairly well.... What I think has happened this year is with you, you've come in with this process, it's supported and it's done a lot. It's made me re-think and re-focus the tasks at hand both in managing the big group plus managing the athlete. It's validated a lot of the feelings and beliefs I've had about how it should be managed, with what we're doing with you, it's like it's more... it's a better tool. It's created... It's added more information to the mix and forced what we already started, like meeting on the hill and has taken that to another level. So we've gone from a basic level to a much higher level. I think the group focus has gone, "Wow, this is cool. This really works". And in a very simple way of just increasing the communication. And the flow of ideas. We have young kids like Ben who, he's only 18, he's young, and he's going, "Wow! This is cool. I'm learning stuff, but I'm also capable of giving stuff". Which to me is going... if we keep this whole thing going and you kept a group of coaches like this together for two or three years it would be really amazing because you would take a Ben, who after two or three years would have so much more confidence in his own abilities... (John, interview 1)

At the time of John's first interview it had been two weeks since our last RT. A communication misunderstanding and the busy part of the season were the reasons for this. Interestingly, several comments by the coaches indicated that they missed the opportunities afforded by the round table meetings. Before meeting John I had run into Ben in the clubhouse. About this encounter I noted, "Ben mentioned that his kids had stopped improving because it had been too long since we had had a meeting!" (My journal, February 23rd, 2002). John, in his interview mentioned that it was too bad that we had not met that day.

I think one of the problems we're having is and it's as we said right at the outset of this whole thing, is it is going to require a certain amount of time. And I think we are running into that wall, because we're getting to the middle end of the season I think all the coaches including myself are hitting the wall, getting a little tired. I noticed the past couple of days, it's actually too bad we didn't have a meeting today, cause we could have brought this up, cause I see Sebastian sick. So everyone's hitting the wall, and now is the time, to have the meeting to reflect on, put your hand up, kind of thing, if you are tired, if you need time. We can do a tag team here because if you need the time, do it because we want to end as strong as we started... (John, interview 1)

Thus the life of the community seemed to be healthy and positively endorsed by the coaches and the organisation. However, the problem of making time for the round tables was a real one. (See Study Two Part One Discussion 19)

We did set the time for the next RT for the following Saturday. I copied several articles that I had co-authored for a ski racing publication and put them in the coaches' mailboxes at the club. This was in response to some issues, such as communication and getting the most out of training, which had been raised in the previous RTs. I also gave them the coaches' personal performance evaluation (PPE) form discussed in RT 5, which I mentioned was useful for reflecting on their work.

Round table six: The coaches reflect on the process.

Three weeks had passed since the previous RT. This sixth one, attended by everyone including Jean, was the longest one. The transcription for this meeting ran to 23 pages single-spaced. A few times during this meeting, Jean and I had to intervene to stop more than one person speaking at once. I noted,

There were no apparent objections to this, as they all seem to have an appreciation of the benefit of everyone listening and contributing. I am very excited as the process is really positive and the coaches are satisfied and also excited by the learning. (My journal, March 3rd, 2002)

During this long RT, the two young coaches, Ben and Chris, raised some specific issues relating to dealing with the different levels of commitment to ski racing, by the parents, and how to handle the children of these parents. A general discussion ensued with

different coaches providing support and suggestions to these two coaches. Ben said that he found it hard to know what to say to the racer who only showed up for training once in a while, but he said that he was learning that not all parents have the same expectations of the program. John shared his thoughts on this.

The club structure naturally weeds out those that aren't really interested. But the way the K1's have been handled this year as one big group has allowed the coaches to go beyond the structure imposed by the 40, 50 and 65-day programs. This has been a good step as it opens the door for talented kids to make their mark and eventually maybe get their parents more involved. Jean thought this, was true. Gord reinforced this. (John, RT 6, notes)

Chris recounted how he was learning that as a coach you have to be good at public relations with the parents. In response to this, John recommended keeping the focus on the child and putting the responsibility for learning on the child by being very specific about their skiing, such as, "Okay. This is why I told you, you had a good run. You did this, this, this, and this, and this is what we are going to only work on again" (John, RT 6, transcription). Jean told the coaches to use the other coaches to boost the kids' confidence and Ben supported this right away with an example of Gord talking to one of his kids.

It's true. There is a girl in my group, a few weeks ago, she skied beside you, and you said, "You ski well little guy" (*laughing*) and it motivated her. She said "He said I ski well". It doesn't matter that you said little 'guy', it's not serious, it motivated her all the same. (Ben, RT 6, transcription)

Jean reinforced the point by saying,

Like Gord, I heard him say to his son, "I was very proud of you, son, today, you skied very well. It made me proud of you". I could see the father was very happy and the kid was really happy. That's good; that's what encourages the kids. (Jean, RT 6, transcription)

Sebastian made a point.

We should not forget that this mix of corrections and good compliments, both for a youngster who is good or one that is less good, I think that it should be the same mix that makes them all happy. Sometimes with the really good ones, we forget them a little because we know they are very good, and we are always trying to find what it is that they do not do correctly. Then you see after a few days, the arms sag, and then they don't feel like skiing in the course. We have to be careful of this too. (Sebastian, RT 6, transcription)

Gord brought the conversation back to John's point about being specific about feedback.

They need to know WHEN it was right. They know when they have a good run or a bad run, but things aren't... I mean you have been working in a certain direction, or a certain focus, in an area like this and you see light at the end of the tunnel, or you see the change, then you need to say, "like THAT, what you did!" and identify that 'what you just did there!'. You know, it's not just "Hey, way to go, way to go!". The kids might go down, and think, "That was shit!", you know (*laughing*). Not just "That looked good". No, it's "That was good, that there, what you felt THERE at this time". (Gord, RT 6, transcription)

This negotiation of the meaning of good feedback ended with several coaches stating that too much talking to the kids was not good either. Ben suggested that when they are working on a specific thing with a racer, they should let the other coaches know so they do not add any feedback about other things. The coaches agreed that some racers are addicted to receiving a comment every run. To end this behaviour Sebastian said, "So stop telling them!" and Gord shared, "I tell them almost every time, 'I missed you'". With this there was a lot of laughing and several coaches confessed that they also do this. John made a final point about this saying, "But if you see something that is really outstanding, you don't have to say that was great because of this, but just that positive, 'That was good'" (John, RT 6, transcription). Two of the novice coaches validated this with their experience by commenting, "And the kids they just light up!" (Gord, RT 6, transcription) and "You just see that, you know like, the *big* smile" (Chris, RT 6, transcription).

During the early RTs I had encouraged the coaches to support each other's work by reinforcing the good things that they saw. Evidence of this form of public validation occurred when Gord congratulated the others on the good skiing of the group in general,

“Kudos to the gang because if you look at all the kids, there is some good skiing going on out there. The whole gang” (Gord, RT 6, transcription). Jean confirmed this and was seconded by Sebastian and John.

I wanted to see what the coaches thought about the personal performance evaluation (PPE) and if they had used it. Chelsea, Sebastian, Ben, and Chris all said that they had read the questions and all but one of these coaches had thought about them although they had not written down answers. The following exchange shows how the process we were involved in pushed the coaches to reflect on their learning, even if they did not write out their answers.

Chris: But you [Diane] have really got me into the routine. Every day on my last ride up on the chair, I always think, “What did I learn today?” I always try to think...

Ben: We did today... all together. All three of us, riding up on the chair.

Diane: So what did you learn today?

Chris: I was talking about my PR. He was talking about H [a skier in his group].

Ben: Oh yeah! I was talking about how everyone goes like this, you know, [makes a line with his hand showing going up in steps] you don't go up, straight up and up. You go up and down, up and down...

Diane: Who was the third person on the chair?

Ben: John.

John: [Mumbles something about having to remember.]

Chris: You [to John] were pointing out how I was supposed to receive...

Ben: Oh yeah! He said that we should, he was transmitting his knowledge of skiing and seeing how, uh...

Chris: Yeah he was transmitting, he was teaching. He was the mentor.

Ben: You were saying about Martin...

John: Oh yes. We were just talking about what, like the emphasis on GS or SL and I was just saying that, like I look at guy like Martin who years ago came up through this club, and the focus was so much on SL that you didn't have a... But when his SL started to falter at 18, 19 he didn't have skills to fall back on to allow him to regroup and get back.

(Chris, Ben, Diane, John, RT 6, transcription)

In this sequence, Chris and Ben, the two youngest coaches, revealed the reflections on their learning for that day. Rather than recounting an 'Ah hah!' type of lesson, John, the most experienced coach in the group, had taken the opportunity of the chair ride to tell a story. The story was one that he felt supported his belief that having the kids train a lot of GS and Super G, which are faster events, helps develop better skills. He used the example of a racer from the club who was familiar to the two young coaches. It is interesting the young coaches recognised the role John was playing with his recounting of the story, that of the teacher/mentor. (See Study Two Part One Discussion 20)

After John commented on his story, an extended discussion about what makes a successful ski racer ensued, with the entire group involved. The discussion was a confirmation of the coaches' philosophy that the ability to ski all terrain and all conditions, and to play on skis and to have some discipline at the right moments, were assets for good ski racing.

When this discussion seemed to have run its useful course, I reminded the group (for the second time) that it was getting on in the afternoon. I returned to the PPE's and pointed out my reasons for suggesting that they write their answers down, at least once a week.

The reason it is not as useful [done mentally] is that even though you think you are going to remember, you don't and this is a log. You have it and you can look back at it. It was actually an idea that I got from Sebastian when he said that when he is in the car at night going home, always does an evaluation of his day. So this is a more systematic way of doing it. I thought that it could serve as a piece for reflection here. (Diane, RT 6, transcription)

In response to this John raised the time issue.

I was thinking about this kind of thing. I think why we are having a hard time with this kind of stuff, it's because, for all of us, this isn't the only job we have got. It's like now, everyone's looking at their watch, saying okay, it's time to move onto the next step of today. I have got to go to my shop, and do this and that.... [But] as a suggestion for next year... we should try to use those things, only because they do make us better as coaches. (RT 6, John, transcription)

My conclusion about the use of the PPE's, after this meeting, was

All said that they had looked at the questions but none had written answers for them. It was meant as an aid for coaches to reflect on their work....

Seems that talking about the lesson at the meetings and on the chair is more realistic than doing the forms. (Diane RT 6, notes)

With John's comment about the PPE, he moved the discussion towards an evaluation of the process. Even though it was only the beginning of March, the coaches knew that with the provincial championships coming up, the season was not far from over. In fact they were into the last quarter. John's comment about the use of the PPE's for next year, and then the following suggestion, seemed to spark a review of the work we had done. For the next year John said they should get all the club coaches together a few times to have, "Just like the kind of discussion that we are having here today, not just technique, but philosophical and real mother earth kind of things" (John, RT 6, transcription). (See Study Two Part One Discussion 21)

After John's suggestions for next year Jean contributed to the validation of the process when he told the group the following about a meeting he had recently held with another group of his coaches, those working with the K2's, being the next age group up (13 and 14 years old).

You know what? I had a meeting with my K2 coaches the other day after talking to Diane about this; this... what you did and, these are the results we are having now in the K1 with the coaching. The bonding together, it's fun, we are performing, everybody seems to do a good job, and the K2's... I got all the coaches in my office for an hour, and I explained what we did, what Diane was doing with you guys and everything, and then everything comes out. I talked maybe for two minutes, and then they were all like... "Okay you don't talk to me, I do my own stuff"... so that is what came out of it. I said, "You see guys. A lack of communication. It [communication] is not existing at all and that is why you are all working differently here. And what we did with the K1's, it is unbelievable; I mean the harmony is this! I'd rather spend more time with them because I am having more fun. You guys are boring! (Laughs). Everybody here is like a guru.... I said, "Come on you guys, open your wings...."

This atmosphere, this thing that we created, Diane is probably... she is playing a big part in that thing because she's the one that came with that study in the fall and telling you that... I would have not done it like that. I probably would have had a little meeting once in a while, but... I learned something from that, that's for sure, and I learned big time! (Jean, RT 6, transcription)

Both John and Sebastian affirmed that they were also learning a lot. I felt that it was important at this point to raise the time issue, so I said, "It's all about having the context and the time to do this kind of thing. It's about making the time" (Diane, RT 6, transcription).

To which Jean replied,

Yeah but I think everybody's allowed the time here today, right? I don't see anybody looking at their watch and having an excuse to go. Because when it is a meeting where it is like this, well it's like, I have to be at home at four today but I am having a really good time here. (Jean, RT 6, transcription)

And, Sebastian added, "I barely remember the first meeting we had when Diane was just asking us, 'Okay, tell me three things that you have learned'. Now she is just sitting there and we just start talking!" (Sebastian, RT 6, transcription). Jean remarked, "And it benefits the kids, that's for sure!" (Jean, RT 6, transcription). John supported Jean by saying, "No but you are right. This has been the catalyst, bringing us all together, like Diane and these meetings. It has further... it has enhanced everything that is going on on the hill" (John, RT 6, transcription).

Ben specified,

Especially for... because you [John] don't talk that much when we are on the hill or when we are on the radio, or at noon, or... and here you tell us what you think really, and we get to see. Because this is my first year and I get to understand what you think and where you think we should be going. And I don't have an opinion, obviously yet... So I was buying into what you tell me and... and then it enhances my performance as a coach because I know more where we are going and what I should be doing. (Ben, RT 6, transcription)

Gord told Jean that it was great he had put John in charge of the gang “because we are all learning from you, man” (Gord, RT 6, transcription). Then Chris said, “We are learning from all” (Chris, RT 6, transcription). And John said, “But it’s a balance. It works both ways. I watch and learn from each of you guys too” (John, RT 6, transcription).

This long meeting ended with some organisational details being discussed, including the timing of our next RT. The following week was the provincials and then, as I told the coaches, I would be away for the two weeks, meaning that we could not all meet again until the end of March. Thus the meeting was set for the 30th, but then Sebastian said, “No but why don’t you leave us a tape and we can do one without you?” (Sebastian, RT 6, transcription) I told them I would be very happy if they did that and Sebastian remarked, “I really think that we should, even if you are not there, we should keep that... Because next year, we can start that right off” (Sebastian, RT 6, transcription). The meeting ended with Jean agreeing that this was a good idea. I thanked them.

With our next meeting all together due on the 30th, I tried to contact John on the 28th and found out that a meeting on the 30th might not work, as there was now a race scheduled for that day. However, I started to make arrangements to do some season-end interviews. I knew that Gord was leaving the country for other work so I interviewed him. Also I found that the group had met, without me, on the 16th, for RT 7.

Round table seven: The coaches meet without a facilitator.

The important thing about this meeting is that it took place without a facilitator. I was away, so the head coach Jean, the group leader John, Gord, Chris, and Chelsea met. Gord used a micro-cassette to record the meeting but the quality was very poor, which meant that I was unable to transcribe it. I listened to the tape and made notes, which I verified with the coaches.

The first issue raised was the training they had had on bullet-proof (extremely hard ice) conditions. There was a general agreement that the idea to use three short courses was very effective for training on these extreme conditions. Chris said that his goal to have the kids skiing SL and GS by the end of the season was nearly accomplished. He also used the RT to tell the others that he wanted to be at the start of the race the next day to boost the kids up. Both Jean and John complimented the group. Jean expressed his content at the good race results. John told the group they "Showed really good teamwork. Good job guys!" (John, RT 7, notes). In my absence, Jean, the sponsor and John, the group leader, assumed leadership roles in this RT.

Gord and Jean cautioned that the season was not over yet.

Jean commented that he had heard coaches and kids saying that the season was almost over. He said, "It is not over until it is over!" He wanted the coaches to reinforce this with the kids and make sure that there were sufficient challenges to keep the learning going until the real end of the season. (Jean, RT. 7, notes)

Before the RT ended Jean stressed the importance of the coaches' presence at the division meeting at which the next year would be discussed. Thus, without my facilitation, the coaches continued to exchange information, negotiate understandings, validate their practice, and communicate with each other concerning important aspects of their work.

Evaluating the Process

Gord's evaluation.

Due to Gord's immanent departure for summer work, I met with him on April 6th to do a season-end interview. I asked him if there was anything he wanted to say about the whole process of the season.

I thought... that was a very interesting observation over the last couple of weeks... Number one, the program that we set up with you, and with the group, the coaches and the kids, it just became tighter and tighter all winter. And it was really... the exchange of ideas and information and the camaraderie, was amazing! Like really amazing... And one thing is we had a lot of amazing results. After the first race we just about owned the podium for the rest of the year. And what was really cool in the last couple of races is that it wasn't the same people. (Gord, interview 2)

Gord gave examples of things he had learned from his coaching experience that season, such as, how to communicate better with the racers, and how to handle the discipline issue. In general he said,

Whew! And I learned a lot from all the coaches. I learned a lot for sure from John, but from everyone... just observing, how they work, points they made... Just how to work with them... and actually I'm a really strong believer, even in my summer job and stuff like this, in life, you learn by experience, like you learn by doing it! I really... and trust yourself. Like I look at it, I got these guys and just trust that I can come up with things that can make them better skiers and racers. And listen, a lot! 'Cause you know, it is interesting, a few points that you made, you know the sort of pre-race, or start stuff, and something like that, I went "Oh, yeah". Ding, ding, ding (*laughs*). "Write this down you know" because if you don't, you forget about stuff, because I didn't live it! [As a racer] (Gord, interview 2)

Gord confirmed that the RTs and the morning warm-up runs were absolutely instrumental in helping him learn from his coaching season.

The last round table: Reflecting on the process.

It was April 13th before I could meet with several of the coaches. This was due to some coaches traveling to competitions (Jean, John, and Chris), one leaving the area for summer work (Gord), two taking further certification (Chelsea and Sebastian), and the two youngest ones studying for their college exams (Ben and Chris). The last RT in this study was attended by John, Chelsea, Sebastian, and myself. Even though there were only three coaches, this meeting was one of the two longest, along with RT 6. The season being over, I asked the coaches if we could use this RT as their season-end interviews about the process

by going back and forth like a conversation. I asked if they had received the notes from RT 6 that I had put in their mailboxes. I said,

In that there was a lot of sort of reflection on the season, but if there are any other thoughts, a) about the actual process and about how next year could be different, or b) if there is anything that has come up in the last... well I haven't seen you in a month, but since the last get together, lessons learned or whatever. (Diane, RT 8, transcription)

John jumped right in and began the evaluation process that proceeded. He said,

I think the process is excellent and I think it can only be enhanced by... I think if we started it earlier.... So like if we met the Friday night before everything got started and just started this process, then even for the first two, three weekends, make sure that we met at least once every weekend if not even twice sometimes... (John, RT 8, transcription)

The others agreed with this but the time issue raised its head again, as this excerpt from the RT indicates. (See Study Two Part One Discussion 22)

John: The problem is we are asking... everyone has other jobs. Other commitments... and once we get into it we are saying... I know it's not really a big commitment, like give me another hour or two, like a Friday night. But it's just getting over that hurdle, like "Okay yeah, I got to go. Let's get up there". You can see that once we are here, the 45-minute meetings... when we started you said, "We only need half an hour, 45 minutes at the end of the day" and they turned into...

Chelsea: Two hours!

John: Two hours, an hour and a half. Which to me shows the level of commitment of all these coaches.

Diane: Yeah, yeah, it's great!

John: Which I think is superb!

(John, Chelsea, and Diane, RT 8, transcription)

I mentioned that I had used them as an example in a presentation I had given to a group of salespersons for a big pharmaceutical company who wished to learn about working better as a team, sharing information, and learning through experience. Sebastian supported this.

I think we have been an example in the club, and outside of the club. I have seen coaches from other mountains, like MB, come and see us, and say, 'Like how do you work it? What do you do to have that kind of results? How do you make your groups, and how...?' (Sebastian, RT 8, transcription)

Chelsea said, "In the four seasons that I have coached, this has been my best season. Yeah, I am going to remember it forever" (Chelsea, RT 8, transcription). Sebastian agreed and John said that it was good.

This was followed by a discussion of the 2003 season in which we talked about which coaches would be working with which groups. John felt that it would be necessary to try and change the way the K2³ group worked (he and Chelsea had decided to move to K2). He thought that getting the coaches of both K1 and K2 together, early in the season would be good.

You know if we did it before Christmas... because ... there are a lot of the kids that never show up, you know. If we take advantage of the lesser number of kids around to do... and we usually can't train gates so there is a lot of standing around, for coaches. So if we did, in one of those three/four week periods did get some sessions, K1's and K2's together, just stand around and even if it was something like doing the hill thing. It would be a start.... It could be fun, because there are some older coaches that have been fixed in doing it their certain way, that have to change their...[approach] (John, RT 8, transcription)

Sebastian thought that even adding in the coaches of the J1's would be good too. The discussion of the next season brought the coaches to reflect on the team with which they had worked and what they would be doing the following season. In terms of their

³ K2 is the category 'Kinder Two', age 13 and 14 as of January 1st of the current year, according to the Fédération Internationale de Ski (F.I.S.), which is the international governing body of ski racing. J1, is 15, 16, 17 year olds.

present team, John said, “The balance of coaches this year, I thought was, excellent” (John, RT 8, transcription). Sebastian concurred, saying, “It was awesome!” (Sebastian, RT 8, transcription). Sebastian, Chelsea, and John talked about the benefits of having some young coaches in their group. Sebastian remarked,

Personally I would like to have another Chris or Ben. Just to bring something different from the way we work... their approach this year was amazing!... Chris and Ben did an awesome job. (Sebastian, RT 8, transcription)

This supported what John had said in his interview (see Checking the pulse of the CoP). I mentioned that the two young coaches, even though they were just beginning, were part of their coaching team, and had contributed to the 14/30 medals that the club won at the K1 provincial championships. To this, John exclaimed, “They were critical!” (John, RT 8, transcription). This cross-generational learning had been confirmed in an earlier RT when Chris said, “We are learning from all” (Chris, RT 6, transcription), to which John replied, “But it’s a balance. It works both ways. I watch and learn from each of you guys too” (John, RT 6, transcription). Gord also emphasised this when he said, “I think everybody can learn from everybody” (Gord, interview 2). (See Study Two Part One Discussion 10)

There followed a conversation about Chris, and how much he had improved over the season and how his strengths became appreciated by the others. He liked being the coach at the start of the races. (See Study Two Part One Discussion 23) John explained,

I said, “Okay Chris you do the start for the second run” ... I think he did the first start too. And he wanted to do it and Gord was going to help him and he says, “Gord I can do it. I can handle this, it’s okay”. He’s alone, all 50 kids and I was just like we better just swing around and make sure that he has got it under control. And he was way up there on the clouds, just pumping these kids up. And it was really... the energy level he brought to the table was great. (John, RT 8, transcription)

Sebastian spoke about Ben’s contribution to the group, and how being just out of racing himself, he was a good model for the racers.

This year we had Ben, who was skiing really well, and a lot of days he likes to train, to go in the courses, and you should have seen the bunch of kids that were following him. All the good kids were following him, to look at him or to try to beat him. (Sebastian, RT 8, transcription)

However, it seemed unlikely that either Chris or Ben would be returning the following season. Sebastian said they had indicated that they would probably be focusing on university. Chelsea and Sebastian were unsure of exactly how they would structure their next winter. They both said that they would continue to coach for the club, but the issue was what they would be doing during the week, since coaching weekends does not pay enough to survive. These were the two coaches who were working for a ski school Monday to Friday and then the club for the holidays and weekends. Chelsea talked about returning to university in the fall but trying to coach at least three days a week. Sebastian stated outright that he would like to coach more, but it depended on the opportunity to make enough money coaching.

Sebastian: If there is a possibility that I can coach more than two days a week.... If there's the possibility to put the bread on the table... I figured out the way I could work at the store two days a week and with the club three days.

John: That's right. It all comes down to... you still have to make a little bit of money.

Sebastian: Yeah! We need to survive.

(Sebastian and John, RT 8, transcription)

Actually Sebastian had joked about the money at an earlier RT. When John had said, "Another suggestion, and I am not sure if it is next year that we do it or..." (John, RT 6, transcription), Sebastian had said, "Just to be paid more so that it is going to be our only job!" (Sebastian, RT 6, transcription). Sebastian had followed this with a laugh, but it was obviously a remark with a serious undertone. Even John, who had retired from coaching and returned only a year or two earlier in order to coach his youngest child, talked about the pull

of coaching. He said, to us all, "But be careful! This sport sucks you in!" (John, RT 8, transcription). Sebastian then declared, "I want to be sucked right in. I'm already... [there]" (Sebastian, RT 8, transcription). This was another indication that Sebastian would like to be able to support himself as a full-time coach. (See Study Two Part One Discussion 24)

Toward the latter part of this RT the discussion came back to the process. I asked the coaches if they found it helpful to have the record of the meetings, and if they preferred the full transcript or the note form. John and Chelsea both said that the point form was good. Sebastian thought that for the following season, without me there, it would not be necessary to have a recorder and that each coach could keep their own journal. Sebastian said, "Just the meetings are doing the job" (Sebastian, RT 8, transcription). Chelsea said that she did not mind taking notes and John said,

I think taking notes is... because I think this process, if we do it... if every year we try and make a conscious effort to make it, you know, much more a part of our whole coaching strategy, then yes, I think that the notes would be important. As we are starting... like this year, I think it was really good. But we were like a bunch of green horns. We were you know, step one... but I think as we do step two, three and, four, as we keep going up, then I think that the notes will become more beneficial because they would actually be used, like more. (John, RT 8, transcription)

I suggested that the notes could eventually be used by a coach leader to engender learning with a new group of coaches. Chelsea asked if they could have a resume of all the RTs and I said that I was going to give them all one, which I did. She also indicated that she would be interested in reading the final thesis.

When the conversation drifted back to the good results achieved during the season and the excellent teamwork between the coaches I asked, "But I think, apart from the fact that you had the results it was a fun process, right?" (Diane, RT 8, transcription) John, Chelsea, and Sebastian answered simultaneously, "Oh for sure!" (John, Chelsea, Sebastian

RT 8, transcription). John then shared some important reflections on the process and what made it work. He said,

Coaches, like we said right at the very beginning, one of the bad things about coaches is that lots of times their egos get in the way. And I think with this, all the egos were tucked away, and everything worked well as a group. And I think that it is because of that little sort of ego thing, that this process is hard to initiate. You know like I think lots of times... [guys don't want to share].... But if you can get them... if we can break down that initial barrier, like to say to everybody out there, you know, "Check the ego at the door, let's come in and start sharing, guess what? You are only going to get better as an individual coach! You are going to share your ideas but you are going to learn ideas"... and the key thing about coaching that I've always had is, everybody's going to coach a little but differently, because everybody's an individual, just like the kids are individuals, and so we are going to share all these ideas, but you are going to go out on the hill, I am going to be standing right beside you, you are going to implement them the Sebastian way, I'm going to implement them John way... There's no right or wrong, and that's the benefit the kids have. (John, RT 8, transcription)

Chelsea and Sebastian agreed with this concept and Sebastian said, only half in jest, "Now, at the end of the year, we are all talking John's way... 'Strong on the outside, above the gates, strong on the outside'" (Sebastian, RT 8, transcription). This was followed by laughter by Sebastian and Chelsea who said, "But it works! They understand. So why not?" (Chelsea, RT 8, transcription). (See Study Two Part One Discussion 25) The following excerpt shows how this important reflection on the process developed with a push from myself.

Diane: To follow on from what you [John] were saying, it goes out there and it is implemented Sebastian's way, and it is implemented your way, but it starts from a consensus here...

Chelsea: Yeah.

John: Exactly!

Diane: And it's that consensus here that keeps it going in a direction that's within certain guidelines.

John: Exactly. I mean, I don't care how much, like I have done in my career of coaching, or Piotr⁴, for example, who's downstairs, the minute you start sitting around the table with Piotr, he's a sly fox, Piotr... he's very, very smart. And he learns from others, and he's good at sharing. It's like so easy to be so strong, like as a group, and you have so much more fun.

Chelsea: Uh huh. I agree.

(Diane, Chelsea, John, RT 8, transcription)

Here, John's use of Piotr as an example makes the learning very situated for the other coaches.

Wrapping up the season.

I spent the weeks following the end of the season transcribing the data, meeting with my supervisor, and setting up the other end-of-season interviews. The club president spoke to me about a summer camp that the club was putting on in France and said that they would like to have me continue my work with the coaches there, if possible. He said that financial arrangements would likely be shared between the club and me. In my peer meetings I discussed this opportunity with my supervisor who thought that it would be an excellent idea. He explained that my "Being asked to do it is perfectly in keeping with the nature of my project since the collaborative aspect demands that I not prescribe or push myself on the other participants" (My journal, April 17th, 2002). As discussed in the meeting I sent an e-mail to the president in which "I sold him on the idea of the camp being a training camp not just for the athletes but also the coaches" (My journal, April 17th, 2002). He said he had to wait to see how many participants the camp would have.

⁴ Piotr Jelen is the National Ski Team women's speed coach who has coached World Downhill Champion Mélanie Turgeon for many years.

I telephoned Jean to set up a time for our interview. Here are my notes on this conversation.

Just spoke to Jean and he said that it was a really good project. I told him that I was very happy and so was my supervisor. He said that if my supervisor wanted a recommendation he could call him. This is fun, and just the offer is confirmation for the process. (My journal, April 23rd, 2002)

I interviewed Chris on April 30th. For Chris the season was fun. He said, "I have honestly no regrets of my first year coaching. It was really a great year. And if I could I would go back for sure. I guess it was just more of a learning process.... No regrets, I was just always looking forward to the weekend" (Chris, interview 2), because he coached on the weekends. He also said,

I think that Ben and I were just really lucky to be surrounded by so much experience, the first year... I think we learned like five times more, than we would have at a small mountain. For our experience and everything. To learn a lot, you know like every day. (Chris, interview 2)

He recognised that his role was that of the clown in the group. This had been verified at previous RTs, both by himself and the others.

In terms of his learning, Chris mentioned learning from the other coaches, at the RTs and on the hill, learning by innovation on the hill, which was subsequently validated at the RT meetings, and he also experienced support for the issues he was facing. He mentioned that John was an excellent role model, and he appreciated the endorsement that John gave him by telling him he was a great motivator and more significantly allowing him to do the start by himself. When I asked him about meetings and bringing the lessons learned to them, he replied, "Well I thought about them all day! Like when I knew that we had a meeting, we'd be going up on the chair, and it would be like, 'Well that worked really well'" (Chris, interview 2). I asked him about issues like dealing with the parents, and what sharing these at the RTs meant to him. He said,

I thought I was just being a kid being beaten on by the parents! [Then] John and Gord told me like, “Man, that’s been going on for 30 years. Don’t worry about it!” (*Laughing*) The wolves had spoken! No, but it is like in any kind of discussion, when you have something on your mind, it really feels good to let it out and share it with the others. It’s the same thing with that. (Chris, interview 2)

An example of Chris learning through innovation and subsequent validation was provided by Jean, and later at a RT.

Like Chris he calls me when I am going up on the chairlift and he is up on the Mercury and he is skiing on the ski boots. I said, “What the hell are you doing?” “Hey Jean! I invented something new, I invented something new! You have got to come here right away!” Okay so when I arrive, he says, “Look at this. What do you think about weight transfer? Look at this!” Now they had no skis so they could get on the outside edge and slide. I said “that’s an excellent idea”.... But he was very happy and I said what you did is very good, I can see, I can relate, and you have results. He invented it, we didn’t tell him, not me or John or whoever, it came out of his own. (Jean, interview 2)

I asked about the notes of the RTs and he thought that they were helpful. He thought Sebastian’s idea of each coach keeping their personal journal was a good idea, saying, “I’m all for that. What you’d do is you’d actually listen to other people’s ideas and note the ones that you think that are good and not ones that you might already know” (Chris, interview 2).

On May 11th I went to a meeting about the summer camp. Prior to this, I had been told that I would be subsidised by a grant to participate in the first two weeks of the three-week camp. After this meeting I interviewed Jean. In my journal I wrote that it was a great interview.

Concerning the necessity to document the RT meetings, Jean said,

I have so much that... if I read everything, I might as well just sit all day and read! I would rather be involved and focus really well on the meetings, and whatever comes out of that meeting I will... Like my memory is excellent... but I am like that; that is me. But the others need to read... Or you just put a video camera there and you tape the meeting. (Jean, interview 2)

About the coaches working together, Jean said, "This was unbelievable. I mean it is the first time in my life I can see something like this. You know like it was... because of the... what you did, Diane, I told you before, you created a bonding" (Jean, interview 2). He also spoke about the group. I had previously remarked that when I approached him about the study he had said "I have the perfect group" and indeed that had proved true. He said,

Like John was telling me last night, he said, "You know when you selected your coaches for the K1 you made the perfect selection". I said, "I did it because you guys, you and Gord were, you know, very highly qualified". He's an instructor but he's the same thing.... The two middle guys are very good coaches but they still need a little bit of guidelines. But they are on the right track. And the other two are totally green, they had no idea what was going on, but imagine the experience they had and the success. They created such an ambience, which was unbelievable. (Jean, interview 2)

He went on to say he wanted to do the same with the rest of the groups, the K2's and the J1's. He told me he had had a meeting with the coaches of these other age groups. He recounted,

We had that meeting... two hours right here. After we saw the results that we were having with this project... I said, "My God, we have got to do [this]..." This was in February, but it's not too late. We had to see the results and then I knew that was it! Talking with the coaches [about the K1 group], "This was good, we talked about all the things we did daily on the hill, and... training, warm-up, camaraderie here [in the clubhouse] after, and then the chemistry between all the [K1] coaches... it was a big family this year. Plus they talked about before, you know, they were always like, "This guy, did you see him?" They come and see you and say, "You didn't see this guy. He set those gates way to close to the bush, Jean you should talk to him, it is dangerous!"... I'd say, "I didn't see that but I will talk to him". And everybody was... Spying on and stabbing in the back... (Jean, interview 2)

I explained "Part of the reason that it works, is because they all engage in the same project together with the same type of goals, and so they all have responsibility and they are all responsible to each other" (Diane from Jean interview 2). Jean told me how he had learned over time to give more responsibility to his staff. He described how he had learned through experience as a boss to let his employees learn through their experience.

I used to keep everything for myself, and direct everything and really... “Not like that, like this! And I will come back in an hour and make sure it is done!” But I never let the person get his feet wet properly! I rarely let them get in to the deep mud up until there, and then... “You have got to work your way out Charlie, by yourself!” And this is what is happening now. And now because they have got to dig their way out they are putting three times more energy, because for their self-esteem.... (*Laughing*) They have got to prove to themselves, not to me, even if it costs me a little bit more, I know that it is going to pay in the long run because I won’t have to be there later on because they are going to know how to do it, better than me! (Jean, interview 2)

He also shared that he had had head coaches from other clubs approach him about coming to work for the club. He said, “A head coach comes to me and says, ‘You know, next year I’d like to go with you. You guys seem to have fun in your program’” (Jean, interview 2). (See Study Two Part One Discussion 26)

We talked about the beginning, when I had introduced him to the concept of communities of practice and how easily he had caught onto the idea (See Study Two Part One Discussion 1). Looking back he confirmed,

I told you why because of the fire department... we have this big problem... and it is still a big problem... and I told the fire department. Actually I talked about what we did in the clubhouse. I said that we need some people here... like someone like you... and try to bind all these guys together. All these hardheads and people that think they know everything about everything. (Jean interview 2)

This confirmed John’s comment about the necessity of the coaches ‘leaving their egos at the door’, which enables the interchanges that engender learning. Jean further described how he saw this working.

You have to be humble. Because I remember... one coach, we talked a lot... when he started in coaching. I said, “You need to be humble and you are not humble enough. You keep everything for yourself... you have got to give it away. And, sometimes you are wrong! And you have to admit... that it doesn’t work! It doesn’t work and you have to make it work. And sometimes you have to listen to others, who have ideas. They might have one year of experience but they might come with a real idea. (Jean, interview 2)

This comment and the one about letting his employees learn from experience demonstrate that Jean's philosophy is very compatible with the concept of sharing and communities of practice.

During the following weeks I worked on my data, creating one document that summarised the eight RT meetings. This I sent to all the coaches, requesting comments. I also sent Gord, Chris, and Jean a resume of their individual interview. I asked each of them if I could send their respective resume to the other coaches in the study, since there were comments in these interviews about the whole process. These three all gave their approval for this. Gord reflected again on the process, stating "Really enjoyed the program you set up for us, I hope we can do the same thing again next year" (Gord e-mail, June 4th, 2002).

Preparing for Part Two of Study Two

On May 9th, it was decided that I would go to the summer camp to continue my research with the coaches, for the first two weeks of the three-week camp. On the 11th I attended an information meeting for the coaches and parents for children going to the camp. At this time I spoke to all the coaches about the project and got their contacts.

Meanwhile, I was preparing my approach for the camp, consulting with my advisor and reading about cultivating CoPs (Wenger et al., 2002). During this time I presented at a scientific conference, which enabled me to push my analysis of the context of Study One and the lessons learned from it for the present study. One of my colleagues presented right after me, and I noted the audiences at these conferences were "starting to look more excited and less perplexed at the end of our presentations about CoPs (My journal, May 27th, 2002). I also noted my uncertainty about what the final form of the thesis would look like, it being so different. I ended this journal entry with, "But this is compensated for by the fact that the research is so very motivating because it works!"

