ORIGINAL RESEARCH ARTICLE

Impact of a Large-scale Coach Education Program from a Lifelong-Learning Perspective

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ABSTRACT
This study examines the impact of a coach education program on coach learning and perceived changes to coaching practices, while situating this episodic learning experience within a lifelong-learning perspective. Three sets of in-depth interviews were conducted with 10 coaches taking part in one of three competition-development modules within Canada’s National Coaching Certification Program (Coaching and Leading Effectively, Managing Conflict, and Psychology of Performance). It was found that (a) the coaches’ biographies varied widely, (b) all of the coaches reported learning from the modules, (c) eight of ten coaches reported a change in their coaching practices as a result of participation in one of the modules, and (d) the coaches credited a combination of mediated, unmediated, and internal learning situations for their learning before and after the modules. These findings suggest that a large-scale coach education program can have an impact on coaches when the program takes a lifelong-learning perspective and integrates constructivist principles into its design and delivery.

Key Words: Coach Education, Coaching Pedagogy, Lifelong Learning, Biography
Impact of a Large-scale Coach Education Program from a Lifelong-Learning Perspective

The study of coach learning and development has flourished in the past two decades (Gilbert, Côté, & Mallett, 2006; Trudel, Gilbert, & Werthner, 2010). Much of the research has focused on how coaches learn, by taking one of two perspectives: (a) the learning perspective (i.e., sources of knowledge) or (b) the developmental profile perspective (i.e., life histories of coaches; Gilbert, Lichtenwaldt, Gilbert, Zelezny, & Côté, 2009). Both approaches have provided a breadth of findings supporting the sources of knowledge and various ways of learning valued by coaches in the journey to becoming a coach. From this literature, eight sources of knowledge have emerged as the most prominent among coaches: (a) formal education (e.g., Cushion, Armour, & Jones, 2003; Werthner & Trudel, 2009), (b) workshops/clinics (e.g., Erickson, Bruner, MacDonald, & Côté, 2008; Lynch & Mallett, 2006), (c) coaching experience (e.g., Erickson, Côté, & Fraser-Thomas, 2007; Gilbert & Trudel, 2001), (d) interactions with coaches and athletes (e.g., Culver, Trudel, & Werthner, 2009; Schempp, Webster, McCullick, Busch, Sannen-Mason, 2007), (e) observation of coaches and athletes (e.g., Thompson, Bezodis, & Jones, 2009; Wilson, Bloom, & Harvey, 2010), (f) resource material (e.g., Timson-Katchis & North, 2008; Wright, Trudel, & Culver, 2007), (g) mentoring (e.g., Irwin, Hanton, & Kerwin, 2004; Stephenson & Jowett, 2009), and (h) reflection (e.g., Knowles, Gilbourne, Borrie, & Nevill, 2001; Werthner & Trudel, 2009). Although detailed information exists about the learning and development of a wide range of coaches—including volunteer coaches (e.g., Wilson et al., 2010), youth sport coaches (e.g., Lemyre, Trudel, & Durand-Bush, 2007), novice coaches (e.g., Stephenson & Jowett, 2009), collegiate coaches (e.g., Carter & Bloom, 2009), and elite coaches (e.g., Werthner & Trudel, 2009)—our understanding of how these sources of knowledge interact with other contextual factors involved in the learning process (e.g., the learning context, coaches’ biographies, the coaching context) is still limited.

Borrowing from the work of Jarvis (2006, 2009) and Moon (1999, 2001), Trudel and colleagues (Trudel, Culver, & Werthner, 2013; Werthner, Culver, & Trudel, 2012; Werthner & Trudel, 2006) have attempted to bring clarity to the process of learning to coach. They have proposed that coaches learn by engaging in one or more of three learning situations: (a) mediated, (b) unmediated, and (c) internal. According to Werthner and Trudel (2006), a mediated learning situation is characterized by an experience in which the content and/or delivery of the learning context are outside the coaches’ control. In relation to the sources of knowledge highlighted above, this would generally include formal education and coaching workshops/clinics. An unmediated learning situation is self-initiated by coaches actively seeking, and in control of, information—often sought to facilitate the resolution of personal coaching issues. Examples include interacting with and observing others, consulting resource material, and choosing to work with a mentor (Werthner & Trudel, 2006). Finally, an internal learning situation refers to a specific moment when coaches reorganize what they already know, for example by writing in a journal or using a colleague as a sounding board (i.e., through reflective discussion; Trudel et al., 2013).

