

Exploiting Social Learning as a Legitimate Tool in Coach Development

By

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A thesis submitted in partial fulfilment for the requirements of the degree of Doctor of Philosophy at the University of Central Lancashire

January 2015

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I declare that while registered as a candidate for the research degree, I have not been a registered candidate or enrolled student for another award of the University or other academic or professional institution.

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Abstract

The aim of this thesis was to contribute to current sport coaching research, knowledge and practice on how socially mediated learning activities can influence both coach behaviour and learning for better and for worse, as well as how coach developers might better exploit them as a legitimate tool in coach development provision. Accordingly, Chapter 2 provided an overview of social learning approaches in coach development and discussed potential implications of their use. In the first of the empirical chapters, Chapter 3 revealed that the coaching qualities and characteristics which the social "milieu" might encourage coaches to aspire to and pursue were not comprehensive across all areas and that, with respect to the characteristics coaches might "need" to develop, they might not necessarily be aware of or pick up during informal learning situations. Chapter 4 confirmed that coaches' preferred, and mostly acquired, coaching knowledge from informal learning activities, especially when these permitted social interaction. However, critical justification for and application of, acquired knowledge was largely absent. Having identified a clear need for practical tools and structures that might better enable coaches to recognise and deal with the potentially mixed influences of the social milieu on informal coach learning, Chapters 5 and 6 explored the use of online blogs as a potential tool to support learning in coach education pedagogy. Results suggested that structured group blogs were a useful tool for facilitating and perhaps encouraging a sufficiently critical approach to social learning. Furthermore, Chapter 7 revealed that blogs were perceived by coaches as being a useful learning tool while appearing to meet coaches' preferences for less formal modes of learning. In closing, Chapter 8 summarised the findings and implications of this thesis, with particular focus directed towards their potential applied impact on coach development provision.

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Acknowledgements

First and foremost, my deepest thanks and appreciation go to my parents for their constant and unconditional love and support. I am also indebted to the rest of my family, especially my grandparents, for their inspiration, encouragement, and care over the years – I know this work will make them very proud. I would like to thank Professor Dave Collins for his invaluable mentorship, wise advice, and exemplary guidance in completing this PhD program. During the last 3 years, Dave has also played an instrumental role in kindling an intellectual curiosity and thirst for knowledge that goes beyond the confines of academia. I'm sure he won't miss the late night phone calls and impatient nudges for feedback. Additional thanks are also extended to my office mate, Clint Godfrey. Our often-rambling discussions about all things life and philosophy have provided much mental stimulation as we have embarked on our research journeys. Last, but certainly not least, I would like to express my heartfelt thanks and appreciation to Hollie for her unflagging patience, constant understanding, and gourmet cooking (!), especially during those moments of discouragement and frustration. The writing of this thesis would have been much more difficult without her, and I'm sure she now relishes the thought of a PhD-free Norfy.

CHAPTER 1 - INTRODUCTION

1.1 The Current Picture of Coach Education and Development

The continued inclusion of sport as an integral part of government policy (e.g., DCMS, 2012, 2014) and the subsequent increase in the scale and demand for sport coaching (McCullick, Belcher, & Schempp, 2005) has progressed the examination of coaching as an emerging professional area of activity, with an associated desire to raise vocational coaching standards (Gilbert & Trudel, 1999; Lyle & Cushion, 2010; Taylor & Garrat, 2010; Taylor & McEwan, 2012). In response, large-scale coach education programmes have been developed in many countries to help prepare coaches for their role (Nelson & Cushion, 2006) and, once qualified, to enhance their further development. These sport-specific courses operate at various levels, include well defined content based on role descriptors (e.g., assistant coach, club coach, advanced coach) and typically take a competency-based training approach to coach development (Wright, Trudel, & Culver, 2007). Thus, for coaches to be deemed competent and ready to coach, they must be able to demonstrate a minimum level of technical proficiency and instructional aptitude in a prescribed manner (cf. Abraham & Collins, 1998; Cushion, Armour, & Jones, 2003).

Consequently, and reflecting this central agenda, a great deal of formal coach education consists of a "train and certify" approach (Trudel & Gilbert, 2006) where the program developers direct what is to be learned and, it is assumed, coaches are able to acquire the concepts and skills they require (Mallett, Trudel, Lyle, & Rynne, 2009) before transferring and applying them effectively to the context in which they practice (Gilbert, Gallimore, & Trudel, 2009). Given that coaching certification is predominantly obtained after successful completion of a formal coach education programme, it is logical to assume that this source of learning would be the most impactful influence on coach behaviour. However, the limited academic literature available has been highly critical of such courses and suggests that coaches' needs are not being met with the current system. In fact, formal coach education is said to have a relatively low impact on coach learning (Cushion et al., 2010; Gould, Gianinni, Krane, & Hodge, 1990; Jones, Armour, & Potrac, 2003; Mallett et al., 2009; Sáiz, Calvo, & Ibáñez Godoy, 2009; Saury & Durand, 1998).

Instead, coaches appear to resist formal educational opportunities and certifications, with pursuance of training reflecting a preference for informal and nonformal learning experiences including: (a) self-directed learning experiences (Irwin, Hanton, & Kerwin, 2004; Nelson, Cushion, & Potrac, 2006; Reade, Rodgers, & Spriggs, 2008; Wright et al., 2007); (b) past athletic experiences (Stewart & Sweet, 1992; Cushion et al., 2003; Cushion, 2011a); and (c) coaching experiences, observations, and interactions with other coaches (Abraham, Collins, & Martindale, 2006; Cassidy & Rossi, 2006; Gould et al., 1990; Jones et al., 2003). Furthermore, a variety of coaches' self-perceived limitations of, and resistance to, current formal provision have been outlined in existing research. These include financial and logistical concerns such as cost, location and timing (Trudel & Gilbert, 2006; Turner & Nelson, 2009; Vargas-Tonsing, 2007), a lack of context-specific relevance to course content (Cassidy, Jones, & Potrac, 2004; Hughes, 2005) together with negative experiences in terms of the consistency and quality of delivery, and a perceived lack of support from coach educators and other agencies (Gilbert & Trudel, 1999; McCallister, Blinde, & Kolenbrander, 2000).