At a peer debrief meeting several days later I discussed the documents that I was working on in preparation for the second part of this study, the summer camp. I noted, “We decided that I should try and get John to write a blurb about the project to the other coaches, so that they see his endorsement of it” (My journal, May 29th, 2002). I spoke to him about this and on June 5th he dictated a letter to me, which I wrote up, sent to him for verification, and then translated into French (see Appendix P). The main paragraph of this letter is copied here, as a final piece of data for this study.

In a nutshell, it promotes a method of working together as coaches and helps create an environment that is proactive, positive, and sharing of ideas and methods. It is more than enhancing communication. It is creating work habits and procedures that truly enhance our coaching ability. It brings a group of coaches together making them a “team of coaches”, which is much more effective and focused than the “vacuum of coaches” approach. What I mean by this is that too often as coaches we work alone or even if we do work along side other coaches we tend to guard our problems and knowledge, keeping them to ourselves, instead of sharing them with others. (John, letter to summer coaches, June 5th, 2002) (See Study Two Part One Discussion 27)

With John’s letter as a reification of the evolving practice, I continued to develop strategies for the next step of the overall project. In reviewing the work of this study, in particular the comments of the coaches at the end of the season, I rewrote the information letter to the coaches, trying to put an emphasis on the involvement of the coaches. I wrote, “Une collaboration efficace est fondée sur de bonnes relations et des échanges ouverts. Chaque participant doit être prêt à écouter les autres et à partager ses connaissances et son expérience” (Info letter to summer coaches⁵, see Appendix Q). In discussion with my peers

⁵ While Study Two Part One was primarily conducted in English, the primary language of Study Two Part Two was to be French.

we had decided that it was important to emphasise the idea “check your ego at the door” (John, interview 2), since this was a lesson we had learned in the current study. Thus, as was the case at the end of Study One, the project evolved, again taking lessons from finished work to move onto to another context and Study Three.

Discussion

This discussion, similar to the one for Study One, has two parts. The first part is a series of numbered notes that refer to specific points (page numbers indicated) in the findings of Study Two Part One. A general discussion that brings together the central themes of this study follows.

1 Theory and Practice: What gap? (p. 150)

The ability of Jean to grasp so easily the concept of CoP demonstrates how the CoP framework works to close the gap between theory and practice; how a person with extensive practical experience working with groups of people, like Jean, can come to understand the value of the concept for learning. According to Wenger (1998), theory and practice do not reflect a dichotomy. Communities of practice include theory and practice, “Ideals and reality... talking and doing.... Even when theory is a goal in itself, it is not detached but instead is produced in the context of specific practices” (p. 48). Thus, in a CoP, the interplay between the theoretical and the practical is dependent on the enterprise. Jean’s quick understanding of the concept of CoPs derived in part from his experience with a completely different enterprise than ski coaching; the volunteer fire department, of which he was at the time the chief. In response to my explanation of CoPs, he explained that firemen take hundreds of hours of training courses before starting to work on fires. When they do start, the more experienced firefighters, due to the urgency of the situation, are reluctant to let the newcomers gain the practical experience necessary for them to assimilate theory with practice. It was immediately clear to Jean that learning through participation in a CoP would serve the fire fighters much better than the present system. Jean’s practical experience with the firefighters helped him understand almost immediately the concept of engendering

learning through participation in a community of practice, bridging what in some cases has been termed the theory/practice gap.

2 Establishing Rhythm (p. 152)

“At the heart of a community is a web of enduring relationships among members, but the tempo of their interactions is greatly influenced by the rhythm of community events” (Wenger et al., 2002, p. 62).

Like other vibrant organisms, communities of practice have a rhythm. A crucial role of the facilitator is to monitor this rhythm and organise activities that afford members the opportunity to interact in such a way that the community has the quality of ‘aliveness’, that there is a sense of moving forward in a productive manner. In speaking about combinations of the different modes of belonging to a community, such as engagement, imagination, and alignment, Wenger (1998) remarked, “Part of a learning community’s task is to understand the rhythms of its own learning in order to find optimal opportunities for combining these modes” (p. 218). Every community evolves in different ways, therefore the ideal rhythm changes with this evolution. Being familiar with the rhythm of the ski season, I knew that it was essential to establish a good beat to the CoP’s activities early on so that the members would experience the satisfaction of learning, which would sustain the community when the season became hectic.

3 John: A Community Leader (p. 153)

Jean had already put John in place as the coach leader of this group before I approached him about the study. The plan to use the morning warm-up as an occasion for sharing information was an example of the leader providing opportunities for learning. Among the roles of a community leader, connecting members with each other and scheduling community activities were being fulfilled by John in this idea of the morning warm-up (U.S. Navy, 2001). Allowing for this time to watch and discuss technique gave the

coaches the opportunity to develop a shared vision of technique as well as a way of talking about it and working to improve the skiers' execution of it.

4 Adjusting Your Role Frame (p. 157)

Gord had been working with adults for most of the 22 years he had instructed before coming of the club after the start of the season. The change in the boundary component 'age' caused Gord to adjust his role frame, especially as related to the discipline component.

5 Alone at the Top (p. 158)

The fact that Jean had little support when it came to his role as head coach is not surprising. There existed a CoP of club coaches, of which, as a coach, he was a member. However, by nature of the job, as head coach he was on his own. He mentioned that in his job as head coach he was the one who pulled all the strings and that while he had the support of the board, ultimately he had to make the decisions. He might consult with the coach leaders of the different age groups but there was no community of head coaches. In fact there is little opportunity for head coaches to interact. This would seem to follow the common adage "it is lonely at the top". Most people are members of several CoPs (Wenger, 1998) and it would seem important for leaders to also have a CoP in which they could engage, where issues relating to being a head coach would be addressed. Later in this study the reader will note that head coaches from other clubs expressed an interest in coming to the club in this study to work as ordinary coaches. This indicates that head coaches seek the same type of opportunity to learn through their interactions with other coaches as was experienced by the K1 coaches.

6 Supporting an Existing CoP (p. 155)

In addition to Wenger's (1998) three dimensions of practice, joint enterprise, mutual engagement, and shared repertoire, there are other indicators that point to the existence of a CoP. Some of these are (a) a strong sense of identity linked to the community, (b) members learning how to become proficient, or not, by practicing together with others, (c) shared ways of doing things together, (d) shared ways of talking about what they do, (e) behaviour patterns such as sitting patterns in the cafeteria, posture, gestures, and (f) common tools, methods, techniques and artefacts (Distance Consulting Company, 2000). The group of K1 coaches displayed these indicators, which pointed to the existence of their CoP.

The work of supporting an existing CoP with the goal of engendering learning involves making contact with the sponsor(s) and members, negotiating and providing support, and managing and evaluating relationships.

7 Trust and 'Walking the Halls' (p. 160)

As a community develops it goes through certain stages. Wenger et al. (2002, p. 82-83) have observed five stages: potential, coalescing, maturing, stewardship, and transformation. During the coalescing stage, the main issues are establishing the value of sharing knowledge, developing relationships and trust, and specifying what knowledge should be shared and how. In short, the most important function of this stage is enabling CoP members to "develop the habit of consulting each other for help" (p. 84). The development of relationships and trust is a community issue that enables knowledge to be shared. A primary function of the community coordinator, or facilitator during the early stages of community development is making the connections between community members that afford the members to experience value. My presence during certain on-hill coaching sessions was the equivalent of a community coordinator 'walking the halls' of an

organisation to promote connections between the CoP members. According to Castro (2003) the 'human relationship element', which also goes by the terms 'trust' and 'goodwill', "is at least half of a CoP's health... [and] the ability to foster behaviours that favour trust, and to reward the exercise of goodwill toward other CoP members, is a key CoP management competency" (p. 5).

8 Deconstructing Familiar Processes of Knowledge Acquisition

Stringer (1997), who teaches community-based ethnography to students in educational settings, described the problematic nature of this endeavour. Traditional education contexts are founded on the acquisition metaphor (Sfard, 1998) in which the teacher-professor-expert is both responsible for setting the curriculum and transmitting knowledge. This implies that students expect to have their learning environments structured by the individual responsible for the course. When Stringer attempted to introduce a participatory decision-making process to his graduate class in community-based ethnography, he found that many of the students experienced evident discomfort with the initial lack of direction and structure. They were accustomed to the safety of having clearly delineated routines and outcomes. Stringer's experience underlined the challenges for learners and facilitators in deconstructing traditional ideas about teaching and learning. The coaches in the present study also experienced what could be considered normal uncertainties about the learning process we were trying to promote. These uncertainties underlined the changes they had to go through as they adjusted to learning through participation in a CoP.

Collaborative inquiry was of course in itself a new experience for the coaches; indeed every new collaborative inquiry process is a new experience (Bray et al., 2000; Heron, 1996a). It is normal that a period of uncertainty will precede a time when participants will feel the positive effects of participating in a collaborative inquiry process.

9 The Social Learning Begins **(p. 162)**

Right from the first RT the coaches were engaged in learning from their everyday experience and sharing the lessons learnt. In the early stages of community development it is important for community members to feel value in their participation. Helping members discover what knowledge is valuable and important for their practice is therefore a priority. Wenger et al. (2002) suggested, "One of the most useful ways for a core group to explore this issue is for the community members to begin helping each other solve everyday work problems that fall in their domain" (p. 89). Barab et al., (2002) found that the members of their community of teachers needed "to start with the specific and then the general... reflecting on best practices in terms of their experience and not as a set of abstracted facts presented by a professor" (p. 510). Furthermore, using current problems is a way of getting the community up and running with high-energy issues. In business, corporate intranets and databases provide employees with large amounts of information about solving work related problems, but it is in the interaction with others facing similar issues that learning takes place. Already the coaches were beginning to experience the type of social learning as described below by Saint-Onge and Wallace (2003).

Often the single dimension or static nature of information doesn't provide the level of meaning that the individual requires to take effective action.... When people who have had a similar situation can talk about their experience, they can outline what worked and what didn't work and how their experience can be applied to another situation.... When this information comes to the members with meaning, they are able to take action. The new knowledge becomes an inherent part of practice – it's not just lying out there unattached to real situations. Community members can internalize it, make it theirs, and assimilate it into how work is done. (p. 98-99).

In coaching also there is plenty of information available, at coaching courses, and in books and videos. The coaches in this study had all participated in at least one coaching

course and were exposed to other materials containing information about ski coaching. Having the coaches bring lessons to the round table encouraged them to be reflective and allowed them to share and validate new knowledge in their lived experience and the experience of the others.

Jarvis (1999) also recommended this kind of retrospective reflection in which a facilitator asks teachers to reflect on what went right in their practice and then to encourage them “to try out the results of their reflection in subsequent lessons” (p. 70). He found that helping practitioners evaluate “their practice was a major learning experience” (p. 70).

10 Getting Comfortable with the Learning Activity

We have already indicated that certain elements of a CoP of these coaches seemed to be operating. It is likely that this contributed to the apparent open, non-threatening atmosphere that helped the coaches leave their egos at the door, right from the first RT. The RT idea, however, was a novel forum for developing the community, introduced by me. Having introduced the concept, I needed to hang back and let the coaches get comfortable with the process, and to let it evolve and be appropriated by the CoP. The role of facilitator here involves walking a fine line between facilitating and interfering. How the members would learn from the RTs was not something that I could dictate (Wenger et al., 2002).

11 Young and Old Learn the Same Lesson

This lesson is repeated at different meetings (John in RT 1, Ben RT 3, and John RT 5). For John, who repeats it six weeks apart, it is obviously a very important part of his teaching approach, which he wants to impart to the others. He has likely had the point reinforced through his current coaching work. Whether Ben picked it up from John, who raised it in RT 1, we cannot say, but he brought it to RT 3 as a lived lesson from his current work experience. For Wenger (1998) practice is defined by meaning, which is a process of

negotiation. Even though patterns of behaviour exist within a practice, meaning is re-negotiated each time.

We produce again a new situation, an impression, an experience: we produce meanings that extend, redirect, dismiss, reinterpret, modify or confirm - in a word, negotiate anew - the histories of meanings of which they are part. In this sense, living is a constant process of *negotiation of meaning*. (p. 52-53)

Thus the coaches had the opportunity during the RTs to revisit and re-negotiate certain meanings.

12 Negotiating Roles (p. 170)

In this RT the coaches are negotiating their respective roles regarding race day. John, the coach leader told the others that he did not want to be at the start, letting them know that this was not a role he wanted to fulfill. This negotiation was important for the CoP since within a community it is important to know who is good at, and who likes to do certain jobs (Wenger, 1998).

13 Elements of Success (p. 170)

The leveraging of a successful CoP requires a number of critical elements. The alignment of the purpose of the community with the strategic vision of the sponsoring organisation is one of these and official sponsorship is part of this element (Saint-Onge & Wallace, 2003). My journal entry about the progress of the CoP development underlines the role of the head coach, Jean, and the coach leader of the group, John, in legitimizing the community. Also I noted that the coaches were feeling the benefits of sharing with the other members of the community and that their learning was being supported within the community. This is the type of informal evaluation that needs to be an ongoing part of the role of community facilitator.

14 Coaching as We Were Coached (p. 171)

Here we have an example of a young coach who told us that his experience as an athlete has impacted his way of coaching. In his comments regarding preparing athletes for competition, he shared a reflection on the way he was coached. Cushion et al. (2003) noted, “As performers themselves, future coaches have an unusually good opportunity to learn about coaching from their own coaches” (p. 217). Coaches who have been athletes often use their experience of having been coached to make decisions about how they will approach an issue (Gilbert & Trudel, in press-a; Salmela, 1996).

15 Revisiting and Re-negotiating Basic Principles (p. 172)

Again in this RT Ben returns to John’s advice about using different approaches to get the kids to do what you want them to do. Also we find here further negotiation of meaning of some basic coaching principles relating to communication and using goals to focus and motivate the athletes. The negotiation of meaning involves interpretation and action; the coaches engaged in both of these through their work and the discussions, on the hill and at the RTs.

16 Modelling or Reflective Transformation (p. 172)

According to the model of Gilbert and Trudel (2001), one of the three ‘other’ options for strategy generation engaged in by coaches is called reflective transformation. This is a type of modelling in which a coach observes another coach’s strategy and then tests it, modifying it to suit his or her context. In the Gilbert and Trudel study, the coaches considered this an important option for strategy generation but they did not use it often because they were too busy to spend much time observing other coaches. Not only did Chris have the opportunity to engage in reflective transformation on the hill, he was reminded of it because of the interaction afforded by the RT when Gord shared his story about using paper

drawings to teach what line to take when skiing in the gates. The examples of coaches in this study sharing lessons that involved this type of learning demonstrate a further advantage of working closely with a community of practitioners.

17 Generational Encounters

The group of K1 coaches who were the coparticipants in this study was a mixture of old-timers, mid-career coaches, and newcomers. This is common in most CoPs. A mix of generations affords members the possibilities of negotiating and re-negotiating their identities.

Any community of practice provides a set of models for negotiating trajectories.... From this perspective, a community of practice is a field of possible trajectories and thus the proposal of an identity...Newcomers can engage with their own future, as embodied by old-timers.... And the relation goes both ways; newcomers also provide new models for different ways of participating. (Wenger, 1998, p. 156)

Communities of practice often serve to promote innovation. The reason for this has been cited as “the close interaction with members... who have developed the ability to have productive conversations... in a high-trust vessel for exchange” (Saint-Onge & Wallace, 2003, p. 69). The mix of newcomers and old-timers allows for the type of dialogue in which assumptions are routinely questioned and new ideas are co-constructed. CoP members use other members as sounding boards for innovative ideas. In a study of 11 organisations where CoPs were said to be creating value, this feature was deemed highly valuable for community members (Lesser, 2001). In the present study, Chris brought several innovations to the RTs. He also used Jean to validate, on the hill, his idea of teaching weight shift by having the kids ski on the soles of their ski boots.

18 Evaluating Community Progress

Once a community is up and running, it has been recommended that a check is made of community progress and value (Saint-Onge & Wallace, 2003; U. S. Navy, 2001). This

informal check, part of my role as community facilitator, should in fact be an on-going process. Some of the questions that should be answered positively are: Does the community have a common purpose? Is the purpose aligned with the overall organisational purpose? Are the leaders and sponsors on board? Are community leaders able to develop the community? Is there a context for dialogue? Are resources and tools available? (U. S. Navy, 2001). In reality, feedback is often forthcoming. Saint-Onge and Wallace noted, "Given the nature of community members, chances are you won't have to wait to find out how things are going. People will let you know - positive or negatives, full barrel" (p. 184). This is what happened in the current study such as when Jean pulled me aside to talk about the success of the process and Ben told me that his kids had stopped learning because we had not had a RT for several weeks. Doing the interview with John at this time also permitted a progress check. As the initiating researcher, I was continually reflecting on the process, but incidents like those mentioned above, and conducting John's interview provided me with the opportunity to step back a little and reflect on the progress of the entire research project.

19 Maintaining the Community Rhythm (p. 179)

As I had predicted, community life became very busy during the middle part of the season. With a competition approximately every other weekend and most groups only training on the weekends, time was in short supply. The fact that some of the coaches expressed that they missed the opportunity to interact at a RT indicates that the community had established a beat. When we went three weeks between RT 4 and RT 5 and then again between RT 5 and RT 6, there was a sense that learning had slowed down. Wenger et al. (2002) gave examples of communities where events provided "the beat around which other activities find their rhythm" (p. 63). For our CoP, the RTs were such an event, providing the opportunity for learning and sharing activities.

It is expected that the beat of a community will need to evolve as the community moves through different stages. Jean, John, and I had decided that once every two weeks was the appropriate time to have the RTs during the busy part of the season. The fact that this was not possible might point to the need to think of other events that could engender the same interactions for community members. In fact, the morning warm-up that was maintained during the season was one such event. Yet some of the coaches still missed the RTs. This could mean that the opportunity to sit and discuss their work away from the immediate work context afforded a different type of learning; reflection-on-action instead of -in-action.

20 Storytelling versus "Ah hab!" Learning (p. 183)

In this sequence, Chris, one of the young coaches, used the word 'transmit' to describe what John, their leader was doing when he told his story. Stories are one of the types of knowledge that make up a community's resources. The term *practice* as used in the concept of community of practice is described here.

[Practice] denotes a set of socially defined ways of doing things in a specific domain: a set of common approaches and shared standards that creates a basis for action, communication, problem solving, performance, and accountability. These communal resources include a variety of knowledge types: cases and stories, theories, rules, frameworks, models, principles, tools, experts, articles, lessons learned, best practices, and heuristics. (Wenger et al., 2002, p. 38)

Examples of communities that use stories to share knowledge are traditional midwives in the Yucatan and Xerox copy machine technicians (Wenger et al., 2002). The character of stories allows for knowledge to be shared because contextual information is integrated with more technical and conceptual information (Denning, 2001). In his role as group leader, John was articulating an aspect of 'good practice' for the new coaches. This is a recognized function of group leaders and old-timers in CoPs (Barab et al., 2002; Nickols,

2001). Mentoring new members is also a function of group leaders. The type of mentoring that John engaged in with these new coaches was like Nicholl's (2002) apprenticeship model of mentoring, although there was also an element of the reflective model in which the mentor is a facilitator and co-enquirer.

21 More General Learning (p. 184)

It is interesting how John described this discussion, recognising the value of this more general 'philosophical... mother of earth' type of issues. This is as opposed to the more specific lessons and issues raised by the coaches in the previous RT meetings. Other communities have expressed that participating in more general discussions, such as what should go into a document of best practices, lessons learned, and procedures produced by a community of engineers at DaimlerChrysler, is just as important as having the final document (Wenger et al., 2002). Some of the engineers reported the same thing as Jean and Sebastian in this study, who said that reading the documents is not as important as participating in the discussions.

22 Time (p. 189)

Previously, we highlighted the difficulties involved in persuading practitioners to devote so much time to the collaborative research process. Other authors have supported this. Moon (1999), writing about the conditions for reflection, related that learners need time to reflect and time for learning activities that allow them to learn how to be reflective, including time for more interactions that promote reflection in between practice sessions. An essential part of the success of CoPs is that sponsors allow the time for members to participate and that members sense the value of giving up their time for community activities (Saint Onge & Wallace, 2003; Wenger et al., 2002).

23 Legitimate Peripheral Participation (p. 191)

This description of how John allowed Chris to handle the start position, by himself, but with supervision from afar, is an excellent example of legitimate peripheral participation (LPP), as introduced by Lave and Wenger (1991). In the beginning of the season, Chris had been at the start with one of the other, more experienced coaches, in a peripheral role. Throughout the season his mode of belonging moved toward fuller participation, in conjunction with the other community members' legitimization of his position within the CoP. This is a process that occurs through members learning about who is good at what in their practice.

As a community matures, its members get to know each other's style, strengths and weaknesses; "In conversation and joint projects, they... come to appreciate others' contributions, energy, interest, perspectives, and individual styles" (Wenger et al., 2002, p. 98). In this instance, as the season progressed, the coaches in this study were reaching this stage of 'craft intimacy' and their recognition of Chris' strength as a motivator at the start of races was an indication of this.

24 Identity and Life Trajectory (p. 193)

For Wenger (1998) identity in practice is about becoming, not being. Through successive forms of participation we constantly renegotiate our identity, forming our life trajectory. Participation in a CoP provides the context for different types of trajectories including peripheral, inward, outward, boundary, and insider trajectories. For Sebastian and Chelsea being a ski coach is an important part of their identity. They were negotiating insider trajectories. Chris and Ben still maintained an identity born of their recent participation as racers in the club. At the same time, they participated as full members of the K1 coaches' CoP during this season. They were probably on a mix between peripheral and inbound

trajectories. However, unlike Sebastian and Chelsea, their life trajectories did not, at least for the moment, include 'becoming a full-time ski coach'. They were bright young students on the trajectory of being successful university students, moving towards careers other than full-time ski coaching. For Sebastian, the desire to make enough money ski coaching to make it a career was clearly important to his view of how he would like to see his trajectory. Wenger (1998) noted "Learning communities will become places of identity to the extent they make trajectories possible" (p. 215). Despite his desired trajectory, Sebastian's doubt that he could make enough money coaching could be a limiting factor for his participation. For the two younger coaches, coaching salary was not an issue because coaching was a part-time job while they pursued their studies.

25 Shared Repertoire (p. 194)

Wenger et al. (2002) have written about cultivating CoPs and how they can take charge of the development of their practice. Regarding this development, CoPs should consider, "what processes should be standardized and when are differences appropriate" (p. 46). The coaches' use of the same language to describe the technique they are seeking to develop in the racers is an example of their shared repertoire, language being a tool of their CoP. Through the interactions, both in the RTs and on the hill, the coaches negotiated the meanings of the words. It was interesting that John, who could be described as the practice leader of this group, had led the evolution of this tool, as witnessed by the comments of Sebastian and Chelsea. The role of practice leader is based on competence and includes such responsibilities as identifying trends and patterns in CoP activities and knowledge base, as well as in other areas that impact the practice, promoting 'good practice', providing leadership in resolving problems, and coaching new members (Nickols, 2001). At the same

time, though, John has underlined the importance of each coach practicing his or her own style of coaching.

26 Creating Value (p. 199)

According to Wenger et al. (2002)

The value communities create includes tangible results such as a standard manual, improved skills, or reduced costs through faster access to information. It also includes less tangible outcomes such as a sense of trust or an increased ability to innovate... some of the greatest value lies in intangible outcomes, such as the relationships they build among people, the sense of belonging they create, the spirit of inquiry they generate, and the professional confidence and identity they confer to their members. (p. 15)

In this study, the community of K1 coaches created value in both tangible and intangible ways. The product of their coaching brought 14/30 medals to the club during the provincial championships. Also the coaches all claimed to have learned a lot through the process. The sharing of lessons at the RTs seems to have encouraged innovation. Jean and the others spoke about the amazing sense of bonding and working as a team. Value was even recognised by coaches from outside the club who remarked not only on the performance of the group but also on the atmosphere of camaraderie, and even expressed an interest in coming to work with the club.

27 John's Letter as a Reification of the Process (p. 201)

This letter, as a reification of the CoP of K1 coaches, shows that John not only understood the 'normal' atmosphere within which coaches usually work, but also how the K1 coaches' participation in their CoP was beneficial. Others have documented that coaches often guard their knowledge because of the competitive aspect of sport (Lemyre, 2003). Furthermore, coaching is often like teaching, in that the coach is usually alone with his or her group of athletes, without the opportunity to interact with other coaches about their

everyday coaching practice. John's letter parallels what others have said about participating in CoPs (Barab et al., 2002; Wenger et al., 2002).

General Discussion

In response to the main research question for this study, concerning the dynamics of a facilitator collaborating with a group of coaches to help them learn from their coaching experiences, this discussion will be organised around the three secondary research questions relating to different aspects of the dynamics. Thus the three headings are (a) the role of the facilitator (my role), (b) the role of the coaches, and (c) the process of learning within the community of practice. The first two of these themes will provide a summary of the actions taken respectively by myself, and by the coaches; the last theme will describe how we interacted to enrich learning.

The role of the facilitator.

In accordance with the literature (Heron, 1996a; Saint-Onge & Wallace, 2003; Wenger et al., 2002), my role as the facilitator in this collaboration was central and multifaceted. Primary among my responsibilities was creating the conditions that would allow the coaches to learn through their participation in a community of practice, that is, developing the CoP. Specific tasks involved building trust, orchestrating learning activities, recording and managing data, acting as the chairperson for the RTs, monitoring the flow and rhythm of the CoP, and checking and evaluating progress.

In terms of developing a CoP, Wenger et al. (2002) observed five stages: potential, coalescing, stewardship, maturing, and transformation. I will comment now on how my actions related to these stages of development. According to these same authors most community development begins with an existing social network, which was the case in this

study. The group of K1 coaches was in place when I approached the club, and with the first interviews I was able to confirm that elements of a CoP were in place. By helping the coaches discover that their colleagues shared their passion and many of the same issues, I was able to energise the potential of the community. The coalescing stage is characterised by the building of trusting relationships between members and “an awareness of their common interests and needs” (p. 82). As the facilitator in this study, I did not have a lot of work building the level of trust between my self and the coaches because I was already familiar to them; some I had known for many years. The level of trust between them was also quite high at the start of the study, although I worked during the RTs to be sure that each coach’s voice was heard. Most of my work in this regard concerned the building of trust in the process. It was critical that I help the coaches recognise the value of spending time participating in community activities. This was accomplished by encouraging the coaches to “develop the habit of consulting each other for help” (p. 84) through the RTs. Asking the coaches to reflect on their practice and to share these reflections with the others are actions I took to kick start this habit. In the stewardship and maturing stages my role involved monitoring the rhythm of, and continuing to develop community learning activities. This entailed checking the progress of the CoP and maintaining the momentum. Wenger et al. noted that facilitators “need to be aware of the waxing and waning of community energy and take action to help the community meet the changing demands of its environment in a way that preserves and even develops its own sense of self” (p. 105). The CoP in this study experienced the waxing and waning of community energy pointed out by these authors. As the facilitator, in a democratic process such as this collaborative inquiry, I had to respect the time limitations of the coaches, especially once the second half of the competitive season was underway. The fifth stage of community development is transformation in which the

community either dies off or transforms into another community. In the case of this study, the end of the season brought a natural end to this CoP. My role in this stage was to seek out the coaches' evaluations, which indicated that they would like to continue in a similar vein the following season, although some of them wondered how they might succeed with a different group and no facilitator.

A further aspect of my role was to manage the boundaries of the community, that is link with the club leaders, the head coach and the president, who were the organisational sponsors of the project. I did this by providing them with the summaries of the RTs and by otherwise keeping them abreast of the community progress. In regard to this last activity, I was assisted by the natural energy produced by the CoP, which permeated the club. As Wenger et al. (2002) remarked, "When word spreads that the community is effectively sharing knowledge, it can move from relative isolation to an onslaught of newcomers and onlookers" (p. 97).

A general comment on my role as facilitator is that in a manner similar to that described by Heron (1996a) it moved from more directing to less directing as my coparticipants embraced the process and their role moved toward being on a par with mine in influencing the direction of the process.

The role of the coaches.

Obviously the primary role of the coaches was participating in the community. This involved reflecting on their practice, sharing these reflections, asking for and giving advice, negotiating various aspects of their practice, and engaging in the evaluation of the process. After agreeing to participate in the inquiry, the first action of the coaches was to respond to my request to bring three lessons learned to the first RT. In order to do this the coaches had

to engage in individual reflection on their daily coaching practice. Having done this they had to share these lessons with their fellow CoP members. After a few RTs, the coaches began to interact and comment on the reflections of the others. This led to collective reflection on their practice.

As the coaches became accustomed to this type of interaction I no longer had to ask them for their individual lessons learned. Furthermore, they began to develop the habit of asking each other for advice on certain coaching issues. This, and the need to develop tactical plans for training and racing, led to the negotiating of a number of different aspects of their practice, such as who among them was good at what (craft intimacy) (Wenger et al., 2002), what was involved in good feedback and effective communication, how to deal with parents, and a shared repertoire (Wenger, 1998). The coaches also evaluated the progress of their CoP. These evaluations included reflections on their progress regarding the inquiry process, on the learning related to their practice, and suggestions for the future. The coaches also spread the word about their CoP, through their actions, words, and the performance of their athletes. John's letter to the summer coaches was an example of this and acted as a reification of their participation in the CoP (Wenger, 1998).

Enriching learning through interactions.

With the information provided in the two previous themes on my role as facilitator and the role of the coaches, we will now examine how these two intersected to enrich learning through social coparticipation within a CoP.

In collaborative inquiry, "It is the interplay between individual reflection and group reflection conducted through dialogue that produces meaning" (Bray et al., 2000, p. 98). As explained above, my request for the coaches to share lessons learned from their daily coaching practice led to individual and eventually collective reflection on their practice.

Asking the coaches for these lessons seems to have encouraged them to make reflective practice a habit, as indicated by the comments of Chris and Sebastian. Among a list of the features of reflective practice, Moon (1999) included two that are very pertinent for the learning process in this study; first, that reflection may be aided by oral articulation, or written account and second, that reflection is usually enhanced by sharing with others. The sharing of their reflections with the others in the RTs enriched the coaches' learning from their daily practice. Raelin also supported this type of learning when he said, "Practitioners often learn best by sharing their theories and experiences with each other" (p. 67).

Furthermore this sharing and collective reflection led to the negotiation of meanings of important aspects of the coaches' practice. In relation to organisational learning, Raelin (2000) noted, "Reflective practice should also occur simultaneously with knowledge sharing so that new meaning and methods can be assessed by organizational members and partners" (p. 110). For Wenger (1998), practice is defined by meaning, which is embedded in the process of negotiating meaning through on-going interaction involving both interpretation and action. This signifies that negotiated meaning is never static, but is dynamic, historical, and contextual. Thus, "Our engagement in practice may have patterns, but it is the production of such patterns anew that gives rise to an experience of meaning" (p. 52). In this study the coaches engaged in their practice and, through their interactions negotiating about, for example, the meaning of good feedback, or elements of their shared repertoire such as technical language, they learned about *their* practice and created new knowledge specific to it. The revisiting of basic coaching principles and the resurfacing of certain lessons throughout the winter demonstrated the value of learning through on-going negotiation. These basic principles and lessons would not have been revisited if there had not been a need to negotiate their meaning within the context of this CoP.

Learning within the CoP was also enriched through the concept of legitimate peripheral participation (Lave & Wenger, 1991). The newcomers, Chris and Ben, were able to move from the margins of the CoP toward a more central position. As the winter advanced, they came to be coaches and their participation in the CoP permitted their colleagues to recognise their strengths. This point leads to an important element in relation to how learning was enriched within this CoP.

The ski coaches in this study had varied amounts of coaching experience with two newcomers, two with about eight years of coaching, and two with more than 20 years in ski coaching or instructing. This blend of experience laid the foundation for what Wenger (1998) called 'generational encounters', in which more experienced members of CoPs interact through practice with less experienced members. Through these interactions newcomers come to be included as full members of the CoP. The learning that occurs through these generational encounters is not always conflict free and in fact, newcomers may challenge existing knowledge, leading to the negotiation of new meanings for the practice. In this way, "Practice is an on-going, social, interactional process, and the introduction of newcomers is merely a version of what practice already is" (p. 102). In this study the newcomers, Chris and Ben were afforded opportunities to approximate full participation as they were mutually engaged with other members, were involved in the actions and the negotiation of the enterprise, and the repertoire. As participants in the CoP Chris and Ben also brought new perspectives to the more experienced coaches and contributed to the evolution of the community.

Summary

The purpose of this study was to explore and document how cultivating the CoP of a group of coaches can enrich learning and develop practice. In the role of facilitator I introduced a group of six coaches, along with their boss, to the concept of creating and sharing knowledge within their practice. In the words of their leader, John, “We were like a bunch of green horns” at the beginning, but over the six months of the ski season we developed a way of working together that has been described here. Using principles borrowed from the disciplines of education, sport pedagogy and psychology, and business we succeeded in creating a structure for learning from our everyday experiences, bringing newcomers into fuller types of participation, producing excellent results, and doing all of this with the added value of enjoyment. From the perspective of the participatory paradigm, the primacy of the practical (Heron, 1996b) was demonstrated. At the same time I continued, at times, to act as a consultant, as I had done in Study One with the athletics coaches. In this role I participated in the reflective conversations of the coaches, sometimes individually and sometimes within the group.

The fact that the club president requested that I work with the coaches at the summer camp was an excellent endorsement of the project and entirely in keeping with the collaborative, non-prescriptive nature of the research. John’s letter to the summer camp coaches was another endorsement of the project. His description of how the project worked by getting the coaches to share ideas and methods and work together to solve problems provided a practitioner’s view of the benefits of being in a community of practice. It is interesting that John’s description of coaches working in a vacuum, all alone, not sharing with other coaches, is very much the way teachers’ work has been described. It has been said, “Institutions of formal education historically have been structured, both physically and

otherwise, to foster learning as an individual enterprise.... Teachers work and learn in relative isolation” (De Sousa, Huebel, & Prendergast, 2000).

With the awareness that every context is different, and the lessons gleaned from this study, I continued with the idea that I would again be a facilitator for the group of summer coaches and that our work together would result in the camp being not only a training camp for the athletes, but also a learning experience for the coaches.

Study Two Part Two

Introduction

In this second part of Study Two, we continued in the same vein as the first part, working with a group of ski coaches to help them learn by sharing knowledge within a group of their colleagues. Once again I declared that I would be a facilitator and coparticipant in this process. The conceptual framework for this study is the same as for the first part of Study Two; therefore there is no review of the literature needed here. Thus we begin with a description of the context.

Coaching Context

The site of second part of Study Two was a town in the French Alps with a glacier ski area. The ski club organized a three-week summer ski camp with six coaches and about 30 athletes (11-15 years old). The participants were housed in a hotel in the town and left every morning at seven for the 40-minute ride up the lifts to the glacier. The athletes ranged in age from 11 to 15 years old. Two of the coaches (Paul and Phil) worked with their groups from the previous season. One of these was from a different club (see Table 6). The others had groups new to them, but made up of athletes they knew from the club. A guest coach (Florian) moved around to work with different coaches and their groups. Given that everyone except one coach stayed in the hotel, there was ample opportunity for the coaches to spend time together.

In comparison with Part One of this study, the winter, only the head coach of the club, Jean, was a participant in both studies. The other club coaches, Bjorn, Paul, and

Table 6

Study Two Part Two Coach's Affiliations

Coach name	Club ¹	Athlete group coached at camp	CoP exposure
			Yes (participant winter) Limited (saw and heard of at club) No
Jean	Host	Other	Yes
Bjorn	Host	Other	Limited
Paul	Host	Own	Limited
Sylvain	Host	Other	Limited
Florian	None	Other	No
Phil	Other	Own	No

¹ Host is Club in Study Two Part One (winter)

Sylvain had not been part of the CoP in Part One; however they had been exposed to the outcomes through seeing and hearing about the study and its outcomes. The other two coaches, Florian and Phil had not been exposed the CoP concept prior to the start of this study. The fact that the coaches were together around the clock (except the one staying elsewhere) provided plenty of time for on-going interactions. During the winter study, the coaches went home at the end of the day to other commitments. The other significant difference between the two contexts was the orientation of the coaching work. A summer ski camp is a training camp, a time to work on technique, rather than trying to train and prepare for competitions, as is the norm in the winter.

Research Questions

The type of collaboration under investigation remained the same as in the first part of Study Two. The questions were essentially the same although they were adjusted for the context: What are the dynamics of the collaboration of a facilitator working with a group of alpine ski coaches at a summer ski camp to help them to learn from their everyday coaching experiences?

The secondary questions were unchanged, a) What role does the facilitator play in such collaboration? (b) What role do the coaches play in such collaboration? And, relating to the effects of the collaboration, (d) How is learning enriched through social co-participation within a community of practice?

Methods

Co-Participants

Five of the coaches in this study were employed by the same ski club as in Study Two, Part One. However, not all were regular ski club coaches. One, Florian, was a guest coach with extensive international experience as a competitor and organiser/coach of summer camps. It had been more than 10 years since this coach had been involved in regular coaching. As indicated in Table 6, four coaches were from the host ski club; three regular coaches (Bjorn, Paul, and Sylvain) and the head coach (Jean). The sixth coach (Phil) was employed by another club, to work with his own skiers. Of these six coaches, only the head coach had participated in Part One of Study Two. During the camp we had several other coaches drop-in to our round table meetings. These included a National Team coach (Peter), a provincial team coach (Connor), and a divisional coach (Nick), all of whom had worked with the club in the past.