Although the three learning situations are presented above as mutually exclusive concepts, Trudel et al. (2013) note that the distinction between these situations is not always obvious; coaches will often shift from one situation to another within the same learning context.
For example, when interviewed about the learning experience during their participation in seminar/coach education courses (mediated) some coaches stress the importance of discussion time with other coaches during the breaks and lunch; an opportunity for learning new things and developing a network (unmediated). (Trudel et al., 2013)

Following Trudel et al.’s example, an internal learning situation could occur as coaches take time throughout the day to document and revisit what they have learned. The authors stress that, regardless of the information available to coaches within a specific learning context, the important point to keep in mind is “what is learned by each coach will vary depending of their unique previous experiences [and] approaches to the learning situations” (Trudel et al., 2013). Moon (1999) and Jarvis (2009) have been used as theoretical frameworks for Trudel et al.’s work due to the emphasis these theories place on the learner’s lifelong experiences.

Central to Moon’s (1999) generic view of learning is the concept of an individual’s cognitive structure (i.e., what is known by the learner at any one point in time). Moon suggests that the cognitive structure acts both as a compass and a filter in the learning process. As a compass, the cognitive structure guides the learner from one experience to another, and as a filter, it influences how the learner perceives an experience and what, or if, he or she will learn from it. Comparable to Moon’s concept of cognitive structure, Jarvis’s (2009) theory of human learning described the learner’s biography as the sum of all the learner’s experiences to date (i.e., knowledge, values, attitudes, and beliefs). He suggested that a biography “is an unfinished product constantly undergoing change and development…and will affect the way that we respond to experiences and continue to learn” (p. 25). Although both theorists discussed learning from a constructivist perspective, Jarvis’s theory adds to our understanding by describing learning as a lifelong journey in which each learning situation, or episodic learning experience, is viewed as an individual step in the journey—one that is influenced by all previous steps and that will have influence on all future steps.

To recognize and account for the influences of coaches’ cognitive structures/biographies, coach development administrators have been encouraged to adopt a lifelong-learning approach to their coach education programs (Trudel et al., 2010), by making use of innovative strategies to promote mediated, unmediated, and internal learning situations (Trudel et al., 2013). By doing so, these administrators are able to create learning contexts that cast wider nets in their attempt to meet the learning needs and preferences of a greater number of coaches, and this consequently improves the impact of their workshops. According to Moon (2001), impact reflects “the manner in which courses can more directly and positively affect the practice in which people engage after they have attended a short course [or workshop]” (p. 5). Moreover, Moon argued that “unless a short course has impact on what a learner can and does do after it, there is little point in its existence” (p. 124).

A number of studies have explored the role of coach education as part of coaches’ learning (Cushion et al., 2010; Lyle, 2007; McCullick et al., 2009; Trudel et al., 2010). In a recent review of coach education effectiveness, Trudel et al. (2010) revealed a scarcity of studies examining the impact of coach education programs. Although some research has been conducted
to assess (a) small-scale programs (e.g., Coatsworth & Conroy, 2006; Smith, Smoll, & Cumming, 2007), (b) university-based programs (e.g., Jones & Turner, 2006; Knowles, Tyler, Gilbourne, & Eubank, 2006), and (c) large-scale programs (e.g., Campbell & Sullivan, 2005; Lee, Malete, & Feltz, 2002), the majority of these studies used measures of perception (e.g., efficacy and goal orientation) as indicators of the programs’ effectiveness. Few studies looked for changes to coaches’ practices after the intervention, and among those that did, only a couple reported findings supporting the programs’ impact (e.g., Hall, Jedlic, Munroe-Chandler, & Hall, 2007; Knowles et al., 2001). As a result, our understanding of the impact of coach education on coach learning, and ultimately on the coaching practice, remains limited.

In Canada, efforts continue to examine the design, delivery, and impact of the country’s newly restructured National Coaching Certification Program (NCCP). By transitioning from a knowledge-based approach to a competency-based approach in 2005, a paradigm shift took place (Werthner et al., 2012). Evidence of this shift is presented in the certification model, which consists of three streams: community, competition, and instruction (Coaching Association of Canada [CAC], 2011). These streams are divided into eight contexts designed specifically to recognize and accommodate the diverse task requirements of the coaches working with the athletes participating in each context (CAC, 2011). This paradigm shift also included a change in the program’s educational philosophy to become more aligned with a lifelong-learning approach (CAC, 2011). A problem-based approach is taken in which coach learners are engaged in an interactive process that cycles through the following steps: (a) an activity that helps the coach recognize his or her starting point in relation to the targeted skill or knowledge, (b) the discovery of new knowledge either through reading or listening to the learning facilitator, (c) an exchange of ideas with other coach learners in the group, (d) the application of new knowledge, and (e) the validation of this knowledge by way of a summary.