As a result, it appears that a large body of coaches are not influenced, or at least not willing to be influenced to any significant degree, by formal coach education and yet, are still deemed "competent" practitioners (Cushion, 2011a) by this same "questionable system." Accordingly, there is an increasing acceptance within the coaching literature that the majority of coach development, *at least as perceived by the* *recipients*, occurs outside of formal educational settings (Cushion et al., 2003; Nelson et al., 2006). In tandem, the literature suggests that coach development is complex, largely individualised, and in many cases serendipitous (Abraham et al., 2006; Cushion et al., 2003; Cushion et al., 2010). In short, the system does not seem to be meeting the needs it was designed to meet!

1.2 The Social Side of Coach Development

Perhaps as a result of coaches' apparent preference for informal development, there has been an increasing focus on the social aspects of learning within the coaching literature. Most commonly, this entails "social constructivist" perspectives of coach learning which purport that an individual "constructs" knowledge through the direct experience of social practice and their interactions with others (Butterworth, 1992) rather than as a direct result of a formal educational process. For example, the importance of coach mentoring is frequently discussed (Cushion, 2006; Nash, 2003) and mentoring schemes are commonly established by National Governing Bodies of sport (NGBs) outside of formal learning settings (e.g., in the UK, "FA Club Mentors," 2014; UK Sport, 2013). Similarly, Lave and Wenger's (1991) concept of learning within a "Community of Practice" (CoP) is commonly cited as a mode of facilitating coach development (e.g., Callary, 2013; Cassidy, Potrac, & McKenzie, 2006; Culver & Trudel, 2006; Culver, Trudel, & Werthner, 2009). Exponents of such approaches argue that, through social interaction, real-world practice and participation within CoP, learners are better able to construct meaning in practical ways so that knowledge may be more effectively applied, unconstrained by the more formal coach development settings (Gilbert & Trudel, 2005). Furthermore, recent developments in Web 2.0 tools and technologies (e.g., blogs, social networks, wikis) have led to the suggestion that the interaction and sharing characteristic of social learning approaches such as CoPs can effectively take place "online," removing many of the traditional barriers to accessing coach education (Dixon, Lee, & Ghaye, 2013; Piggot, 2013).

Undeniably, these social learning approaches provide a great opportunity for coach development. However, more careful investigation is needed on precisely *how* these concepts can influence both coach behaviour and learning for better (or for worse), as well as how coach developers might exploit social learning as a legitimate tool in coach development provision. Clearly, social learning approaches, if managed incorrectly, could pose a significant threat to effective coach development and may simply serve to magnify and perpetuate many of the issues that coach developers should endeavour to nullify. Furthermore, although formal coach education has its critics, these views are often self-perceived and yet to be checked against any accepted criteria of evaluation. On the basis of these contentions, this thesis will suggest that formal coach education may still have a vital role to play in the professionalisation agenda, all be it in a different guise to that in which it is currently found or within which it is currently framed. Such a line of enquiry should strengthen the efficacy of both formal, and informal, social learning-based initiatives in coach development provision by providing coach developers with empirical evidence and practical advice for their implementation.

1.3 Objectives of the Thesis

Reflecting the concerns discussed in the previous section, and to address both the theoretical and applied need for further research into social learning in coach development, the objectives of this thesis were fivefold:

- 1. To identify what the social "milieu" in coaching currently encourages coaches to aspire to, focus on and learn.
- To check these assertions and identify any mismatches between coaches' learning preferences, their perceived learning needs, and their recent knowledge acquisition experiences.

- 3. To explore the use of online blogs for facilitating and supporting a critically reflective approach to knowledge acquisition while meeting coaches' preferences for informal, socially mediated learning activities.
- 4. To refine and improve the use of online blogs in order to improve levels of reflection and encourage the emergence of fully functioning CoPs.
- To explore coaches' perceptions of their engagement in, and experiences of, online blogging for reflection and learning.

1.4 Methodological Considerations

The formulating and addressing of the aforementioned research objectives carried a very high perceptual component; as such, there was an immediate tendency to align myself with the basic ontological principle of constructivism, whereby social phenomena are said to be socially constructed and in a constant state of revision (Bryman, 2008). Similarly, as the objectives of the research involved attempts to understand and interpret how coaches viewed and constructed the world around them (Schwandt, 1994), I adopted an interpretive epistemological approach to the research design, whereby the utilisation of a qualitative methodology was perhaps inevitable in order to sufficiently capture and examine coaches' underlying experiences, feelings, and attitudes (Glesne, 1999).

In making these methodological decisions, it is worth recognising the generic limitations of the approach. For example, qualitative research often relies on smaller sample sizes to provide rich and subjective data, whereby depth is sought over breadth, and it is difficult to condense or reduce subjective interpretations to a "norm" (Glesne, 1999; Whittemore, Chase, & Mandle, 2001). As such, whilst the orientation of this thesis is predominantly qualitative, I was keen to use a mixed methods approach where possible. For example, in at least one of the studies I was keen to target a larger number of participants in order to see the extent to which I could make more generalisable points. In addition, I was acutely aware that I was the main instrument of qualitative research during most of the studies; making observations, asking questions, interpreting responses. Therefore, I was keen to ensure that I maintained a reflexive approach throughout the nuances of the research process (Kuper, Lingard, & Levinson, 2008); in particular, I endeavoured to acknowledge and keep "front and centre" my professional and personal background as a coach and coach educator in order to identify and understand any potential biases that could affect the inquiry and the context of the findings (Hammersley & Atkinson, 1995; Patton, 2002). Specific methodological issues with the specific studies are highlighted in the relevant chapters.

1.5 Overview of the Thesis

This thesis comprises eight chapters, five of which describe empirical research studies. These studies address each of the thesis' objectives in a systematic fashion. Chapter 2 begins by providing an overview and discussion of social learning approaches in coach development, with particular focus on the CoP framework. Specifically, implications of informal, socially mediated learning in coach development are provided, and the rationale for the direction of travel and methodology of the succeeding chapters in this thesis was established.

To address the first thesis objective, Chapter 3 describes a two-part qualitative study that explored the constructs that a sample of British sub-elite coaches used to identify coaching quality in their own self-selected role model coaches. An inductive content analysis of field notes and transcribed conversations with sub-elite coaches, as well as three separate focus group interviews, was conducted. Results suggested that, when identifying coaching prowess, coaches appeared to focus on the outward facing behaviours and personality characteristics of their role model coach as opposed to coaching technique and *how* they worked. Consequently, a central tenet of this chapter was that the coaching qualities and characteristics which the social milieu might

encourage coaches to aspire to and pursue were not comprehensive across all areas. Similarly, it was apparent that, with regard to the characteristics that coaches might "need" to develop, they might not necessarily be aware of or pick up during informal learning situations within the social milieu.