Data Generation Methods

As in the first part of Study Two, data were generated through interviews, RT meetings, participant observation, and my journal. All of the coaches were interviewed before or near the start of the camp. Acting as the facilitator, I participated in the first two weeks of the camp, during which time 11 round table meetings were held. During this period I was also a participant-observer on the glacier every morning during the coaching sessions. During the last week, after I had left, the coaches held five more RTs without me. All of these meetings were taped. Meetings 1 through 4, and 12 through 16 were transcribed verbatim (c. 72 pages, single-spaced). The remaining meetings were listened to by the initiating researcher and summarised in note form (c. 22 pages, single-spaced), with certain parts transcribed verbatim. The transcribing of such meetings with multiple participants is a very lengthy procedure, and because the intent of this project was not to conduct a conversational analysis, we decided it was not necessary to transcribe all the RTs. The decision to do the first and last ones was taken because these were considered important for tracing the development of the group. A second interview was conducted with all of the coaches except Phil, who, being from another club, was too difficult to track down.

Findings

Similar to the previous ones, this findings section again tells the story of my collaboration with a group of coaches, this time at a summer ski camp. As would be expected, the context and the coparticipants influence the type of participation, therefore the learning that takes place. The focus in this section will be a description of how this group shared their knowledge and pushed their learning through their interactions. As in the previous findings sections, the reader will find parentheses that link parts of the findings to numbered notes in the discussion. We suggest that you read these notes as you proceed through the reading of the findings, moving back and forth between the two sections. A general discussion, following the point form discussion, bridges the central themes in relation to the research questions.

The Beginning: On-going Contact

As this study grew out of the previous one in the evolutionary manner of collaborative inquiry, if we are to properly explain the collaborative process we must begin these findings by returning to the end of Study Two, Part One. The club president had spoken to me at the end of the winter about the possibility of continuing my work with the coaches at a summer ski camp in France. In May I attended an information meeting for the coaches and parents for children going to the camp. At this meeting Marc, the club president presented me to the group stating that I would be working with the coaches at the camp, for the first two weeks. I met all the coaches and got their contacts. Consent forms were also discussed at this time. These were either signed at the time or an arrangement was made to have them mailed. I also told them that I would send them an information letter, in French. This updated version of the information document provided to the coaches in the other

studies (see Appendix R) was based on the experience of the first part of Study Two, in which it was stated that 'leaving the egos at the door' was essential for productive discussions. It emphasized in particular the importance of good collaboration between the coaches themselves, and myself, "Une collaboration efficace est fondée sur de bonnes relations et des échanges ouverts. Chaque participant doit être prêt à écouter les autres et à partager ses connaissances et son expérience" (Summer info letter to coaches). This information letter also specified that they would be asked to attend RT meetings every day after skiing during the camp.

The reader will also remember that John, the coach leader of the K1 group involved in the winter study, wrote a letter to the summer coaches explaining the process and inviting them to participate during the camp. The full text of this letter, which was sent out in French and English to the summer camp coaches, can be found in Appendix P. (See Study Two Part Two Discussion 1)

During this period, I had several conversations with the club president concerning the project and the importance of getting started right at the beginning of the camp. Jean and I would both be leaving after the first two weeks and the plan was that I would hand over the responsibility of the convening, taping, and chairing the RT meeting to the coaches themselves for the last week.

Knowing the Coaches

An early interview was set up to get information about each coach's experience and philosophy. I contacted all the coaches in May/June but was only able to interview one of them before we left for the camp. As previously noted, ski coaches do all kinds of other work (roofing, construction, dock building, event management, etc.) to make enough money to be able to coach, and these months were busy ones for them all. I decided that I would

interview them on the plane or at the start of the camp. The following information comes from these interviews.

Coaches' background.

The information regarding the coach's background experiences is summarised in Table 7. All the coaches had extensive coaching experience, the range being from 10 to 30 years. Furthermore, all but one coach had experience as a ski racer. One, Florian was a National Team member and pro-racer for many years. The others competed at provincial and national levels. Bjorn, the one coach with no ski racing experience was, however, a physical education teacher, ex-gymnast, and gymnastics coach. He had come to Canada from Switzerland in the 60's. He was also the one with the most years of ski coaching.

Table 7

Study Two Part Two Coaches' Background

Coach name	Ex-ski racer	Years coaching	Level of Athletes
Jean	Yes (ø)	18	Club to international
Bjorn	No	30	Club to international
Paul	Yes (ø)	<i>18</i> ²	Club to national
Sylvain	Yes (+)	18	Club to international
Florian	Yes (+)	10	Pro and camps
Phil	Yes (+)	10	Club and divisional

¹ Extent of experience as an athlete: (-) = limited, (ø) = medium, (+) = extensive

² Italics denote experience in ski instruction and coaching.

(Information regarding the coaches' previous exposure to the concept of promoting learning through experience using a CoP has been described in Table 6).

Coaches' role frames.

The interviews with these coaches¹ did not all reveal clear role frames, however some information was presented. As far as boundary components (those that are relatively stable and having to do with the environment) are concerned, competitive level is one. All of these coaches had worked with the elite level of competition, and even if they were not doing so at the moment of the camp, their style of coaching did not seem to be affected by the competitive level of the skiers. One coach, Bjorn, mentioned athlete gender, another

¹ Information about Jean's is in Study Two, Part One.

boundary component, stating that coaching girls was one of his biggest challenges. Bjorn, who had been coaching for 30 years, also spoke of the change in the nature of the athletes today compared to when he started coaching. He said that previously when you asked a 14-year-old to do something, they (normally) did it. Now, he said, the 14 year old will ask you why you want him or her to do it. He believes that children are much more willing to challenge the coach these days, and that they have greater access to information, with the Internet and so on. This could be considered a cultural boundary component.

As for internal role frame components (personal views), three of the coaches, Bjorn, Phil, and Paul spoke about personal development. For example, one said that for him, “[Coaching is] to teach them a way of life... .. because determination gets you everywhere in life” (Phil, interview 1). Another said, “I just want to... educate, try to develop and educate them” (Paul, interview 1). This ‘education’ involved developing thinking athletes by asking questions to promote athlete involvement in the learning process. Clearly sport specific development was an important internal role frame component for all these coaches. One coach said, “I arrive with a smile and always arrive with an attitude that we’re going to develop things” (Phil, interview 1). Winning was another internal component mentioned, but winning did not always mean coming in first place.

All these kids are in competition, it’s not to finish last it’s to finish first... everybody’s there to finish first... So... I mostly try to teach them how to be strong and win, not necessarily be first place but, if they were 40th that, first race, then let’s try to make 30 now... I love to win, and it’s very important for me, but I understand we need to lose sometimes to learn. (Phil, interview 1)

Coaches’ support network.

For the coaches working regularly with the club, there was already the sense that they could discuss coaching issues with the other coaches in the club, even if it was not as

systematic as it had been with the K1 group of Study Two, Part One. When asked about how often he discussed coaching with others, one coach said, “Four, five times a week...I’d say five hours a week... either with Nick (the divisional coach who came to some of our RTs) or, John (coach leader, Part One), or whomever” (Paul, interview 1). The same was not true of Phil, the coach who worked for another club, where he felt isolated because he was the only coach who was really serious. He described how the others only worked on the weekends and got into their cars and went home at 2:30 when they were finished on the mountain. He said, “What I’m jealous about the most are the coaches at Bowsky because they can all sit down and chat about different things. Even if you’re wrong, if you’re not on the right track, somebody will put you back on” (Phil, interview 1).

The Process

The one interview that I was able to conduct before the camp was with Paul who had been to Les Trois Monts for a camp the previous summer and who was therefore familiar with the hotel and the whole set up. He was able to confirm that there were several places in the hotel where we could hold our meetings. He also suggested that after lunch would be a good time.

Round table one: Introducing the process to the coaches.

We arrived in France on the 23rd and held the first meeting on the 24th. This meeting was a further introduction to the concepts we were promoting and Jean was instrumental in assisting me with this. Being the head coach of the club, he was the coach leader of the camp, and whole-heartedly fulfilled his role as sponsor of the project. In my journal I wrote, “Jean was excellent introducing the project and though I think the others were open but a little vague about how this would work, it was a positive meeting” (My journal, June 26th).

Without my pushing, Jean once again demonstrated his grasp of the concepts and used his storytelling talents to bring these alive for the coaches.

On s'est assis ensemble une demi-heure de temps, puis je me rappelle les premières meetings ils regardaient l'heure un peu mais ensuite ils ne regardaient plus l'heure pas en tout. C'était moi qu'il fallait que je les mette dehors à 6 heures et demi du soir du clubhouse. Alors ce qui est sorti de ces meetings là c'est que j'ai vu des résultats....Non seulement la mise en application de ce que Diane a fait avec ces entraîneurs, ce qu'elle a expliqué tout à l'heure, qui est favorable pour l'entraînement au niveau communication, mais aussi ça a déteint sur toutes les jeunes. Ça a créé une ambiance incroyable au niveau participation, au niveau camaraderie, au niveau bonding, c'est-à-dire tout rapprocher le monde, du plus fort au plus faible... le plus faible, il tire la patte et le plus fort il l'encourage à continuer, et puis tout ça. On a vécu une expérience extraordinaire.... Alors c'est très simple... on a tous nos egos, puis à un moment donné on a mis tous les egos ensemble et... ça a fait des egostots! (*On rit!*).. Ça prend de l'humour.. parce qu'on est une équipe... c'est basé sur ça! Le journée que tu arrêtes de faire des blagues c'est plat!... Je l'ai vu cette année l'harmonie, c'était là. Il y avait une bonne camaraderie, une bonne communication. Puis c'était du fun.. c'était vraiment le fun....

Juste pour déborder un peu du sujet, au service d'incendie de Bowsky, on avait les mêmes problèmes qu'on avait dans le coaching. Des capitaines, des chefs, les lieutenants et des pompiers et il y avait un manque de bonding comme ça parce que tous les lieutenants ils voulaient faire leurs affaires et puis les pompiers étaient tout le temps là à se tourner les pouces. Ça fait que je leur ai dit qu'il fallait faire participer les pompier, que le lieutenant, qu'il s'assoit un peu sur son queue et qu'il laisse les gars, qu'il les encourage, et les aide... c'est ce que John a fait avec le gang. (Jean, RT 1)

It is interesting that Jean mentioned 'egos'. The idea of 'leaving your ego at the door' was recognized by John as one of the important elements of the process. It was also discussed with my peer advisors as something that needed to be stressed in the present study, but Jean brought it up on his own accord. After Jean provided his introduction, I added mine, also emphasizing the importance of leaving one's ego out of the process. I explained about the winter study.

À moins qu'il y ait d'autres suggestions on va commencer comme j'ai fait l'hiver passé. J'ai demandé que chaque individu arrive avec au moins trois choses qu'il a appris entre chaque meeting. Ça peut être trois choses qui ont marché ou des choses qui n'ont pas marché... les problèmes qu'il a eu et les choses qu'il a fait pour résoudre ces problèmes là. Ça a comme déclenché des conversations. L'idée c'est comme John a dit dans sa lettre, c'est que souvent on travaille seul comme dans un vacuum, seul avec les jeunes sur la pente. On sait que d'après certaines théories d'apprentissage on apprend beaucoup des autres, par l'expérience. Puis les coaches disent la même chose, ils vont dire qu'ils apprennent à travers l'expérience. Mais là c'est d'essayer d'être un peu plus systématique, de pousser un peu plus la réflexion. Comme ça il faut que tu arrives chaque jour avec trois choses. Comme les jeunes, Ben et Chris, eux ils en avaient tout le temps, mais, John aussi il a appris des choses avec eux. Ce n'est pas juste ceux qui ont le moins d'expérience qui vont apprendre, on a tous nos idées et puis des fois on est un peu fixé dans ce qu'on croit qu'il faut faire pour tel problème et tel autre problème. Avec ça c'est 'un step outside the box', ça nous fait réfléchir et puis c'est aussi l'affaire de... comme Jean a dit, on met tout les egos ensemble, c'est ça. C'est à dire qu'on laisse les egos qui sont comme problématiques pour l'apprentissage à la porte. Ici on peut dire n'importe quoi et ça ne fait rien, on a le support de tout le monde. Alors, est-ce que tout le monde comprend un peu ça? (Diane, RT 1)

We had a good number of jokers in this group of coaches, therefore laughs were many. For example in response to my question about their understanding Bjorn replied, "Bien, si on peut dire n'importe quoi, oui !" (Bjorn, RT 1).

Jean said that the process might seem a little intangible at this stage but that after a few days they would feel how it works. This excerpt from the RT demonstrates how Jean and I shared the role of explaining the process, helped by questions from the others. 

Study Two Part Two Discussion 2

Jean: Tu vas arriver, tu vas donner tes trois opinions, après ça, à moment donné la discussion part.

Paul: La chicane part!

Jean: C'est là que ça vient intéressant parce que, supposons moi je suis là j'écoute ça et là mon Bjorn dit, « Moi j'ai fait ça puis ça avec mes jeunes et j'ai eu un résultat incroyable », bien on peut parler de ça ou d'autre sujet.

Diane: Oui!

Jean: Moi je suis là et je me dis, « Bien demain matin, je vais essayer ça! Ça a de l'allure cette affaire là parce moi j'ai le même problème ». Alors je reviens le lendemain et je dis, « Écoutez, qu'est-ce Bjorn a dit, moi je l'ai essayé et... »

Paul: Ça peut être n'importe quel problème.

Diane: Oui.. l'approche communication, ainsi de suite.

Jean: Ça fait une pyramide.. on part les discussions de rien... le bénéfice de tout ça c'est qu'après trois ou quatre jours ça va venir comme une drogue « Eh! Toi là, moi j'ai appris quelques chose de toi, tu as parlé de les faire skier juste sur les bottines pour le transfert du poids; c'est bon. Je l'ai essayé aujourd'hui et c'est bon! » Et toi tu vas me dire, « Et moi j'ai appris quelque chose de toi parce que quand tu as parlé de ton pole plant, dans la ligne de pente... » Ou bien l'autre c'est la communication, ou l'autre qui braille parce qu'il veut voir son père... Ce sont toutes des affaires de même.

(Jean, Paul, Diane, RT 1 transcription)

Thus went the introduction, with stories from the winter interspersed with our explanations.

As coordinator I set the context for the meetings and when we might meet, based on Paul's suggestion. The coaches discussed this and asked if it was possible to meet outside, by the swimming pool, which we did a number of days.

When Jean and I were explaining the process, one of the coaches, Paul, raised an issue that was bothering him. This was a coach who came to the camp with his regular group, thus he was carrying an issue over from the end of the winter season. He wanted to discuss a problem he was having with one of the parents. This led us right into a lengthy discussion on parent issues, involving most of the group. Paul received advice and support from this discussion. At one point Florian, the guest coach, asked for clarification about Paul's specific issue. This was good because it focused the discussion. As various members of the community gave advice, Jean, the club president, and I recounted past experiences of the same sort to support the advice.

Round table two: Negotiations begin.

The time of this RT was rescheduled because the World Cup of soccer was on television and some of the coaches did not want to miss the game. Thus we had the meeting after the game but were a little squeezed for time since some coaches had to leave to meet their athletes for dryland training. A seventh coach, Nick, joined us for this RT. He was private coaching an individual from the club, but he had been a coach with this club for seven years and knew all the others.

At the start of this second meeting I asked Florian if he wanted to start and he turned to Jean to ask him if he wished to begin. Finally Bjorn launched the RT with a general question: “Avez-vous pensé au prix à payer pour être un entraîneur? Pour la vie d'un entraîneur?” (Bjorn, RT, 2). This question, he declared, was related to the fact that he had sacrificed his family life for coaching. There followed an animated discussion relating to the costs of leading the life of a coach, who is trying to balance surviving financially, which means doing other work, and keeping a family together. The subject was one of importance to the group, who were all passionate about the sport of skiing, and the practice of coaching. At one point Florian asked Bjorn what he has gotten from his coaching career and he answered, “Moi j'ai du plaisir et j'en ai encore du plaisir à skier, alors... c'est la passion. Mais des fois je suis désabusé” (Bjorn, RT 2), to which Florian replied, “Comme tout le monde dans son travail!” (Florian, RT 2). (See Study Two Part Two Discussion 3)

In this broad conversation about the nature of their practice, it was agreed that coaching involved sport power and political power. Peter, the Women's National Team speed coach, who was at the time also in Les Trois Monts, was used as an example. Jean said that coaching needed “un esprit artistique” (Jean, RT, 2a). (See Study Two Part Two Discussion 4)

While this conversation was useful I tried to steer the coaches back to their daily experience. Jean and Bjorn, before they left to play soccer with their group, commented how their young athletes had noticed the number and caliber of the European children on the glacier. Bjorn again asked to have the RT after the World Cup match, stating that it only takes place every four years. This led to a discussion about keeping the RT on track, with both Jean and Florian saying that a moderator, chairman, referee was needed. Obviously this was my role and I reinforced that I would be looking for the lessons learned while they coached. I noted, "I learned that I must be a little more proactive in this sense. Coaches will get together and talk about their sport willingly anytime but that is not what this project is about" (My journal, July 26th). There seemed to be a need to focus the discussions and give them a little more structure. (See Study Two Part Two Discussion 5)

The RT continued after Jean and Bjorn left. I tried to draw in Phil, the coach from another club, who was coaching his own athletes. He had declared in his interview that he was a reserved person. He was also new to the process. In these early RTs he usually gave a summary of his day, rather than revealing any specific lessons learned or issues. Paul used his time to introduce us to some of the athletes in his group, speaking particularly about how he was learning to communicate with each one on an individual basis because they were all different. Paul used this opportunity to validate something that Nick had told him the previous winter about one of his athletes. Before we ended I reminded them once again to come tomorrow with precise things that they had learned.

Round table three: Narrowing the focus.

During the morning I circulated between the groups on the glacier and reminded them yet again to come to the RT with some 'lessons'. I started the meeting, which was once

again squeezed between the televised soccer match and the afternoon physical training, by saying that we only had 30 minutes for the meeting. In my journal I noted,

The discussion today was much more related to the work on the hill. We did not have time to get around to a number of lessons per person but everyone had at least one thing to say.

Paul and Phil more or less summarised their day and the results they had. I tried to draw them out a little on the how of these results. Jean said that he and Bjorn had worked as a team to create a good bonding in their group, similar to what was accomplished this winter with the K1's. They agreed they did this by pointing out the strengths of each individual and making sure that even the strong ones had things to work on. (My journal, June 26th, 2002)

As Paul gave a resume of his day, Bjorn asked him a question about why the interactions with the skiers had started to get better. This was a good example of a peer asking a question to push reflection (See Study Two Part Two Discussion 6). I also questioned the coaches to help them share their experiences with the others.

When Jean and Bjorn were talking about how they were working, really as a team, Florian clarified that they were working as the K1 coaches had done the previous winter. Bjorn said that he had not been involved with the K1's but that Jean had and that the two of them had discussed their approach to the camp on the plane going to France. Both Jean and Bjorn used stories to give the others advice about coaching. At one point Bjorn asked if it was all right if he shared an anecdote.

I was more proactive in my role as coordinator, policing who spoke when and reining in the discussion when it strayed too far from their live coaching experiences. I reminded them of the time and at the end set the time for the next RT. I noted in my journal that the next soccer match was not until Saturday (this third RT took place on Wednesday, the 26th of June).

Round table four: Value begins to be felt.

In opening this RT I told the coaches that I had revisited our previous RT and commented that there were some very good specific comments about their work and that they should try to stay away from very general topics. I gave them the example of how Jean had explained the manner in which he and Bjorn were working to create good bonding in their group. With this Jean again offered to start and he shared some specific technical information, what the athletes needed and how they approached the corrections. (See Study

Two Part Two Discussion 7)

Next Florian talked about working with Paul. Florian is very funny and he always speaks very directly. He used the RT to get some more information on the athletes. He shared his morning with the group and had everyone laughing a number of times. I interjected to keep the discussion on subject. Here is an excerpt from this part of the RT, in which the process of two coaches working together, Florian and Paul, is explained.

Diane : Je veux juste revenir à ce que tu disais au début, comme vous étiez deux là, à regarder.

Florian : C'était le fun ça.

Diane : Puis là c'était quoi? Il y avait quelque chose de croche, mais avec deux vous avez mieux pointé ce que c'était?

Paul : Lui, il voit qu'il y a un truc [qui ne va pas], puis moi je lui explique sur quoi je travaillais, donc [on voit que] je ne regarde pas le même endroit. Mais en regardant ce que lui a observé, on revient à une autre analyse, puis on dit, « Ah! Si on passe par là, peut-être ça va aller plus vite [pour corriger le problème] ».

Diane : OK, good! Ça, c'est bon!

Florian : Ça là, ça revient un petit peu plus à ce qu'on disait en ce moment. On est cinq coaches, on essaie d'aller chercher individuellement [comment corriger les erreurs]...

Diane : Oui, oui, oui... c'est vrai. Parce que des fois c'est une chose qui va placer toutes les autres choses. Puis si toi tu travailles sur la mauvaise chose...

Paul : C'est ça!

Florian : J'apprends. Je n'ai jamais été là dedans. Je n'ai jamais coaché des jeunes, oui, j'en ai coaché, c'est faux, je m'excuse. J'en ai coaché, mais ça fait longtemps, je reviens me mettre dedans... puis là je suis capable de le dire. Je trouve ça super intéressant, de travailler comme ça là. Moi je pense que c'est excellent!

Paul : Oui, oui... c'est bon.

(Florian, Diane, et Paul, RT 4)

In this RT there is a sense that the coaches were beginning to catch onto the idea of sharing their experiences. In my journal I wrote the following.

Thursday, the weather was good again and the meeting was attended by everyone except Sylvain and, including Nick. I began by stating that everyone had to be more specific and really try and relate his comments to the day's work. It was the best meeting yet. Finally I am starting to feel that this will work well with the group. (My journal, June 26th, 2002)

The next excerpt demonstrates how the coaches began to participate with each other in the telling of experiences. Also here, Paul shared how working with Florian helped him remember things that he had known many years prior but had forgotten.

Paul : Un autre, ce matin, avec Michael on a fait des bonnes choses.

Florian : Oui, Michael.

Diane : OK, ça c'est bon.

Paul : On travaillait sur son pop. Il a arrêté de popper mais son extension était encore très verticale. Puis à un moment donné, on l'a juste mis debout, plat, en situation de simuler une fin du virage, sa position, tu t'es placé en avant et tu lui as dit, « Laisse-toi aller! »

Diane : Aval...

Florian: Tu vas voir tes pieds vont revenir. Basculer.

Paul : Une couple de fois on le laisse tomber. Puis on l'a placé de l'autre côté et on a fait les deux côtés.

Bjorn : Oui, en principe c'est ça que ça prend.

Paul : Puis, ça, c'était un bon point. Il a compris, il a dit, « Ouï! Je me sens comme si j'étais pour tomber en pleine face ». J'ai dit, « C'est en plein ça! ». Il rie. C'est exactement ça!

Nick : Le résultat en ski après, c'était quoi?

Paul : Il savait exactement le feeling qu'il devait rechercher.

Nick : Ça a sorti correct?

Paul : Ça s'en vient. Ça a fait boom, boom, boom... mais en faisant ça, à la fin de la journée, c'est ça que je disais à Diane tantôt, je commençais à me rappeler d'autres exercices, que je faisais, il y a peut-être 15 ans, qu'on va pouvoir utiliser demain pour compléter l'évolution. En fait, tu oublies des choses.

Bjorn : Ah, bien oui.

Paul : Là, ça revient. Ça va être intéressant de voir jusqu'où...

Bjorn : Ce n'est pas vraiment des exercices, ce sont des mises en situation.

Paul : Des mises en situation, si tu veux.

Bjorn : Voilà. Ça fait sentir quelque chose.

Diane : Oui, exactement. Tu les aides.

Paul : Mais des fois ce sont des choses que tu as fait il y a longtemps, tu oublies, tu n'y penses plus, puis whoops à un moment donné ça revient.

(Paul, Florian, Diane, Bjorn, Nick, RT 4)

(See Study Two Part Two Discussion 8)

Being on the glacier also helped me facilitate the RTs, such as when I saw the two coaches, Phil and Nick (coach who was working with a private athlete) working together on Thursday I was able to ask about this at the RT. They spoke of the advantages of working together when one coach had athletes of a higher caliber than the other. I knew that Nick would not be at all the RTs so I asked him if he had anything else he wanted to share and this led to a long explanation of finding the critical part to work on. He described trying to get the

feeling himself and then analyzing it and testing it through trials and observations. (See Study

Two Part Two Discussion 9)

This RT ended with some reminiscing and a general discussion about coaching competitive alpine skiing. This conversation provided an opportunity for the coaches to collectively recognize the difficulties involved in their practice, and also the magic and beauty. (See Study Two Part Two Discussion 10)

Nick : Tu regardes la petite Polanski, tu regardes Vandernoot, de toute beauté, dans le mur, à pic, court, j'ai vérifié, virages slalom. J'ai vérifié dans une course, j'ai vérifié en géant, et puis en ski libre géant, elle l'a, partout la fille....

Florian: En tout cas... tout ça pour dire que ce n'est pas évident. C'est un sport de touche, c'est un sport de finesse.... C'est de la magie le ski en quelque part.

Diane : Pour Connor, il dit que les gens qui disent que le ski est facile, il ne faut pas croire !

Florian : Je ne crois pas à ça. Ah ça c'est l'enfer.

Bjorn : Parce qu'on n'est pas sur un terrain fixe. On est sur un terrain nouveau.

Jean : Il n'y a pas un virage qui est pareil.

[Discussion sur ce point]

Phil: Imagination!

Bjorn : C'est ça qu'ils disent.

Diane : Imagination.

Phil: De l'imagination de la part de l'entraîneur, puis de l'athlète.

(Nick, Florian, Diane, Bjorn, Jean, Phil, RT 4)

Nick then said that he had to go and everyone said "Thanks". I invited him to participate again. The next day was a day off skiing for most groups so our fifth RT was on Saturday.

Round table five.

Looking back on RT5, here is what I wrote in my journal.

Saturday the 29th the day was the best yet; clear and cool so the glacier stayed hard a long time....

The meeting went very well again... Jean always brings the level of sharing up by informing the group with examples from their day. Phil started to come out of his shell and said that he wanted to be able to have someone work with him to give another eye to the job. (My journal, June 30th)

I began the meeting by noting that Paul and Phil had skied on Friday, so I asked them to begin. Once again they gave a short report of what they did. This led to a discussion about the importance of tuning skis. This was an issue because the glacier was frozen hard that morning for the first time since we had arrived. This affected the training for some. With this, Jean jumped right in and agreed that at first it was difficult, but he went on to share the trick that he and Bjorn had used to get the young skiers to use more edging. This sharing seemed to prompt Phil to ask, even if a little tentatively, for help. (See Study Two

Part Two Discussion 11)

Phil: What I noticed... I was happy to see, and I think I would like to try... I was a little... not jealous, but I was wondering if it would be possible for Florian to come with my kids too. I found that good and I think that is the benefit of a team approach, with the kids and the coaches, I would like anybody to come with me. For me, the reason I came here, not for my athletes but for me, was, not to insult anyone in particular, but there are people here that have more experience than I do and I think it is important for me to stretch my knowledge and look to others. (Phil, Notes RT 5)

The others joined in here to encourage him. They talked about the importance of the CoP to help them see things in a different light or to work through a problem with a different approach. Phil said it was like in RT 4 when Paul and Florian shared how they had worked together. How having another set of critical eyes, those belonging to Florian, had helped Paul see a new way of attacking a technical problem that he had been working on for a long time with one of his skiers. The Bowsky coaches said that their CoP made their

practice easier for them. Phil said that the coaches at his area worked only on weekends and they were not interested in improving their practice, which meant that he could not have discussions with them.

For me my weekends are long because when I go to your area to ski I see all the coaches sitting together; they are all passionate about skiing so they sit together and talk about their skiers during an hour when they are eating.
(Phil, RT 5)

Bjorn also pointed out the importance of having more than one way to say things to athletes.

In fact you are talking to a skier and you say something about the colour green but there are different shades of green and maybe he doesn't understand it the same way that you mean it, so another way of saying might help. (Bjorn, Notes RT 5)

The conversation flowed on from this point and Jean once again told a story to reinforce the importance of asking questions and being humble if one wants to learn from others about his or her profession.

Checking the pulse of the CoP.

As discussed in Study Two Part One Discussion 15, part of the role of a community facilitator is to evaluate the progress, or health of the community. The night before the sixth RT I spoke to Paul about the process. He was happy with everything except the fact that we had adjusted the meeting times to accommodate the soccer fans. On the day of the sixth RT I also conducted interviews with two coaches, Phil and Florian.

For Phil, who was not a regular club coach, and who by his own admission is shy and reserved, it was evident that he was opening up. In his interview he said,

It's tough because I'm from another mountain, and it's tough to try and get in, and I'm very um, how can I say, I'm shy, and... And I don't like to hop in a big boat, 'cause it is a big boat, and I'm the small boat. I'm still rowing and they have a motor. To hop in and, not start telling what to do, 'cause I'm like that, I like to, you know, have a certain control. But I think everybody, does want to have a certain control. So it's tough to just to get over that; there's a line and I'm on it, but it's, I have a hard time. (Phil, interview 1)

However, as witnessed in RT 5, he was beginning to open up and consult with the other coaches. (See Study Two Part Two Discussion 12)

Florian was very interested in the whole approach and had already declared his enthusiasm during RT 4. I wrote in my journal that he asked me if I was going to promote this type of thing as a new approach for coaches' education. Although I had never said as much, he seemed to understand the ultimate purpose of the research. At dinner, on the evening of RT 6 Jean asked me how I thought the project was going. I answered, "I felt that after a few days the process had started to come together and I thanked him for his specific input... which provides an example for the others' (My journal, June 30th, 2002). Finally, I asked Paul if he would be in charge of taping the RTs after Jean and I left at the end of the first two weeks. He said he would do this.

Jean, as the leader of the coaches, also took responsibility for checking the pulse of the CoP. Other feedback was forthcoming from the other coaches, within the RTs. The community seemed to be coalescing, relationships strengthening, and members settling into the concept and feeling value in it. A review of these first five RTs shows similarities and differences with the content of the RTs in the first part of this study. A number of points about this have been made in the discussion.

The second week: RTs 6 through 11.

The RTs continued after every training day during the second week of the camp. A review of these six RTs indicates a similar pattern to RTs 4 and 5. This section will provide a brief glimpse of the main features of RTs 6 through 11. These are: the stories, the broad view question, the role of the 'out-of-camp' coaches, and my role.

Right from the first RT Jean, in addition to sharing specific issues related to his daily coaching, used stories to enhance understanding (See Study Two Part Two Discussion 13). Here is an example of a story he told in relation to communicating and what to do when an athlete does not make the changes the coach desires. This is a story of when Jean started to teach skiing and he had a beginners' class.

One guy just didn't get it. I kept saying to put the weight on the outside ski and nothing worked, he kept falling. Wednesday [the third day] after I had thrown in my tuque and my gloves, he got it and when I said, "You finally understood!" He said, "Not thanks to you! You have been saying for three days to put the weight on my outside ski, and I didn't get it".

I felt pretty small and asked how he got it and he said, "I was in the chair (a single in those days) and I was thinking that it didn't work to put weight on the outside ski so I thought what if I take the weight off my inside ski?"
[Everyone laughs...]

So he found the way to make it work. That really taught me something.
(Jean, Notes RT 7)

He was joined in this telling of anecdotes by Bjorn. At times, Florian, who had been coached by Bjorn in the late 70's and early 80's, joined in the storytelling with Bjorn, as they reminisced and drew from their past histories to highlight a point of discussion. Even Phil, the 'shy' outsider, eventually shared a story.

RT 9 began with a discussion about the bad weather and the benefits of training in it. Jean told another story and the discussion flowed on, eventually to other things. Right at the end of the meeting Phil came back to the subject of the weather, which had been discussed at the start of the RT, and said that he wanted to tell a story relating to an important life lesson he had learned about the weather.

I would like to say something to Diane about the day. Yesterday, it wasn't nice weather. When I was about 14 years old, I used to go hunting with my father. We would go for two weeks; I missed school. We left on a Tuesday, and we got up Wednesday morning and it was snowing, and all the rest. My dad left to go out. I told my dad that I was going to lie down and said that it is not possible that a deer would be out here in this terrible weather. My dad said, "No, you are coming hunting!" So I went out in the woods, it was raining and snowing and blowing. I put myself in a position where I was as protected as possible from the rain. And I saw four moose within about 45 minutes within 50 to 150 feet from me! And in my life until this day, it was the most beautiful thing that I ever saw. If I had stayed at the camp, I would never have had that great experience. I think in that one day I learned all that I needed to learn about the weather. (Phil, Notes RT 9)

While in Study Two Part One there were some 'broad view' issues discussed (See Study Two Part One Discussion 21), these discussions were more frequent with this group. Indeed the content of the RTs swung between specific issues related to the coaches' daily experiences at the camp and these broader issues, which were often instigated by one coach asking the others a question. For example, in RT 2 we saw Bjorn's question about the cost of coaching on a coach's private life. In RT 8 there was a long discussion of how to help the skiers concentrate better and this evolved into a talk about communicating with the athletes.

As indicated earlier there were three 'out-of-camp' coaches who participated in one or more of the RTs. One of these, Nick, has already been mentioned in RT 4. The other two were Peter, the National Women's Team Speed coach and Connor, the coach of the Quebec Women's Team and an ex-club coach and head coach. These coaches were well known and respected by the study coaches, and were long-time friends of mine. I had spoken to them about the project and invited them to 'drop in' to our discussions if they wished. Ultimately, they came of their own interest to some of the RT meetings (see Study Two Part Two Discussion 14). When one or more of them participated in an RT, they did so in a similar fashion to the study coaches. For example, in RT 8 Peter joined the meeting after the start and aired his belief that the physical education in many Canadian schools is terrible. He

asked the others if they thought this was true. This led the negotiation of what they as coaches could do to help the skiers become fitter. Another of the 'out-of-camp' coaches, Nick, sometimes acted as a broker between the study coaches and Connor (See Study Two Part Two Discussion 15). I sensed his desire to ask Connor certain questions and encouraged him to do so. Here is an instance of this type.

Diane: Nick, did you have a question for Connor?

Connor: I have talked a lot!

Nick: What fascinates me is that I observe how the club is running the camp; and I observe how Connor does his camps, and what fascinates me and what I would like him to explain is: How does he structure a camp and how does he organise himself? How does he arrive at saying, "Okay, I am going to work on this or that". You know? You prepare camps, and...

Connor: Two months in advance; every day. It is my job, and I admit that before going to a camp.... The plan, I look at it and I question it. I look at it again, re-question it again during a good, long time. And I have my moments of incertitude, at certain times, and others where I believe it is good. Finally I find something that pleases me, and I attack!

Diane: But you start with your athletes.

Connor: Yes I study their needs that vary from one year to another. But in general it is always the same thing. It is skiing, technically speaking that is it.... And we do camps because technically, for me, it is at the camps, because in winter you can't start playing technically when you are in the competitive phase. So you have to accept that it is in summer that you achieve change....

Diane: Nick, has your question been answered?

Nick: Yes. Another question... After planning a camp like this, you arrive on the snow and do a few days, a week; do you consider whether what you planned is good for the three weeks? Do you modify it? I am not just thinking about here but also all the other camps that you have done?

Connor: What you just asked me is what I asked myself during two months. What is the quickest road that I can take to succeed with these youngsters? I looked back, all the way to '96. Where did I succeed? But are there other ways that could be better, more modern, etc.? There have been lots of things since that time. Different people, different ... there is always that. Was it better before or should I take this approach, or that one? Like you guys I want it to work as well as possible, as fast as possible. That is what took a long time. And I admit that I came back to the things that helped me succeed before....

Nick: So they like it.

Connor: So they like it because if they like it they will go, and they will go more often and they will get better. So that is the type of goal that I try to throw out there. Of course, in my approach I try to keep it interesting and exciting....

Nick: It is visual every day.

Connor: The precision of skiing, you can see it better than before, I think. So the last two days we proceeded like that. We are in gates now, medium radius turns, and we did three or four days on this. We started with a rhythm, tack, tack, tack, tack... Then I changed the rhythm.... They learn because how to move through the gates, and everything becomes natural, technically it is good, and that worked really well in '96 too.

Diane: If we come back to Phil's question, at the end of the day, even during the day, you are always asking yourself questions, it is working or not?

Connor: You can see right away if it is working or not.

Diane: I know, because Nick wanted to know...it is not like you make a plan and you stick with it no matter. You have a global plan of what you want to achieve in their skiing and you have your tricks and exercises.

Connor: I don't hesitate, if it does not work. Like tomorrow morning if I set the course, from top to bottom, it takes three trips, and then I send three girls on the GS in the pitch, and I was left with three that were having a little more trouble. I started with them free-skiing, It was going well... forget the course. I didn't use it all morning and it was not used. So it happens that I change my plans mid-morning.