Within the competition stream, Werthner et al. (2012) used a constructivist perspective to examine the coach education program designed for the competition-development context. Interviews with the program director and key learning facilitators were conducted to understand better their perspective of the program’s paradigm shift. The findings revealed several challenges associated with adopting a constructivist approach to the large-scale program, such as (a) quality assurance, (b) managing different coach biographies, (c) creating effective evaluation for learning facilitators, and (d) facilitating appropriate content to enhance the impact of the program. In conclusion, Werthner et al. stressed the importance of examining impact:

It will be important to examine how the impact of the entire program is measured…. It might be wise to think of impact from two different perspectives—what the coaches can demonstrate upon completion of a particular module, and what they actually change in their own coaching practices. (p. 353)

In line with Werthner et al.’s (2012) suggestions, the purpose of this study was to (a) examine the impact of three NCCP competition-development modules on coach learning and coaching practices, and (b) to situate this episodic learning experience within a lifelong-learning perspective. The results will help coach educators understand the relevance of incorporating a
A lifelong-learning perspective in the design and implementation of future coach education courses.

Method

A case study approach (Stake, 2005) was used to examine the influence of the NCCP competition-development modules. Case study research is unique in that, to understand better the central phenomenon or issue, researchers “study some of its single cases—its sites or manifestations” (Stake, 2005, p. 6). The context and complexity of the phenomenon is revealed through the conversion and/or diversion of the various accounts and viewpoints of the cases (Creswell, 2007). Furthermore, using a case study approach to guide this study is appropriate due to its “interest in diversity of perception, even the multiple realities within which people live” (Stake, 2005, p. 38).

Participants

In line with Stake’s (2005) recommendation for selecting cases, the present study reports findings from 10 Canadian coaches (7 males, 3 females) representing five sports (flat water kayak, field hockey, ringette, sailing, and soccer). Coaches were selected due to their ability to provide diversity across contexts (i.e., modules; Stake, 2005). In total, three NCCP competition-development modules were represented: Coaching and Leading Effectively (CLE, n = 4), Psychology of Performance (PP, n = 4), and Managing Conflict (MC, n = 2). All participants were made aware of the voluntary nature of their participation, ensured anonymity and confidentiality, and signed a consent form approved by the researchers’ University Research Ethics Board. Additional details concerning the coaches’ biographies are presented with the findings to better situate the lifelong-learning perspective of the study.

Data Collection

All data in this study were collected using semistructured interview guides—one for each phase of the study. Each coach participated in three interviews: (a) before participating in a module, (b) upon completing the module, and (c) 3 months after the completion of the module. Guided by the coach-learning literature, the semistructured interview guides were designed to “focus respondents on situations they [the researchers] have observed…and have good descriptions of the situations to make responses meaningful” (Stake, 2005, pp. 31–32). More specifically, the first interview (M = 41.6 min; range = 33–45 min) was designed to examine the coaches’ biographies (i.e., formal education, athletic and coaching experiences, and sources of coaching knowledge). Sample questions used in the first interview included “How did you get involved in sport?” “How did you get involved in coaching?” and “How have you learned to coach?” The second interview (M = 34.3 min; range = 28–38 min) explored the learning that resulted from the coaches’ participation in the modules. Sample questions used in the second interview included “Tell me about your experiences in the module,” “What, if anything, did you learn from the module? Please provide a specific example,” and “What do you think you can take and apply with your athletes?” The third and final interview (M = 25.6 min; range = 19–29 min) examined (a) what changes to their coaching, if any, were made by the coaches in relation to their participation in the modules and (b) the learning situations they engaged in during the 3-
month period. Sample questions used in the third interview included “What, if anything, have you used or done differently as a result of the module?” and “What other ways have you been learning, or working on improving your coaching?” All interviews were conducted in person and audiotaped by the first author.

**Data Analysis**

Before data analysis, all interviews were transcribed verbatim and printed. Corresponding transcripts were mailed to each coach participant to acquire respondent validation (Maxwell, 2005). After one participant made minor edits to his transcripts, the data set was uploaded into NVivo (2010, version 9, Qualitative Solutions and Research, Doncaster, Victoria, Australia), software designed to assist in the coding and management of qualitative data. The first phase of analysis used Braun and Clarke’s (2006) thematic method. In short, this analysis comprises six phases: (a) becoming familiar with the data, (b) generating codes, (c) searching for themes, (d) reviewing the themes, (e) defining and naming themes, and (f) producing the report. The process of generating codes was inductive in nature, with the codes and subsequent themes emerging from the data.

In addition to a thematic analysis, Stake’s (2006) cross-case analysis was conducted by merging the findings from each individual case and searching for similarities and differences on attributes across the emergent themes. According to Stake, the primary purpose of the cross-case analysis is to provide an understanding of the aggregate that is “an interpretation across the cases” (p. 39). Efforts were made to find a balance between preserving some of the situationality of the findings of each participant and providing an overall picture of the phenomenon when reporting the data (Yin, 2009).

**Results**

The findings are divided into two sections corresponding to the study’s research objectives. The first section reports the modules’ impact on coach learning and perceived changes to coaching practices, as well as the findings describing factors that prevented change in coaching practices. The second section explores a lifelong-learning perspective by discussing the coaches’ biographies and the learning situations in which they engaged pre- and post-participation in one of three NCCP modules.