To address the thesis' second objective, Chapter 4 presents a study that sought to obtain coaches' perceptions of the acquisition and application of coaching knowledge on a larger scale. Descriptive and inductive analysis of online survey responses revealed that coaches' preferred, and mostly acquired, coaching knowledge from informal learning activities, especially when these permitted social interaction. However, critical justification for and application of, acquired knowledge was largely absent. It appeared, therefore, that, before social learning activities such as CoPs are placed at the centre of formalised coach development provision, practical tools and structures are needed that might better enable coaches to recognise and deal with the potentially mixed influences of the social milieu on coach learning. Accordingly, Chapter 5 addressed Objective 3 by exploring the use of individually maintained online blogs in supporting reflection and CoP. Category and content analysis of a cohort of student-coaches' blogs revealed that bloggers exhibited a positive trajectory toward higher order thinking and blogs were an effective platform for supporting tutor-student interaction. However, despite the peer discourse features of blogs, collaborative reflection was conspicuous by its absence and a functioning online CoP did not emerge.

Having established the potential of blogging in coach education pedagogy, Chapter 6 satisfies Objective 4 and evaluates the implementation and impact of several small group-based blogs. Finally, the thesis' last objective is satisfied in Chapter 7 and data from semi-structured focus group interviews are interpreted in order to explore group blog users' perceptions of their experiences when utilising group blogs for reflection and learning. In Chapter 8, the thesis is brought to a conclusion and the findings are evaluated and discussed with an emphasis on their potential applied impact on current and future coach development initiatives. In addition, recommendations are put forward for future research.

During the construction of this thesis, the research papers listed on page x emanated from the writing process and were submitted for peer review. To ensure consistency with the typical formatting requirement of research publications in the sports coaching field, this thesis has been written following the guidelines of the American Psychological Association (6^{th} Edition).

CHAPTER 2 - COMMUNITIES OF PRACTICE, SOCIAL LEARNING AND NETWORKS: EXPLOITING THE SOCIAL SIDE OF COACH DEVELOPMENT

2.1 Introduction

As identified in Chapter 1, there has been an increasing focus on the social aspects of coach learning in recent years. Undeniably, coaches are social beings operating in a social environment (Jones, Armour, & Potrac, 2002) and, for that reason, it is clear that knowledge is "socially constituted, socially mediated, and open ended" (Cushion et al., 2003, p. 221). Crucially however, although to date there has been a significant amount of work that has examined the social complexities of coaching practice itself (e.g., Bowes & Jones, 2006; Cushion, Armour, & Jones, 2006; Potrac & Cassidy, 2006), insufficient attention has been paid to the fundamental social dimensions of coach development. Thus, whilst it may be recognised and even, in part, understood that learning to coach is a "socially mediated" activity, the insight and guidelines, which could enable the optimisation and exploitation of the process, is currently lacking. In recognising this substantial research-practice gap, the overarching aim of this chapter is to provide an overview and discussion of social learning approaches in coach development. Specifically, the potential implications of informal, socially mediated learning in coach development will be provided, with a particular focus on CoPs. In doing so, the chapter aims to establish the rationale for the subsequent direction of travel in the succeeding chapters of this thesis.

2.2 Underpinning Theory: The Social Side of Learning

Traditionally, coach education has been underpinned by behavioural and cognitive educational perspectives and psychological conceptions of learning (Cushion et al., 2010). However, both the behaviourist and cognitivist approaches to learning fail to attend fully to social meaning and, it is suggested as an almost inevitable

consequence, possess an inherent lack of social criticality (Brockbank & McGill, 2007; Cushion et al., 2003). These approaches often seem to perceive knowledge to be neutral and value free, existing in a social vacuum detached from the wider world (Cushion et al., 2003; Jarvis, 2004). In effect, they view coaches as empty vessels waiting to be filled with coaching theory (Schempp & Graber, 1992) ignoring the on-going and inevitable social interactions against which such knowledge will be evaluated and applied.

In contrast, the social constructivist approach to learning contends that knowledge is a social construct and that individuals learn from and alongside other people in all their social relationships (Jarvis, Holford, & Griffin, 2005). Viewed from this perspective, learning is a collaborative process where knowledge is effectively coconstructed through interaction and negotiation (Sullivan, 1998). As such, knowledge is not just imposed from outside (as much formal coach education attempts to do) but rather, is also formed inside the learner (Schunk, 2012) through an interactive process with both outside and inside influences. This view is reflected in existing coach development research, the nature of which has been of a mixed, but predominantly qualitative, method across a range of sports settings, and which has concluded that coaches most often learn from other coaches (Gilbert & Trudel, 2005; Gould et al., 1990; Salmela, 1995). For example, Abraham et al. (2006) utilised in-depth interviews to determine the learning sources of 16 "expert" coaches, concluding that observation and discussion with other practitioners were key learning sources. Similarly, Lemyre and colleagues (Lemyre, Trudel, & Durand-Bush, 2007) and Erickson and colleagues (Erickson, Bruner, MacDonald, & Côté, 2008) employed interviews and found that voluntary coaches across a wide range of sports valued interactions with other coaches/peers. King (1990) suggests that it is this verbal interaction between peers that is the key to the construction of new knowledge or the process of transforming previous

knowledge into new formats.

Alongside this perspective, theories of situated cognition have also brought the social construction of knowledge fully into focus (e.g., Brown, Collins, & Duguid, 1989; Lave & Wenger, 1996; Wenger, 1998) and these theories demonstrate that learning happens best "in context" as people attend to challenges and problems in their own environment. Reflecting this, Rogoff and colleagues (Rogoff, Radziszewska, & Masiello, 1995) suggest that there is no generic development that is independent of communities and their practices. Similarly, it has been suggested that the majority of coaches' learning should be situated in practice (Cushion et al., 2003) as this can remove much of the "transfer distance" between learning and practice (another perceived limitation of formal coach education – Abraham, Muir, & Morgan, 2010).