Generally agreed that that happens to the others too.

Connor: I had a plan, but I didn't follow it! *laughs* What is better than that!
(Diane, Connor, Nick, Notes, RT 11)

In another instance involving one of these out-of-camp coaches, the learning process of the CoP took a different than planned direction. Although Peter was not present at RT 9, we had decided to try the same concept of the morning warm-up runs that the K1 coaches had used the previous winter. This involved all the skiers taking three warm-up runs on the same trail, and all the coaches watching together, with the opportunity for individual coaches to solicit help from the other coaches on technical issues with specific athletes. When this was tried, for the first time, on the glacier, Peter was present and his presence altered the planned format. Instead of the coaches discussing technical issues relating to their athletes as they skied, Peter used the skiers to explain good technique, telling the coaches on which elements they should focus. Later, during RT 10, Jean was reflecting on this and Peter added his support for the sharing of knowledge.

Jean: It is just that everyone was reinforced when Peter arrived and he talked to us about the wipers, [technique] etc..... that was good material. But, last winter it was the communication between the coaches that really helped... like me who might be a little green, and I am having trouble. I have pulled out all the tricks, and you suggest something different and I decide to try it.

Peter: We have to work like this. We have to discuss. Otherwise everyone keeps secrets...

(Jean, Peter, Notes, RT 10)

Finally, in the second week of RTs my role continued as facilitator/coordinator. I continued to 'police' the conversations, bringing them back on track when they strayed too far from the current coaching issues of the group, and making sure that everyone had a chance to speak. I also continued to keep track of the time and set up the time and place for the RTs. As the week progressed I set things up for the RTs to continue after Jean and I were gone. The coaches seemed aware of their role in the process. There were examples of a coach taking the responsibility for some aspect of organizing learning opportunities. Nick brokering is one such example. He also reminded me to comment on the tape about the

weather, in order to provide the context for the discussions at that RT. Bjorn asked good questions during the discussions. I informed the others that Paul would be in charge of the recording the RTs after I left. The coaches demonstrated a certain degree of awareness about the project. For example, at the end of RT 11 I noted “They [the coaches] all wished us a good trip and laughed about all the stuff on the tapes that I have to listen too” (Notes RT 11).

After Jean and I left: The last five RTs.

The first two RTs in this set, RT 12 and RT 13, were quite long; just over nine and eight single-spaced pages respectively. RT 14 and RT 15 were short, at one and half pages each. The final meeting, RT 16 was over five pages. In terms of leadership, although Paul had agreed to be responsible for taping the meetings, he did not assume the role of facilitator during the RTs. Instead Bjorn took on this role, and he did it very well. He managed who spoke when, asked questions, orchestrated plans for the next day, summarised, and carried forward the thread with certain issues to see what solutions were tried. Paul, however, did at times remind the others to stick to issues related to their coaching. For example, a few minutes into RT 12, the first one after Jean and I left, he said, “OK, même si Diane n’est pas là je pense qu’on devrait garder le contenu.... On a fait la petite joke là, mais... (Paul, RT 12). The discussion up to that point at this RT was about which languages are useful for a ski coach who will coach in Europe. Paul’s comment directed the conversation back to the day on the glacier. Mostly the RTs continued as an occasion for the coaches to discuss specific issues, as well as broader more general coaching issues, and negotiate meanings surrounding these issues. Examples of the specific ones were those relating to equipment, coaching tactics, and the behaviour of certain athletes. Often these specific issues led to broader

discussions, such as the length of the camp, stemming from a discussion about the lack of concentration of certain athletes. There were clear instances when coaches gave advice to the others, and there were more stories, even in the absence of the number one storyteller, Jean. The visiting coach from another club, Phil, continued to open up. Instead of just summarizing his day as he did at the beginning of the process, he raised specific issues, asked for advice, and joined in the telling of more stories. The particular points to be discussed from these five RTs are: two examples of issues, the revisiting of various issues over the course of the week, the awareness of the group regarding the process, and the end.

In an example of pure advice giving, in RT 12, both Bjorn and Paul cautioned the others to be careful on the glacier because there are so many teams and coaches working. They both had had incidents that day of either colliding or nearly colliding with other skiers (See Study Two Part Two Discussion 16). In another instance, Phil (RT 15) explained that he had experienced some trouble with one of his athletes that day. He advised the others that he had e-mailed the parents concerned that afternoon so that they would have his version of what happened, written right after the incident, for when he eventually faced the parents with the athlete, to discuss the incident.

An example of an issue being revisited began in RT 12 when Florian mentioned that he had been working on the line (through the gates) with his group. This instigated Phil to raise the issue of teaching line, and tactics in general, to young skiers. He asked Sylvain if teaching tactics was part of the normal program in Europe. The conversation carried on a while, the coaches negotiating the importance of teaching line and other tactics, before Bjorn raised the question of what they were going to do the next day. The following day, during RT 13, Florian returned to the line issue, telling the story of when he went to an advanced driving course. Phil then shared that he always tried to take his young skiers go-carting at

least once a year, to help them with understanding the line in turns in relation to speed. Others shared more stories about go-carting, cycling, and lugging with ski racers. After four pages of discussion around 'line' Bjorn summed up this discussion saying, "Donc on a quand même appris des choses aujourd'hui. C'est que... nous sommes tous conscients qu'on devrait peut-être travailler la ligne; avec peut-être d'autres points" (Bjorn, RT 13). In RTs 15 and 16 the coaches discussed several 'problem' athletes, first explaining the problem and negotiating an understanding of it and a plan in RT 15, and then returning in RT 16 to follow up. In one of these discussions they recognized the contribution of a partial outsider, the club president, who had acted as an intermediary between the coaches and an athlete.

A number of times, the coaches verbalized their awareness of the process in which they were engaged, often by addressing me on the tape. In RT 12, the first one in this set, Paul was not asked about his day, but near the end of the RT, he says, "Mais en passant, j'ai eu une excellente journée" (Paul, RT 12) to which Florian says, "C'est toi le chef". At the end of this RT Bjorn says, "Salut Diane". Another time, when they were meeting outside the hotel in the garden Bjorn asked me if I could hear that someone was trying to say something; it was a bird in the trees nearby. The second meeting ended as follows.

Florian : On a fini là?

Bjorn : Oui tu peux arrêter. Merci Diane.

RT 14 was very short due to the weather having been very foggy and snowy that day. Florian said, "Diane aujourd'hui ça serait un peu te mentir parce qu'ils étaient dans le brouillard, on ne les voyait pas. Aujourd'hui, honnêtement, il n'y a pas des tonnes de choses à dire" (Florian, RT 14). After a short discussion about how some of the skiers were not dressed for the weather, but some still seemed to ski well and even enjoy it, Bjorn wrapped

up this meeting by addressing me directly on the tape, saying that tomorrow looked like a better day.

In RT 16, the last meeting, the coaches were very involved and they engaged in several important discussions. Over the course of the RTs Florian's role was significant; telling stories, asking questions, providing an 'outsiders' point of view, and especially making the others laugh. Paul again waited until near the end of the RT to share a few points with the others. These were not long but based on his experience that day and he was supported in his telling by Bjorn and Florian. It was evident from the tapes of these RTs that the coaches were having fun; they laughed among themselves, with me and even a little at me. Finally Bjorn, who had acted as the facilitator, in effect replacing me during this last week, signaled the end.

Alors Diane, ça nous a fait plaisir de travailler pour toi. Et ce soir c'est le dernier soir, imagine : raclette, fondue, et sortie des entraîneurs. Galopins, génépi, aucun commentaire sur cette bande en rapport avec notre soirée parce que c'est le seul petit coin où les coaches restent cachés, nos petits secrets 'top secret' sur la quantité, la qualité, etc. Salut Diane, et j'espère que tu vas t'amuser avec toutes ces bandes; nous, on s'est bien amusés. Salut!
(Bjorn, RT 16)

They even went as far as bringing the recorder to the dinner table where they celebrated the end of the camp.

Bjorn : Et c'est bon la raclette! Tu as mangé ta première toi? Eh, ça s'en vient! Non, non c'est bon eh? Je pense qu'elle ne manque pas juste la fondue, elle manque la..

Florian : Tu dis ça à Diane?

Bjorn : Oui.

Paul: Jean aussi.

Bjorn : Oui, Jean aussi.

Sylvain : Amène-moi le tape.... La bouteille de blanc.

Bjorn : La bouteille de blanc là.

On entend le vin versé dans un verre

Bjorn : Ça va être bon, eh? Santé les gars!

Sylvain et tout le monde: Chin, chin.

Paul: Just for a souvenir.

(Bjorn, Florian, Sylvain, Paul, After RT 16)

In sum, even after Jean and I left, the coaches kept up the collaborative inquiry process. Furthermore they continued to include the two of us in the inquiry group, speaking directly to us on the tapes. It is likely that the context assisted the group in the continuation of the process. The camp was only one more week in duration after we left, and I had prepared the blank tapes with the dates on them for the remaining RTs and asked Paul to do the taping. The rest of the camp routines remained the same, thus it was probably quite easy for the coaches to carry on with the collaborative inquiry. Despite this, the coaches' views expressed in the next section indicate their willing participation.

Evaluating the Process

The coaches' view.

Five coaches, including the head coach Jean, provided their views on the process during the second interviews, which were conducted some months after the camp, at the start of the next winter. I asked them what they thought of our collaboration during the camp. Three important elements were evident from their comments, (a) the pleasure of the being involved in the process, (b) the necessity of having this type of interaction, and (c) an understanding of what the process gave them.

To support the pleasure element, there were comments such as, "Oh, on a eu du plaisir, l'atmosphère était extraordinaire!" (Florian, interview 2), "It's just fun to get all that

together” (Paul, interview 2), and “Le concept, c’était super bien. Je veux dire moi j’ai bien aimé ça parce que ça a mis un peu tout le monde ensemble... Tout le monde a eu plaisir, et puis, ça a créé une bonne ambiance” (Bjorn, interview 2).

The coaches expressed their belief in the process, both for themselves as coaches and for the benefit of their athletes. One commented on my role as the initiator,

C’est pour ça ici que des fois on est obligé d’avoir un détonateur comme toi là, opl, Pour qu’on se mette ensemble ! Dès qu’on se met ensemble on arrive à faire des bonnes choses... C’est ça qu’on a besoin. Oui c’est utile pour nous... c’est bon. Qui est-ce qui va en profiter ce sont les coureurs, ce sont les enfants, pour leur système de développement. (Sylvain, interview 2)

Another commented,

Au début, tout le monde venait un petit peu pour voir bon, on va essayer d’aider Diane, et puis après, bien tout le monde a eu du plaisir à venir, on a bien rigolé. Puis, je pense que d’avoir cette communication entre coaches, ça c’est bien. Moi je trouve que ça devrait être dans tous les camps... c’est positif à cent pour cent, je veux dire, si on ne se parle pas on ne saura jamais ce que l’autre a besoin ou, ce que l’autre veut... Tous les camps du club devraient être faits dans cet esprit là, de collaboration. (Bjorn, interview 2)

Finally there was a sense that the RTs helped them broaden their perspective. One explained, “C’est la mentalité de changer, regarde, think large. Not narrow... c’est ça qu’il faut faire (Florian, interview 2). Another said,

Des meetings comme ça ouvrent les horizons. Puis pas seulement sur le ski ou sur la technique, mais sur d’autres choses... Et ça peut-être des fois plus important. Tu sais, comment ça se fait que dans un groupe les athlètes aient le sourire puis dans l’autre groupe il n’y a jamais de sourires? (Bjorn, interview 2)

Perhaps the most interesting aspect of the coaches’ evaluations was their apparent understanding of the process, and their ability to explain what it did for them. As indicated in the last quotation, there was an understanding that participating in a process like this opened up their minds to new and different ways of doing things in their coaching practice. In a comment similar to one made by the coaches at the end of Study Two Part One (see

Findings, The Last RT), Bjorn talked about listening to advice from another, thinking about it, and then trying it out. He said,

Mais tout ça c'est quand tu parles... n'importe quelle information on va la prendre puis on va prendre ce qu'on pense bon... tu l'ajustes, puis tu l'essaies. Pourquoi qu'on ne l'essayerait pas. Tout d'un coup click, ça click, pour quatre élèves, puis les autres ça n'a pas changé. Ouais, mais à quatre ça a servi. (Bjorn, interview 2)

Another explained the process as being like scientists in a laboratory.

L'approche là des entraîneurs en général, pas juste le ski, parce que je pense que ça peut s'appliquer à tous les sports.... C'est comme si tu t'en allais à un camp, le Space Shuttle, ok, tu veux faire des expériences, donc t'amènes des « ci », des « ça »... je pense que c'est un laboratoire, autant pour les skieurs, les jeunes, que les entraîneurs, c'est une remise en question, puis tu mets le timer à zéro. Là on commence scratch.... Puis ce serait de trouver un truc, autant pour les coureurs que pour les entraîneurs, parce que les entraîneurs ne font pas ça. (Florian, interview 2)

This same coach, who the reader might remember was the guest coach at the camp, was interviewed on the day of an important race during the following winter, which he had come to watch. During his interview he related how while watching the race, he had engaged in an informal interchange with other coaches about the racers. He recognized that informally, the same type of interchanges as at the camp would sometimes happen naturally while coaches are watching a competition.

Je te donne un exemple. Aujourd'hui on était sur le bord de la piste. Il y avait... quatre, cinq coaches.... Puis à un moment donné, ça s'est fait naturellement. « As-tu vu là telle, ouap, regarde, ah, ouen en. Qu'est-ce t'en penses? » Et là, un parlait à un autre, « C'est quoi qui se passe là? » Là il dit « Mais je ne suis pas d'accord »....Ça s'est fait de même. (Florian, interview 2)

(See Study Two Part Two Discussion 17)

Even the coach who was the most forthcoming about his limits of being able to work too closely with others provided a clear statement of how it helped him and ultimately his athletes. For him, the most significant outcome was learning more about the others and having them learn more about him.

I guess in the end it was to discover what and how the others were thinking. For me it's basically how the others were thinking versus me.... I know who I want work with and when, and when it's good and when it's not good compared to what I want do with the athletes that are assigned to me... so it's good to know when you need something, who to go to right away, versus,

sometimes losing an entire day or two trying to figure out who am I going get... so right now it's very easy. And if, I know exactly what they [his athletes] need, then I can send them to Bjorn right away and they'll "snap" you know, the way he does things, they'll catch on, or with Jean, or with John, or somebody else. And in that sense, also personally if I have a question or if something's bugging me and I can't figure it out, I know exactly who has what strength, where they are, so I can go and... get them. So I lose less time... but it was really impressive. The others got to know how, the way I work, and vice versa. (Paul, interview 2) (See Study Two Part Two Discussion 18)

This general summary of the process points to the nature of this collaborative process, which while somewhat systematic, must maintain its flexibility or ability to 'go with the flow'.

Chacun travaille dans son coin d'habitude. Et puis là au début c'était un petit peu, disparate. C'est-à-dire on parlait de choses et d'autres puis tranquillement c'est devenu naturel et on avait du plaisir à se rencontrer. Pas toujours pour le plan initial, mais au moins les coaches se parlaient pendant, on va dire, une demi-heure, 45 minutes, même si c'était de tout et de rien, moi j'ai bien aimé que les conversations bifurquent. C'est-à-dire on part avec une idée, on dit, « Bon qu'est-ce que tu as vu aujourd'hui, qu'est-ce que? »... Puis d'un coup ça va totalement à l'autre parce qu'en fait, le coach, c'est quand même un être humain, et puis, il a quelque chose qui trotte dans sa tête et puis tout d'un coup il prend confiance puis il va le dire, même si ce n'est pas dans le ski, mais ça fait du bien de parler et puis de donner ses expériences. Alors c'était sympa, je veux dire. (Bjorn, interview 2) (See Study Two Part Two Discussion 19)

Bjorn, one of the principal storytellers during the RT meetings, even showed an understanding of the value of storytelling for learning. He said,

C'est un peu comme les Fables de La Fontaine, tu sais, tu connais La Fontaine. "Les Fables de La Fontaine", ce sont des histoires mais il y a toujours une morale.... Dans les histoires, si t'écoutes un peu plus loin, il y a un message.... Et, dans nos, au niveau où nous étions là, moi j'essayais d'écouter les messages. (Bjorn, interview 2)

When I asked Jean if he got any feedback about the RTs from the coaches, he said only that some thought every day was a little too much and every other day might be better.

But, he said that is really helped the group gel, and made for good communication, especially since they did not all have the same focus as the K1 coaches had had in the first part of the study.

My view.

As for my own evaluation, before I left I wrote, "It is really satisfying to see the coaches getting into the process. And Nick and Peter even come and join in once in a while. . . . I so believe in this process" (My journal, July 3rd, 2002). During the transcribing and listening to the RTs I kept a journal with a running commentary on my thoughts as I listened. I noted that there was a progression in relation to the coaches' participation in the RTs during the camp. I noted after transcribing RT 2 that the coaches were still trying to figure out the process. As I finished RT 3 I wrote that some of the coaches still tended to be very general in their comments, that is, not sticking to the daily work. As I worked on transcribing RT4 I noted, "I really enjoy this because there is a real sense that they are getting the idea and exchanging good info" (My journal, September 29th, 2002). While transcribing one of the later RTs, after I had left, I commented on the increased participation of Phil.

During the transcribing I often felt a real sense of being in the live action. I once wrote, "Paul is talking about having Florian there. It's like I am there, and I am in [participating]! Interesting, regarding CoP's and participation" (My journal, September 30th, 2002). At the same time I was writing my reflections in my journal, for example, providing examples of different types of learning that were occurring in the RTs.

It is really interesting. Line 27, page 5 Paul is explaining the exercise that he did with Michael and after Nick asked what it brought to his skiing. A good example of how the group pushes the learning and brings it even more to the practical.

On line 34, page 5 again, Paul remarked how you forget some exercises, and working together can help bring these back to your service. I remember Connor saying the same thing this summer too. This is interesting as it involves the experienced coaches relearning. (My journal, October 3rd, 2002)

Their learning continued after my departure too. About RT 13, when the coaches are discussing the importance of teaching the correct line (in race courses), I noted during my transcribing,

Phil has listened to Florian about driving and the discussion is on the line and he talks about bringing his kids go-carting. It seems that listening and telling are acting as catalysts for learning as he pulls together threads of what he is hearing and what he has experienced. (My journal, October 28th, 2002)

In conclusion, while there was the odd occasion when there was less interaction, I believe that the process was valuable because (a) the participants felt that they learned from it and found it enjoyable, (b) the RTs continued with good participation after I left, and (c) near the end there was evidence of the coaches conducting a type of collaborative inquiry on their own as they carried issues forward from one RT to the next.

Discussion

This discussion, similar to the previous ones, has two parts. The first part is a series of numbered notes that refer to specific points (page numbers indicated) in the findings of Study Two Part Two. A general discussion that brings together the central themes of this study follows.

1 Research as an Evolving Practice (p. 232)

The reader will remember that John was the coach leader of the K1 coaches who partook in the first part of Study Two. John's letter is important because it demonstrates the participatory and evolving nature of this research. The letter is his creation and his endorsement of the process. It is also a reification of the evolving practice. The reader will recall that reification, the partner of participation, is "the concept of giving form to our experience by producing objects that congeal this experience into 'thingness'" (Wenger, 1998, p. 58). John's letter gives form to his experience of being involved in the CoP of the K1 coaches. It is the short version of his story of the winter, which he used to encourage the summer coaches to invest in the project.

The letter is also a statement of value, pointing as it does to the benefits of the process. John, who is known as a coach leader and respected by the coaches in the summer study, was in a good position to support community building for the coaches of the summer camp. Saint-Onge and Wallace (2003) were clear about the role of community leaders in helping to cultivate communities.

2 Cycles of Reflection and Action (p. 233)

The reader will recall that the collaborative approach involves a group of peers engaged in cycles of action and reflection, about matters of importance to them (see

Collaborative Inquiry in the Literature section of Study One). In this excerpt Jean describes these cycles to the coaches. Wenger also recently described this type of learning cycle in an interview with Kahan (2004). According to Kahan,

In this learning cycle, Wenger says, the practitioners are involved both in their work and in their communities of practice. This interchange promotes the forming of new ideas at work that individuals then bring to the communities to develop. Then they go back to work and apply the refined ideas to performance, and the cycle continues, building upon itself with each interaction. (p. 34)

It needs to be noted that Jean knows nothing of the theory behind collaborative inquiry and communities of practice except what he has learned from his practical experience of being involved in the first part of Study Two with the K1 coaches. Thus, here, we see the telling of his lived experience with these cycles, and how it is possible to learn about practice through this collaborative process.

In his description of the process, there is even the recognition that disagreement is productive and can lead to learning. According to Wenger (1998), homogeneity and agreement are not requirements for communities. Indeed, "In some communities, disagreement can be viewed as a productive part of the enterprise. The enterprise is joint not in that everybody believes the same thing or agrees with everything, but in that it is communally negotiated" (p. 78).

3 Different Context Different Issues (p. 240)

It is to be expected that every CoP will be unique due to the make-up of the community. Not only are the members different, but also the dimensions of the CoP (mutual engagement, joint enterprise, and shared repertoire) are never exactly the same. According to Wenger et al. (2002),

A community of practice is a unique combination of three fundamental elements: a *domain* of knowledge, which defines a set of issues; a *community* of people who care about this domain; and the shared *practice* that they are developing to be effective in their domain. (p. 27)

The strong community is one that “encourages a willingness to share, expose one’s ignorance, ask difficult questions, and listen carefully” (p. 28). It is interesting that Bjorn began RT 2 with a difficult question that exposed part of his trajectory as a coach and invited the others to reflect on this issue. Skiing, unlike some sports that can be practiced almost anywhere, requires coaches to spend large amounts of time away from home. It is not uncommon for a ski coach working at a level higher than the divisional one, to be away from home for half of the year. While the coach’s passion for his or her work sustains them, these absences are often very hard on the coaches’ personal relationships.

Newcomers to a practice are not likely to start right off by questioning the practice, however with more experience a person might indeed ask themselves (and others) questions about their participation in the practice. Bjorn, with the most experience, and being the oldest (age 68) of the coaches, by a good 15 years, seemed here to be reflecting on his trajectory. At his stage he was perhaps more inclined to look back over his career than to look ahead. He raised an issue not about the nuts and bolts of the practice of coaching but about coaching practice as a way of life.

Wenger (1998) expanded on the relationship between identity and practice. He said, “Our practices deal with the profound issue of how to be a human being.... The formation of a community of practice is also the negotiation of identities” (p. 147). Thus identity in practice is socially defined. Identity is produced through “A very complex interweaving of participative experience and reificative projections. Bringing the two together through the negotiation of meaning, we construct who we are” (p. 151). Bjorn’s raising of the question about the personal cost of the ski coach’s life would appear to be part of this construction.

The coaches in this study shared a repertoire and were mutually engaged in a joint enterprise. The enterprise, however, was broader in nature than the enterprise of the coaches in Part One of this study. The summer coaches were all working with different age and ability groups, so their enterprise was less focused on the same elements of coaching practice than the enterprise of the winter coaches, who had worked with the one age group. The joint enterprise of the summer coaches might be described as providing a positive training environment for the development of the athletes' technique. But the research project was presented to them as an opportunity to view the camp as a training camp for themselves as coaches, in addition to developing the athletes.

Wenger (1998) elaborated on the subject 'identity in practice'. He said, "Our practices deal with the profound issue of how to be a human being... the formation of a community of practice is also the negotiation of identities' (p. 149). For Bjorn and the CoP of summer coaches, the RTs were an opportunity to negotiate their identities in practice.

4 Coaching: A Science and an Art (p. 240)

In this discussion of the makings of a passionate coach, the coaches in this study describe Peter, a National Ski Team coach, and how he uses his powers to achieve the outcomes he has in mind for his job. The words 'artist' and 'alchemist' are used by the coaches to describe the successful coach. Woodman (1993), in an article about the emerging profession of coaching declared that coaching was an art and a science. He said,

Despite the rapid developments in coaching science, the better dissemination of coaching knowledge, the greater application of scientific techniques, and better planning, coaching is still very much an art that requires optimal application of this developing knowledge to each coaching environment to ensure maximum development of each athlete.... There is a little of the artist in all good professionals. Regardless of the level of scientific knowledge and the use of scientific methods, it is often the application of that knowledge and methodology through individual flair that separates the excellent practitioners from the others. It is perhaps about putting science to the service of the art. (p. 6)

Schön (1983) referred to “The artistic, intuitive processes which some practitioners do bring to situations of uncertainty, instability, uniqueness, and value conflict” (p. 49). Wenger et al. (2002) referred to the craft intimacy that develops as a community begins to mature and members “get to know each other’s style and approach to technical problems” (p. 98). Another author, Silberman (2003) questioned whether education is a science or an art. He outlined a number of questions about education that the sciences cannot answer, such as, judgements about what should go into a curriculum, the utility of education, and how a teacher renders the subject intelligible to the student. Speaking of the role of the teacher, William James (1908), one of the fathers of modern psychology, said, “Psychology is a science, and teaching is an art; and sciences never generate arts directly out of themselves. An intermediary inventive mind must make the application, by using its originality...” (pp. 23-24). Good teachers, and coaches, beyond scientific knowledge, “must have an additional endowment altogether, a happy tact and ingenuity to tell us what definite things to say and do when the pupil is before us. That ingenuity... and tact... are the alpha and omega of the teacher’s art” (p. 24). Silberman, in answer to the question whether education was an art or a science, declared “education always has been and always will be” (p. 46) an art.

Despite the fact that coaching and teaching, as professions, are different for a number of reasons (Lyle, 2002), coaching does involve teaching and furthermore, both

coaching and teaching are forms of professional practice. Importantly, for research such as this project, Schön (1983) stated that while the artistry of professionals might not be “invariant, known, and teachable, it appears nonetheless, at least for some individuals, to be learnable” (p. 18).

5 Negotiating My Role as Facilitator (p. 241)

My role as facilitator was also being negotiated within the CoP. The unique combination of domain, community, and practice that makes up a CoP means that the facilitator's role will also be different from one CoP to another. At this early stage of the process I was treading lightly, being aware of the conflicts of my role, especially relating to how much I should impose on the group in terms of a learning agenda. The coaches were participating on a voluntary basis, and I had set out to take a non-prescriptive stance, but the comments about keeping the discussions ‘on track’ indicated that at least some of the coaches desired a more focused, structured approach. As facilitator I was aware of the importance of coaches experiencing value from their participation in the RTs early in the process and that this is accomplished effectively by keeping discussions centred on specific issues related to daily practice.

6 Peer Questioning (p. 242)

Peers questioning each other is an important element in collective learning approaches such as action learning (Revans, 1982), action science (Argyris et al., 1985), and other forms of collaborative inquiry (Bray et al., 2000). Within CoP's this type of supportive yet challenging behaviour is part of the negotiation of meaning that leads to learning. Bjorn, perhaps because of his many years of experience and his training as a physical education teacher, seemed to understand the importance of asking questions to his peers.

7 The CoP Negotiates Their Sense of Practice (p. 241)

There was ongoing negotiation concerning the nature of the issues around which this CoP wanted to interact. As the facilitator I tried not to have them stray too far into general issues, reminding them to relate to their everyday practice, but there surfaced at times these broader philosophical type issues that were also discussed in the winter group.

8 Working on the Shared Repertoire (p. 245)

Wenger (1998) described three dimensions of the relation of practice to community that he contended act as sources of coherence in a community: mutual engagement, joint enterprise, and shared repertoire. The repertoire of a CoP provides the resources for negotiating meaning and can include “routines, words, tools, ways of doing things, stories, gestures, symbols, genres, actions, or concepts that the community has produced or adapted in the course of its existence, and which have become part of its practice” (p. 83). In this section we see the coaches negotiating around elements of their shared repertoire. Both the discussion about the exercise and the labelling of this sort of learning tool (*des mises en situation*) are examples of this. Paul tells the other coaches about how the use of this tool, shown to him through his partnering that morning with Florian, helped him remember other tools of his coaching repertoire that he had used years before and about which he had forgotten.

9 The Facilitator as an Observer of Practice (p. 246)

Heron (1996a) made reference to full and partial forms of cooperative inquiry. In the former, both the initiating researcher (initiator) and the coparticipants are full participants in the decisions relating to the research process and in the experience (in this case coaching practice) being researched. In the partial form of cooperative inquiry, both the initiator and coparticipants participate fully in those decisions regarding the research itself, but the

initiator is not directly involved in the experience (practice). There are, according to Heron, also different forms of this partial involvement on the part of the initiator. Two possibilities are that the initiator researches something similar in their own practice or that the initiator makes “occasional visits to the workplace of inquiry group members for participant observation or unstructured interviews and dialogue” (p.23). A combination of these two things is also possible. My role in this study was similar to such a combination. While I did not take part in the action directly related to the coaches’ practice, observation of their practice was important for eventual learning outcomes. Similar to ‘walking the halls’, my presence on the glacier enabled my role as facilitator. At the same time I was researching the possibilities of such a role for the education of coaches, thereby conducting an analogous inquiry about sport pedagogy and psychology.

10 Creating Value Within Their Community of Practice (p. 246)

Communities of practice create value for members and organisations in many ways (Wenger et al., 2002). Much of this value is intangible, “such as the relationships they build among people, the sense of belonging they create, the spirit of inquiry they generate, and the professional confidence and identity they confer to their members” (p. 15). The discussion in RT 4 about the nature of coaching is an example of such intangible outcomes. The community, in this case, afforded the members the chance to negotiate the meaning of their practice, and in so doing, boost their professional confidence and their identity, as ski coaches.

11 Evidence the CoP is Coalescing (p. 247)

For a CoP during the coalescing stage, the main issues are establishing the value of sharing knowledge, developing relationships and trust, and specifying what knowledge should be shared and how (Wenger et al., 2002). In short, the most important function of

this stage is enabling CoP members to “develop the habit of consulting each other for help” (p. 84). In RT 3 Phil heard about Jean and Bjorn working together and in RT 4 he heard Paul and Florian describe what they had learned while working together. These interactions probably helped build Phil’s trust in the sharing process and wet his appetite for the possibilities for learning within the CoP. In this fifth RT meeting Phil demonstrated this by asking the others for help.

12 Phil: Moving from Outsider to Insider (p. 249)

Wenger (1998) discussed identities and non-participation. He said, “In a landscape defined by boundaries and peripheries, a coherent identity is of necessity a mixture of being in and being out” (p. 165). Phil in this instance might be an example of peripherality: “Participation enabled by non-participation, whether it leads to full participation or remains on a peripheral trajectory” (p. 167). Not being a full member of the CoP of the Bowsky coaches, because he coached at another club, he was well respected by the other coaches, and when he asked for help, he was encouraged to participate more fully in the community.

13 Storytelling: A Collaborative Tool for Knowledge Sharing (p. 240)

In Study Two Part One (See Study Two Part One Discussion 20) we introduced storytelling as a specific knowledge type often used as a resource for communities of practice. In Part Two of this study, storytelling was a common mode of knowledge displayed in the RTs. A look at why this might have been so and how storytelling works to ignite learning is the subject of this discussion point.

As discussed in the findings, the coaches in this study were very experienced. Furthermore, several of them were natural storytellers, that is, known by their friends and acquaintances to enjoy telling stories and to be good at storytelling. In terms of why storytelling might have been more prevalent in this part of the study compared to the first

part, a closer look at the nature of the community might be helpful. As previously noted, the three dimensions of community that are described by Wenger (1998) are mutual engagement, joint enterprise, and shared repertoire. The first and last of these were evident in this group. The mutual engagement, whereby “people are engaged in actions whose meanings they negotiate with one another...” (p. 73) was encouraged through the collaborative process. The shared repertoire, which combines participative and reificative aspects and can include tools, routines, words, actions, stories, ways of doing things, symbols, and so on, was definitely well in evidence. However, compared to the winter coaches, the joint enterprise of the summer camp coaches was less clear. That is, in Study Two Part One, the group of coaches were all coaching K1 racers, even if some coaches had more elite skiers. In Part Two, only two of the coaches were working with their usual athletes, the others were coaching athletes that they may have previously coached but not ones with whom they had worked the previous winter. Also the age range of the athletes was much greater than in the winter study. The joint enterprise of the summer camp was to develop the skiers as much as possible over the three weeks, but this was much less focussed than the winter joint enterprise. The summer camp coaches shared less in terms of the specific actions of their daily practice, because of the diverse groups with which they worked. Due to the less defined joint enterprise, stories, which tend to have broad applications, were one element of the shared repertoire that was frequently used in this context.

Recently storytelling has received quite a lot of attention in the field of organizational change and knowledge management. Authors such as John Seely Brown and Steve Denning (Denning, 2001; Brown, Denning, Groh, & Prusak, in press) are devoting whole books to the topic. These authors have investigated how stories work to ignite change. According to

Brown in an interview with Kahan (Kahan, 2003), “stories talk to the gut, while information talks to the mind... [storytellers] can get to them [people] emotionally... then... create some scaffolding that effectively allows them to construct a new model” (p. 1). Discussing why classic stories remain powerful down through the ages, Brown noted, “The meaning of the story may morph according to the social practice of the culture at any moment in time even when the story line remains relatively stable... These stories have the capacity to move wonderfully through time. They have enough of a root structure that enables us to uproot them and replant them at a later time in another place” (p. 6-7). What is clear from these statements is that the effectiveness of storytelling as a tool for creating new knowledge has to do with the participatory role of the listener.

Denning (2001) compared the abstract and the narrative modes of thinking. In the former, the learner is a spectator whereas in the latter, “Participants visualise and live the story in the mind’s eye, and so experience the story as if they are living inside it” (p. 70). When people listen to a story they fill in the missing links, making the experience a lived-in one. This explains why stories do not need to be updated over time. According to Denning, “It is the listeners’ interpretation of them that changes” (p. 69). Essential to an understanding of this process is viewing communication not as knowledge transfer but as “an interaction in which the listeners already have huge mental bins of information of their own” (p. 82). Because these bins of information include both implicit and explicit information, transfer is not the issue. What is needed is “something that can be catalyzed into a new pattern of understanding reality” (p. 82).

In this group, coaches told stories when they linked an issue that was being discussed in an RT with a prior experience they had lived. The issue would remind a coach of something from their repertoire and they would then share this with the others. For

example, in RT 7 when the coaches were discussing the importance of good communication with the athletes, Jean told the story of his beginner from years before; or in RT 9, Phil's hunting story, sparked by a discussion about bad weather. In this group of experienced coaches, the collaborative nature of storytelling was an appropriate tool for sharing knowledge.

14 When 'Thought Leaders' Participate (p. 231)

It is worth reflecting on the pros and cons of the participation in the CoP of the three 'out-of-camp' coaches. Each of these coaches, Nick, Peter, and Connor could be considered as expert coaches who had been coaching elite skiers for more than five years. They were however also well-known to the camp coaches, which meant that their participation did not adversely affect the group's rapport. For Wenger et al. (2002), these coaches could be seen as 'thought leaders', that is, "people... who are defining cutting-edge issues in the domain, or are well seasoned and well respected practitioners" (p. 78). As indicated, I invited them to come to our meetings anytime it suited them. In doing so I was attempting to influence learning for the CoP. Wenger (1998) included participation/reification as one of four dimensions of design for learning. In designing for practice, "one can make sure that the right people are at the right place in the right kind of relation to make something happen" (p. 232). The participation of these coaches in some of the RTs added value to the process as well as legitimizing the community (Wenger et al., 2002) even if at times their participation interrupted the indigenous flow of community learning activities, such as in the example of Peter attending the morning warm-up session on the glacier.

15 Brokering

Most of us belong to several different CoP's (Wenger et al., 2002) and the coaches in this study were no exception in this regard. Any community can be said to have boundaries, which in many cases imply limitations and exclusion, leading to the negative connotation of the concept. On the positive side, the overlapping of CoP's, such that members have the opportunity to interact with members of other communities, can lead to deep learning as fresh ideas are introduced and existing assumptions challenged (Wenger et al., 2002). Thus "boundaries are learning assets in their own right" (p. 153). Individuals who straddle the boundaries of different communities, that is, have multimembership, are sometimes able to broker the interactions between two communities. Wenger (1998) described the work of brokering as quite complex, involving "processes of translation, coordination, and alignment between perspectives" (p. 109). The broker needs to have legitimacy so as to be influential in the development of the practice. Furthermore, a broker must have "the ability to link practices by facilitating transactions between them, and to cause learning by introducing into a practice elements of another" (p. 109).

Nick, once again, was not one of the camp coaches but attended, out of his own interest, some of the RTs. He was a previous club coach who had recently been coaching a division team with so much success that most of his team had been promoted to the provincial team. Because of his success as a coach, he was well respected by the club coaches. Connor was one of the provincial coaches who also had coached the National Team. Nick was also in a position, between the club and provincial levels to act as an intermediary agent. Over the previous years he had had the opportunity to watch Connor work and to learn from him. He had experienced the benefits of questioning and reflecting on the practice of a more experienced practitioner. Nick realised that Connor had some

knowledge that he wanted to learn about and also that he thought would be helpful to the camp coaches, so he acted as a broker. According to Wenger (1998), some people “seem to thrive on being brokers” (p. 109), even if we all do some amount of brokering. Nick did indeed seem to enjoy the brokering role.