**Impact of Modules on Coach Learning and Coaching Practices**

### Module 1: Coaching and leading effectively.

The CLE module was attended by 4 coaches who, during their interview immediately after the 12-hr course, spoke of learning the importance of a variety of communication and leadership skills, including listening, clear and concise speaking, and effective facilitation. The sailing coach said:
It was useful how the course went over how to be a good presenter of skills…. You need confidence when speaking and approaching people; you also need to be a good listener and feel empathy at certain points, which I had not been doing in the past. (C1)

Elaborating on these sentiments, the ringette coach discussed learning about clear communication and empathetic listening:

We reviewed the difference between listening to someone and listening empathetically, and it was something I had never heard of before. I thought it was good that we had the chance to practice it in an isolated situation. (C4)

The same coach said the CLE module provided her with an opportunity to reflect on and manage her personality traits to enhance the effectiveness of her coaching:

I like to think that I am pretty calm and collected, but in the course I learned I am really not. The other day…I got pretty worked up. I see that I get very emotional about things and that’s something I need to work on. If I had the ‘I see, I hear, I feel’ strategy from the module it would have helped. It will now help moving forward. (C4)

A soccer coach who attended the module described how it helped him understand the value of proper facilitation when working with athletes: “At several clinics, the national coaches asked us to facilitate more, to step aside and let the players figure out how to handle certain situations on the field. This course certainly added to how we might do that well” (C2). He continued by stating, “There is a lot to learn, and coaches have to appreciate that you can learn new things about leadership that will help you and your athletes achieve your goals.”

All 4 coaches who attended the CLE module reported that their participation in the module had an impact on their coaching practices. In looking at some of the changes made by the coaches, all 4 coaches spoke of adopting a more structured leadership role, because they had learned the importance of leading their teams by example. The sailing coach explained:

When coaching younger kids, leading by example is the biggest thing I have taken away from that course, and I have actually implemented some of the techniques. When you work with younger kids it is important they see you having fun doing your job. It basically makes them have fun doing their job of training or competing. (C1)

Three coaches also described changes in their communication styles thanks to the various strategies and information presented in the module. The field hockey coach stated:

Communication is a huge part of explaining drills. I am now making sure the athletes understand the drills before they go out on the field. I think more about my communication and using different ways to explain…. I will show them on-field and say, ‘this is what we are doing’ or I will have a few people try it or do a walk through. (C3)

A soccer coach, who in his second interview had mentioned a particular communication strategy to deal with conflict, discussed applying it during his third interview:
I actually used ‘I see, I think, I feel, I need’ when I was talking with parents. I did not judge, I just said what it was and my communication was much clearer. This is something I will continue to implement in the future. (C2)

Finally, the ringette coach discussed a change in her feedback to athletes during training:

At past training camps, I would constantly be cueing them while they were trying to learn a new skill. I remembered from the module that might not be the most effective way to help them learn. I still do it sometimes, but I have become much more aware of it and I am starting to phase that out, and give less feedback so they think more. (C4)

**Module 2: Psychology of performance.**

Four coaches attended the PP module, which consisted of a 7-hr course. In reflecting on what they had learned from the module, all 4 coaches spoke of proper goal setting, creating more detailed race/competition plans, effective debriefing with their athletes after competition, and a better understanding of the concept of focus. One of the kayak coaches commented:

My post-competition review of goals was not getting done well enough. Setting goals for long-term and for specific regattas was being done, but the review of those goals immediately afterwards was probably lacking. I realized that from the discussions we were having in the module, and I started thinking ‘I should probably correct that.’ (C7)

Another kayak coach talked about the debriefing strategies she learned:

Debriefing is about getting the athlete to talk a little bit more after the race—what was good, what could they have improved upon...and making sure not to ask yes or no questions…. You have to probe a little bit. It is important to have a discussion and get them to reflect on their race so that you can work on certain aspects. (C8)

A third kayak coach discussed learning about the importance of creating and maintaining effective race plans. Before the PP module, he admitted that he would frequently encourage his athletes to adjust their race plans on the day of competition. Through discussion with the module’s facilitator and other coach participants, he became aware of the danger of changing a race plan during a competition: “We discussed that you can never make good decisions when you are exhausted or under stress, so changing a plan during competition is likely not going to be a good idea” (C5).