2.2.1 Communities of Practice: Only "Part of the Answer"?

In attending to these issues, a social constructivist approach to learning that has gained traction in recent years is Lave and Wenger's (1991) concept of learning within CoP. Building on earlier work, Wenger (1998) and Wenger and colleagues (Wenger, McDermott, & Snyder, 2002) propose that a CoP shares common elements, specifically a domain of knowledge, a community of people, and shared practices (Cassidy et al., 2004). Reflecting this, Culver and Trudel (2006, p. 98) define a coaching CoP as a "group of people [coaches] who share a common concern, set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis." In a CoP, each member is said to actively engage with other members of the community (mutual engagement), actively share information and assist each other to pursue the jointly agreed goal (joint enterprise), and share the routines, gestures, words and actions that are common to the CoP (shared repertoire) (Galipeau & Trudel, 2006; Wenger, 1998). St. Clair (1998) also depicts this type of learning community as a "sociocultural" phenomenon; it is the "site of cultural production and

reproduction" (p. 8). Based on these various perspectives, it is apparent that these communities must be discursive; in short that is "discourse acts through communities to shape culture" (St. Clair, 1998, p. 9).

Crucially, however, although learning within a CoP is determined by its members as a result of membership of and participation in the community (Wenger, 1998), learning is also shaped by what Billet and Somerville (2004) term the "social press": that is, by historical, social, cultural, and institutional factors (Cushion, 2011b) inherent within it. For example, the dialectical perspective of constructivism purports that knowledge is derived from the tension and interaction between an individual, situational and social factors, and the ever-changing environment around them (Schempp, 1993; Tusting & Barton, 2006). Similarly, informal learning has been acknowledged as "the lifelong process by which every person acquires and accumulates knowledge, skills, attitudes and insights from daily experiences and exposure to the environment" (Coombs & Ahmed, 1974, p. 8).

Accordingly, and since much of a coach's work takes place in a complex, multifaceted and constantly changing social setting (Cushion et al., 2010), it seems logical to assume that this setting will have a significant impact on coaches' construction of knowledge. This social "milieu" can incorporate a wide range of significant others and multiple stakeholders (e.g., athletes, administrators, colleagues, role models, parents, policy makers, NGBs), who may all be working to varying agendas, with competing egos, and within complex hierarchies (Abraham et al., 2010; Cushion et al., 2003; Jones et al., 2002). In addition, the pervasive roots and influence of socio-cultural values and tradition in sports run deep (Cushion, Ford, & Williams, 2012; Williams & Hodges, 2005), and the proclaimed basics of "how to coach" are explicitly repeated and reinforced in the testimony of more senior coaches, retired coaches and ex-athletes, as well as by articles published in the sports media (Grecic &

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Collins, 2013). Moreover, the media may "sell" or promote certain coaching values, which may either compliment or contradict the extant or dominant values. Consider, for example, the emphasis on long term player development as against current success. Existing literature has already purported that, within coaching society, winning is often the main aim and athletic achievement is subsequently equated with coaching prowess (Pankhurst & Collins, 2013).

Reflecting this complex and often contradictory set of influences, it is simply not possible to isolate a coach's development within a CoP from the social pressures that abound within the social environment (Jarvis, 1999). In essence, the superseding social milieu, distinct from the CoP, will place pressure on developing coaches to behave in a certain way in order to conform (Collins, Abraham, & Collins, 2012) while, in parallel, developing coaches will seek to conform to established stereotypes in order to secure approval from their more experienced "fellow" coaches. The subtleties of this "milieu" (e.g., tradition, historical precedence, workplace hierarchies, cultural practices, social norms) will also promote and perpetuate the value and acceptance of certain types of knowledge and behaviour over others (Cushion et al., 2003; Light & Evans, 2013) and, whether consciously or subconsciously, guide what coaches choose to pay attention to as well as what they choose to learn from their experiences (Jones, Armour & Potrac, 2004; Werthner & Trudel, 2006). For example, it is logical to assume that, if winning is emphasised within the social milieu, developing coaches are more likely to seek out knowledge in order to model their approach on professional or elite sport (Gilbert, Trudel, & Haughian, 1999; Gilbert & Trudel, 2004; McCallister, Blinde, & Weiss, 2000), whether this is appropriate or not for the actual context in which they coach. Ultimately, people don't know what they don't know, and any motivation to participate in peer discussion on a particular topic will depend on the perceived benefits (Mallett et al., 2009) to the individual rather than an often amorphous, higher order target. If this is

the case, how do coaches within a CoP decide which knowledge or behaviour to value and which to ignore? In short, against what standards do they judge what is good and not so good and, even more importantly, where do these standards come from? The point is that, in the absence of such "focused criticality," social constructivism will be just as value laden, and may generate an equally flawed learning outcome, as the methods it is purported to supersede.

2.2.2 Epistemology as a Potential Sieve

One potential "sieve" through which to evaluate quality is a coach's epistemology. Epistemological beliefs are an individual's beliefs about the nature of knowledge and how it is gained (Buehl & Fives, 2009; Howard, McGee, Schwartz, & Purcell, 2000; Kaartinen-Koutaniemi & Lindblom-Ylänne, 2008). Reflecting this, Pajares (1992, p. 316) uses the term "belief" to refer to an "individual's judgement of the falsity of a proposition." These deeply held beliefs are at play in any learning experience, as every coaches' past experiences and interactions with and within the ever changing social milieu they inhabit and the way they frame their role, will (or at least should) screen or filter information which is most salient to them (Gilbert & Trudel, 2004; Grecic & Collins, 2013; Schempp & Graber, 1992).

Such beliefs may lead coaches to question the value of the information presented, make epistemic assumptions about the nature of coaching knowledge and question the validity of knowledge content (Fives & Buehl, 2008). However, these beliefs are often unexamined and will influence how both future and practicing coaches approach the task of learning to coach, as well as the knowledge they construct from any learning experience (Fives & Buehl, 2008). In addition, these beliefs are often antiintellectual in nature and can be very difficult to change, which is a problem if the beliefs are in fact ill-judged (Ennis, 1994). Indeed, Tetlock (2005) refers to a "cognitive conservatism" which outlines the reluctance of human beings to admit mistakes and update beliefs.