16 Reminding the Others of Simple Safety (p. 256)

Wenger et al. (2002) described a community of practice as having three basic elements, a domain defining a set of issues, a community that cares about this domain, and a practice that is shared among the community. In the domain of alpine ski coaching, safety is an important issue of practice. During Study Two, safety was not often discussed. Safety is a consideration both for the athletes and the coaches. Coaches are responsible for the safety of the athletes. In this instance two coaches addressed the others about their own personal safety, a rare point of discussion, even if there have been cases of coaches being badly injured and even killed. Both Bjorn and Paul indicated that they had not paid sufficient attention to their safety and reminded the others not to be complacent. It is an indication of the level of comfort and trust within this group of coaches that these two coaches, apparently not concerned about defending their egos, were ready to expose their errors, for the benefit of the others.

17 Coaches Exchanging at Competitions (p. 261)

Similar to the coaches in Study One, Florian describes here interacting with other coaches during a competition. In this case, the ski coaches seem to be analysing the technique of various competitors and negotiating around this. The coaches in Study One spoke about talking about coaching with other coaches at competitions, especially about certain athletes and their progression, and what competitions are coming up. Whether or not

they spoke about specific training issues or even workouts depended very much of the closeness of the relationship. This type of interaction was only very occasional.

18 It's not About Knowing it All but About Knowing Who Knows What (p. 262)

Wenger (1998) was clear that “homogeneity is neither a requirement for, nor the result of, the development of a community of practice” (76). As a member of a CoP, what is important is not only one’s own competence within the practice, but also knowledge of the competence of the other members in the community. Paul’s experience of the collaborative process during the camp helped him to realise that even though he believed he works best with perhaps only one other person, he felt the camp provided the chance for him to get to know the other coaches, and vice versa. He had experienced the sense that “it is more important to know how to give and receive than to try to know everything... [one-]self” (p. 76).

19 Trusting the Fluid Nature of the Process (p. 262)

In this evaluation of the process, Bjorn expressed his appreciation of the fluid nature of the RT discussions. For Bray et al., (2000), it is very important for the collaborative inquiry group to cultivate a capacity for learning; something that includes coming “to trust the meandering and chaotic nature of the collaborative inquiry” (p. 72). It is evident from Bjorn’s comment that he had come to trust and enjoy this aspect of the process.

General Discussion

This discussion groups the main themes of this study in response to the research questions. These questions were the same as those in Study Two Part One except that the context was different; a different set of coaches at a summer ski camp working with variable aged skiers, instead of a group of club coaches working throughout the winter season with the same age group. The focus of this discussion will therefore be on the different context and how the elements of it affected learning within the CoP. We will start first by the composition of the CoP and how this influenced the types of issues discussed. Next there will be brief comments on my role and the role of other leaders in this CoP, and finally a short discussion on how learning was enriched in this particular community.

This CoP.

Commenting on the variety of forms that CoPs can take Wenger et al., (2002) said, “They are as diverse as the situations that bring them into existence and the people who populate them” (p. 24). Using several descriptors from these authors, the CoP of ski coaches in this study was small, short-lived, intentional, colocated, mostly homogeneous, and reputable (in its relationship to the club). That is to say, it was a small group of elite coaches, with a similar passion for their practice, which was gathered together in an isolated setting by a ski club for a summer camp that aspired to develop not only the athletes but also the coaches. The three dimensions of practice that contribute to community coherence (Wenger, 1998) are mutual engagement, shared repertoire, and joint enterprise. We will look at how the development of these dimensions during the camp contributed to the coaches’ practice beyond the camp.

The coaches, based on their regular winter coaching positions, shared a repertoire and were mutually engaged in a more global community of ski coaches. There is evidence that in the process of promoting learning within the CoP at the camp, engagement was much further enabled and relationships were developed. According to Wenger, "Mutual engagement involves not only our competence, but also the competence of others" (p. 76). The bringing together of this group of coaches to interact, and share issues and stories helped the coaches learn who knows what and who is the best person for them to go to for help. A shared repertoire "combines two important characteristics that allow it to become a resource for the negotiation of meaning: it reflects a history of mutual engagement and it remains inherently ambiguous" (p. 83). This combination of experience and ambiguity, through negotiation of meaning, keeps practice relevant. Thus, effective communication is not a question of getting rid of all ambiguity but one of seeking social situations that allow history and ambiguity to work together to produce new meanings. The coaches in this study, with an average of over 17 years of coaching experience, had a shared repertoire to begin with but which was further developed during this study by being "re-engaged in new situations" (p. 83). Examples of this are when they clarified the meaning of certain ways to use exercises and what to call these methods. The joint enterprise of this group, at the start of the camp, was less developed. Certainly they were all interested in advancing the athletes with whom they were working at the camp, but there was little mutual accountability because not all of the coaches would coach all of the athletes at the camp. However, the joint enterprise that served to bring the CoP together was the collaborative inquiry process. In a process similar to that explained by Wenger, the coaches and I defined the enterprise by our negotiated response to the situation, making it "a local collective creation of the community" (p. 80).

The nature of the CoP and the trajectories of the individual coaches influenced the types of issues that were discussed in the RTs. The lack of mutual accountability in relation to the specific coaching practice of the camp has been explained above. The trajectories formed by the identities of the coaches represented peripheral (Florian, the guest), inbound (Phil, from another club) insider (the rest of the camp coaches), and boundary (Nick, Connor, and Peter) trajectories. Thus the types of issues discussed tended toward the more general rather than the specific. For example, the coaches exchanged their reflections on the personal cost of coaching skiing, the importance of looking after their own safety, dealing with parents, and the nature of a successful coach. The forum provided by the RTs gave the coaches the opportunity to negotiate the meanings of these difficult issues within a CoP that evidently inspired their confidence.

Facilitation and leadership.

My role in this part of Study Two was similar to that in the first part of the study and included responsibilities commonly recognised by others who have written about facilitation in CoPs (Saint-Onge & Wallace, 2003; US Navy, 2001; Wenger et al., 2002). As in the first part of the study my first challenge was to get the CoP up and running by keeping the focus on creating value to the members in exchange for the time that they were putting into the process. This aspect of community development was even more accentuated in this context because of the short duration of the whole process (three weeks). Another distinctive feature of this context was the proximity of other coaches who were not working specifically with the club camp. These coaches, while not members of the CoP of camp coaches, were respected members of the community of ski coaches in the home region of the club. As the facilitator I sought to connect these other coaches to the camp CoP by inviting them to

attend any RTs that suited them, and when they did attend, by promoting interactions between them and the CoP. In this way I provided the CoP with some further resources that could be the basis for negotiating elements of their practice (Wenger, 1998). For example, I encouraged one of these coaches, Nick, to act as a broker, working the boundary between the community of camp coaches and that of the other coaches who were currently working with higher performance skiers.

In this context, I was assisted with the community development by the head coach, Jean who had participated in the first part of the study and therefore had some experience with the collaborative inquiry process. Even though he had not participated in all the RTs in the first part of the study, he was knowledgeable about the process and the outcomes. With this knowledge and his position he was able to act as both a champion and a sponsor of this CoP (Wenger et al., 2002). In this part of the study he was very instrumental in the first RT when he and I described the process to the coaches. But also, as a participant in the first two weeks he was also helpful by example. His input during the RTs ranged from keeping the focus on the everyday coaching practice, pushing me to be more directing at times, and by sharing his stories during the discussions. His participation lent legitimacy to the process (Saint-Onge & Wallace, 2003; Wenger et al., 2002). Another coach who took a leadership role in this CoP was Bjorn, the most experienced of the CoP coaches. When Jean and I left after two weeks it was Bjorn who took over the role of coordinator and discussion leader. It is interesting to note that this was spontaneous as I had in fact requested that another coach, Paul, be in charge of recording the last RTs. This, he did, and he supported Bjorn in his leadership of the group, but being quite quiet, he did not assume the role of leader. The literature on both CoPs and collaborative inquiry refer to how a mixture of participants with

varying degrees of interest in the different aspects of the group activities will lead to a balanced process (Bray et al., 2000; Wenger et al.).

Enriching learning within this CoP.

Even though I asked these coaches to come to the first few RTs with the same idea as in Part One, that is 'lessons learned' from their daily coaching practice, this approach was not as productive with this group. As explained above, the context influenced the types of issues raised in this part of the study, which tended to be of a more general, philosophical nature. Thus, rather than there being a progression from individual reflection to sharing lessons, to collective reflections and negotiated meanings, the learning in this context was supported by three principal processes: dialogue, storytelling, and cycles of reflection and action. Each of these processes has been considered a method for synthesising experience in collaborative inquiry. Indeed, Bray et al. (2000) remarked, "In practice, groups may use a combination of these methods in exploring their questions, mixing storytelling with dialogue and reflection" (p. 93). While each of these processes played a role in Part One, they did so differently in Part Two. In particular, questioning by the coaches and storytelling were much more significant, and the cycles of reflection and action were clearer.

For Mezirow (2000), discourse (or dialogue) is interconnected with critical reflection. In collaborative inquiry, "dialogue should be practiced with the intention of forestalling consensus. Consensus should be reached only after thorough examination of possible modifications of underlying patterns of meaning" (Bray et al., p. 97). Within this process, questioning plays an important role. Other forms of collective learning, such as Action Learning, also use appropriate questioning to explore meaning:

The typical conversational device in most learning teams is questioning rather than advice-giving. Through apposite questioning, the problem solver is led to reflect on a problem from different perspectives.... Questions tend to be open-ended rather than closed (requiring a "yes" or "no" answer); tend to ask for specifics; and, when asked in a "why" format, are typically applied to future actions rather than past actions. The idea is to create an environment for exploration rather than rationalization (Beaty, Bourner, & Frost, 1993). As the process unfolds, the questioners might themselves come to appreciate, through the very process of inquiry, particular nuances that affect their own problems and environments. (Raelin, 2000, p. 116).

In this part of the research project, the coaches engaged in this type of dialogue, asking each other questions in order to push meaning-making.

Storytelling was another method of meaning-making in this study. It has been said, "In collaborative inquiry, the starting point for meaning-making is typically the stories of experiences of the participants" (Bray et al., 2000, p. 93). In their description of this process, Bray et al. explained how participant's stories born out of recent actions are supplemented by other participants' comparative stories in such a manner that not only does learning occur but also these combined experiences add rigour to the meaning-making venture. Raelin (2000) remarked on the value of storytelling as a method to deal with work related problems. He said, "Typically, it is necessary for field workers, through their informal interactions or war stories that represent repositories of accumulated wisdom, to bring coherence to an otherwise random set of conditions" (p. 82). The coaches' use of storytelling in this study helped them make sense of some of the conditions of their practice.

Finally, in this part of the study, more clearly than in the first part, we saw evidence of cycles of reflection and action. This might have been due to the condensed time period of the study. With the coaches meeting almost every day, the issues that related to their daily practice remained very present in their minds. The reader will remember that the defining characteristics of collaborative inquiry are "a group of peers, engaging in repeated cycles of action, and reflecting on a question of importance to all of them" (Bray et al., 2000, p. 12). In

this instance, the coaches revisited several issues in one RT after another, such as the question of teaching the skiers the correct line to ski. Within this process, the line between action and reflection remains fluid, because “engaging in dialogue and meaning-making within the group is a form of action” (p. 75). However, while reflection is “the mechanism for learning from action, it is action that triggers the learning, providing grist for the reflective process” (p. 77). It should also be noted that these cycles were especially evident in the last week of the camp, when the coaches were conducting the collaborative inquiry with neither my presence as facilitator, nor Jean’s as their leader, providing evidence that a CoP was at work.

Summary

With the research questions essentially the same as Study Two Part One, the context of Part Two, including the participants, provided the opportunity to further investigate the concept of a facilitator working with ski coaches to help them learn from their everyday coaching experiences. What we saw was that there were aspects of the community similar to that in Part One and some particular to the context.

In relation to the development of the community, the initial stages were similar to Part One. That is, Jean was there as the community leader, I as the facilitator/coordinator, and the coaches had been informed before the camp of the process. Whereas in Part One Jean gave his support to the process, in this study he was an integral part of explaining of the process to the other coaches (see RT 1). As in Part One it took one or two meetings for the coaches to settle into the idea of the RTs, as the primary learning activity. As facilitator, I also took some time to gauge how active and directive I should be in the RTs. I think this is normal. With the group of coaches being so experienced, and the joint enterprise being less

clear, I needed some time to understand the dynamics of the group. Jean helped me also in this respect. Still, it was surprising how quickly trust was established and how this group began to feel comfortable with the sharing process. Once again, as in Part One, my presence on the hill was important, not only for establishing trust, but I think it expedited some of the discussions because I was able to draw on things that I had witnessed relating to their daily work.

A major difference in this part of the study was the opportunity to see how the coaches managed the process during the last week when both the community leader and the facilitator were gone. A number of the coaches took on roles important to the learning process, coordinating discussions and asking appropriate questions.

In terms of learning, as in Part One there were instances of coaches re-learning things that they had forgotten, and there were numerous occasions when the coaches negotiated the meaning of certain aspects of their practice. In this part, there were more instances of coaches who had worked as a pair, collaborating in their reflections of their day. As well, there were more examples of discussions around broad coaching issues. There was also the voluntary, occasional participation of other coaches in the RTs. Finally, there was the amplified role of storytelling.

Study Two Part Three

Introduction

This last part of Study Two involved the same ski club as in the other two parts of the study. It pertains to the winter following the first two parts. The purpose of this part of the study was to see what would happen to the learning process, within two groups of coaches, without the facilitator. Thus as the researcher I took a step back from my coparticipants to see how they managed their interactions and other learning activities under their own direction.

Coaching context

The study took place over six months from November until April. As such the context was the same as Study Two Part One, with the exception of my absence as a facilitator.

Research Question

The main question for Study Two, Parts One and Two was: What are the dynamics of the collaboration of a facilitator working with a group of alpine ski coaches to help them to learn from their everyday coaching experiences? In Part Three, the question was: What happens to the learning process in two groups of alpine ski coaches when the facilitator is no longer active in the process?

Methods

Coparticipants

The coparticipants in this third part of the study were six club coaches and the head coach of the same ski club in the other parts of Study Two. Each of these had been exposed to learning within a CoP either the previous winter (John, Gord, Sebastian, Chelsea, and Jean) or during the

summer camp (Bjorn, Paul, and Jean) (see Table 8). As a group, the coparticipants were not all working within the same coaching team. Two of them (Gord and Sebastian) were with the K1 age

Table 8

Study Two Part Three Coaches' and Meetings

Age group	Coaches	Part One winter 1	Part Two summer camp	Part Three winter 2 Meetings
K1	Gord	X		14 December
	Sebastian	X		23 December
	A	X		11 January
	B			1 February
	C			
	Jean	X	X	
K2	John	X		
	Chelsea	X		17 January
	Bjorn		X	
	Paul		X	
	D			
	E			
	Jean	X	X	

group and four (John, Chelsea, Bjorn, and Paul) were with the K2 age group. Jean remained the head coach of the club. The total number of coaches in each of these groups was five for the K1 coaching team and six for the K2 team. These other coaches (A, B, C, D, and E) were not considered coparticipants for this study because we were only interested in those coaches who had been coparticipants in Parts One and Two of the study. However, because we are dealing with group dynamics, it is possible that these other coaches had an effect on the process.

Data Generation

The data for this study were generated primarily by observation and interviews. I attended the first meeting of each group of coaches. During the season I observed both on and off the hill, I conducted informal interviews, kept my journal, and produced a document for the coach leaders of each group to help them facilitate their group's learning activities (see Appendix S). During the period when this part of the study was taking place, I conducted some of the second interviews for Study Two Part Two and used the opportunity to ask how this winter was going (e.g., interviews 2 with Paul and Bjorn). Finally I conducted a group interview at the end of the season (April 12th, 2003). This interview was with one K1 coach (Sebastian) and two K2 coaches (Chelsea and Paul). After the analysis, I communicated with four of the coaches to verify my understanding and interpretation.

*Findings**The Beginning*

At the start of the winter I sent the resume of the previous season's RTs to Gord and Sebastian, who were coaching K1 again, and to Paul, John, and Chelsea, who were coaching K2, as well as to Jean, the head coach. I hoped that this would remind them of the benefits of what we had done in Study Two Part One and also to have them see that those who did participate in that study had stated that they wished to continue during the following, now current, season. After speaking to Gord and Sebastian, I attended their (the K1 coaches') first meeting (RT 1) on December 14th, 2003. Before the meeting I had noted in my journal, "Jean wants me to prep *him* on being a facilitator, as he will get things going. But Sebastian was clear that they want to be autonomous after the first few meetings. I really have confidence that they will be" (December 3rd, 2002, My journal).

At this first meeting I asked Gord and Sebastian to explain the process of the previous winter to the other coaches in the group. I let these two explain how they remembered the process, adding certain points to reinforce them. They spoke about the better level of communication between the coaches that was reflected also on the athletes. They mentioned the lessons learned and told some stories about certain of the issues discussed, to help the others understand. The meeting lasted about 35 minutes and before it ended Gord asked if they might begin right away by having each person share a lesson learned from their recent coaching practice. Those new to the process seemed to catch onto the idea with ease. At the end I pushed them to make a schedule for the next meetings, reminding them about the importance of getting right into the rhythm so as to make the most of the training during the Christmas camp. The next meeting was set for the 23rd of December. I did not participate in any more of the K1 meetings.

During this same time, the early part of the season, I was equally visible to John and Paul, the two potential leaders of the K2 group. However, whereas the K1 leaders, Gord and Sebastian, seemed keen to get the process up and running, there was not the same motivation with the K2 group. I did not insist with either group; instead I let them understand that I was there to help them get started at their first meeting, if they took the initiative to organize it. With the K2 group, this did not occur until well after the Christmas camp, on the 17th of January.

The Process Without a Facilitator

The following is an entry in my journal about five weeks after the first meeting with the K1 coaches.

The K1 03 coaches have met three times (December 14, 23, and January 11th). I re-sent the resume of last year's meetings to them and also to Jean, Paul, John, and Chelsea. In this e-mail, and in person, I spoke to John and Paul about being leaders in the K2 coaches' group. I am now putting a document together for them on tips to be leaders. They were enthusiastic about this. My role this season has been to give little pushes. With the K1's it was easy. It has been harder with the K2's. John was concerned not to step on Paul's toes and he thought that if he took on the leader role that Paul would step back. But I have now spoken to them both and hopefully with another little push they will start meeting. They say that they are working together a lot on the hill. Jean was pleased about the e-mail. He is so busy that it is hard to pin him down but I must get him to show an active interest, especially for the K2's. (My journal, January 17th, 2003)

This entry indicated that Jean had been too busy to take on the sponsorship role, let alone the role of facilitator or even leader.

The 2003 K1 coaches.

The K1 coaches continued their meetings. I gave Gord my tape recorder and he recorded their fourth meeting on February 1st. In this meeting Gord acted as the facilitator. The coaches included me in the CoP, starting off by saying hello to me, and saying that they missed me. Gord also informed me, on the tape, that Jean had given them a nice compliment that morning by telling them that in the whole K1 group of skiers, all were on the right track technically. There was a

consensus that the kids were skiing well. The coaches also shared with me that the race results from the previous weekend were good. Gord started by asking the coaches for some lessons learned, but when Sebastian began by saying how the weekend had gone really well, the coaches began to discuss the plans for the following weekend's training. This led to the issue of getting parents involved in useful ways, such as videotaping the races, and keeping the parents away from those duties that should really be done by the coaches.

After this Gord again tried to bring the group back to specifics. He asked if any special event had taken place in anybody's group. Again, the discussion went general; Sebastian said that he thought they might have trained too many gates. Other coaches agreed with this. Gord congratulated the other coaches on the progress of the athletes. Jean came into the meeting part of the way through. There followed a conversation about the success of the Bowsky athletes on the World Cup circuit, and how these athletes, when they were at the club, did a lot of skiing in all types of situations, not just training gates. The discussion drifted off into general conversation and finally one of the coaches asked if they were finished and turned off the tape recorder. (See Study Two Part

Three Discussion 1)

A few weeks later, I wrote in my journal:

Since I have been injured I have not been on the mountain as much, but I have been to the club at least three or four times to 'be there' and check with the coaches. Last week Gord and coach B both said to me, "We did our homework". I said, "It is your work, for you, not me" And coach B replied, "That's right. We did *our* homework". (My journal, February 14th, 2003)

The K1 coaches had a sense of CoP. However, after this meeting, even though I again gave Gord my tape recorder, they held no further meetings for the rest of the season.

The 2003 K2 coaches

For the K2 coaches, the group did not seem to be forming with the same sense of purpose. During an interview with Paul, I discussed the need for some leaders in their group, to get a

community of practice up and running. I mentioned that Jean had told me that he (Paul) and John seemed to be concerned about stepping on each other's toes (by taking the role of coach leader in the group). He said, "Actually it would be more of a relief because I have way too many things going on" (Paul, interview 2). Paul was the one coach in the whole of Study Two who had indicated that working in a group was not always what he enjoyed. About the summer camp he had said,

It's just fun to get together. But I know personally I need a little bit more freedom. I have to breathe, just room to breathe sometimes. So knowing my limits... it's not the limits of anybody else, but they were my limits as far as being such a large group of people working together... it's just I am kind of a bit of a loner. (Paul interview 2)

In January I did sit in on the first meeting with the K2 coaches and I thought that they might start from there and keep up the meetings. When I spoke to Jean at the end of January, he said that he now had time to put some energy into the K2 coaches to help them from a more productive community. Jean also told me that he spoken to John about getting the process going, since he, John, had lived it the previous winter. Regardless, the K2 group of coaches did not continue to meet. They did say that they were working together a lot on the hill. However, it was evident that they were working in smaller groups (more elite ones separate from less elite ones) on the hill because the needs of the different competitive levels demanded different training situations. (See

Study Two Part Three Discussion 2)

Reflecting on the Process

At the end of the season I met with Sebastian, Chelsea, and Paul to look back at the process. Chelsea confirmed that after the one meeting with the K2 coaches in January, there were no more. She said that they met at lunch each day and discussed their day and plans for race days. I asked Chelsea how this season compared to the previous one. She said that she learned a lot from John, Paul, and Bjorn, but that it was not as structured as the previous season. Chelsea confirmed that she learned by asking advice from the more experienced coaches. She also said that it took a while to get the ball rolling at the start of the season, noting that because John, Bjorn, and Paul had all had off-

season camps with many of their athletes, they were on a different rhythm right from the start of the season. Paul supported this. He said he had just made a report on his last two-year program cycle and he had recommended that the elite be completely separate from the club, because the needs are so different, and the number of days on snow is vastly greater for the elite groups. This confirmed that Paul had moved in the direction speculated in Study Two Part Three Discussion 2.

Sebastian and Chelsea both mentioned that the winter passed so quickly that it was over before they knew it. Once the Christmas camp was finished and the competitions began it seemed they could not squeeze in meetings that had not been scheduled. This issue had been discussed at the end of Study Two Part One, and these two coaches were among those that had made the recommendation to start early with the meetings in the new season. Without a structure, this did not occur.

When I asked the coaches about how they thought the club coaches were viewed from the outside, by other coaches, they said that the club coaches were seen by other coaches as working in a non-hierarchical way. Paul said, "At the top of a race when the officials look at the six of us and say, 'Who is the chief here?' We all point to each other". Paul said that he had discussed leadership of the K2 group with John and Bjorn at the beginning of the winter and that none of them had wanted to take the role of leader (see Study Two Part Three Discussion 3). Jean, however, confirmed that Paul had been delegated as the leader of the K2 coaches.

In terms of sharing the coaching task, Paul said that he would not go and tell the skier of another coach what to do but, if a skier or coach asked him about something, he would respond (see Study Two Part Three Discussion 4). Sebastian and Chelsea felt that the sense of sharing in the coaching of different athletes was no problem and that if a coach missed their own athlete coming down a training run, another coach would comment to the athlete. (See Study Two Part Three Discussion 5). Chelsea, however, clearly stated that she thought it was important to have the elite

and non-elite groups train together a couple of times a month so that at the races the athletes were comfortable with all the coaches.

When I brought up the subject of 'egos', asking if there were any problems with egos getting in the way, they said, "No, just tempers, sometimes". Chelsea recounted how Paul had blasted her once in front of all the other coaches, and how it had insulted her.

Finally I asked Sebastian what he would like to see happen the following season. He said,

I would like to see the RTs continue. Whether it is you or someone else, there needs to be someone come to get them started, for the first two and even three meetings to get them going. And have a calendar, a fixed set of dates, so that we don't end up with people saying, 'Oh have to go... I have such and such to do'. [Here I interjected that the idea this year was that I would not push them. This he understood].

We did have several, some without you, but at a certain moment it was like, 'I have to go' and 'I have someone waiting for me' and so on. This is what happened after the last meeting. So we should make a schedule, maybe every three weeks. There should not be too many either, because it can become redundant and we can loose interest.

But the season went quite well. We were able to react quickly to the problems that arose. No one was afraid to speak up, we were all open... It went well. (Sebastian, end of season interview, April 12th, 2003)

Sebastian also commented that he would like to see one or two young coaches again the next season, like they had in the previous one. He felt that the dynamics of having young coaches in the group was something that was missing in the present season. He remarked, "Someone who is there. Working in the same direction as the rest of us, learning at the same time, with a lot of energy" (Sebastian, interview, end of season, April 12th, 2003).

Summary

The overall picture of this third part of Study Two is one of two groups of coaches. The first, the K1 coaches, continued to work within their CoP, although less successfully than in Parts One and Two. The second group, the K2 coaches, never really managed to operate as a CoP. The K1 coaches carried on with some of the same learning activities as in the earlier parts of the study

(the on-hill warm ups and the 4 meetings). Two of the coaches in this group had been in the K1 group during Part One, and they both acted as leaders in the community process. However, without a facilitator and the structure of a meeting schedule, their interactions were less based on everyday learning through negotiating. As for the K2 group, although two coaches had been in the K1 group during Part One and two others had participated in Part Two, the new group lacked a strong leader interested in promoting learning through social coparticipation. It seems that this handicap coupled with the lack of a facilitator led to the failure to establish a CoP as a vehicle to push learning through participation. (See Study Two Part Three Discussion 6)

Discussion

This discussion, similar to the previous ones, has two parts. The first part is a series of numbered notes that refer to specific points (page numbers indicated) in the findings of Study Two Part Three. A general discussion that brings together the central themes of this study follows.

1 Less Structure less Reflection on Learning (p. 294)

Although I was not present at the two K1 meetings between the first, on December 14th and this one, the fourth, on February 1st, we can speculate that fewer meetings and less instruction about bringing lessons learned to the meetings, led to a looser format in the meetings. It is possible that the 2003 K1 coaches, especially those who had not participated in the process during the previous winter (Study Two Part One), had not developed the habit of being as reflective about their day-to-day coaching practice. Indeed it took the coaches in Study Two Parts One and Two several RTs before they really became accustomed to the process, and before reflection and sharing became established parts of their practice. And, this was with the benefit of a facilitator. With only one meeting in the five weeks between this fourth meeting and the second one, the 2003 K1 coaches might not have been as motivated to regularly think of things that they could share with the others. The issues discussed did relate to problems in their practice, but they were quite general. Despite Gord's attempts during this meeting to get the coaches to share specifics, this did not occur. This is not to say that the meeting was not of value to the coaches. They used it to validate their work and to plan. There was not, however, the same level of sharing and learning related to specific experiences of their daily work as occurred in the first part of this study, during the previous winter.

2 When Role Frames Affect the Joint Enterprise (p. 295)

Even though Paul had participated in the second part of this study, at the summer camp, in which the joint enterprise was less precise than in Part One, he did not seem to remember the value

of interacting with the other coaches on a more general level, that is, less related to the specific requirements of his athletes. For Paul, the competitive level of his athletes was an important boundary role frame. His athletes were elite and his focus was to optimize training opportunities with regard towards the best possible performance results. Paul mentioned his lack of time at this point in the competitive season. For him, it might have been more appealing to have meetings with other coaches who were all coaching at the elite level, even if some had older athletes. It is possible that during the intense part of the competitive season, the more general type of learning afforded by meeting with all the K2 coaches, regardless of the level of their athletes, did not appear to Paul to provide him good value. He seemed to be focused on the more tangible, rather than intangible results of participating in a CoP.

Most people are members of more than one community of practice. Paul might have acted as a broker between two different communities, the elite and the non-elite. In this role, he could connect the elements of one practice with the other (Wenger, 1998). However, as Wenger stated, “Although we all do some brokering... certain individuals seem to thrive on being brokers: they love to create connections” (p. 109). Paul, given his own declaration, “I am a bit of a loner” (Paul, Interview 2), was not a likely candidate for acting as a broker.

3 K2 Leadership Vacant (p. 296)

The lack of a real coach leader for the K2 group could be another explanation for why they never got together for the meetings. As described in Study Two Part One, there are certain critical roles in the nurturing of CoPs. Among the most important are the facilitator and the community leader (US navy, 2001; Wenger et al., 2002). In certain CoPs the community leader may take on some of the functions of a facilitator. In this last part of Study Two, I was no longer acting as a facilitator, thus the role of community leader was even more important than in the other parts of the study. Given that Paul and John were concerned about stepping on each others toes, and that

neither of them wanted to take the role of coach leader, it is not surprising that this group, operating without a facilitator or a leader, failed to establish a CoP and a system for sharing knowledge.

4 Less Negotiating and More Advice Seeking (p. 296)

This type of one-on-one advice seeking and advice giving, as mentioned by Paul and earlier by Chelsea, is reminiscent of the type of knowledge sharing that was described with the athletics coaches in Study One. Chelsea is talking about learning one-on-one from the more experienced coaches, and not about learning through participation in a CoP. Paul is commenting that he will respond to the requests of others for information. This type of knowledge sharing depends on the inclination of the seeker to initiate the exchange, and does not tend to involve other community members in the negotiation of meanings relating to their specific coaching practice.

5 A One-Way Street for Advice (p. 296)

Interestingly, we heard Chelsea say that her athletes felt comfortable with getting comments from Paul or other coaches, but at no time is there any indication that she felt comfortable commenting about Paul's athletes. Neither did we hear Paul saying that a benefit of working together was that his athletes could get feedback from the other coaches, unless he specifically orchestrated this. It seems likely that this type of interchange was a one-way street. It was fine for the coach of a more elite group to correct the skiers of a less elite group, but not vice versa. Again, this type of relationship is reminiscent of traditional, formal education programs that focus on individual knowledge acquisition, often with an expert conveying knowledge to a non-expert (Sfard, 1998). Indeed the description is evidence that these coaches were not part of a CoP.

6 Another Look at the Facilitator's Role and Responsibilities (p. 298)

Based on their experience of establishing a CoP of independent agents at Clarica Life Insurance, Saint-Onge and Wallace (2003) wrote the following about the role of the facilitator.

The purpose of facilitation is to ensure that the goals and objectives of the community are met. A combination of cheerleader, worker bee, camp counselor, and jack-of-all-trades, the facilitator is instrumental in keeping the community focused and moving forward, while maintaining the infrastructure that supports the community's development. (p. 275)

One might have cause to wonder if the greater success of the K1 coaches was due to my providing one of their members, Gord, with the tape recorder to tape meetings. Providing tools and resources is a role of the facilitator. However, I only gave Gord the machine after they had held two meetings on their own. I believe their will to work together was stronger than that the K2 group of coaches. There was no ego issue between Sebastian and Gord, and both acted as leaders in their CoP. It has been recognized that a community can succeed, left on its own, "but the speed at which it achieves its goals and the extent of the success are increased by facilitation" (Saint-Onge & Wallace, 2003, p. 223). This seems to have been the case with the K1 group.

In a recent interview with Kahan (Kahan, 2004), Wenger was "especially clear that the effort to build such a community will never succeed if it is undertaken half-heartedly" (p. 33). According to Kahan, Wenger said,

If I were talking to a CEO, I would say to him or her, "If you choose to build communities of practice for your members, understand that significant communication and nurturing will be required. These communities are completely voluntary. If your communities don't create value, people will vote with their feet". (Kahan, 2004)

In the case of the K2 coaches, significant nurturing did not occur. Due to the reticence of Paul and John to take on leaderships roles, and Jean's lack of time to coordinate group learning activities, the K2 group of coaches were unable to experience the value of working within a community of practice.

General Discussion

In answer to the research question for this study (What happens to the learning process in two groups of alpine ski coaches when the facilitator is no longer active in the process?), we will

look at the conditions that might be necessary for a CoP to flourish. Because the context (clubhouse and season) was the same as the one in Study Two Part One, except for some different participants, this discussion will focus on two factors that contributed to there being more or less of a CoP within the two groups of coaches (K1 and K2). These factors are the degree of facilitation and leadership, and the dimension of joint enterprise.

Facilitator and leaders: Not the same but both important.

According to Wenger et al. (2002), “The most important factor in a community’s success is the vitality of its leadership” (p. 80). Earlier in this report we have seen how the facilitator plays a critical role as the person “who organizes events and connects members” (Wenger et al., 2002, p. 55). As such the facilitator is someone who has the resources and tools to promote interactions between members thereby nourishing community development and fostering learning. The facilitator is, in this role, a type of core community leader, but other members of a community often act as leaders as well. These others are usually senior members of the community who are recognized by others as subject matter experts (US Navy, 2001). In this instance, Jean, the head coach, was potentially such a leader. However, in contrast to Parts One and Two, he simply had too many other obligations, leaving him with no time to perform this duty. He did, however, delegate official coach leaders for each of the groups. He also made it clear that he supported the concept of the CoPs. Notwithstanding, without Jean leading the CoPs, each group needed a community leader. According to the US Navy’s (2001) CoP guide, this person is “an active member of the community [who] serves an integral role in the community’s success... energizes the process and provides continuous nourishment for the community” (p. 18). In smaller communities, this role often overlaps with that of the facilitator, and sometimes even the sponsor.

In Study One Parts One, I, as the facilitator and the initiator of the inquiry, largely fulfilled this role. In Part Two, for the first two weeks, I shared this role with Jean, and in the third week,

Bjorn assumed this leadership role. In Part Three, the coach leaders of the groups, appointed by Jean, were Sebastian for the K1 coaches and Paul for the K2 coaches. Both of these two were encouraged to promote learning through the CoP. Both had participated in a previous CoP (Sebastian in Part One and Paul in Part Two). The findings of the present study indicate that the K1 group were more successful than their K2 colleagues in promoting a CoP, although they were unable to sustain the community throughout the very busy time of the season. We will now hypothesize about the conditions that either favoured or hindered the development of the CoPs.

The K1 coaches were led in their CoP efforts by Sebastian and Gord, both of whom had taken part in the successful CoP of the previous season (Study Two Part One). Gord assumed the role of community leader in the meetings, trying to facilitate the process. While he understood the concept of keeping the discussions focused on their everyday coaching practice, he perhaps lacked some resources to fully facilitate the learning activities through apposite questioning and managing of the dialogue. This may have led to some feelings among the coaches of lack of value for time consumed by the meetings, but the more significant hindrance was the lack of scheduled times for the meetings. Case studies of organisations who have promoted and sustained CoPs have indicated, "When pressing issues arise [in practice], members may overlook the long-term benefits of community participation" (APQC, 2002, p. 38). Therefore, two of the four key steps that organizations can take to institutionalise CoPs, while still allowing for their organic nature, are to allow employees time to participate and to incorporate CoP needs into budgets and plans.

For the K2 coaches in this study, the situation regarding leadership was more complex and less clear. With Paul being the delegated coach leader, and John having been the coach leader of the K1 coaches in Study One Part One, both Jean and myself approached them about taking some

leadership in the nurturing of a CoP. The findings, however, have shown that neither John nor Paul took on this role, apparently because they did not want to step on the other's toes.

This seems to indicate that there was a reticence on the part of John and Paul to commit to the process. Yet John had indicated at the end of his participation in Study Two Part One that he believed the concept to be excellent and that he wished to pursue it in the future. Paul had said, about his participation in the summer camp project (Study Two Part Two) that although he was more comfortable working alone, he realised that the CoP had allowed him to remember tools that he had forgotten about, and to become aware of the resources that the other coaches could provide. The fact that he did not take the lead in the last week of Part Two should, perhaps, have been a warning that he would not do so in this instance. Given this situation, with both potential leaders shying away from taking the role, Bjorn would probably have been the best leader for this group, but this might have entailed Jean or I setting this up. Whereas in Part Two the CoP already had momentum when Jean and I left, no such momentum existed in this part. Ultimately, the members of a CoP have to take responsibility and engage in the process.

The enterprise: Individual versus collaborative

Another condition that affects the development of CoPs is the enterprise. In order for a CoP to be coherent, there needs to be a joint enterprise (Wenger, 1998). The K1 coaches in this study had the benefit of a joint enterprise, the development of all the skiers in their age group. Despite there being some coaches with more elite skiers, the community worked as a whole. This was not so with the K2 groups. Part of this is the result of the general pattern of development for alpine ski racers. For those who aspire to be truly elite, the K2 years are when they begin to ski many more days than non-elite skiers. This was alluded to by Chelsea and Paul, who remarked that at the start of the season Paul's skiers had already been on snow for more days than some of the other K2s

would ski all winter. John and Bjorn were also coaching elite K2 skiers. The split in the competitive levels of the K2 groups seems to have had made it difficult for the coaches to see a common enterprise around which they might build a community of learning.