A better understanding of the concept of focus was touched on by all 4 coaches. One coach described a strategy she learned to help her athletes manage their focus in practice:

If an athlete comes to practice having a really bad day, rather than letting her talk about it and have it affect her training, you can get her to either write it down on a piece of paper and physically put it in a box, or have her visualize putting it away. (C7)
Finally, a soccer coach who attended the module was unsure how much she learned until she had the opportunity to reflect during her interview:

We discussed debriefing and how you want to figure out ‘what, when, where and how’ of the performance.... I also remember talking about narrow focus and being focused internally. I would like to talk to the players to make sure they are using a narrow focus. Well, I guess I actually learned a lot. (C6)

Among the 4 coaches who participated in the PP module, two of the coaches described making changes to their coaching practices as a result of the module. More specifically, both coaches discussed implementing more structured debriefing with their athletes following practice and competition: “After every race, we debrief each of the athletes. We get them to talk about their races.... The athletes are starting to get into the habit now and the parents have actually noticed it as well” (C8). Incorporating the concepts of focus and awareness as part of being more effective in communicating with athletes was also mentioned by a kayak coach: “Instead of telling them their top arm needs to be straight or they need to rotate, I will ask them how it feels and to go through the motions. I want them to know what muscles they feel” (C7).

**Module 3: Managing conflict.**

The MC module was a 4-hr evening course and was attended by 2 of the 10 coaches. Both coaches reported learning about the importance of using proper communication strategies to help prevent and manage conflict in sport. For example, a soccer coach explained that he learned the importance of concise communication and effective listening when dealing with conflict: “We need to keep it simple especially when dealing with a conflict. People tend to over-talk in a conflict situation. We should keep it short, concise and to the point, and always listen” (C9). The other coach, also working within the context of youth soccer, explained a specific communication strategy he learned from a fellow coach participant during a group discussion: “A coach introduced us to something called the ‘WIN’ concept. When you are talking to someone in a conflict situation you can say, ‘When I hear you, I feel this or think this, I Need you to do this’ [emphasis added]” (C10). In addition to learning new material, both coaches claimed that the module also confirmed aspects of coaching they already knew:

I had a gut feeling about a lot of the content presented, so it is good to see that there is some research behind it. It appears that I have been on the right course, and it was good to learn about some of the strategies for dealing with people in a conflict situation. (C10)

Not only did both coaches report learning from the MC module, they also indicated that the module had an impact on their coaching practices. During the interview that took place 3 months after their participation in the module, both coaches noted an improvement in the application of conflict prevention strategies. One coach remarked:

I was pretty familiar with the information beforehand, but when I began preparing for the season, I incorporated some strategies on conflict prevention. We had a preseason code of...
conduct meeting, and I made a note of my body language and eye contact. All of those things I think I do okay, but the focus on it in the course reminded me that these things are very important in preventing conflict. (C9)

The other coach described a specific situation in which he applied one of the conflict prevention strategies he learned from his experience in the MC module 3 months earlier:

There was an instance where a player did not make the team, and a complaint went to the technical director and the head coach and I was asked to respond. One of the things that I used, that I learned from the course, was to hold off a bit before responding. Some of the comments made by the parent got me upset. I was ready to fire off a reply, but I held off and replied the next day with a more sober, thought-out, and controlled response. Rather than escalating the conflict, I learned to take the time to present a response that focused on the facts of the situation and not on the emotions. (C10)

Factors preventing impact.

In the third interview, conducted 3 months after the modules, 2 coaches, both participants in the PP module, reported no change in their coaching practices. The four factors that prevented change were (a) time constraints, (b) lack of understanding a new concept, (c) wrong time in the season to introduce a new concept, and (d) knowledge that was incongruous with the coaching context. For example, a kayak coach discussed how time constraints interfered with his ability to integrate focus and debriefing strategies: “I have time constraints because the athletes I work with are busy adults with demanding jobs, so organizing a time to debrief is very difficult” (C5). He also discussed having difficulty understanding the concept of focus: “We talked a lot about focus and the benefits of using it with our athletes, but I am still not sure I fully understand what exactly it is and how to use it” (C5). The soccer coach explained that, although he felt the strategies learned in the module were beneficial, it was the wrong time of season to implement them with his athletes:

I have not used the visualization material yet because I have not figured out how I want to incorporate it. I do not want to throw too many curve balls during the season. I am trying to think about how to set it up in the fall…so by the time we get to the competitive season it is not something new, it is something routine to them. (C6)

This coach also spoke of how concepts within the PP module were not applicable to his coaching context because his role was to help the players improve their technical skills: “I am unable to apply long-term goal setting with the players. Kids only come to train for an hour a week, and our focus is mostly based upon getting as much technique done as possible” (C6).

A Lifelong-Learning Perspective

To situate the impact of the coach education modules within a lifelong-learning perspective, the findings below present the coaches’ biographies and the learning situations engaged in before and during the 3-month period after the completion of the modules.
lifelong-learning perspective emphasizes that a coach’s biography will influence and be influenced by how he or she approaches a particular coaching module and any subsequent learning situations.

Coaches’ biographies.