2.3 Exploiting Rather Than Just Acknowledging Social Pressures: Can we use CoPs to Change Beliefs?

Given the clear influence (for good *and/or* ill) which social pressures may exert, it is clear that identifying and directly challenging the ineffective values and practices promoted by the social milieu is crucial: accordingly, provoking debate amongst coaches and their peers, perhaps by introducing theory and evidence that provides a basis for this critical discussion (Abraham et al., 2010), is essential. Consequently, and perhaps paradoxically, CoPs themselves provide an interesting avenue for investigation in terms of achieving this aim; coach developers cannot ignore the embedded potential that CoPs have for challenging or altering existing norms and knowledge bases (Bitterman, 2000). Indeed, Damon (1984) suggests that any development that requires giving up current understanding to reach a new perspective might be best attained through interaction with peers.

It would seem, therefore, that CoPs can provide coach developers with an "unrivalled opportunity" to encourage and enable coaches to critically examine the underlying beliefs that predominantly guide and influence their behaviour (Gilbert & Trudel, 2004). In turn, the specific naïve beliefs and misconceptions that may be promoted by the social milieu and which may hinder the development of effective coaching practice might beneficially be identified and countered. Portnow and colleagues (Portnow, Popp, Broderick, Drago-Severson, & Kegan, 1998, p. 22) refer to this as "transformational learning" as it enables the learner and their community to ponder critically, not only the veracity of knowledge and information, but also the bias and intentions of those creating that knowledge and information.

However, I would also contend that there is a "clear and present" danger that a CoP may similarly serve as a mechanism to regurgitate and reinforce the values of the social milieu, unless the necessary focused criticality discussed in section 2.2.1 plays a central role. In this regard, the epistemological chain (EC) can provide the link between a coach's philosophy, beliefs about knowledge and learning, and their demonstrated behaviour (Grecic & Collins, 2013). Research has already shown that coaches who are less developed are likely to have a less developed EC. For example, Stephenson and Jowett (2009) found that when football coaches (especially novices) observed and interacted with their peers (as they would in a CoP); they often almost unquestionably integrated (or even more concerningly, attempted to integrate) what they have observed into their own coaching practice. Likewise, Sage (1989) also demonstrated how neophyte coaches learn the dominant culture, what knowledge matters, and how they should act in the coaching environment from more senior coaches.

Unsurprisingly, the mere application of someone else's practices into one's own, *simply because it sounds or looks better*, may have negative ramifications for a coach's development and may also increase the likelihood of picking up bad habits (Stephenson & Jowett, 2009). Conversely, those coaches with a more developed EC may simply look for information that agrees with or "fits" their existing knowledge and belief structures. It is apparent, therefore, that if left unchecked, social constructivist learning methods (such as CoPs) provide the potential for coaches to pass on, and reiterate, harmful or ineffective practices and beliefs if knowledge is simply transferred between coaches without critical consideration of the ideas (Cushion et al., 2003; Reade et al., 2008).

2.3.1 So what is the Solution?

It seems that coaches may benefit from observing, interacting, and communicating with their peers in a CoP but only if they have a clear vision (i.e., a philosophical standpoint) of what underlying beliefs they may have, where those beliefs originate, and what type of coach they wish to become before joining (Stephenson &

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Jowett, 2009). In short, if coaches were made aware of the foundations on which their own personal epistemology was based, they may then be able to make more conscious selections of their knowledge sources (Grecic & Collins, 2013). Reflecting these contentions, Bitterman (2000) concludes that individuals can most effectively collaborate and co-create within a CoP when they have previously considered their own unique identity, have formed clear understandings of self, and are able to function in fairly autonomous ways. Thus for example, as a minimum requirement, presentations at CoPs should provide a clear context to what is being described, trace and make explicit the "chain of reasoning" through which this particular combination of options were selected, describe some other options and finally, describe and discuss how the processes are evaluated and refined. Without this, the risk of "halo led plagiarism" (s/he is good so I should do that) could be significant.

It seems necessary, therefore, for developing coaches to have a good sense of critique that they can apply to the wealth of information with which they are bombarded. Indeed, Hake (1999) suggests that an individual must develop a "reflexive biographical competency" in order to know more about how their previous experience and educational biography, as well as the learning setting, impacts upon their ability to learn (p. 87). In addition, according to Sullivan (1998), if a contradiction between a learner's existing understanding and what they experience can be created, this gives rise to a disequilibration which, in turn, can encourage the learner to question his or her beliefs and to try out new ideas. As an example, coaches should seek out and experience perspectives which disagree or cause dissonance with their current opinions and habits. Unfortunately, human nature tends us towards the exact opposite!

One mechanism or coaching "skill" to facilitate this process is that of becoming a reflective practitioner, which has received significant attention in recent years (e.g., Cropley, Miles, & Peel, 2012; Gilbert & Trudel, 2001; Gilbert & Trudel, 2006) and which is often proclaimed as the hallmark of professional competence (Larrivee, 2008). This research has utilised experiential learning theory and the role of the coach as experimenter (Schön, 1987) to examine coach development. In essence, the reflective practice approach both prescribes a method for understanding how coaches may have developed as a result of their previous experience, as well as outlining a means by which a coach can improve their ability to engage in reflective processes and, as a result, become "better" at realising how they have improved. Consequently, it is assumed that a coach is then better able to make informed decisions about their future behaviour. Unfortunately, some systems fail to fully recognise, or exploit, the detail within Schön's work. For example, how many CoPs will ask coaches to discuss their "experiments," or even "socially sanction" those who claim, with pride, to "stay with what their experience helps them to know what works best" (cf. Collins et al., 2012).

In this regard, whilst authors such as Gilbert and Trudel (2001) present a structure to guide the actual mechanics of reflection, if a coach is to be able to reflect critically on the origin and nature of their epistemological beliefs (as well as their practice) in order to maximise the development opportunities on offer through CoPs, how or where do they develop the skills to allow them to apply this process effectively? More to the point, how do they know which structures, issues, knowledge or information they should reflect against? Once again, the need for CoPs to share practice within a structure that requires the key context and associated decision making is clear.

2.3.2 Does Formal Coach Development have a Role to Play?

If providing coaches with a critical awareness of their role frames is indeed a crucial element of personal and professional development (Gilbert & Trudel, 2004), could it be that formal coach development programmes are the best place to help facilitate the development of these critical maxims? Instead of being a set of isolated activities or separate courses (Abraham & Collins, 1998), formal coach education could

become an on-going system designed to expose coaches to the epistemology and the "why" and "what for" of their own beliefs and decision making, then to grow this along a structured and explicitly presented route. In addition, coaches could be provided with the structures and standards against which they should compare or measure these beliefs: at the very least, they should be asked to keep their own standards and structures explicitly in mind when evaluating the content of material shared at the CoP. This way, coaches are provided with the skills they need to effectively formulate their own coaching beliefs and be able to make rational choices about the coaching methods, techniques and practices they develop (Grecic & Collins, 2013). Additionally, in raising awareness of the social influences on beliefs and behaviours, coaches could become aware of the value laden nature of their practice (Jones, 2000), and likewise, how their actions in turn shape the social milieu in which they function (Cervero & Wilson, 1999).