The development of elite athletes falls into the domain of performance sport, which is highly competitive, and in which coaches (and athletes) are rewarded by outcome success (Lyle, 2002). This is a world in which coaches are often reluctant to share the secrets of their success with their opponents (Trudel & Gilbert, 2004), unless specific opportunities for sharing are made available, such as clinics or mentoring programs (Moraes, 1996). Further compounding this, existing approaches to coaching education are founded on the acquisition metaphor, which encourages individual intellectual property above the collaborative, democratic approaches of the participation metaphor (Sfard, 1998).

Summary

Trust is a critical element for successful learning teams; members must feel comfortable about asking for help, thereby exposing their vulnerability. They need to have confidence that the group is truly interested in collaboration and not in individual profit or success (Raelin, 2000). In action learning sets where “one of the great strengths... is the non-competitive spirit” (Beatty et al., 1993, p. 362-362) members have to be able to receive support in order for learning to occur. Reciprocity in community participation is very important: “Members of a healthy community of practice have a sense that making the community more valuable is to the benefit of everyone” (Wenger et al., 2002, p. 37). For learning to occur in a collaborative inquiry, openness is necessary, and trust is essential. It would appear that the lack of leadership combined with a fragmented enterprise and low levels of trust left the K2 coaches with conditions that were unfavourable for the enrichment of learning within a CoP.

Overall Discussion

A perspective that takes a more global view of the entire research project leads us to a number of themes that might be viewed in relation to the different studies. The main themes are time, leadership, ego, legitimate peripheral participation (LPP), networks of practice (NoPs) and informal knowledge networks (IKN) compared to CoPs, and value. Within this discussion, some recommendations for future directions in coaching education are also presented.

Time

Time was an issue for all the coaches in this research project. Nearly all of them had other jobs, and finding time to devote to their own learning, especially on a daily basis, was not easy. A number of authors have underlined not only the importance of having time to reflect, but also having the time and the context in which to learn to reflect (Ghaye & Ghaye, 2001; Francis, 1995; Grossman, Wineberg, & Woolworth, 2001; Moon, 1999). In Study One we really only wanted to see what would happen when I made myself available to the coaches as a consultant, and there were no specific efforts made to provide a structure, the time and context, for reflection. Consequently, the times when I was beside the coaches as they worked seemed to remind them about reflecting or sometimes of issues upon which they had reflected. Beyond this, there were at least two coaches that engaged me in their reflections by e-mail.

In Study Two Part One, the time and context for reflection and interaction were specifically set up. Time, or the lack of it, was an issue. John mentioned time a number of times, remarking that the RTs required time after their day on the hill, that doing the personal performance evaluations was one more thing to fit into their busy time schedule, and that when the season got really busy with competitions, it was hard to find the time to fit in the RTs. However, the coaches also stated

that the time set aside for the RTs was worth it, even though they were not paid any more for this time.

In Part Two of Study Two, despite the almost ideal context with all but one coach staying in the same hotel, and everyone being away from home and there solely for the purpose of the camp, time was also an issue. Even without the World Cup of Soccer matches, which some of the coaches did not want to miss, fitting the meetings into the day meant a long, full day for all. When I asked Jean if he had had any feedback from the coaches about the meetings at the camp, he said that they thought they were good but maybe that every day required too much time.

In Study Two Part Three, time also played a role. The K1 group started to meet early in the season but once the competitions began, and time became an issue, the meetings appeared to be the first item they cut. The K2 group held only one meeting, and this was when the competitive season had already begun. Without having established any sort of rhythm, let alone experiencing value, it is not surprising that they never made time to meet again.

There is no doubt that participating in a CoP, especially one that is productive, requires time. Time is one of the demands that result from being a member of a community. Without time, there is no participation. It has been said, "The human relationship element is at least half of a CoP's health" (Castro, 2003, p. 5). Time spent in community activities is essential for the establishment of trust and goodwill, which are a big part of the human relationship element in CoPs. According to Wenger et al. (2002), during the early stages of an emerging CoP,

Members need to develop the habit of consulting each other for help. As they do this, they typically deepen their relationships and discover not only their common needs, but also their collective ways of thinking, approaching a problem, and developing a solution. However, most people... have a personal limit on the time they are willing to contribute before realizing value. (p. 84)

The K1 coaches most likely did experience some value before the middle of the season, but perhaps not enough to keep their CoP going through the really busy time of the season. The K2

coaches, however, would not have had time to establish the habit of consulting each other and to discover the benefits of collective learning. Future efforts to use CoPs in the education of coaches need to make room in the coaches' schedules for meetings. Also, if meetings are put on the schedule at the start of the season, there will be a greater chance that they will not be cut when the season becomes hectic.

Leadership

Leadership was another issue that played a role across the research project. Leadership and organisational support are important elements for establishing a culture of reflective practice (Ghaye & Ghaye, 2001) and for nurturing CoPs (US Navy, 2001; Wenger et al., 2002). For CoPs, organisational support, or sponsorship, provide the resources and legitimacy for community initiatives. A community leader, whether appointed or naturally arising, helps manage a CoP, enabling effective decision-making and overall community efficiency. This role is key for community success (Hasanali, Hubert, Lopez, Newhouse, O'Dell, & Vestal, 2002; US Navy, 2001). Wenger (1998) made the distinction between institutional authority and "privileging some perspectives through design while marginalizing others" (p. 261). He said that it is not really important in a CoP whether an organisation is highly hierarchical, but that it should provide opportunities for the negotiation of meanings across different perspectives.

In Study One, there was no clear leader of the coaches. Jerry, the head coach, was in a position where his leadership was being questioned because of the restructuring of the club. With this, Jerry was required to apply for a new position because the position he held was no longer going to be. As we have seen this lack of leadership affected the type of work that I was able to do with the coaches, especially considering that I had gone into this context as a consultant and not a facilitator. In terms of the athletics camp coaches, leadership was also lacking. Scott, the coach in

charge of the camp coaches did not assume a leadership role for the work we were trying to do. Despite indicating that he thought it was a good idea, he never committed the time to follow through (another case of not acting according to what we say we are going to do).

In Study Two Part One, the CoP benefited from both a leader (John) and a sponsor¹ (Jean). In Part Two, Jean acted as the leader and the sponsor. The club president (Martin) was also present during the whole camp. He acted as another sponsor who attended some meetings during Part Two. For Part Three, Jean, despite his verbal support for the process, was unable to devote the time required to be an effective leader or sponsor of the groups. He simply had too many other organisational duties. The lack of leadership was particularly noticeable in the K2 group of coaches. If, as Wenger (1998) remarked, it is not a well-defined chain of command that is needed for a CoP to function well, then Jean's absence, and Paul's reticence to play the role of leader, might not have mattered if John had taken up Jean's suggestion that he be a leader. It appeared though, that the question of egos prevented this from happening.

The Ego: Me/I versus We/Us

The individual egos of group members can get in the way of productive interactions. Whether trying to establish a system for coaches to learn from reflections on their everyday coaching practice, as with the athletics coaches in Study One, or nudge an existing group toward a proper CoP, as in Study Two, it seems evident that an attitude of secure openness is necessary for success. John stated the importance of coaches 'leaving their egos at the door', in order for the RTs to lead to the types of exchanges and negotiations that have the power to change practice. There are

¹ Sponsor is a term used for leaders who help launch and support CoPs. They may provide funding, but not always. In this study the sponsors did not provide funding.

a number of reasons this is so important, and why egos might have been a factor in some of the other groups investigated in this research project.

Whereas teachers might be “wary about publicizing their ‘private’ professional development projects” (De Sousa, Huebel, & Prendergast, 2000, p. 143), coaches also are not always open to working collaboratively with other coaches. The world of sport coaching is a competitive one and many coaches are hesitant to share information with their opponents, even hiding their knowledge from others (Lemyre, 2003; Trudel & Gilbert, 2004). When winning is the currency with which coaches’ careers are advanced, it is easy to imagine how there is often more of an individualistic rather than collaborative culture. Even in the broader context of the West, individualism is the more common philosophy.

Traditional communities, built on personal and active engagement in organized groups, have withered in favor of more individual pursuits, like those symbolized by the “virtual communities”... where people drop in and out of social networks by interest and whim – not because of association or shared purpose. Many theorists see social responsibility and commitment crumbling in a culture of unrestrained individualism. What we risk losing, many agree, are those communal spaces where meaningful social interaction broadens people’s sense of self beyond the “me” and “I” into the “we” and “us”. (Grossman et al., 2001, p. 945)

Part of the success of Study Two Part One was surely due to the ego-less culture of the group. John, the coach leader, helped set the tone for an atmosphere conducive to sharing. He modelled the idea of leaving one’s ego at the door, and this in turn helped the others do the same. One has also to recognize that my presence as facilitator, no doubt impacted the tone too. While we never spoke of egos until the end of the study, I had made it clear from the beginning that the coaches should feel comfortable to say whatever they wanted to and that as a group, we would respect each other’s comments. This group was also assisted by their joint enterprise; even though there was an elite/non-elite division, this did not affect the goal shared by all of the coaches to help improve the performance of every skier in the age group. Future research that seeks to optimise

knowledge sharing and learning through interactions with others in different sport contexts (e.g., clubs, where coaches work as a group versus leagues where coaches are in competition with each other) will need to place an emphasis on the establishment of a joint enterprise for these different groups.

In Study Two Part Three, the problem of ego was present, and at least partly responsible for the lack of community. Interestingly, one might think that this was caused by the K2 group being split into a very competitive, more elite sub-group (Paul, John and Bjorn), and another non-elite sub-group (Chelsea, Coach E, and Coach F). Instead, the problem seemed to be caused by the egos of two elite coaches, Paul and John, who were each afraid to take on the role of leader, for fear of stepping on the other's toes. In such a situation, a third person, acting as a facilitator would no doubt have been able to manage the group in such a way as to keep the egos at bay, and keep learning at the fore.

Legitimate Peripheral Participation

The concept of legitimate peripheral participation (LPP) (Lave & Wenger, 1991) is an important one for those interested in the education of sport coaches because "it concerns the process by which newcomers become part of a community of practice" (p. 29). Learners, move toward full participation in their communities of practice, and it is in this process of social participation that they master the knowledge and skills required in their practice. In the absence of CoPs, amateur sport largely fails when it comes to the preparation of the next generation of coaches. There is no tradition of LPP.

In Study One, if the athletics club had wanted to cultivate a CoP of coaches, it could have had the ideal situation for bringing new coaches into the practice. As it was, without a CoP the

newcomers in this situation had to rely on the existing culture of one-on-one advice seeking and observation of other coaches to learn.

In Study Two Part One, we saw the potential of LPP as a way for new coaches to participate in a “social process [that subsumed] the learning of knowledgeable skills” (Lave & Wenger, 1991, p. 29). The group of coaches in Study Two Part One was in some ways the ideal mix, and Jean was very aware of this. It included one very experienced coach (John), one very experienced instructor (Gord), two coaches with a moderate amount of experience (Sebastian and Chelsea), and two newcomers (Chris and Ben). Through their participation in the CoP, the newcomers said they had learned five times as fast as might have been expected, and the more experienced learned through the questions and initiative of the less experienced.

The experience of Chelsea in Study Two Part Three is an example of what can happen to learning when there is no CoP and the coach is not yet an expert. Without the RT meetings or other learning activities that offered the opportunity to share and negotiate meanings, Chelsea was forced to resort to one-on-one advice seeking from the more experienced coaches. This robbed her, and the other would-be members of a CoP, of the chance to have the learning of knowledgeable skills subsumed by participation in a social process.

Networks of Practice, Informal Knowledge Networks, and Communities of Practice

Sport coaches, similar to other practitioners, will need to exchange information on a daily basis with other coaches and will also have to work with other sport specialists such as nutritionists, sport psychologists, and sport physiologists (Durand-Bush, 1996; Lyle, 2002). Therefore, it becomes more important to know where and how to find information and guidance than to try and learn everything. On the premise that the nature of knowledge and learning is social (Allee, 2003) it is important to examine the types of interactions that coaches might have, and how these serve their

interests. Three types of work-related networks are possible for helping practitioners share knowledge and build understanding, (a) networks of practice (NoPs), (b) informal knowledge networks (IKNs), and (c) communities of practice (CoPs).

In NoPs, “most members are unknown to one another.... The members hardly meet face-to-face, yet they contribute and help each other out regularly. This type of community readily adapts to the Internet and other communication technologies” (Nichani & Hung, 2002, p. 50). While these types of networks have a large reach there is “relatively little reciprocity across such networks” (Brown & Duguid, 2000, p. 142). More apt for sharing information, NoPs are not usually known for producing action and knowledge. Hockey Canada’s online ‘Learn from the Best’ e-mentoring series (2003b) might be an example of a NoP.

Smaller than NoPs, IKNs are groups of people who know one another and exchange information. Also primarily for collecting and passing information, these networks “are loose and informal because there is no joint enterprise that holds them together, such as development of shared tools. They are just a set of relationships” (Allee, 2003, p. 115). The types of interactions between the coaches in Study One were of this type. Indeed the knowledge sharing map (see Figure 3), is an example of a social network analysis, a tool often used to discern the patterns of connections within such IKNs. The study of such patterns can be useful for enhancing success in these knowledge networks (Allee). The coaches in Study Two also interacted via IKNs. According to data from the first interviews, the coaches in Study Two Part One indicated that they had strong support networks. In Study Two Part Three Chelsea, because there was no CoP, had to resort to advice seeking through her IKN.

Unlike NoPs and IKNs, CoPs are groups of people who work together closely. In a CoP there is “a sense of mission – there is something people want to accomplish or do together that

arises from their shared understanding” (Allee, 2003, p. 116). The example of a non-issue in Study One, when the coach made the comment about a female athlete crying, might have been explored within a CoP. As the facilitator I might have asked the coaches how they dealt with this type of issue. This is a fairly sensitive type of issue, and not one that one would expect to see the coach raise in a NoP or even an IKN. For discussion of issues such as this, interpersonal trust needs to be high. This type of relationship is nurtured in CoPs. According to Nichani and Hung (2002), “In CoPs, there is mutual sharing and learning, leading to a thick flow of knowledge... [which is maintained by attending to] the social issues of trust, reputation, space, and time” (p. 52). In the Barab et al. (2002) study of a community of teachers, there is an excellent example of the discussion of a sensitive issue. A participant (student teacher) asked the community something about asking her students not to use the word “gay”. As described by the authors of the study,

This resulted in an instance in which her idiosyncratic comment stimulated discussion that led to the formation of an actual lesson plan. This ability for conversation to easily flow from informal comments to explicit practices and, eventually to tacit understandings is an important process that can occur seamlessly when one learns as part of a community of practice. This interaction of experience, reflection, and the generation of meaning created a fertile breeding ground for learning content, as well as for transforming members’ identities. (p. 525)

In a manner similar to the teachers in the Barab et al. (2002) study, the coaches in Study Two Parts One and Two benefited from the types of interactions afforded by being in a CoP and these benefits could complement those gleaned from being in a NoP or an IKN. For example, when three weeks had passed between RTs in Study Two Part One, the coaches said that they missed the meetings. This is an indication that their IKNs were not accounting for the same flow of knowledge as their CoP. It is worth noting that some authors see a difference between information or knowledge sharing, and knowledge building. For most knowledge management practitioners, “Knowledge is information that has been placed in context and validated by others who have credibility” (Saint-Onge & Wallace, 2003, p. 64). For Allee (2003), “Information, knowledge, and

wisdom are not discrete but are way-stations along a continuum of complexity” (p. 81). Allee also concedes that although “all interpretation and understanding is social in nature” (p. 82) information is popularly viewed as that which takes a symbolic, written, or verbal form. Regardless of this distinction, information or knowledge sharing seems to be more a question of giving and taking, of exchanging, whereas knowledge building is a matter of negotiation or generation of meanings, a co-construction between two or more learners, a combination of participation and reification.

Value

Wenger et al. (2002) reported the short- and long-term value to organisations and community members of cultivating CoPs. They suggested, for members short-term value amounts to an improved work experience, including such specifics as help with challenges, access to expertise, confidence in solving problems, fun with colleagues, more meaningful participation, and a sense of belonging. For long-term value they suggested among other things, community members have a forum for expanding skills and expertise, enhanced professional reputation, and a strong sense of professional identity. For organisations, short-term value was evidenced in an arena for problem solving, quick answers to questions, more perspectives on problems, improved quality of decisions, and strengthened quality assurance. Long-term value to organisations includes increased retention of talent, authority with clients, and capacity for knowledge development.

In the instance of this research project, the above values were realised respectively by the community of ski coaches in Study Two Parts One and Two, and the club. Much of this value was realised through the RT meetings. However, as important as these were, meeting just for the sake of meeting is not the point. The coaches must have the conviction that the meetings will allow them to learn. In order for this to occur, each participant must be prepared for the meeting; that is, be ready to negotiate significant meanings. Asking the coaches to share their lessons learned at the RTs put

them in a reflective mode (Schön, 1983, 1987), which led to richer discussions. This process corresponds to what Wenger (1998) called the interaction between participation and reification. The coaches in Study Two Part One did not fill out the personal performance evaluations. They preferred to reflect on the questions and discuss during the RT meetings where there was an interaction between participation and reification (e.g., stories, tools, lessons learned). Similarly, an exchange of lessons learned by e-mail, without the same opportunity for discussion, amounts to information exchange but not knowledge building and negotiating meanings (see above on NoPs and IKNs). Exchanging documents without the chance for negotiation, and having meetings without some clear points to discuss amount to little when it comes to the kind of learning that practitioners value (Wenger).

Future Directions: Integrating Key Benefits of CoPs into Coach Education

Clearly every different group will make a different CoP as each context has its own characteristics, but we feel that these communities have potential for the future of coaching education, and we are not alone in our thinking. Tosey and McNair (2001) suggested three themes for the future of work-related learning. Two of these seem pertinent. The first is that “the focus of teaching, learning and accreditation needs to be increasingly on the process rather than the content of learning” (p. 106). For formal coach education programs such as the NCCP, this means that coach education should be concerned with helping coaches learn to learn. The move to a competency-based approach is, as we have indicated, a step in the right direction, but the process of evaluation needs also to reflect competency in the coaching process and not just content. The second suggestion is that learning in organisations ought to “aim... to build communities of practice predicated upon learning rather than to develop impressive but ultimately unintegrated programmes of learning” (p. 107). For coaching this implies that local clubs and community sport associations,

with the help of provincial and national sport organisations, should provide opportunities for coaches to interact and ensure that adequate facilitation is available to nurture CoPs, as well as IKNs. NoPs would likely be the responsibility of the provincial and national sport organisations.

Given all of the above, what lessons can be taken from this research project that will lead to the enrichment of sport coaches' learning through practical experience? Before addressing this question we would like to re-emphasise Sfard's (1998) caution that there is a place for both the acquisition metaphor (AM) and the participation metaphor (PM) in the formation of sport coaches. Existing theory courses, based on the AM provide necessary information for the coach's toolbox. The CET is an example of a prescriptive program in which the researchers/consultants set the learning agenda, making it teaching curriculum. The program attempts to integrate these prescribed behavioural guidelines into coaches' practices by teaching coaches two behavioural-change techniques: behavioural feedback from peers and others, and self-monitoring. Smoll and Smith (1998) also suggested other procedures such as follow-up sessions for coaches and consultants, to discuss the coaches' experiences with the program. These types of procedures can promote individual and collective reflection, which are part of the process of learning in the PM. Lyle (2002) stated that "reflective practice needs to be complemented by an understanding of the cognitive activity that coaching practice represents... the trainee coach must therefore have knowledge of principles of good practice and prescriptions in order to inform the analysis and evaluate solutions" (p. 289). An important consideration, and one that is highlighted in the andragogical approach, is that coaches' previous experiences will affect their learning in the AM. It has been found that coaches benefit more or less from formal coach education programs depending on the quantity and quality of their previous athletic and coaching experiences (Lemyre, 2003).

Lave (1997) noted that research on everyday math challenges the idea that school is the main source of math problems. She said, "A prerequisite for working on a math problem is 'owning' the

problem – a felt dilemma and a ballpark sense of its solution. Otherwise it is not a problem but only a constraint” (p. 27). The same is true for coaching. When coaches have the opportunity to develop their practice through activity-driven dilemmas, they are operating within a learning curriculum, rather than a teaching curriculum. This learning curriculum is one that encompasses the previous experiences of the learners. Knowledge in a CoP is created not in a teaching curriculum but in a learning curriculum. Thus, to precipitate coaches’ learning through practical experience, in other words, to make sense of much of the information acquired in the AM, we recommend the development of opportunities for coaches to learn through participation, using approaches that favour “interactions (negotiation of meanings) over prescription” (Trudel & Gilbert, 2004, p. 176). Bloom et al. (1998) recommended the establishment of more structured mentoring programs, rather than leaving the formation of positive mentoring relationships to a matter “of being in the right place at the right time” (p. 279). Based on our research, it is the opportunities to interact that need to be structured and also, certain elements of the interactions themselves, without there being specific prescriptions. The apprenticeship model of mentoring (Nicholls, 2002) is one that has the potential to help coaches learn in the PM. There is, however, an important difference between the learning process in mentoring relationships and that in CoPs. In the first case, the mentor usually tries to influence the mentoree regarding some element of his or her practice. In CoPs, where the potential for learning is ever present, knowledge develops through the negotiation of meaning of issues deemed important to the practice of the members. Within a CoP a facilitator may try to influence the process of creating knowledge but not directly the practice of the members.

Undoubtedly, the most crucial step toward such an approach is the need to convince associations and clubs of the value of committing time and resources to provide opportunities for coaches to interact. Gilbert and Trudel (2001) suggested two strategies for community sport associations: issue-discussion meetings and coaching pods. They stated, “At the very least,

implementation of the strategies herein may generate more communication and collaboration between coaches” (p. 32). The use of CoPs in this research project, especially Study Two, demonstrated the value of such interactions for coaches’ learning. Moving a step further, this project also highlighted the importance of a facilitator for these groups. The facilitator in a CoP helps to create the environment for a learning curriculum. Important elements of this environment have been discussed and include the time and space for interactions, an open egoless attitude on the part of participants, the creation of value for practice, and the recognition of the importance of the community by sponsors and leaders. In this project, we only explored one of the ways in which a CoP could be nourished, the round table meetings, but other possibilities for learning exist. For example, a facilitator may combine the AM and the PM, if the CoP group desires, by bringing in an expert on a specific subject to expose the group to certain information. Afterward, the facilitator might lead a debriefing session during which the CoP members could discuss how the information might be used in their practice. Later, another discussion could reflect on how the information contributed to their practice. This example provides a view of how CoPs can be used to enrich knowledge that might have its origin in diverse learning activities, individual or collective, in the AM or the PM. That is to say that the promotion of CoPs does not exclude other approaches to learning.

Head coaches, or coach leaders could eventually be trained to fill the role of facilitator, if the organisations recognise the significance of coaches’ work-related learning. That is, if coach development is truly seen as a priority in their job description. Indeed, setting up a CoP for head coaches and coach leaders would be an excellent way to accomplish this. Leaders could benefit from their participation and learn how to facilitate at the same time. Robertson (1995) conducted an action research doctorate that addressed this issue with 12 elementary school principles. The principals engaged in peer coaching in partnership with another principal in the group, supported by

a university academic. They also met as a whole group three times a year. The principals felt that the project assisted them to develop as educational leaders.

Organisations need to plan to provide the time and space for coaches to interact. The provision of time and space is primordial and has been noted by numerous authors in education (e.g., Ghaye & Ghaye, 2001; Loughran & Gunstone, 1997; Moon, 1999) and business (e.g., Brown & Duguid, 2000; Saint-Onge & Wallace, 2002). In order to further address some important issues such as the lack of time and proximity, businesses have been working hard to develop strategies for virtual, or on-line communities.

Nichani and Hung (2002) concluded that with a few limited exceptions the type of learning in Internet communities (NoPs) involves “discourse about knowledge rather than learning to be” (p. 54). Still there are a number of design heuristics that can maximise the potential of such e-learning communities. Saint-Onge and Wallace (2002), when developing a large online CoP of insurance agents, used a blended approach of face-to-face and virtual, synchronous and asynchronous meetings. Face-to-face meetings early in the development of CoPs are very important in order to establish trust. Coaches who work in different areas often come together for formal education courses and for competitions. These occasions could be used to launch CoPs. Other heuristics for the design of online CoPs include (a) technology tools that allow creativity and brainstorming, (b) interactions structured in time, space, and scope (context driven), (c) well-defined purposes and goals, (d) a dynamic environment that permits evolution, (e) possibilities for individual and group identity construction, (f) clear social norms and moderation, and, (g) the support of private and public dialog that includes collaboration, problem-solving, sharing, debate, and socializing (Notess, 2003). While some coaches are very Internet literate, others, including some in this study (e.g., Colin, John, and Bjorn) are not. Due to the passionate nature of the practice, and the need for high levels of trust in a context that is more often than not competitive, online CoPs of coaches would

probably need to have several face-to-face meetings each year. The coaches in this project, especially in Study Two Parts One and Two, shared a lot of stories. It would be important, when designing CoPs for coaches, to provide contexts in which coaches could engage in storytelling. As well, they would need an experienced facilitator. The role of facilitator is a complex one and the selection of facilitators for such groups requires some careful attention (Trudel & Gilbert, 2004). A facilitator should be well respected within the organisation, but also someone who can inspire new ways of learning, especially through knowledge building. The outcomes of this project clearly point to the necessity of some structure and facilitation in order to cultivate healthy, productive CoPs.

*Limitations and Challenges**Limitations*

Any discussion of research limitations needs to be framed in the appropriate paradigm. Heron (1996a) specified seven validity procedures of cooperative inquiry (research cycling, divergence and convergence, authentic collaboration, challenging consensus collusion, managing distress, reflection and action, and chaos and order). Bray et al. (2000) adapted these for collaborative inquiry. Ultimately, they said, “The mark of a valid collaborative inquiry is that it has produced change in the participants – change is the marker of learning. Often this change results in new approaches to practice...” (p. 57).

Whereas in traditional qualitative research, valid findings are those which provide an insider’s view of the research context, the researcher in collaborative inquiry is an insider. A possible limitation, however, could occur if the coparticipants, including the initiating researcher, fall prey to collective self-deception (Heron’s consensus collusion). Bray et al. (2000) warned that two models of group dynamics, Argyris’ defensive routines model (1985) and Janis’ groupthink model (1972), can interfere with collaborative inquiry processes. This type of threat might have existed in the present research project, especially if my coparticipants participated to please me. This might have been true in Study Two Part One because I was well-known to most of my coparticipants as a knowledgeable person in the world of Alpine ski coaching. However, procedures recommended to avoid collusion were taken, such as, the use of the devil’s advocate process, the write up summaries of the round table meetings that were distributed to the coparticipants, the cycles of reflection and action, and the process of writing up the inquiry for the public arena (Bray et al.; Heron, 1996a). While it is possible that my coparticipants in this study might have evaluated the process more favourably because they were trying to say what they thought might please me, in their second interviews, the rest of the

process speaks for itself in terms of the coaches participating, of their own will and for their benefit in the cycles of action and reflection. Furthermore, at the end of Part One, it was the club president who asked me to continue the work at the summer camp, which became Part Two.

Another approach, using other than the participatory paradigm, might consider my personal variables a limitation because who I am (my previous experiences) might explain at least some of the responses of my coparticipants. For example, on one hand, because the ski coaches knew of my history as a National Ski Team member and coach, they might have responded more positively to my facilitative role. On the other hand, the athletic coaches did not know me at all and knew that I was not an expert in their domain. Regardless of this, I had good collaboration with five of the six coaches in Part One. The reality is that in the participatory paradigm, the facilitator is a coparticipant and therefore part of the research context. Even given the same inquiry question every inquiry group will be different depending on the members, including the initiating researcher and/or facilitator. And, the practical outcomes (the changes to the participants' practices), will also be different. Both in collaborative inquiry and in CoPs, the role of the facilitator is central. It is therefore not possible to say what the findings of this research project would have been with a different facilitator. This, however, does not detract from the quality of the present research. Certainly a talented facilitator will inspire more transformation than a less talented one, and facilitators, just like any other practitioner, can develop a good reputation.

In addition to the personal characteristics of the facilitator, two other important factors, both of which impact the collaborative inquiry/CoP process, are time, and leadership or sponsorship. Moreover, these two factors are linked. Without the time necessary to interact, the process of learning collaboratively is not possible, but, without there being sponsorship of the process, it is unlikely that participants will find the time to interact regularly. In Study One, regardless of my approach being less pro-active, right from the start the club leadership did not

promote group meetings of the coaches. In Study Two, Parts One and Two, the club leadership actively supported the process (which included my facilitation), so that even though time was an issue, the interactions occurred. In Part Three, the leadership of the club was behind the process but did not have the time to orchestrate it and thus, without my facilitation, the process of learning through group interactions was very much curtailed.

Challenges

A reflection on the limitations of this study raised several important challenges including the amount of time required for such a project, learning to be a researcher in the participatory paradigm, and the question of how to write up the project. The first two of these challenges blend together. Time was a challenge because of the extensive periods spent collaborating with my coparticipants (what some might call 'doing the fieldwork') and because of the time required to allow the collaborative processes to occur. Included in the latter was the time necessary for the on-going analysis. Often, I felt like I should have been 'doing' more, but realized that in the participatory paradigm, one has to learn to go with the flow of the group. So, whereas a facilitator has to learn to walk in another's moccasins without taking off one's own, an initiating researcher in the participatory paradigm has to learn to conduct the project without being the driver of the group. Qualitative research involves greater or lesser amounts of ambiguity, and collaborative inquiry is full of ambiguous moments and circumstances.

Finally the challenge of writing up the report was substantial. How to make the report reflect all that occurred during the project? Guided by other collaborative inquiry reports (Barab, Barnett, & Squire, 2002; Grossman, Wineberg, & Woolworth, 2001, and by Heron's (1996a) 'primacy of the practical' rule, we opted for a narrative presentation of the findings. This seemed necessary so that the participants, and others in the coaching practice, should be able to read the story and take from

it what they deemed useful for their practices. The note form discussion has precedence in certain writings by academics for the general public (e.g., Abrams, 1996; Wenger, 1998, Wenger et al., 2002); the obvious advantage being that those who are interested can read the notes and get the more theoretical background, while other readers can simply enjoy the main text. Finally, this format reflects the collaborative inquiry process of the writer/initiating researcher. As I transcribed the data, I wrote in my journal, thereby generating a record of my reflections. Later, as I wrote the report, I used the notes to record my reflections on the analysis. Thus the writing process was itself a series of cycles of reflection and action.

Concluding Reflections

At the conclusion of this research project it is time to step back and take a very broad view, to reflect on the process. Four and half years ago I set out on a rather courageous mission. On August 4th, 1999, my supervisor conducted a pre-doctorate position interview with me. Having completed the research project, I took out the tape and listened to it. From this, it was clear that I wanted to conduct a study that looked at how a sport pedagogy/psychology consultant might work with sport coaches to help them enhance their practice. While still unclear of the methodology, I wished to participate in the study, not simply be the researcher studying the phenomenon. I believed that knowledge could be co-constructed by coaches and a consultant, through their interactions. In December 1999 I wrote:

This study will use a constructivist approach to study the co-construction of knowledge by coaches and the researcher/consultant. Data will be collected through interviews, participant observation, and reflective journals. The results of this study will contribute to the theory of experience-based learning, professional practice, and the possibilities of collaborative research in this domain. (Mock proposal)

With the knowledge that coaches learn to coach largely by coaching, I thought there might be a better way than trial and error, or chance, to help them learn to coach more effectively. A few months later, in March 2000, after more work and negotiation with the literature and my supervisor, I wrote:

In the proposed study, a researcher will act as a facilitator in the reflective processes of coaches on sport pedagogy and sport psychology issues in an attempt to cultivate excellent practice in sport coaching. The inquiry will seek to document the co-construction of the most effective approach to use in such a situation....

The role of the sport pedagogy/sport psychology specialist working with coaches to solve their coaching issues has not yet been examined. Gilbert's (1999) model provides the starting point for such an examination, with the consultant likely to be involved in joint issue setting, and in advice seeking and joint construction of strategy generation. A co-operative study such as outlined in this proposal holds the promise of furthering our understanding of both of these aspects of coaching education. (Ph.D. proposal)

In those few months the constructivist approach was changed for a participatory approach, the focus became helping coaches in their reflective conversations, and there was the recognition that an important part of the research project was going to be the co-construction of an approach in which a consultant might work with coaches to help them solve their everyday coaching issues. This co-construction was at work on two levels: between the coaches and me, and between my supervisor and me. In this process we negotiated with each other, our work, and many readings. We came to know, through our engagement in the practice of this collaborative research project, about the acquisition metaphor and the participation metaphor, about knowledge sharing and knowledge building, and about the significance of a community of practice for learning. This thesis is the outcome of this co-construction.

Over the four years since I began collecting data, the project has evolved, as is appropriate in the participatory paradigm. The concept of a co-operative inquiry approach was broadened to the more general collaborative inquiry approach. The idea of being a consultant acting as an 'other' in individual coach's reflections progressed to being a facilitator for knowledge sharing and building with groups of coaches. From the start, the approach was a non-prescriptive one that aimed to work with the coaches, dealing with the issues they raised directly from their practice. It was never the goal that I should replace the coaches' other sources of support. Indeed, part of what I hoped to accomplish was to help them make the most of the support they had within their own community. This was achieved in Study Two Parts One and Two, in which the coaches lived the value of being part of a CoP. The final lesson, though, is that CoPs do need to be nurtured, that some structure is required, and that the role of facilitator/coordinator is essential in this process.

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Appendices

Appendix A

First Interview Guide – Purposes: (a) learn coaches' concepts of coaching excellence by accessing their role frame (Schön, 1983). According to Schön, "the construction of a role frame is superordinate to and longer lasting than the setting of a particular problem" (p. 310). Schön's role frames are similar to Brookfield's (1995) paradigmatic assumptions. Both concepts are said to be viewed by the individuals who hold them as given reality. Gilbert (1999) formed a composite role frame for the six youth sport coaches in his study. It consisted of two boundary components being objective conditions of the context, age group and competitive level, and ten internal components consisting of coaches' personal views regarding youth sport coaching (e.g., equity, fun, discipline, and winning). (b) learn about the coaches' community of practice (Lave & Wenger, 1991). For this questions will centre on the task of trying to discover whom the coaches approach when they encounter a coaching issue (Gilbert, 1999).

Questions.(a)

1. How long have you been coaching?
2. Did you compete?
3. How did you get into coaching?
4. What would you say is your coaching philosophy? Please give an example.
 - a. What is the most important task you have as a coach?
 - b. What influences whether you feel you are doing a good job?
 - c. What role do you feel that athletes play?
5. Does this philosophy change much when you coach different groups? Please give an example.

(b)

6. Can you give me an example of a coaching challenge that you have experienced and how you have dealt with it?
 - a. Do you refer to other coaches? Other people? Books and/or videos?
7. Can you give me an idea of you might discuss your coaching with?
 - a. How often?
 - b. In what circumstances?
8. From whom would you say you get support for your work?

Appendix B

Used with Head Coach at First Meeting

Information Guide for Research Project¹

Enriching Knowledge: A Co-operative Approach Between Sport Coaches and a Consultant

By

Diane M. Culver, Ph. D. candidate, Faculty of Education

Introduction

As the initiating researcher I bring to this inquiry extensive sport experience as an athlete and a coach, at all levels from club to international. As well, I have supervised other coaches in their work and their training programs. I consult with athletes and coaches and have conducted various research projects including a Master's thesis on the subject of coach-athlete communication. In the proposed study, I want to act as a facilitator in the reflective processes that coaches frequently use to promote excellent practice in sport coaching. This study will seek to document how the participating coaches and I co-construct the most effective approach to use in such a situation.

Allow me to explain how this might work. Gilbert (1999) constructed a model (see figure 1) that traces the experiential learning process and the reflective conversation of youth sport coaches. The reflective conversation cycled between the stages of issue setting, strategy generation, experimentation, and evaluation. Gilbert's study clearly showed that a coach involved in a reflexive process will often interact with others to resolve an issue. In this study I will be one of these others.

Co-operative inquiry (Heron, 1996a) is research *with* people and not *on* them. Thus this study will involve coaches and a consultant acting as co-researchers and also co-participants. It aims to benefit both the coaches and the consultant as their participation in the research process transforms their practice. Reason and Heron (1995) portray co-operative inquiry as cycling through four phases of reflection and action, similar to Schön's (1983) reflective conversation, in which a practitioner conducts an inquiry within his or her own practice. The difference here is that these cycles involve both individual and collaborative reflection and action (see Figure 2).