The group of 10 coach participants ranged in age from 21 to 45 years old. Five coaches were fulltime paid coaches, whereas five were unpaid volunteer coaches with careers varying from an elementary school teacher to a federal government employee. When asked to discuss how and why they became involved in coaching, the coaches provided a number of different reasons. Four coaches started coaching because of their child’s athletic involvement in sport. As one coach said, “I started coaching when my oldest son started playing soccer” (C2). Another 4 coaches revealed they began coaching while still involved in sport as athletes. For example, the field hockey coach was asked to coach a local high school team while she was still a member of the national team. The 2 remaining coaches were inspired to coach because of great coaches they had worked with when they were athletes. Although the coaches varied with respect to their initiation to coaching, all 10 coaches had been athletes, with participation ranging from recreational and high school sport to competing at the provincial and national levels. At the time of being interviewed, 5 of the coaches continued to participate in sport, albeit at varying levels. Finally, the coaches’ academic education varied substantially, ranging from a high school diploma to a master’s degree. The majority of the coaches possessed an undergraduate degree in disciplines such as electrical engineering, human kinetics, and psychology. In terms of coaching education, all but one coach had completed at least one NCCP course. See Table 1 for additional information.

Pre- and post-module learning situations.

Before and three months after their participation in one of the three modules, the coaches were asked to reflect on the various learning situations in which they participated. The coaches described a wide range of mediated, unmediated, and internal learning situations. First, in terms of mediated learning situations, nine coaches who had previously attended at least one NCCP course spoke of the value and learning resulting from these courses. For example, a kayak coach provided a detailed account of the learning he felt had taken place as the result of his participation in multiple NCCP courses:

At the beginning you are mostly learning drills…. You then learn how to deal with parents and the role of a coach as a leader, a teacher, and a counselor. When you are coaching, you then start thinking about the ways you speak to the kids, and how you approach and prepare for each training session. (C7)
In addition to NCCP courses, six coaches discussed the importance of their involvement in various coaching clinics offered by their leagues and/or sport organisations. In fact, three coaches described these sessions as important learning experiences. For example, one soccer coach explained: “These clinics introduce coaches to basic fundamentals of soccer and even more importantly show us the best way to teach these skills to the kids” (C9). He elaborated on a specific drill he learned from one of the clinics: “I learned a great game warm-up from one of these sessions that teaches the kids to open up and have their body always facing the field.” A second soccer coach described, “At some of the sessions, elite coaches would coach a team in front of you and explain what they were doing, why they were doing it, and the way they were doing it. These sessions were pretty helpful” (C2). A third soccer coach spoke of participating in clinics offered by Soccer Canada, indicating that he learned that “it’s important to keep things simple in terms of explaining the drills and evaluating performances” (C10).

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Table 1. Coach biographies.

<table>
<thead>
<tr>
<th>Coach</th>
<th>Gender</th>
<th>Age</th>
<th>Athletic Experience</th>
<th>Career</th>
<th>Years Coaching</th>
<th>Coaching Context</th>
<th>Module Attended</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>Male</td>
<td>23</td>
<td>National and international sailing</td>
<td>Provincial sailing coach</td>
<td>3</td>
<td>Paid provincial sailing coach</td>
<td>Coaching and Leading Effectively</td>
</tr>
<tr>
<td>C2</td>
<td>Male</td>
<td>45</td>
<td>Recreational soccer</td>
<td>Hotel server</td>
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<td>Volunteer recreational soccer coach</td>
<td>Coaching and Leading Effectively</td>
</tr>
<tr>
<td>C3</td>
<td>Female</td>
<td>43</td>
<td>National and international field hockey</td>
<td>Federal Government</td>
<td>18</td>
<td>Volunteer provincial field hockey coach</td>
<td>Coaching and Leading Effectively</td>
</tr>
<tr>
<td>C4</td>
<td>Female</td>
<td>29</td>
<td>National and international ringette and varsity rugby</td>
<td>School teacher</td>
<td>14</td>
<td>Volunteer Canada Games ringette coach</td>
<td>Coaching and Leading Effectively</td>
</tr>
<tr>
<td>C5</td>
<td>Male</td>
<td>21</td>
<td>National kayak</td>
<td>Canoe/kayak club coach and student</td>
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<td>Paid novice masters kayak coach</td>
<td>Psychology of Performance</td>
</tr>
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<td>32</td>
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<td>Soccer coach</td>
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<td>Paid youth soccer coach</td>
<td>Psychology of Performance</td>
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<tr>
<td>C8</td>
<td>Female</td>
<td>25</td>
<td>National kayak</td>
<td>Canoe/kayak club coach</td>
<td>5</td>
<td>Paid youth kayak coach</td>
<td>Psychology of Performance</td>
</tr>
<tr>
<td>C9</td>
<td>Male</td>
<td>45</td>
<td>High School football and recreational soccer</td>
<td>Retail Associate</td>
<td>4</td>
<td>Volunteer youth soccer coach</td>
<td>Managing Conflict</td>
</tr>
<tr>
<td>C10</td>
<td>Male</td>
<td>45</td>
<td>High School basketball and recreational soccer</td>
<td>Project Manager</td>
<td>5</td>
<td>Volunteer youth and old timers soccer coach</td>
<td>Managing Conflict</td>
</tr>
</tbody>
</table>
Second, in terms of unmediated learning situations, the coaches spoke of observing and interacting with coaches, receiving informal mentoring, and consulting resource material. Specifically, all ten coaches said that observing and interacting with other coaches played an integral role in their learning. For example, one of the soccer coaches commented, “You need to spend time learning from other coaches…to practice with other coaches, and listen to what they have to say” (C6). A kayak coach explained a key coaching lesson she learned by observing some of her colleagues:

I have seen coaches push athletes a lot. They would identify specific athletes they thought could improve their technique and push them during practice all the time,… The lesson for me has been identifying what your athlete can handle and listening to the athlete. (C8)

Another kayak coach spoke of seeking advice from other coaches regarding sport-specific information: “I often ask other coaches for drills and ways to correct technical issues, and the drills they provide often seem to work better than the ones I was using” (C7).

Informal mentoring also emerged as a popular unmediated learning situation for the coaches. Eight coaches indicated they had learned from an informal mentor at some point in their coaching careers. For example, a kayak coach explained how his father has mentored him: “My dad is a mentor for me. He was a huge coaching presence when I was first developing as a coach, and he set the model for the style of coaching that I have developed” (C5). A ringette coach spoke of having multiple mentors:

I have had a few mentors. One was a coach during my teenage years who taught me a lot about developing confidence in myself. Another coach has been a positive influence in helping me by talking through different coaching scenarios…. I have developed the confidence to make decisions on my own. (C4)

Five coaches spoke of utilizing various electronic and print resource materials to help their coaching. For example, a soccer coach described the value of the NCCP course material:

I have taken three modules, plan to complete all six, but in the meantime I have been going back to the course books and reviewing the coaching materials that I have and there is a lot. It is adding to my tool box of coaching resources. (C6)

Finally, although less prevalent, internal learning situations were mentioned by four coaches as being an important source of learning. These coaches spoke of reflecting on their experiences, at a particular moment in time, and by doing so reorganized how they thought about and understood their coaching. For example, a kayak coach commented:

Some of my coaching is influenced by reflecting on my experience as an athlete and what I went through. For example, when I’m writing a program, I can go through and read the manual on how much rest is recommended, but I almost always reflect on how it worked for me. I can put myself in that situation doing that workout and project how that is actually going to end up feeling on the water and make adjustments from there. (C5)
The ringette coach talked about her process of reflecting on the values instilled by influential individuals:

I have grown up with good leaders around me. I had some good teachers and coaches who were positive influences on me. I also have had not so good coaches…. I have taken the important lessons out of those experiences and filtered out the bad stuff. (C4)

Finally, a kayak coach described her process of learning by looking back on the season:

Having gone through the trial races this summer, I will approach it differently next year. I will get it set up a lot earlier, and I realize now, having a large pool of athletes for selection does not work that well. There were definitely a few lessons about timing that I took away for next year and for the future. (C8)

Discussion

The purpose of this study was to examine the impact of three NCCP competition-development modules on coach learning and coaching practices, and to situate this episodic learning experience within a lifelong-learning perspective. Using a case study approach, three sets of in-depth interviews were conducted with 10 coaches taking part in one of three competition-development modules (Coaching and Leading Effectively, Managing Conflict, and Performance Psychology). The findings of this study indicate that the modules did have an impact on all 10 coaches’ learning, involving either the acquisition of new knowledge and/or confirmation of current coaching practices. The coaches spoke of the material they found useful and how they became more self-aware and conscious of their own coaching practice. Although similarities were reported with respect to what the coaches learned from each module, what was meaningful for each coach varied in part due to his or her individual cognitive structures.biographies (Jarvis, 2009; Moon, 2001). As a result, coach educators have the challenging task of delivering standardized content in a way that effectively meets the needs of coaches with many different biographies.

While previous coaching research has questioned the value of formal coach education in relation to coach learning (Cushion et al., 2003; Mallett, Trudel, Lyle, & Rynne, 2009; Trudel et al., 2010), the findings in this study are encouraging because they demonstrate that a coach education program can have an impact when it takes a lifelong-learning perspective—an approach that focuses on learning and recognizes that the responsibility for learning rests with the learner (Jarvis, 2009).