Clearly, this type of long term approach would contradict the current format of coach development in the UK, whereby courses are shorter and more explicit (i.e., "do this" procedural rather than "why/why not" declarative) the lower down the coaching structure you go (cf. Abraham & Collins, 2011a). In addition, researchers (e.g., Mallett & Dickens, 2009) caution that there are other challenges for coach developers when attempting to implement fully functioning CoPs. For example, Wenger and Snyder (2000) describe CoPs as "organic, spontaneous, and informal" albeit "resistant to supervision and interference" (p. 140). Therefore, although cultivating these communities holds great potential for coach developers, their organic nature along with the likelihood that coaches will participate simultaneously in multiple communities, generates an unpredictable quality and can take control away from the coach developer (Bitterman, 2000). Indeed, according to Bitterman (2000), these groups may perhaps through the social pressures outlined above actually undermine or defy established order

and control. A criticism of the CoP approach is that there are rarely commonly defined aims and purposes and, even more rarely, a shared vocabulary and set of goals which will facilitate optimum communication of ideas and philosophies. Also, if there is knowledge being generated, how is the *validity* of this knowledge assured or quality controlled, especially for the inevitably varied needs of the various members? It could be, therefore, that rather than trying to "control" the CoP, the coach developers' roles and responsibilities could include assisting CoPs to establish ground rules for discourse and to devise ways of monitoring their progress (Mallet & Dickens, 2009).

2.4 So what are the Implications?

If more "informal" methods of coach development (such as CoPs) are to be accepted and embraced as an alternative to the training and certification of coaches via formal coach education, and coaches encouraged to become truly autonomous learners, acknowledging the social processes at play in coach learning is essential. Firstly, in order to understand and improve coach development, it is clear that we need to know more about coaches' values, beliefs, their priorities and how they rationalise their behaviours. In short, we need to understand and relate new knowledge to the aims, meta-cognition, planning and actions of individual coaches, whilst also enabling them to do this themselves. At the same time, it is also necessary to attempt to shine a light on why coaches value the types of knowledge they do. For example, understanding why (and perhaps challenging) why Coach A's actions are positive and effective would help the coach developer to ensure optimum benefit (rather than just blind copying) from the encounter. By gaining a deeper understanding of these constructs, we might then be able to facilitate the development of experiences and programming to encourage beliefs that support coaches' practice, motivation, and development and to target those beliefs that are less adaptive (Fives & Buehl, 2008).

Secondly, we also need to know how the social milieu socialises coaches to

fulfil expected roles, and how such influences can both constrain and liberate a coaches' development (Jones et al., 2003). Consequently, we need to look at the constructs that the community uses to judge coaching quality. For example, within a CoP, a coach might assess the relevance of a topic or information based on the reputation of a coach within the CoP or wider social milieu. For example, "it must be right because he says so" or "his athletes are very good so what he says must be right." This transgression of Hume's Law (confusing a "s/he is" with a "we ought" cf. Collins & MacNamara, in review) is both common and damaging; in simple terms, a champion performer does not necessarily have a champion coach (or a champion environment)!

Thirdly, coaches themselves need to increase their awareness of the social processes acting upon them during their development. If they do, they can become increasingly active in "role-making" as opposed to merely "role-playing" (Callero, 1994), and gain a better understanding of how their approaches to thinking, reasoning and behaviour affect their practice (Abraham et al., 2010). Therefore, in order to assist coaches to understand why they coach the way they do; coach developers need to encourage coaches to consider critically the construction and application of their professional knowledge (Hardy & Mawer, 1999). As an example, coaches should focus on how *they* can be better within *their* current context, rather than through an uncritical consideration of someone else's situation.

Fourthly, we need to assist coaches in being confident and assertive enough when interacting with perhaps older, or more established peers, despite being comparatively "fresh-faced" in their development. In this regard, how many leading coaches publicly admit their failings (Collins et al., 2012)? A recognition that everyone makes mistakes, indeed that mistake making is an inevitable and positive part of striving for a new competitive edge, should be a central tenet of CoPs. The process of peer supervision, common indeed required in some other professions (e.g., clinical and

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counselling psychology) is a good way to develop this balance.

Likewise, if coaches can be made aware of the processes necessary for the assimilation of personal epistemologies, perhaps they would also regulate their behaviours accordingly (Hung, 1998). For example, within the police force, it has been suggested that the use of certain attitudes (e.g., racism) are so widely accepted that such behaviour has become something of an occupational sub-culture (Onifade, 2002). Even if newer officers are fundamentally opposed to these attitudes, at least an appearance of their acceptance is often necessary in order to fit-in and "survive" in the job, as well as to avoid being ostracised by colleagues, at least in the early stages (cf. Abrams, Marques, Bown, & Henson, 2000; Ashforth & Mael, 1989; Simons-Morton & Farhat, 2010). It would seem as hard to "buck the trend" as a new coach as it is for a new police officer and yet both must be encouraged if we are to genuinely progress. Consequently, it seems it would be beneficial to engender an environment within coaching where expertise is not merely viewed as a product of accumulated experience or, even worse, time served. Likewise, coaches should be encouraged to challenge the established status quo, without feeling threatened, rather than perpetuate it and feel pressured "to belong" (Onifade, 2002). Whilst "shaking up" established practices can be a risky business, this risk can be minimised if coaches are given ways to engage with their peers that are invitational as opposed to confrontational (Larrivee, 2000).

Finally, perhaps the biggest problem facing coach developers when developing new knowledge is that inappropriate beliefs already held by the coach must first be weakened in order to influence the acceptance of more "correct" beliefs (Abraham & Collins, 1998). It must be cautioned, however, that changing attitudes and behaviour is a notoriously difficult enterprise (Abraham et al., 2010). Nevertheless, if at the very least we can begin to understand the social milieu in which coaches operate, including the plethora of influences and sources of often conflicting information acting upon

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them, many of them subtle and perhaps unnoticed, and we can begin to identify and understand this social context of learning, as well as the tenets of social constructivism at play, coach developers could then begin to manipulate the social processes at work (for example within CoPs) in order to change coach behaviour and raise coaching standards.