Research Question

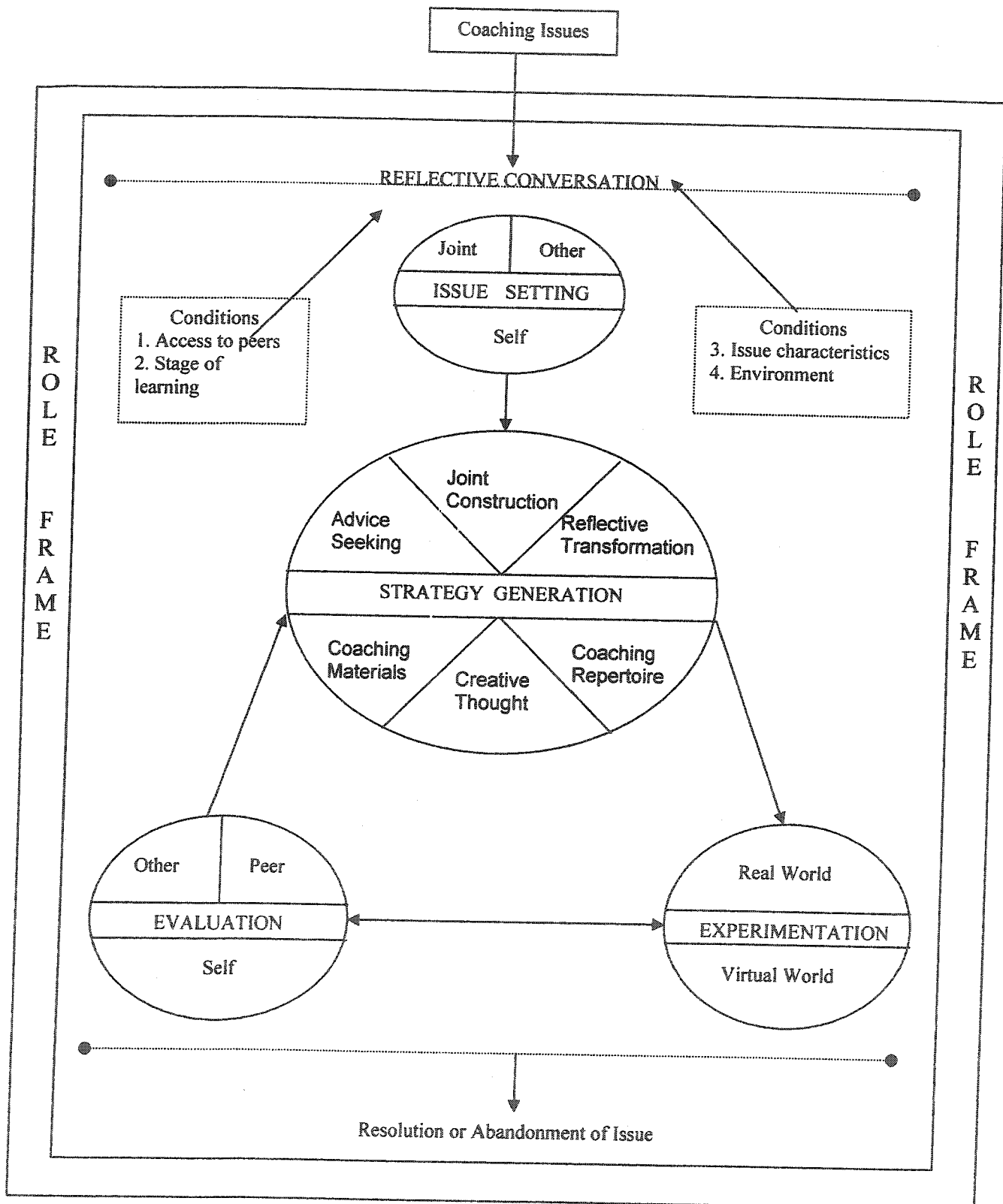
How is coaching excellence cultivated when a consultant and coaches collaborate to solve coaching issues in two different sport contexts?

Coaches' Involvement

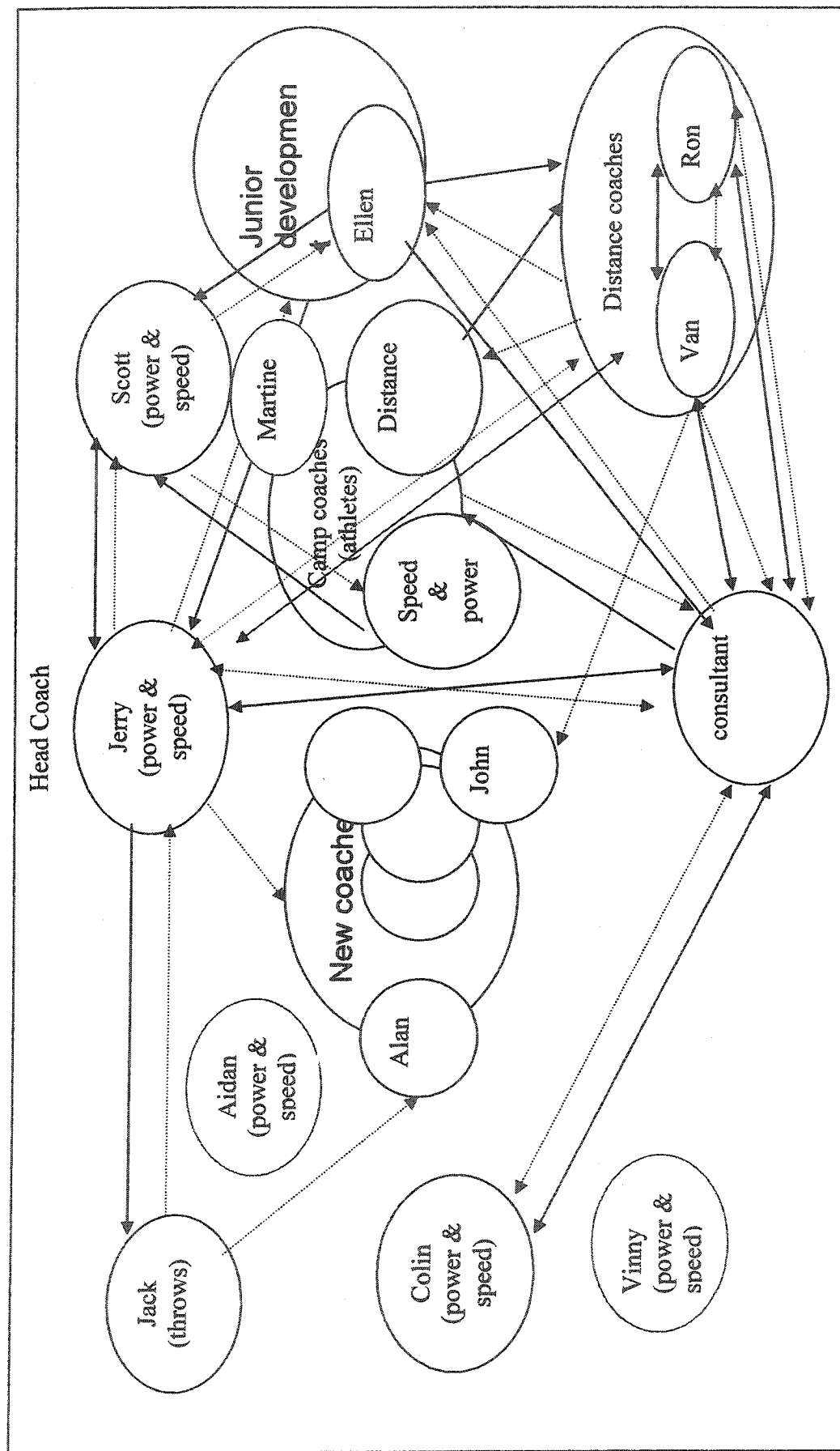
As a co-participant in this study your collaboration over one sporting season would be required for (a) two interviews lasting from 60 to 90 minutes (pre- and post-season), (b) short process interviews occurring as part of the cycles of action and reflection, (c) the maintenance of a journal documenting your experiences as they occur during the cycles of action and reflection, (d) decisions regarding the precise nature of the data generation, and (e) the analysis as it occurs during each cycle of action and reflection.

¹ Please note that this guide will be available in French and English

Figure B 1. Gilbert's model: Experiential learning process and reflective conversation

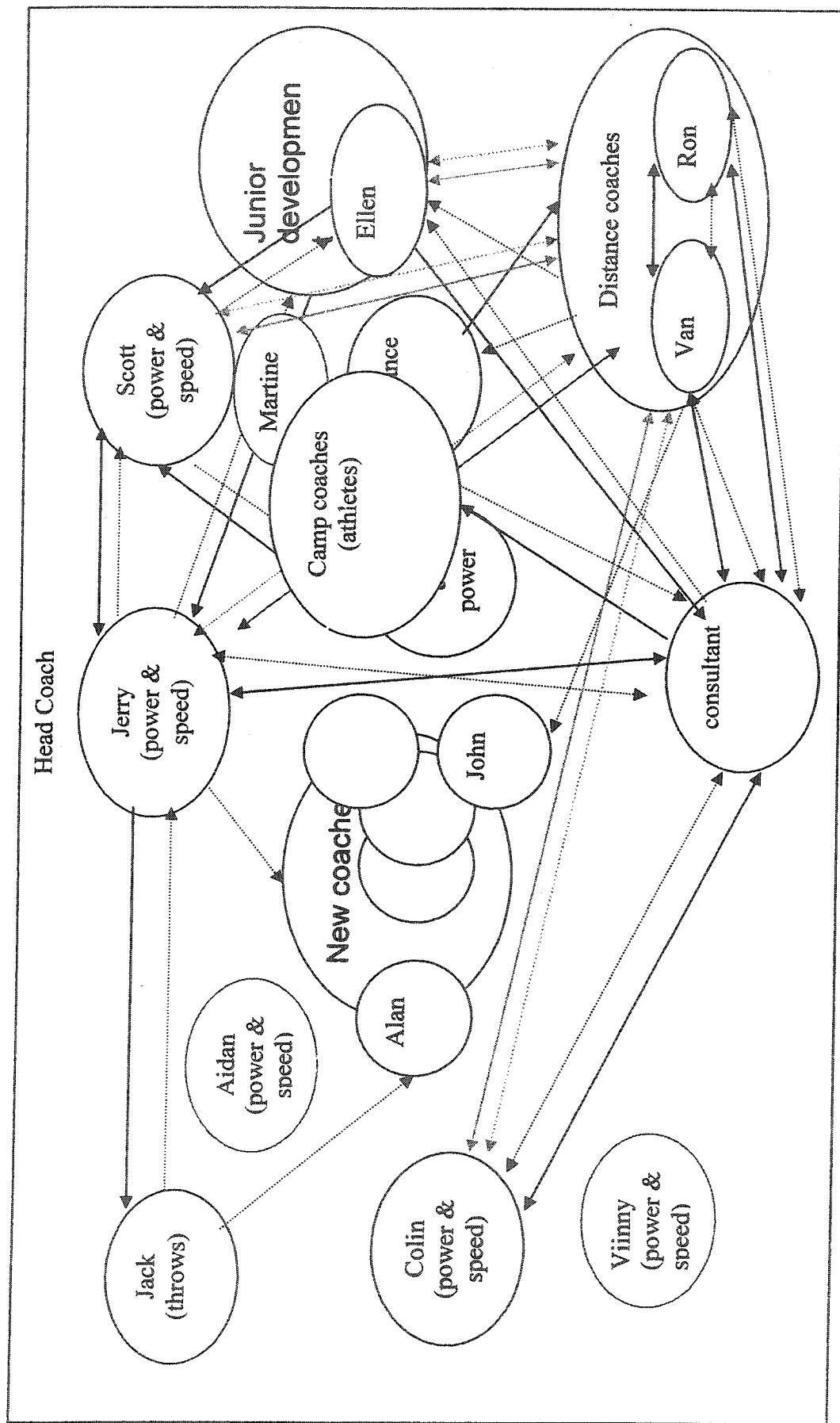


Appendix I
Figure 11: Knowledge Needs and Supply Map after Jerry



Key:
Knowledge request: —→
Knowledge response or supply:→

Figure 1 2: Knowledge Needs and Supply Map after Ron



Appendix J

Coach-Athlete Communication: Getting it Right!

By Diane Culver & Emma Stodel

Consider for a moment the following scenario. Coach Rob takes a large team to the state championships. Among his athletes is Mike, a quiet boy who is coming back from an injury and feeling pressure to perform. Mike perceives that his pre-race training has gone well but he has not had any feedback from Rob who is busy organizing the large team, and who also does not want to put any additional pressure on Mike. Mike skis well in the race but makes a mistake towards the end of the course. Rob decides not to say anything to Mike, because he had been skiing well up to that point. Mike is upset because nothing was said and thinks that Rob is disappointed in him. However, he does not approach Rob because he does not want to bother him. What has happened to the communication in this interaction? The most important lesson from this example is that even a decision to not deliver a message results in a message being received. In fact, one cannot *not* communicate. As this example demonstrates, communication is a complex issue. Breakdowns in communication can have serious repercussions for the coach-athlete relationship.

There is probably no single element of the coaching process that is more important than communication (Spink, 1991). Indeed, being an effective communicator is a distinguishing characteristic of expert coaches (Bloom, 1996). Despite this, little time is devoted to helping ski coaches become better communicators. A study of coach-athlete communication on a national team ski team found that even though both coaches and athletes declared that effective communication must be a two-way process, in reality it is often not. Factors such as individual communication skills, previous experience, the situation, and power issues were all found to interfere with the communication process. In this article, we recommend seven strategies to facilitate effective communication during coaching practice.

1. *Be positive.* Research has indicated that a positive approach leads to greater athlete satisfaction, higher self-esteem, more learning, and better results. Create a supportive learning environment where athlete development is fostered and your belief in them is affirmed. Provide constructive feedback. Use positive images and language to illustrate the behaviors that you want athletes to model rather than highlighting errors. Be respectful in all your interactions.
2. *Listen.* H. D. Thoreau once remarked "it takes two to speak the truth... one to speak and another to hear". The word communication comes from the Latin *communico*, which means to share. In order to share you have to listen, with your ears *and* your eyes.
3. *Get to know your athletes.* Ski coaching is challenging because although skiing is an individual sport, training is almost always done in groups. Learning is optimized when good one-on-one communication prevails. Your athletes are your partners in the communication process so become familiar with their individual communication styles and past experiences which may affect the communication process. For

example, ask racers to tell you what type of cues best facilitate technical change for them.

4. *Check for understanding.* The critical component of communication is what the receiver understands. Rather than asking, "Do you understand?" ask the athlete to relay the information back to you, or even to your assistant or someone else nearby. If the message involves technique, get the racer to show precisely what moves they will try to do to implement the changes referred to in the message.
5. *Remember your position as coach is perceived as powerful.* Within the sub-culture of a ski team the coach is in a position of power, a fact that can complicate communication with racers. Most racers will want the coach to think well of them and will therefore be reluctant to discuss negative issues. Fear of injury and returning after injury are common problems that tend to be overlooked or simply ignored in coach-athlete communication. Just because an athlete is given the go-ahead physically, this does not mean that emotionally and psychologically they are ready. Giving athletes some control over the pace of their reintegration can help them to get back on a solid footing. The racer must be allowed to feel that ultimately, they can make the final decision regarding readiness, *without any repercussions*. Coaches can assist racers by allowing them to discuss their fear, letting them know that it is okay, that others have faced it also, and helping them to control it by making a plan to build up confidence.
6. *Emotional and psychological issues are the hardest to address.* All but the very timid athlete will feel quite comfortable initiating messages to do with technique and tactics. On the other hand, even the most outgoing athlete will be very reluctant to address issues relating to emotional and psychological factors. It is the job of coaches to help athletes deal with these factors by finding the appropriate time and way of initiating communication regarding these sensitive issues. Athletes have stated that knowing the coach believes in them enhances learning by giving them the confidence to change.
7. *Be aware of the consequences of your messages.* While it may appear that at times racers do not seem to be listening, most coaches would be surprised at just how much impact their messages, verbal or non-verbal, have on athletes. Delivered or interpreted the wrong way, a message can mark an athlete for a long time. Coaches need to think before they communicate and judge the appropriateness of their words, tone, and gestures.

Effective communication is the foundation of the coach-athlete relationship, which in turn supports productive coaching. Because good communication must be a two-way process, athletes also have their role to play in the process. However, especially in developmental stages, the coach must take the lead in ensuring that communication is indeed effective. Keeping in mind the points addressed in this article will help coaching performance and at the same time move athletes towards greater autonomy.

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Appendix K

Making Every Run Count

By Emma Stodel & Diane Culver³

The amount of time alpine ski coaches and racers are afforded for on-snow training is precious. Short seasons, bad weather, poor snow conditions, time constraints, and lack of hill space often cut into quality training time. Even when conditions are perfect and racers have access to a fast lift, turn around time between runs is usually about 10 minutes. Add this to the time racers spend at the top of the course stretching, adjusting equipment, and waiting for the course to clear, and it results in them spending one minute out of every fifteen actually training. Given that ski racers are restricted in the amount of time they can work on technical and tactical aspects of skiing, it is important that they are both physically and mentally prepared for each run so they are able to get the most out of the time they spend training in gates.

Mental training is slowly beginning to be seen as the logical complement to the technical, tactical, and physical training which is currently the norm for alpine ski racing. Ski academies and race programs throughout North America are starting to turn to mental training consultants to help racers develop the mental skills they need to take their performance to the next level. By teaching ski racers what it means to be mentally prepared before each run, along with the skills which will enable them to engage in this type of preparation, better use will be made of the limited training time they have on snow.

Based on our experiences working with ski racers, we developed a concern that young racers do not always make the most of the opportunities they have to train in gates because they are inadequately prepared mentally, and sometimes physically, before each run. Stemming from this, we felt it was important to investigate how youth alpine ski racers use their time at the top of training courses and how, if necessary, we can help them put this time to better use.

Through observing 5 members of a developmental alpine ski team (K2s) at the top of a training course over a number of runs and training sessions, we found that they engaged in a number of different behaviours⁴. Some of these comprised physical and/or mental preparation for the next run (e.g., adjusting equipment, stretching, talking to the coach, mentally preparing), whereas other behaviours were not essential to the learning process (e.g., waiting, talking with other racers⁵). We were glad to discover that all of the racers in our study engaged in some form of mental preparation before they set off down the course. However, this time was short (an average of 17 seconds/run) compared to the amount of time spent waiting around doing nothing (an average of 41 seconds/run).

³ Emma Stodel and Diane Culver are Ph.D. candidates at the University of Ottawa, Ontario, Canada. Comments, questions, and requests for further information can be directed to Emma at estodel@istar.ca or Diane at diculver@home.com

⁴ Culver, D., & Stodel, E. J. (1998, March). Analysis of time use of youth alpine ski racers during on-snow training sessions. Paper presented at the annual conference of the Eastern Canada Sport and Exercise Psychology Symposium, Ottawa, Ontario, Canada.

⁵ We recognise that a certain amount of interaction among the racers is an important element of the learning process, however, in our study we observed that many of the communications did not contribute to productive training.

Mental training was not a new concept to these racers. Before the start of our study, the team had already participated in a series of 6 mental training workshops in order to develop some basic mental skills such as goal setting, intensity control, imagery, focusing, distraction control, and positive thinking. We wondered whether we could increase the amount of time these racers engaged in mental preparation before each run by conducting a short mental training session immediately before an on-snow training session. Consequently, in the lodge before training one day we re-emphasised key points which had been presented in earlier workshops and provided concrete examples of how the mental skills the racers had developed could be applied to make every training run a quality run. Impressively, after this short reminder the amount of time the racers engaged in mental preparation at the top of each run increased dramatically (from an average of 17 seconds/run to 34 seconds/run). Not only did the amount of mental preparation increase, but the time spent waiting around dropped substantially (from an average of 41 seconds/run to 4 seconds/run) as did the amount of time spent talking with other racers (from an average of 13 seconds/run to 4 seconds/run).

These results are not just impressive numbers; they related directly to a quality day of training. The increased amount of time the racers spent mentally preparing was reflected in their skiing. After that day's training the coach was ecstatic:

What an awesome day! The kids were really focused and some great things happened. . . . I strongly believe that when the kids are focused well they can execute their moves so much better. They can communicate what goes on in their mind to their muscles a lot easier and a lot faster.

The racers also acknowledged the importance of mental training and how it was helping them. One racer commented:

I think sport psychology is really helpful. . . . People on the team are starting to realise how sport psychology can help them and how much it can improve the efficiency of your training runs so you can get a lot more out of it. So [now] you don't kick yourself at the bottom of the course for not doing it. You do it at the top.

This study highlighted the importance of making mental training an ongoing component of ski racing preparation. It is not a "one shot deal". Mental training is most effective if it is started at an early age and integrated into other aspects of training. It is not something that can be done in isolation; separate from the work of the technical, tactical, and physical strength coaches. The mental training consultant must become part of the team and work with the coaches and racers towards common goals. Unfortunately, due to limited funds, time, and a lack of qualified mental training consultants, this can often not be realised. Instead, the coach and athlete must take responsibility for mental skill development. To start you on your way towards better mental preparation, ask yourself the following four questions before each run.

1. What is my **goal** for this run? (e.g., be aggressive, run a straighter line)
2. What is my **focus** for this run? (e.g., keep my arms in front)
3. Can I **see** myself doing it? (use imagery to mentally practice what you want to achieve)
4. Am I at my optimal **intensity** level? (Am I too psyched up? Too relaxed?)
5. Am I **committed** to making this run? (Will I give it 100% and fight all the way down?)

Then, commit to **MAKING EVERY RUN COUNT**. You will soon notice the improvements. Have a great season!

Appendix L

Promoting Autonomy in Developmental Ski Racers

By Emma Stodel and Diane Culver

Coaches working with developing athletes shoulder many responsibilities; their job does not end with “performance coaching”. Along with teaching the technical and tactical components of ski racing and preparing young racers for high level competition, developmental ski coaches also face the task of facilitating the development of personal and social skills in the athletes they work with. Couple this with the need to create a fun and healthy learning environment to maximise continued involvement with ski racing and it becomes obvious that the job of the developmental coach is a complex one. But perhaps one of the most challenging roles of a developmental coach is to foster a shift towards athlete autonomy and encourage athletes to take an active role in their learning. By developing autonomy, coaches are creating independent, self-directed, decision-making, intrinsically motivated individuals who can develop and grow in a constructive regard. Indeed, experts have suggested (that) “coaching practice that is more directive in leadership style may even stifle the development of the athlete and militate against independence” (Lyle, 1999, p. 39). To this end, in this article we provide coaches with some guidelines for promoting autonomy in their athletes (they work with). The basic tenet throughout is that coaches form a respectful partnership with the athletes and shift away from an authoritative or directive coaching style towards a more humanistic approach to coaching. Some coaches may be resistant to this idea as the value is placed on the long-term personal development of the athlete rather than immediate performance success – a factor many coaches are evaluated on.

In order to develop a co-operative relationship between coach and athlete, **good** communication and a respect for individual differences are key. Communication involves listening as well as speaking, non-verbal behaviour as well as verbal utterances, and emotion as well as content. Athletes pick up on all these aspects of communication so coaches must be sensitive to the messages they are transmitting. We will provide more information on coach-athlete communication in an upcoming issue of *Ski Racing*.

The coach’s acknowledgement and consideration of individual differences among the athletes is fundamental to the development of a good relationship. Athletes come to ski racing from different backgrounds, with different experiences, and will have different needs and goals. Understanding the most important challenges (they) faced by (as) each racers and assisting them in overcoming these will take a coach a long way. Each athlete will have his or her preferred learning style and respond differently to different coaching styles; indeed, some athletes may be more comfortable with a more directive/authoritarian style than a humanistic one. In order to be an effective coach to all members of the racing team, coaches must be flexible and adapt their style as necessary.

For those coaches wanting guidance in facilitating the development of independent athletes, below are 5 methods for promoting autonomy.

1. *Promote reflection and self-directed learning* **Ask: What works and what doesn’t?**

All too often we find that racers ski to the bottom of the course and immediately look to the coach for guidance. Engage the athletes in reflective learning by asking them to evaluate their own runs and identify what they did well, what needs improvement, and what, if anything, they would do differently next time. Question, then listen to, the

athletes and provide feedback in a positive, constructive, and supportive manner. Together agree on a goal for the next run. Push (the) athletes toward a sense of (take) control (of) in their learning. Offer rather than impose advice, knowledge, experience. Value their ideas. Provide support during this process so that they feel that their investment in the process has been worthwhile. Encourage the athletes to look for solutions to their problems from sources other than yourself, the coach (e.g., teammates, teachers, role models, parents, books, video). Providing all the answers stifles independent thinking.

2. *Involve athletes in the decision-making process* **Ask: How (do) you want to be coached?** Include athletes in the planning of **some** training sessions when possible. For example, allow them to lead stretching at dryland, choose cross training activities.
3. *Give the athlete responsibility for quality training*
In December 8, 2000 issue of Ski Racing we highlighted the importance of mental preparation if athletes are to reap maximum benefits from their training time. We suggested that athletes ask themselves the following 5 questions before each run:
 - What is my **goal** for this run? (e.g., be aggressive, run a straighter line)
 - What is my **focus** for this run? (e.g., keep my arms in front)
 - Can I **see** myself doing it? (use imagery to mentally practice what you want to achieve)
 - Am I at my optimal **intensity** level? (Am I too psyched up? Too relaxed?)
 - Am I **committed** to making this run? (Will I give it 100% and fight all the way down?)
4. *Make goal setting a collaborative effort between coach and athlete* **Ask: What are your goals?** Goals must be important to the athletes if they are to put in the necessary time and effort to attain them. Allowing athletes to identify their own goals often means they will be more committed to achieve them and consequently work hard to accomplish them. Coaches can provide valuable insight into the athletes' current performance level and help them set individualised goals that are realistic yet challenging. Both long-term and short-term goals should be set for all performance areas (physical, mental, technical, & tactical). The goals should be within the athletes' control, specific, measurable, and written in positive terms. Target dates for achieving the goals should be determined. Once the goal setting process has been completed athletes should be encouraged to view it as a contract they made with themselves and post them in visible places. Goals are not carved in stone; if athletes fail to achieve their goals coaches should offer support and assist the athletes in reassessing and adjusting their goals as necessary.
5. *Engage athletes in the evaluation process* **Ask: What factors impact your performance?** Get athletes into the habit of evaluating their racing and training sessions as soon as possible after the event. This can be done in a log or through performance profiling. Taylor (1993) provides basic instructions on how to create a post-race profile (this can also be used for training) and elaborated as needed. These profiles allow athletes to identify the factors that impacted their performance and provide guidance for planning upcoming training sessions.

Most coaches work hard in an effort to ensure their athletes are in shape and that their technique is continually improving. The effort spent engaging developmental ski racers in the more cognitive aspects of learning will pay dividends in the end.

Comments, questions, and requests for further information can be directed to Emma at estodel@istar.ca or Diane at diculver@home.com

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Appendix M

Study Two Start

My two roles:

1. How can I directly help a coach? (If CoP is working well then there will be less need for me to play this role).
2. How can I help cultivate the CoP?

Start with Jean to nourish the CoP and then I might be a facilitator with the other coaches.

The context of the ski club favours interaction between CoP members.

Sub-groups consist of coaches that work with each age group and elite groups. This means that they must negotiate meaning between them on a continual basis.

Jean's role:

The structure for healthy CoP must be there and Jean is vital as a leader.

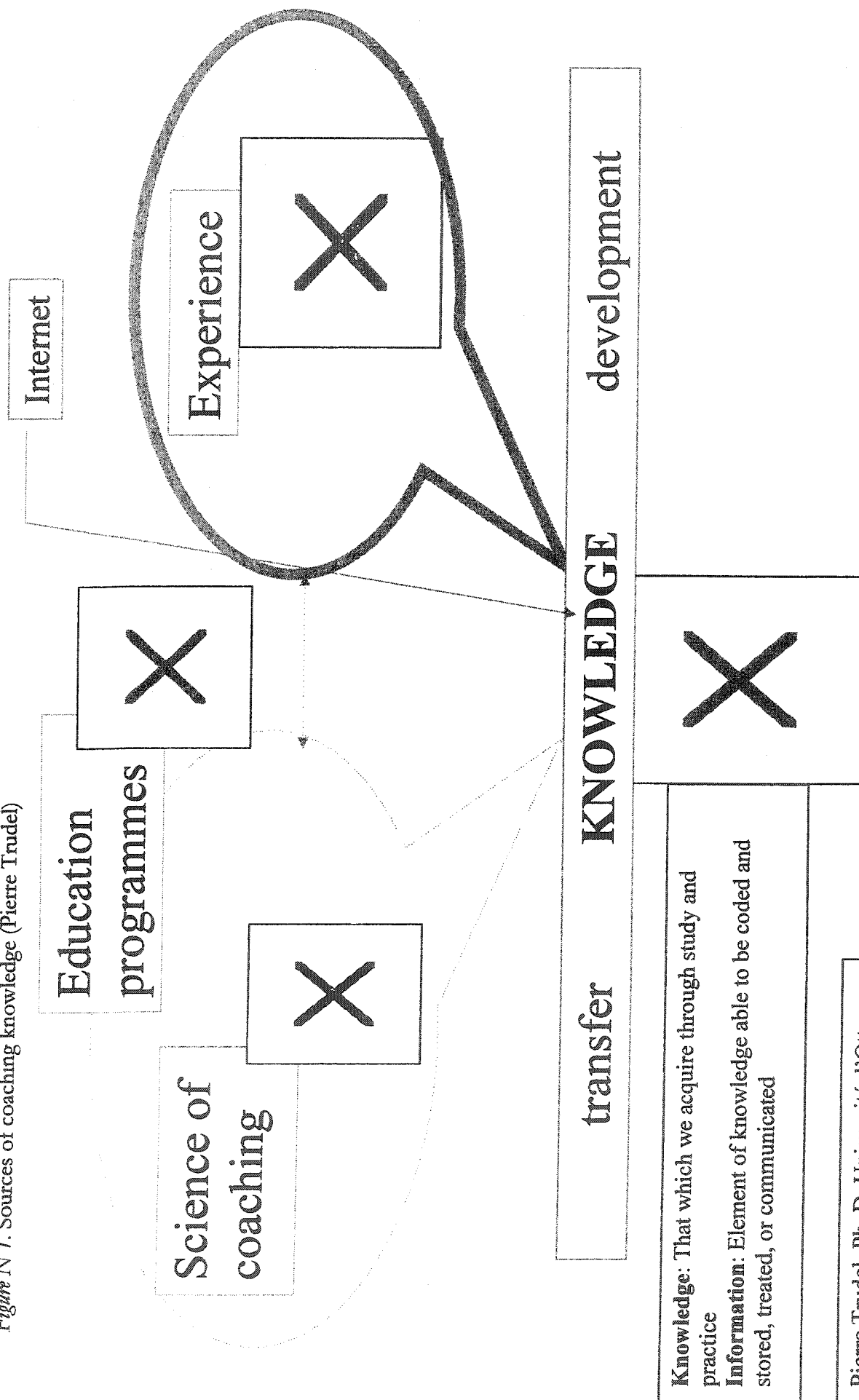
First step: Interview Jean to help build a description of the CoP that is existent.

Second step: Use Navy checklist to help tell Jean what is needed to nourish the CoP.

Third step: Set up a meeting when Jean and I can meet the other coaches and explain project.

Appendix N

Figure N 1. Sources of coaching knowledge (Pierre Trudel)



Appendix O

PERSONAL PERFORMANCE EVALUATION (Coaching)

1. How did you feel about your coaching performance during this race or training session?

2. What were the highlights of this day?

3. How do you know you were doing a good job?

4. Where was your focus when you were coaching your best?

5. If you were performing less well in parts, what was the major problem?

6. How did you check that your athletes were understanding you?

7. Did you do one thing today to learn more about the best way to help *each* individual improve?

8. What are the lessons from this day? What can you work on to continue to improve?

Appendix P
John letter to Summer Coaches

June 5th, 2002

Dear Fellow Coaches

I am writing to you to introduce you to the project that you will be working on with Diane in Les Trois Monts.

In a nutshell, it promotes a method of working together as coaches and helps create an environment that is proactive, positive, and sharing of ideas and methods. It is more than enhancing communication. It is creating work habits and procedures that truly enhance our coaching ability. It brings a group of coaches together making them a "team of coaches", which is much more effective and focused than the "vacuum of coaches" approach. What I mean by this is that too often as coaches we work alone or even if we do work along side other coaches we tend to guard our problems and knowledge, keeping them to ourselves, instead of sharing them with others.

I am please to have gone through this experience with Diane and I am confident as you work together in Les Trois Monts you will also see the benefits. It does require work on your part and a commitment to the process. I can only encourage you to give this the chance it deserves. You will be the recipient of the benefits!

Good luck in Les Trois Monts,

John Lake.

mercredi, 5 juin, 2002

Chers amis entraîneurs

Je vous écris pour vous parler du projet dans lequel vous aurez à travailler avec Diane aux Trois Monts.

En bref, ce projet est pour promouvoir une méthode de travailler ensemble comme entraîneurs et aider à créer un environnement proactif et positif, avec échange d'idées et méthode de travail. C'est plus que de l'amélioration de communication. Ceci est pour créer des habitudes et procédures de travail afin d'améliorer nos habilités de coaching. Cette approche amène un groupe d'entraîneurs ensemble pour travailler « en une équipe », qu'est-ce qui est beaucoup plus efficace et focalisée que l'approche « entraîneur seul ». Qu'est-ce que je veux dire par ça c'est que souvent comme entraîneurs nous avons une tendance à s'isoler et même quand nous travaillons à côté de d'autres entraîneurs, nous gardons nos problèmes et notre savoir pour nous même, au lieu de les partager.

Je suis très heureux d'avoir travailler avec Diane et l'équipe d'entraîneurs et je suis très confiant que pendant que vous allez être ensemble aux Trois Monts vous aller sentir les bénéfices. Ce projet demande du travail de votre part et de l'engagement au processus. Je vous encourage car ce projet en vaut la peine et vous avez la chance d'y participer et d'en bénéficier.

Bonne chance aux Trois Monts,

John Lake

Appendix Q

Info Letter to Summer coaches

Enrichissement des connaissances : Une approche coopérative entre un consultant et des entraîneurs de sport

Introduction

Les entraîneurs apprennent comment entraîner à travers la formation formelle, soit des stages et des cliniques, et leur expérience de travail. Le but de cette recherche est de voir comment un consultant dans le rôle de facilitateur peut travailler avec des entraîneurs pour promouvoir l'excellence en coaching. Donc, durant les deux premières semaines du camp aux Trois Monts, je vais travailler comme facilitateur dans vos processus réflexifs. Gilbert et Trudel (2001) ont construit un modèle⁶ qui document le processus d'apprentissage expérientielle et la conversation réflexive des entraîneurs des jeunes. Ce modèle démontre qu'un entraîneur engagé dans le processus réflexif va souvent interagir avec des autres personnes pour résoudre un problème. Dans ce projet nous allons tous jouer ce rôle « d'autre ».

Une enquête coopérative (Heron, 1996) s'agit de la recherche *avec* des personnes et non *sur* des personnes. Les entraîneurs et le consultant agissent comme co-chercheurs et co-participants. L'enquête profite à tous les participants à travers leur participation, qui transforme leur pratique.

La question de recherche

Comment l'excellence en coaching est-elle cultivée lorsqu'un consultant collabore avec des entraîneurs dans le but de résoudre des problèmes?

La participation des entraîneurs

Étant co-participant dans ce projet, ma collaboration inclus (a) deux entrevues d'entre 20 à 40 minutes (avant et après le camp), (b) des courtes entrevues sur le processus, (c) des tables rondes après chaque jour de ski. Une collaboration efficace est fondée sur des bonnes relations et des échanges ouverts. Chaque participant doit être prêt à écouter les autres et à partager ses connaissances et son expérience.

⁶ Figure 1, page suivante.