Eight of the 10 coaches made perceived changes to their coaching practice as a result of completing one of the modules and reported that aspects of the module’s material were helpful within their coaching context. They spoke specifically of how they incorporated into their coaching practice various skills learned in the modules, such as debriefing after a performance, or ensuring their communication of training strategies were well understood by their athletes. Adopting newly developed skills and knowledge indicates that a learner is working with
meaning, thereby moving toward a deep approach to learning (Moon, 1999). Indeed, the NCCP competition-development modules appear to be having a positive impact on what coaches do, which according to Moon (2001) should be the prime purpose of short courses and workshops. It is also important to situate the impact of these particular coach education modules within the coaches’ lifelong-learning process. The findings of this study support the literature on coach learning that has emphasized the multitude of learning situations—mediated, unmediated, and internal—that coaches engage in. All the coaches experienced numerous learning situations over the course of their coaching careers, before coming to one of the three modules, as well as within the 3 months after the module. These findings lend support to the earlier research on sources of knowledge (e.g., Erickson, et al., 2007; Lemyre, et al., 2007; Werthner & Trudel, 2009). Although all three learning situations were reported by the coaches, unmediated situations (e.g., interacting with other coaches) were most prevalent. Internal learning situations were mentioned, although not as frequently. In line with previous research, it should come as no surprise that unmediated situations were most popular considering that the amount of time coaches spend in formal educational contexts (e.g., NCCP) reflects only a small percentage of the time they are involved in coaching (Mallett et al., 2009; Trudel, et al., 2010). Moreover, internal learning situations have been shown to be difficult to articulate or identify by coaches (Werthner & Trudel, 2009) and to integrate into their coaching practices (Knowles, Borrie, & Telfer, 2005; Gilbert & Trudel, 2001).

Another key finding reflects the importance of considering coaches’ biographies when examining how coaches learn and determining the impact of a coach education program. As Jarvis (2006) stated “learners bring their lifetime experience to the learning situation” (p. 73). The previous coaching experiences of the coaches in this study ranged from recreational youth sport to coaching at the Pan-American Championships. The NCCP competition-development level is intended for coaches who are coaching athletes at the provincial or emerging national level and includes built-in discussion portions based on a problem-based or competency-based design. Moon (2001) explained that discussion is “one of the most widely used processes in education but is at the same time one of the most difficult of teaching procedures to use effectively” (p. 146). With such a wide range of coaching experience, it should come as no surprise that what the coaches felt they learned varied considerably. Some of the discussions would not fit well for the recreation-level coach.

Despite the range of experience and varied perceptions, the majority of coaches in these three modules found meaningful learning and turned that initial learning into a changed practice. One possible explanation may be that the learning facilitator was effective in managing such a disparate group of coaches and enabled the coaches to learn through discussion despite their different coaching experiences. Indeed this might be a good example of a combination of mediated and unmediated learning situations. Research on the effectiveness of learning facilitators in formal coach education will certainly be an important future research endeavor. By taking a lifelong-learning approach, the redesign of this large-scale coach education program recognized the role of coaches’ biographies and coaching contexts in the learning process, and this may be another reason for its fruitful impact on eight of the coaches.
Finally, it is important to note that the findings also indicated that two of the coaches, who attended the PP module, reported no change to their coaching as a result of the module, at least within the three-month time frame. A variety of reasons were offered, such as time constraints, a lack of understanding of new concepts, wrong time of season to introduce change, and information that had little application to their current coaching situation. Jarvis (2006) stated that learning takes time. Integrating new knowledge from a particular module may take longer than the three months allowed in the present study. Furthermore, the coaches who reported not understanding a specific concept, such as focus, may not have had enough time in the module to experience the level of in-depth discussion and reflection necessary for deep understanding. Moon (2001) noted that the skill of reflection deepens learning, and yet not all participants in a course may actually know how to reflect. Teaching the skill of reflection as well as the content of a module may not be possible in the time allowed. Although a reflective activity called “How am I doing,” which encourages coaches to reflect on their learning in the workshop, is built into the modules, it is possible that the learning facilitator did not have ample time to provide an opportunity for the participants to thoroughly complete this activity. It is also possible, given that both coaches were attending the Psychology of Performance module, that the content of this module is more difficult to implement in the short term of three months without some deeper reflection.

Conclusion

This study demonstrates that a formal large-scale coach education program can have an impact on coaches’ learning in terms of both changed coaching practice and a greater self-awareness. It is an encouraging finding and in part is due, we would suggest, to the program taking a constructivist approach to learning, in which the learning facilitators take the coach learners through the steps of the problem-based approach (Jones & Turner, 2006), by allowing the coaches to reflect, question, and discuss real coaching situations that are connected to their practices. Nevertheless, we continue to see that learning is a complex affair, as two coaches, for various reasons and within the time frame of the current study, did not change their coaching practice.

We also clearly see that learning for all the coaches did not start and stop with the modules but is a lifelong endeavour. As Jarvis (2006) noted, the notion of lifelong learning advocates that individuals learn through a variety of learning situations across their lifetime. Each of the coaches in the present study expressed an interest in continuing to learn. As one of the soccer coaches stated: “I think that learning is consistently an ongoing process, and the modules help. I am looking to learn any chance I get” (C2). Taking a lifelong-learning perspective may not make coaches’ development any easier, but it can improve the impact of short, formal, coach education workshops and encourage coaches to be in a continual state of becoming better coaches.
References


Werthner, P., & Trudel, P. (2006). A new theoretical perspective for understanding how coaches...


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