2.5 Conclusions and the Next Step

In summary, this chapter has provided an array of potential talking points and areas for further investigation. Most importantly, it appears that coaches perceive that the current system of formal coach education fails to meet their needs, and instead, they show a preference for informal and non-formal learning experiences. Consequently, within the coaching literature, there has been a subsequent focus on the social aspects of coach development and "social constructivist" perspectives of coach learning (e.g., CoPs) in particular. However, despite social learning having several potential benefits in coach development, it is clear that a coach arrives at any learning opportunity with a pre-existing set of epistemological beliefs, attitudes and dispositions that have been, and continue to be, tempered by their experiences and interactions with their social milieu (Dodds, 1994). At the very least, therefore, we need to begin to understand these constructs, and if we are really switched on, the potential for coach developers to manipulate and exploit them in order to create or enhance contexts for effective learning (Collins et al., 2012; Kilgore, 2004), and as a result, enhance the professionalisation agenda, is obvious. If we do this, ultimately we may be able to influence coaches' epistemological beliefs, and subsequent coaching behaviour for the better. Based on these considerations, Chapter 3 now describes a study that sought to begin to identify the "messages" the social milieu currently promotes, and what it encourages coaches to learn.

CHAPTER 3 - WHAT MAKES THEM SO GOOD? THE CONSTRUCTS USED BY COACHES TO IDENTIFY COACHING PROWESS

3.1 Introduction

In Chapter 2, it was stressed that the subtleties of the social "milieu," in which a developing coach is inevitably embedded, are a powerful source in promoting and perpetuating the value and acceptance of certain types of knowledge and behaviour over others (Cushion et al., 2003) and guiding what coaches choose to pay attention to as well as what they choose to learn (Werthner & Trudel, 2006). Therefore, if the right messages are (a) being sent, (b) being received, and (c) are genuinely correct, then subsequently integrated with practice in an appropriate context, the social milieu might be a highly efficient and effective tool for coach development, either solely or in tandem with other approaches. However, this is at best a "triple whammy" assumption and there has been limited research examining these processes in detail. Consequently, before strategising ways of improving informal methods of coach development, there is a need to better understand and consider more critically the processes already taking place as coaches learn their craft (Occhino, Mallett, & Rynne, 2013). For example, in order to avoid coaching practice being guided by uncritical inertia, and similarly prevent outdated knowledge and behaviours being passed on and reproduced during informal development activities such as CoPs (Cushion et al., 2012), insight is needed into the constructs that the existing social milieu uses to judge coaching quality. Accordingly, the purpose of this chapter was to identify and examine the criterion that coaches use to judge their peers.

Firstly, these criteria form part of the received wisdom and social schematics used by coaches to establish pecking orders and mutual reinforcement (Ritzer, 1996; Wacquant, 1998). As such, identification and exploitation of these criteria can provide coach developers with some useful tools. Secondly, the constructs used by coaches will play a key role in the development of social schema (as described excellently by Bowes & Jones, 2006). These structures are created as a result of past interpersonal experiences and have a powerful influence on current behaviour. For example, the acceptance of new information in any learning experience will be dependent on its compatibility with a coach's existing schemas (Nassaji, 2002). An understanding of the constructs used by coaches could therefore help uncover how coaches develop a mental framework for their behaviour (Baldwin, 1992) and, subsequently, a great deal about the priorities for attention in raising coaching standards within and across sports. Thirdly, monitoring and regularly revisiting these schemas can offer a genuine and impactful measure of progress. In driving through change, administrators and coach educators alike can then make use of such knowledge in monitoring the evolutions in perception that both reflect and enhance the process. In this regard, genuine culture change must have an effective political dimension as well as a sound scientific rationale (Butcher & Clarke, 2008). In short, whilst what the public thinks isn't always right, it is a vitally important consideration in any change process.

With these factors in mind, the aim of the study reported in this chapter was to offer some preliminary insight into the constructs used by a sample of British sub-elite coaches to judge coaching quality and the nature of the expertise possessed (or perceived to be possessed) by their own self-selected role model coaches. Equally, by examining the perceptions of coaches, I was interested in identifying what the social milieu encourages coaches to learn i.e., are the "right" messages being sent and/or received, and are they in the right direction? Or, does the social milieu simply serve to magnify and perpetuate the issues that coach developers should endeavour to nullify?

3.2 Method

3.2.1 Phase One

3.2.1.1 Participants. The insights presented are based on the Director of Studies' (DoS) exhaustive field notes and transcribed conversations with 143 coaches, drawn from over 15 years of conversations as part of his on-going work in coach education. These notes and annotated conversations were initially designed for use in contextualising new information and educational materials to the coach-clients' environment, goals and opinions. All participants were (by present day standards) level three status (Sports Coach UK, 2012a); as such, they were sub-elite but experienced coaches acknowledged by their respective sports as being capable of autonomous practice. The coaches used in generating the data included 105 male (Mage = 42.4 years, SD = 5.8) and 38 female (Mage = 39 years, SD = 7.4) coaches from a range of sports. The breakdown was as follows:

- 31 athletics
- 29 rugby (union or league)
- 16 tennis
- 13 judo
- 13 canoeing
- 11 karate
- 9 hockey
- 8 curling
- 7 Olympic weight lifting

The remaining six (making up the total of 143 participants) perceived themselves as multi-sport coaches albeit with a good level of perceived (or at least certified) coaching prowess. All participants were UK citizens or had been domicile in the UK for a minimum of five years. The median coaching experience was reported as 12 years, with experience ranging from 6 to over 40 years. All recruitment was by personal contact, with complete anonymity guaranteed; an assertion reinforced by the informal/visiting presenter roles held by the DoS when data were collected.

3.2.1.2 Procedure. Prior to data collection, the study received ethical approval from the research ethics committee of the DoS' institution. In all cases, responses were made to the question "why is Coach X such a good coach?" where Coach X was the

"role model" identified by the coach from his or her own sports domain. The question was posed by the DoS at the beginning of coach education courses as part of an informal needs assessment and in order to ascertain course participants' beliefs and schemas surrounding "effective" coaching. Consequently, this process offered the DoS clues on how he might present participants with subsequent exemplars and facts to best effect during the course.