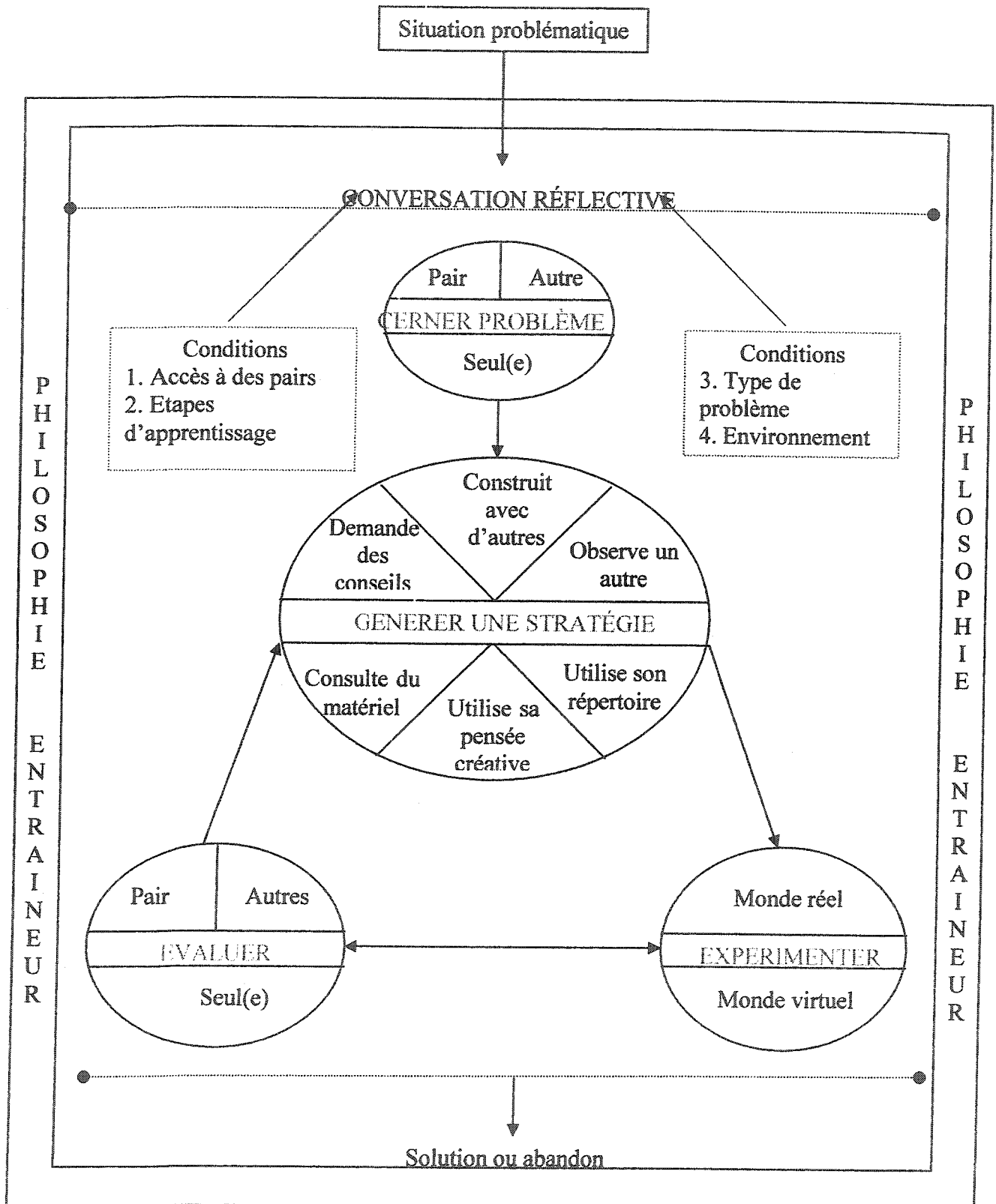


Figure Q 1. Processus d'apprentissage par l'approche réflexive Tiré de Gilbert et Trudel (2000).

Appendix R
September 4, 2003

Record of Round table Meetings

Introduction

After the initial meeting with the K1 coaches, during which the project was explained, it was decided that we would meet about every two weeks over the winter. These notes have been compiled from the eight 'round table' meetings held in the clubhouse, after skiing. I have not changed the format of the first meetings, during which I took notes. But the later meetings that were taped have been condensed into note form. The progression of the process of learning through the sharing that took place in the meetings is evident. It should be remembered that for the first meeting I asked each coach to come to the table with three lessons that they had learned in their coaching; three things that worked or didn't work. After a few meetings it was no longer necessary for me to go around the table asking for lessons. The coaches came ready to talk about different challenges and lessons.

Thursday, December 27, 2001

Lessons

Ben

1. Even the best one in the group needs feedback too.

Catharine

1. Using the skiers from other groups in the AM free-skiing session as models to see what is missing in her athletes.

Chris

1. The skiers need the confidence to balance on the edge. Seeing Mary Anne in the AM session, so patient at the top of her arc, helped Ch understand this.
2. Saw Nick go beside an athlete and work with them showing and explaining what he wanted.

Gord

1. Need a K1 video to motivate the kids and use as a model.
2. Discipline: Leave on time in the morning. From Chelsea: Use the 1,2,3 system.
3. Get the kids to look at their goals to make them more responsible for learning.
4. Mix in the fun!⁷

John

1. Keep working on same things but from different angle.
2. Alex made some good moves and is getting excited about skiing, smiling even.
3. Be aware!

Issues

1. Morning free-skiing sessions are really working out well. *This is a routine that should be kept up.* It is a time for coaches to share thoughts about technique and individuals as well as other aspects of coaching.

Sunday, December 30th, 2001

⁷ Even Olympic level athletes insist that there must be fun involved in their sporting pursuits.

Lessons

Chris

1. Gord told C to be more precise, tell kids what part of body to move, like big toe, heel, etc. Precision!
2. Ski on different types of terrain; bumps etc., then groomed will feel easy.
3. Exercises without poles, putting hands in different places. Doing the oogie boogie! The whole afternoon had fun playing in the woods at the Ridge.

Ben

1. On the 28th: Make them ski and have fun, playing in the snow and then watching a video (hill too crowded).
2. 29th: be flexible - but don't push too hard. Be receptive to how they are. They They don't all work the same. Remember this!
3. 30th: From Sebastian: "Put the kids in difficult situations to make the faults show".

Gord

1. More success with a one on one approach. Taking them aside one by one and looking them in the eye. Focus on the individual.
2. Relate to things they know and can visualise, e.g. Press on the gas pedal gradually.
3. Use a videotape and relate back to it.
4. Don't give too much info. Start at the base.

Catharine

1. C experienced a lot of parent pressure and she realised that her mood was being picked up by the kids and she was losing some of them. Try to remember being 12 years old. Break up the session, like: warm-up, work, have fun.

Jean

1. Parent problems. First coach should try to deal with it and then if necessary J will step in.

Sebastian

1. 30th course: speed to zero is good for seeing faults. Kids did not feel good. In the afternoon fun in the woods, Ridge. (balance the day)
2. Five days in a row is intense. Watch their concentration level.

Saturday, January 05, 2002

Lessons

Chris

1. In order to motivate Mackenzie he took her aside and was pretty firm about the reality of her skiing. He felt badly but got some results. Also spoke to her Dad. *Letting them live in a fairyland will not result in much learning.*
2. At the transfer of the turn, have the skiers try kicking back to start on the tip, in order to work the front of the ski. Result: More movement, knees working better. This was quite hard for them to do but after about a half a run they began to feel the sweet spot.
3. In Club Elite race some performed well and others not so well. There should not be too much focus on the specifics as it can be too confining.

Gord

1. Don't be afraid to be more encouraging. "That's a boy" type thing but always related to a specific thing. Look them in the eye and say what you have to say.
2. Be careful to spend some time focusing on each individual in the group each session.

3. Work and play need to be combined but work needs to be fun too, especially when they are getting tired and burned out like now at the end of the Christmas camp.
4. You have to work hard to change movement patterns of the kids.

Sebastian

1. When the kids seem to be skiing well and we think we have done a good job, we have to be careful not to get too cocky. When we feel cocky this should be combined with some *reality* like the tight course this afternoon.

Catharine

1. Check the kids interpretation of what you say and do. This for the physical and psychological things.
2. Try different things, even if sometimes they don't work. If you see something is not working let it go.⁸
3. Taschereau selection was hard. The kids seemed okay with it on the day but then the next day they were upset. So check these things over the days, not just once.
4. Had to speak to Erin about her loud criticism of the race organisation.⁹

Ben

1. The virtues of optimism: Today the kids were not understanding what B was trying to do. He just wanted some knees and showed them but to no avail (no results). So... even if they weren't getting it try to find something positive that they were doing and point this out to them.
2. Do not insist too much on one thing. If they are not getting it, try to trick them into doing the thing you want.
3. B's assumptions were wrong as to how much they know and are capable of understanding. You can't count on them knowing things. It is necessary to start at scratch.
4. Try to ski like the skier you are trying to change and feel what they feel and use this to help them change.

John

1. Kids are getting tired. Sometimes it is just luck that something works well, like this afternoon. The tight little course was not planned but ended up being challenging and fun. It was the hard for al of them so it brought the field to a somewhat level plane. So... in the face of adversity (dead batteries, no snow, etc.) and the kids expectations (they wanted to run a course) don't be afraid to change your plans. Read the mood of the kids and the coaches; listen to each other.
2. Taschereau selection: Some disappointments. We must be able to look it this type of thing from the view of the kids and the parents. More *time* is needed in this type of issues and also better communication. (Catharine said that she took aside the kids that were not going to forerun and told them first before announcing who would forerun - a good idea).
3. Remember that the brain receives the message and sends the signals to the muscles so that if it doesn't work that way you want it to work you need to look at two possibilities. Either the message you are sending is confusing or the skier's message form their brain to their body is not working. Find out which of these it is and act accordingly.

⁸ But you might want to come back to it later, perhaps from a different angle.

⁹ Excellent that C shared this info and that she, as should all the coaches, feel comfortable to address such issues with any of the K1 kids.

Issues

1. Chris asked for help understanding why some kids are good at free-skiing and not in the course and others are the opposite. This was discussed and the main points here were:
 - Be patient. The kids have not done that many gates.
 - Teach line.
 - Remember that free-skiing you turn where and when you want.
2. Gord pointed out that he felt that there is generally a big difference in maturity between the first and second year K1's.
3. Chris said he tries to be a friend and John said that he could balance that out by being the policeman at times.

Plans

Sunday the 7th

1. Easy slalom. Have practice addressing the gates.
2. As G says, "Don't beat a dead horse!" Remember they are getting burnt out. Watch the intensity.
3. D suggested working on starts tomorrow.
4. John suggested that the kids be taught to have a routine before the start of making 3 or 4 turns in the rhythm of the course to get the muscle memory tuned up. This encourages going for specific feelings and not just words (like must use this, or bend that).

This week

John to approach Jean for the video tape(s) to use as a model for all coaches to be on the same wavelength.

Saturday the 12th

1. GS training and free-skiing.
2. Do some race simulation with timing.
3. Re-introduce the routine for warm-up (3 or 4 turns in the rhythm of the course).
4. Review starts.
5. Provide all info for race day.

Sunday the 13th, GS at Garnet

1. Always have two coaches at the start (not John).
2. Every kid should hear something positive about their first run and get feedback for second run.
3. Manage stress and have some fun.
4. Help them to focus on the right things.
5. Brush the skis but no heavy waxing. J believes that this removes the focus from the things that make them ski their best.

Saturday, January 19th, Club de Ski¹⁰

¹⁰ All coaches present. Jean intended to come but got stuck talking to someone in his office.

Lessons Race 1: Mt Garnet¹¹

John

The snow was limited so it was difficult to follow through with plans for warm-up at start. We were less organized than I would have wanted. The kids are skiing better but not racing as well as they might be. Sebastian seemed to do the best job organising the kids to be race ready.

Sebastian

Yes and no. With Robin the encouragement to do well seemed to put pressure on him and the result was that he was not focused on the way to ski well to get the results. The others on S's team seemed to be fine with S's expectations. Next time S will take all the kids and really focus on warming them up well technically to get the feeling for the race; to be moving and skiing well.

Chris

From C's experience with Bjorn as a coach, he thinks that in training the racers should be encouraged to think of each run as the most important race to get them used to skiing under full pressure.

Sebastian

In response to Ch. Yes but there needs to be a separation between training to learn new things, that is training as an aid to learning, and training to race.

Ben

B added that he always skied well in training but only 50% in races.

John

In order to focus on racing better the kids need to practice at race intensity. They need to be in the position where they make mistakes in order to learn. D. added that if they never have to recover they don't learn how to recover!

Sebastian

We learned at the race that we, as coaches, can be too cocky about how the kids are skiing. The race brought a big dose of reality. There are a lot of kids skiing well from other mountains.

We need to be like mums to the kids on race day. Be there for all their needs.

Chris

In the second run, to motivate them, he gave them the image of Tomba or Maier to inspire them and make them confident.

Diane

This can be good but in line with S's experience with Robin we need to keep in mind that the racers are individuals and that we need to get to know what helps each one perform. D.

¹¹ These notes follow the flow of the conversation although some common topics are bunched together.

suggested that each coaches should keep a few little notes on each of their racers concerning what helps them perform in races.

Gord

Agrees with all said. Did practice starts.

Sebastian

A start and finish gate should be set up on every training course. Ca. added that coaches should stand down from the finish so that the kids finish properly.

Ben

Had trouble teaching starts. Ca. agreed. D. tried to show them again how to start without skis on. Sebastian said that he had worked on them. It was agreed that **a wand should be set up at a proper start gate on practice courses.**

Sebastian had told B. to stick with something even if they don't get it right away, but B. felt that some kids feel failure when they keep hearing the same feedback. D. reminded everyone about John's comment in one of the previous meetings about finding different ways to get the kids to do the same thing, or correct the same error. J had said that sometimes you have to trick them and get them to do something without knowing they are doing it.

B. asked what to do when a kids says flatly, "I can't". How do you respond to this? D. suggested asking the child if he wants to do the thing?

Chris

Asked what to do when they say, "I'm tired". He says that he has a bunch of kids that do this.

Ca. recommended ignoring them.

Catharine

When trying to really communicate with the kids she has had success by getting them to take off their skis and gather around her and really look at her, and she at them. She asks them about their goals and how they think they will get there. After that when they are doing exercises she reminds them that this is putting the goals into their skiing.

Gord

Working more specifically with the kids and their goals and the discipline is getting better. G. feels progression.

Sebastian

Today when it was cold and they wanted to go in he brought them to the club to watch some ski videos. This way they didn't waste the time in the Grand Manitou.

Gord

When he took his group in to warm up he played a game with them on paper. He drew a series of curves representing turns and asked each of them to put an X where they thought the gate would be. He said that they were all over the place! He then showed them where it would be and this was a learning experience for them.

Chris

This seemed to remind Ch. Of something that he learned from John who used his hand to explain the radius of a turn to a skier.

General

- The free skiing in the morning still working well even if come coaches have to set courses.
- Tomorrow an easy slalom and some drill courses on the Ligne de Pente. John says that they need to find ways to help the racers understand the relationship of the body to the gate (slalom, cross-blocking).
- Video: Sebastian has a tape so K2/K1? D. said that she would speak to Jean about doing some video for using as a model.
- Saturday 26th, set a proper race prep course.
- Sebastian suggested that the racers be at Belle Neige at 7:30 am next Sunday for the race as the chalet is small and getting 50 odd kids in the same place is hard. This is important for organization.

After the meeting D. spoke to Jean who excused himself for not being there. He said to be sure to give him the notes as he liked being kept in the loop. D. spoke also about doing some video to use a model for all the coaches to look at together. **D. to send J an e-mail this week about doing video next week.**

Saturday, February 12th, Club de Ski¹²

Lessons Race 2: Belle Neige SL

Everyone agreed that the preparation for this race was superior to the last one and that they were better organized.

Sebastian

The technical work is starting to show and pay off.

John

Said his philosophy is to do GS and SG and the SL will take care of itself to a certain degree. Seems to be working. SG training a great idea. It really helps the kids to feel the right position automatically.

Ben

But we did 3 days of SL training and drills on top of that. Good quality with tougher courses and good shape ones. The training contexts were good and the focus of the courses were well planned.

Diane

Asked whether race days were productive other than when the kids were racing. Are they standing around a lot? Something to consider.

Some of the coaches said that they always stand around a lot for the start.

John

¹² All coaches present. Jean intended to come but got stuck talking to someone in his office.

To do start at the GS at Val St Come on the 10th. Need to be careful to help the first years in inspection and organizing themselves.

Race inspection

Gord

Felt that the inspection can be confusing - too much information. N.B. the changes in terrain.

Sebastian

Goes by sections.

Ben

Gives general info.

Chris

At the end of the inspection have the kids go over the course in their heads.

Diane & Sebastian

Focus on first few gates and the last few gates.

Ben

Stress. Felt that the coaches did a great job keeping the stress level down for the kids at Belle Neige.

Gord

- Realized that once Dylan believed in himself he was more focused and did better.
- Automaticity takes awhile so you have to stick on the same things.

Other Lessons

Chris: The use of skiing backwards to help the kids develop the feeling of carving with the weight in the right place.

Ben:

- SIMPLE SIMPLE SIMPLE....POSITIVE POSITIVE POSITIVE!!!!!!!

From Jean the other day in session instead of saying e.g., "you are side slipping" say: "I'd rather see you...". B realized that he made a mistake with Hugo, telling him what he is doing wrong.

- Learning to race is half of it. tactics need to be taught. Don't add new technique near races.
- Fix individual things.
- SG helped his kids to feel the carve.

Sebastian: After the Level IV the week before S came back full of ideas and now realises that in February with the races on it is not the time to give too much technique. There is too little time. Just try and make them go faster.

Diane: Still need to be consistent and keep coming back to main elements.

John: Introduce them to new things without them knowing it - trick them into learning new things. Put them in the situation where they have to make some changes (Diane supported this).

Sebastian: Just not too deep. Try not to make them feel too uncomfortable at this stage in the season.

- S had a question about how do we judge that the programme is working well? Is it only by the best kids results? Everybody should improve.

Diane: Assume that everyone has potential. Assume that some kind of learning will always be taking place. Ask yourself what it is that they are learning at any given moment.

Sebastian: Remarked on the importance of evaluating oneself. Even if the day did not go as planned - what were the results?

John: remember that what you tell them today might take weeks to really sink in. Just because you don't see it immediately you should not give up or think that they have not got it. Just change the approach but keep your goal in view (*What do I want them to look like???*)

Gord

- Getting the kids to focus better by relating how much they focus to how fast they will ski.

It was noted the today they had the wand for training. **Will try to use the wand more often to help with start training.**

What about video???

Diane to give out coach personal evaluation forms. Coaches can use these to help them evaluate their coaching day.

March 3, 2002

Clubhouse, meeting room¹³

First time in a while all coaches are present including Jean. Chelsea came in a little late.

Ben

From talking to the parents of one of his kids at the race he realized that not all the parents have the same expectations of the program. These parents said that it was very unlikely their son would make a living out of skiing (lots of laughter here)! The parents just want the boy to have fun, which all agreed is fine. So when asked how he dealt with he said that he concentrated on the ones that really wanted to get better, because even though he thought the kids wanted to improve he hardly ever came to training. Sebastian added that there should be a commitment on the part of the parents and the kids and the club should spell this out at the time of registration.

Chris

The parents control the kids' timetable. Jean said though that kids will push parents when they really want something.

Everyone talked at once and D and Jean asked for order.

John

Believes the club structure naturally weeds out those that aren't really interested. But the way the K1's have been handled this year as one big group has allowed the coaches to go beyond the structure imposed by the 40, 50 and 65 day programs. This has been a good step as it

¹³ This summary includes some direct quotations from the tape of the entire meeting (23A pages in all). I felt that it is important for the reader to get a sense of the live conversation in some instances. *Diane*

opens the door for talented kids to make their mark and eventually maybe get their parents more involved. Jean thought this was true. Gord reinforced this.

Chris

Dealing with parents! Sympathy from the others!

Talk of how to tell kids they have improved and are skiing technically well even though the times don't show it. Jean said that he explained to Karine that a lot of really good skiers are small when they are young but ski well technically and get the times eventually. She gained confidence and did well and then saw her capabilities. **The importance of communicating well to the kids!** John recommended that it is important to really be specific when talking to the kids and tell them what they did right and when, and then put the responsibility on the kids to work with that information. Jean said that it is good for the kids to hear positive things from other coaches, especially if the other coach is recognized as knowing their stuff. If the kid doesn't know the coach then the kid's coach should build the coach up so the kids gets the feeling that their feedback is valuable. Ben said it had motivated one of his girls when Gord had told her she was skiing well. **Don't underestimate the positive effect your comments can have on the kids.** Jean even notes that Gord gives positive feedback to his son and that David loves it.

Sebastian

Very important to mix the compliments with corrections and don't forget the good ones because they need feedback too.

Gord On corrections: Be specific

"they need to know WHEN it was right. They know when they have a good run or a bad run, but things aren't... I mean you have been working in a certain direction, or a certain focus, in an area like this and you see light at the end of the tunnel, or you see the change, then you need to say, "like THAT, what you did!" and identify that "what you just did there!". You know, it's not just "Hey, way to go, way to go!" Not just that looked good. No, it's "that was good, that there, when you felt THERE at this time".

Ben

Sometimes there is too much talking and the kids are being told too much.

All agreed! The kids expect something every run. Gord tells them he missed them!

John and Jean reinforced Gord that when it is right you need to help them feel it and keep it.

General comment that the group is skiing very well.

Chris and Ben talked about going up the chair with John and how he was teaching them, being the mentor. Ben said that he had learned that the learning curve or better said the performing curve for the kids was not an even climb; that they went up and down. John was saying that it is important to do not just SL, but also GS and Super G, even if the strength is SL. John recommended that they talk to Ken and get him to focus on GS, round turns, and speed. Jean agreed with this principle. Sebastian said that the principle in Nancy Greene was not to focus so much on racing but being able to ski all terrain all conditions. Jean said that's great. He said Nick' group did not spend enough time doing that when they were younger and they couldn't ski the bumps on Rad. Sebastian underlined that in all of that a great athlete still needs discipline and so the kids have to learn some of that too.

Summary by John: There's a time for play and a time for work.

PPE's

Diane asked about the PPE forms (questions to reflect on coaching day) and all said that they had looked at the questions but none had written answers for them. It was meant as an aid for coaches to reflect on their work.... Seems that talking about the lesson at the meetings and on the chair is more realistic than doing the forms.

John said they should be used next year as he believes the process would make better coaches out of all.

Next year

John: "Just like the kind of discussion that we are having here today, not just technique, but philosophical and real mother earth kind of things; like if we had a meeting, or a symposium, or some kind of round table, with all the coaches of Bowsky, maybe do two..."

Jean: "You know what? I had a meeting with my K2 coaches the other day after talking to Diane about this, this is what you did and these are the results we are having now in the K1 with the coaching. The bonding together, it's fun, we are performing, everybody seems to do a good job, and the K2's... I got all the coaches in my office for an hour, and I explained what we did, what Diane was doing with you guys and everything, and then everything comes out. Like I talked maybe for two minutes, and then they were all like... okay you don't talk to me, I do my own stuff,... so that is what came out of it. I said, "You see guys. A lack of communication. It is not existing at all and that is why you are all working differently here. And what we did with the K1's, it is unbelievable, I mean the harmony is this! I'd rather spend more time with them because I am having more fun. You guys are boring! (Laughs). Everybody here is like a guru, you know like you have Sylvain, who's like a guru, and you have Paul who is a guru, and Ronnie does his own thing, and Lawrence is just floating between all that. She doesn't get a chance. I said, "Come on you guys, open your wings. We are going to have to be more...."

Time for meetings – importance for the success of group

Diane: "It's all about having the context and the time to do this kind of thing. It's about making the time.

Jean: "Yeah but I think everybody's allowed the time here today, right? I don't see anybody looking at their watch and having an excuse to go. Because when it is a meeting where it is like this, well it's like, I have to be at home at four today but I am having a really good time here.

Sebastian: "I barely remember the first meeting we had when Diane was just asking us, 'Okay, tell me three things that you have learned', now she is just sitting there and we just start talking!

John: "No but you are right. This has been the catalyst, bringing us all together, like Diane and these meetings. It has further... it has enhanced everything that is going on on the hill.

Ben: "Especially for, because you don't talk that much when we are on the hill or when we are on the radio, or at noon, or.. and here you tell us what you think really, and we get to see. Because this is my first year and I get to understand what you think and where you think we should be going... So I was buying into what you tell me and... and then it enhances my performance as a coach because I know more where we are going and what I should be doing.

Gord: "You know what was good was that Jean did a hell of a job to hire John as the head of this gang because we are all learning from you, man.

Chris: "We are learning from all.

John: "But it's a balance. It works both ways. I watch and learn from each of you guys too.

Next meeting

Sebastian suggested doing a meeting without Diane as the provincials mean coaches will be away next week and then she is away for two weeks. Perfect... meeting set for the 16th for coaches only. Gord to tape meeting and give tape to Diane. Good prep for next year and Jean added that he decided not to wait until next year and has already started with the K2 coaches.

March 16th, coaches' meeting clubhouse.

Diane not there.

Jean, John, Gord, Chris, Chelsea.

Note: Gord taped this meeting on his micro-cassette. Unfortunately it is relay hard to hear everybody. I have taken the gist of the conversation here. Some of my questions have been clarified with the coaches.

Conversation regarding the bulletproof conditions on Friday and how Saturday the three short courses worked really well. Working on having the kids focus for a short period of time and not be able to loose focus as a result of the extremely difficult conditions. All agreed that this worked really well. There was some discussion about this and how it helped the kids.

Jean commented that he had heard coaches and kids saying that the season was almost over. He said, "It is not over until it is over!" He wanted to coaches to reinforce this with the kids and make sure that there were sufficient challenges to keep the learning going until the real end of the season.

John wanted to say the this morning it was cool that Ben and Chris, who were ahead of Gord and himself, had gone ahead and set things up without any directions from John.. John said "This showed really good teamwork. Good job guys!"

Chris said that he wanted to see at the end of the season kids who could ski SL and GS, and that most of them were doing pretty well on this.

Discussion regarding the video of the race tomorrow and Jean said that the videos were not available. One of the coaches, Gord (?) said that he might have one to use. Talk of parents that have video of races.

Chris said that he wanted to really boost the kids up at the start of the race the next day.

Jean brought up the criteria for the DLS selection. Some kids didn't get the results at the right races but they should to be cut off.

Jean talked about the race results and said that they were good.

Gord said that the season was not over and that there were two more races.

Jean said "exactly!" And this is why we have to look at eh criteria. ". Jean mentioned that it would be important for them to go to the DLS meeting on Tuesday, because they would talk

about the program for K1 for next year. He said all the coaches were invited to that meeting in Smalltown. John and Sebastian would go with Jean.

Tape too hard to hear... No matter because the essential is that the meeting took place!

Coaches meeting, Interview 2, John, Chelsea, & Sebastian¹⁴
April 13th, Clubhouse

Diane commented on the meeting when she was not there and she was really happy that the meeting was held. The tape was really hard to hear so she clarified some issues that had been discussed.

- The day before that meeting the conditions were bulletproof and so John set three short courses on the Saturday and this proved to be a really good approach. Helped skiers focus for short periods of time and experience some success. So... Tough conditions – short courses – high intensity > surprising results in the race after.
- Video – some coaches asked Jean for video for the race but none was available and finally it was decided that they would have to get it from a parent. This came to a comment that some of the parents were really helpful.

Video:

Did it a few times with the kids this year. Sebastian thinks it is more important for the coaches because you can slow it down and analyze technique. This had been the idea discussed at the start of the year but never followed up on. John said that Janica Kostelic had never seen herself on video but I said this might have originally been a function of lack of money.

Sebastian said:

“Not doing video is maybe just the way she learns. The way she perceives things. She doesn’t need to see it.” So... Some of the K1’s would likely benefit from seeing themselves on video because of the type of learner they are.

John mentioned putting the video back on the table for next season.

The morning on-hill sessions:

J: I think that the way we did it with the morning, we did that quite... we were pretty good. Having the coaches stand together and that helped bring all of us sort on the same wave length.

S: It’s exchanging ideas, but not... it’s still we’re in the field, the kids are skiing. It’s more than just exchanging ideas at the end of the day, or talking everywhere. It’s like the kids are skiing in front of us and we are...

J: I think that was probably one of the better functions of things that we did.”

The season, the study, and the process:

J: “I think the process is excellent and I think it can only be enhanced by... I think if we started it earlier... before it gets busier... Because we would be in a groove. I think we eventually got into a groove, as a group of coaches where we had to talk less about – okay

¹⁴ This summary includes some direct quotations from the tape of the entire meeting (16 pages in all). I felt that it is important for the reader to get a sense of the live conversation in some instances. *Diane*

you do that, you do that – ” So... the importance of good teamwork – it makes the job easier for all.

John felt that this process worked well because:

“Coaches, like we said right at the very beginning, one of the bad things about coaches is that lots of times their egos get in the way. And I think with this, all the egos were tucked away, and everything worked well as a group. And I think that it is because of that little sort of ego thing, that this process is hard to initiate. You know like I think lots of times...

D: Guys don't want to share, sometimes.

J: But if you can get them... if we can break down that initial barrier, like to say to everybody out there, you know, “Check the ego at the door, let's come in and start sharing, guess what you are only going to get better as an individual coach! You are going to share your ideas but you are going to learn ideas”... and the key thing about coaching that I've always had is, everybody's going to coach a little but differently, because everybody's an individual, just like the kids are individuals, and so we are going to share all these ideas, but you are going to go out on the hill, I am going to be standing right beside you, you are going to implement the Sebastian way, I'm going to implement them John way... There's no right or wrong, and that's the benefit the kids have.

C: Right.

S: Now, at the end of the year, we are all talking John's way! (*Laughs*).

C: (*Laughs too*).

J: No, no!

D: Next year, all the K1's talk Sebastian's way!

S: Strong on the outside, above the gates, strong on the outside (*laughs*).

C: But it works! They understand. So why not?”

D: To follow on from what you were saying, it goes out there and it is implemented Sebastian's way, and it is implemented your way, but it starts from a consensus here...

C: Yeah.

J: Exactly!

D: And it's that consensus here that keeps it going in a direction that's within certain guidelines.

J: Exactly. I mean, I don't care how much, like I have done in my career of coaching, or Piotr, for example, who's downstairs, the minute you start sitting around the table with Piotr, he's a sly fox, Piotr... Sometimes he makes people think he's Polish and square, but he's very, very smart. And he learns from others, and he's good at sharing. It's like so easy to be so strong, like as a group, and you have so much more fun.

C: Uh huh. I agree.

Both Chelsea and Sebastian said that it had been their best season coaching, and that they would remember it forever. Sebastian was worried that without the same team it would be hard to have the same thing next season. Diane mentioned that they had the experience now and that she would be around to help them get going and remind them that they wanted to repeat the process. She also said that they would have an easier time bringing in the 'new' guys because of their familiarity with the process. Chelsea was optimistic that they would success.

John said:

“You know what it is? And I think the whole focus is so cool. Is just, first commitment getting around the table and just start and just start talking... and once that started, all of a

sudden all the egos of the coaches and pre-conceived ideas of, you know, this is where we have got to go, just all of a sudden start to meld and the next thing you know... it's...

S: We are all going the same way.

J: We are all going the same way and looking at each for help and helping each other...."

Diane mentioned that she had used the group as an example in a presentation to a business team.

Sebastian said:

"I think we have been an example in the club, and outside of the club. I have seen coaches from other mountains, like MB, come and see us, and say, "Like how do you work it? What do you do to have that kind of results? How do you make your groups, and how...?"

The groups:

John recommended that they talk to Jean about the groups. He said, "But then I think if we let them organize as all fifty kids, and spend the first couple of weeks together,

C: Uh huh.

J: We make the adjustments based on what we are seeing as coaches versus what the parents are paying. If we do it for the right reasons, not for the financial reasons, then I think we are going to have an even stronger group. I think that was one of the pluses about the way we ran it this year, was that there was more...

D: Interaction?

J and S: Yeah.

Meetings: Try to meet at least 3 times before the Christmas camp.

J: Yeah, but I think that can be enhanced a little bit more. So like if we met the Friday night before everything got started and just started this process, then even for the first two, three weekends, make sure that we met at least once every weekend if not even twice sometimes.

John recognized that everyone has other commitments:

J: "But it's just getting over that hurdle, like "Okay yeah, I got to go. Let's get up there". You can see that once we are here, the 45 minute meetings. Like when we started you said, "We only need half an hour, 45 minutes at the end of the day" and they turned into...

C: Two hours!

J: Two hours, an hour and a half. Which to me shows the level of commitment of all these coaches... Which I think is superb!

John warned the others that this sport and coaching thing sucks you in! Sebastian said he is ready to be sucked in!

Team atmosphere with the kids:

John: Keeping the team aspect going. He said it can be intimidating when you go to a race if the group is very together.

A discussion followed about whether this was fair play but Sebastian pointed out that there will always be those that intimidate and those that are intimidated and it is better to be the former!

Next season, K1/K2

John and Chelsea go K2 and Sebastian and Gord stay K1. Diane pointed out that this means each group has a core of two coaches that have already been through this process and can steer the other coaches in the right direction.

John said the K2 group needs to change. Diane said that Jean had spoken to them already about this.

Diane and John discussed whether it would be worth it to get all the coaches from the club together and they thought it would be good early in the season (when number of kids is often low and coaches stand around a lot), when all the groups are still free-skiing. This could be good for the older coaches who might be fixed in the way they see things.

Chelsea said that a session like the one they had the weekend before this meeting with Piotr would be excellent at the start of the season.

- Keeping the stronger second K1's in touch with the new K2's:

Plan to have them ski and train together sometimes; this for technique and also for the social aspect. This would help keep their progress on a more even slope, instead of being hit in the face with the level of the K2's when they move up the next year.

Sebastian said the same interaction should be developed with the Nancy Greene and Ken.

- New coaches for next season:

All commented on the awesome job the Ben and Chris did as rookies. Sebastian said he would like to work with another coach like them next year (they may not be returning). John commented that the balance of coaches this year was excellent. Someone mentioned that it would be fun to bring Bjorn into the group. John felt he would like it.

- Recording the meetings in future:

Diane asked what they thought. They liked the point form resume of the meetings. The coaches asked Diane to e-mail them the resumes of all the meetings this year. But next year... At first Sebastian thought that just the meetings did the job and that it was not necessary to write anything down. Chelsea said that she would write notes for the meetings. John said:

"I think taking notes is... because I think this process, if we do it... if every year we try and make a conscious effort to make it, you know, much more a part of our whole coaching strategy, then yes, I think that the notes would be important. AS we are starting... like this year, I think it was really good. But we were like a bunch of green horns. We were you know, step one... but I think as we do step two, three and, four, as we keep going up, then I think that the notes will become more beneficial because they would actually be used, like more.

D: That's what I am thinking myself. And I am also thinking, like down the road, you know like if this club has this bank of little notes, not huge but then someone like Sebastian comes along, gathers his group, and has all these new coaches in here... so he can maybe take some lessons from those notes and show them to his group.

S: And maybe the coaches should just have a notebook for themselves.

D: They should have a notebook themselves; a journal book.

S: A journal that they can write things about their athletes, things that come out from those meetings, all sorts of things that they need to be reminded of."

Conclusion

John said that he thought the coaches should thank Diane but she responded with a big thank you for the coaches! Chelsea asked about seeing the thesis. Diane mentioned writing some articles for Skipro and maybe SkiRacing. John was interested.

All said that it was neat that the team of six coaches and 50 odd skiers all produced the results. Even the young coaches were a crucial part of the puzzle, as John said. Chelsea said that other clubs would be interested in some coach coaching.

All agreed that the process not only produced results but that it was fun too.

Appendix S Leader Tips

To: Gord, Sebastian, John, Paul, and Jean

As I stated in the e-mail I believe that the K1 group is off to a good start. I have spoken to both Paul and John and they have agreed to be leaders in the K2 group and *will meet soon*.

Characteristics of a good community leader

- Knowledgeable
- Passionate about practice
- Respected by peers
- Good communicator
- Good coordinator
- Understand group dynamics

Tips on being a leader for your community of practice

1. Organize and facilitate regular meetings (bi-weekly?)
2. Manage interaction with rest of club, including Jean
3. Talk about the **purpose** of the group meetings
 - a. *Help* group members solve everyday problems and share ideas
 - b. Develop, test, and share *best practices* (Idea: At the end of every month post in the coaches' room the best practice that your group come up with)
 - c. Promote the *distribution of coaching knowledge* within the group and club
 - d. *Innovate*: Encourage new solutions to coaching problems
4. Remind others of upcoming meetings and what will be discussed
5. Encourage all members to keep a journal of important lessons over the season
6. Keep an open, ego-free atmosphere in the group where members can trust their input will be respected
7. Be sure newcomers understand group purpose, feel welcome, and included
8. Talk to members about:
 - a. The value of their contribution to the meetings
 - b. The benefits of learning from others' experience (avoid reinventing the wheel!)
9. Involve other coaching leaders from time to time (Jean, two Nick's, Connor, Piotr, etc.....)

Tips for each meeting

1. Establish a routine. Example:
 - a. Start each meeting by asking each member to give a two-minute summary of the most important technical issue facing them.
 - b. Finish each meeting by asking for a rating of the value of the meeting to each person and what they can do to improve for the next meeting.
2. Provide value by:
 - a. Focusing meetings on topics relevant to members' everyday work
 - b. Linking members with similar problems
 - c. Linking with outside experts when necessary

Appendix T Ethics Approval

Monday, April 23rd, 0001

RE: Enriching knowledge: A co-operative approach between sport coaches and a consultant (File 04-01-02)

Dear Ms. Culver:

You will find enclosed the Social Sciences and Humanities Research Ethics Board Approval for your research project. If you have any questions, please contact me at extension 1787.

Sincerely,

Lise Frigault
Protocol officer for ethics in research
30 Stewart Street, room 301

c.c. Pierre Trudel
SOCIAL SCIENCES AND HUMANITIES RESEARCH ETHICS BOARD

CERTIFICATION OF ETHICAL APPROVAL

This is to certify that the University of Ottawa Social Sciences and Humanities Research Ethics Board (REB) has examined the application for ethical approval of the research project Enriching knowledge: A co-operative approach between sport coaches and a consultant (File 04-01-02), submitted by Diane M. Culver of the Faculty of Education, and supervised by Pierre Trudel of the School of Human Kinetics. The members of the REB found that the research project met appropriate ethical standards as outlined in the Tri-Council Policy Statement and in the Procedures of the University of Ottawa Research Ethics Boards, and accordingly gave the research project a Category Ia (Approval). This certification is valid for one year from the date indicated below.

Lise Frigault
Protocol officer for ethics in research,
for the Chair of the Social Sciences and Humanities REB
Tim Aubry

Date: April 23rd, 2001

FILE 04-01-02