Responses were wide-ranging and often rambling but, with the imperatives employed for neither self-presentation nor hidden agendas, the responses appeared genuine. This trustworthiness was further enhanced by the use of triangulation (Patton, 2002) using participant responses from other settings (e.g., group discussions) and member checking (Lincoln & Guba, 1985) whereby field note summaries were shared with participants and confirmed as realistically reflecting their views (Sparkes, 1998).

3.2.1.3 Data analysis. An inductive analysis of the raw data was carried out following the procedures described by Côté and colleagues (Côté, Salmela, Baria, & Russell, 1993) for organising and interpreting unstructured qualitative data. First, to increase familiarity, the field note summaries were read several times before being analysed line by line to identify and label meaning units (i.e., raw coach quotations of varying length that exemplify a meaningful thought, point, or piece of information). This allowed for thick description to be reflected in the results (Creswell, 2003). The meaning units were then listed before being compared for similarities and grouped together into distinct categories referred to as lower order themes (Côté et al., 1993). Finally, the analysis proceeded to a higher level of abstraction, whereby the lower order themes that had emerged from the data were grouped into larger and more general higher order themes in a higher order concept. This process allowed for the constant refinement of the results until theoretical saturation occurred (Strauss & Corbin, 1998).

In qualitative research, the issues of credibility and offering a correct interpretation are paramount (Rubin & Rubin, 1995). Recognising the importance of "trustworthiness" (Lincoln & Guba, 1999), and the non-passive role of the researcher as an instrument through which the data must pass for analysis (Patton, 2002), some common steps were taken to help ensure the overall validity of the data presented. In a collaborative process, the meaning units and themes were discussed with an independent investigator at each stage until a consensus of opinion was reached on their accuracy and clarity. In addition, and following the recommendations of Krane and colleagues (Krane, Andersen, & Strean, 1997) and Stake (2005), a reliability check was also conducted by asking a second independent investigator, who was trained in qualitative methodology but blind to the objectives of the study, to read the field note summaries and audit the assigned categories and themes to ensure that they accurately reflected coach quotations. This discourse resulted in a high degree of congruence, with only a small number of minor disparities (eight) between researchers' views requiring adjustment or further rationale (Sparkes, 1998).

Subsequently, in order to further build upon and test the veracity of these findings, in the second phase this study focus groups were administered with similar levels of coaches drawn from specific sports.

3.2.2 Phase Two

3.2.2.1 Participants. For the second phase of the study, participants (N = 15) were purposively selected (Patton, 2002) using criterion sampling (Miles & Huberman, 1994). In this regard, the coaches were required to possess the level three qualification provided by their respective NGB, therefore reflecting the overall makeup of the coaches in phase one. All coaches were male UK citizens (Mage = 37 years, SD = 7.6). The median coaching experience was reported as 11 years, with experience ranging from 6 to over 30 years.

3.2.2.2 Procedure. Prior to data collection, the study received ethical approval from the university's research ethics committee. Prospective participants were contacted via email and asked to read a project information sheet outlining the purposes of the study. Once those willing to participate returned a signed informed consent form (see Appendix A), three focus group interviews were moderated using a semi-structured interview methodology: one group with 4 hockey and 3 rugby league coaches, one with 5 golf coaches, and one with 3 squash coaches. Reflecting the procedure employed in phase one, coach groups were asked to consider their own personal role model, defined as "a coach who, in your experience, characterises what you would aspire to be in your coaching." As before, the main question asked was "why is Coach X such a good coach?" Reflecting recommendations for the administration of focus groups (Kamberelis & Dimitriadis, 2013), open-ended prompts were used to encourage participants to expand upon their ideas and evocate rich discussion. Elaboration and clarification probes were also used to help ensure that clear and comprehensive descriptions were elicited (Gratton & Jones, 2004; Patton, 2002). Typically, these probes involved giving a summary of a point a coach had made and asking them to offer additional detail (e.g., "Why do you think that is the case?") or examples (e.g., "Can you provide the group with a specific example of that?"). Otherwise, conversations were allowed to proceed freely, with all focus groups lasting approximately 60 minutes. All interviews were audio recorded and then transcribed verbatim, with transcripts checked twice against the audio recording to ensure accuracy. To enhance credibility, the word-processed interview transcript was emailed to each participant for checking. This form of member checking (Patton, 2002) gave the participants the opportunity for reflexive elaboration (Sparkes, 1989) and the chance to comment on and clarify the meaning of their responses to ensure an accurate representation of their views had been obtained. No changes were requested.

3.2.2.3 Data analysis. In this case, manipulation of the unstructured interview data were aided through the use of a qualitative data analysis software package (QSR NVivo 10). The raw data were again submitted to an inductive content analysis and followed the same process as outlined in phase one of the present study. Lastly, in order to ensure a rigorous research process and further check validity, respondent validation techniques (Patton, 2002) were employed, whereby participants were sent a summary of results and asked to provide feedback on their accuracy and credibility (Creswell, 2003). No changes were requested and the emergent lower and higher order themes were acknowledged as providing an accurate representation of expressed coaches' views. In order to ensure a critical self-awareness of my own perspective, I maintained detailed handwritten field notes and memos during each interview (Wolfenden & Holt, 2005), and in line with recommendations by Bryman (2008), made reflective "notes" on how the interview progressed immediately after each interview (Marshall & Rossman, 1999).

3.3 Results

3.3.1 Phase One

For presentation purposes, the themes that emerged from the inductive content analysis are shown in Table 3.1. What follows is a brief and selective summary of the generally expressed perceptions. Quotes are used to enable the reader to gain a better appreciation of the context in which the themes emerge from the data.

Table 3.1.

Results of Pl	hase One Ina	luctive Content A	Analysis
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Lower Order Theme	Higher Order Theme
Knowledge base	Knowledge and experience
Experience as a performer	into incluge and experience
Clarity of expectation	
Clear instructions and information	Communication
Portrays confidence	
Drive and sacrifice	
Commitment to improvement	Motivation
Desire to learn from others	
Goal setting	
Training/competition planning	Ability to plan
Athlete selection	

3.3.1.1 Knowledge and experience. Participants commented on their role model's knowledge base, most notably and frequently in the sport-specific area. In particular, the ability to come up with "tidy" answers quickly was noted. For example, a rugby coach said "he is a great walking resource...he will almost always provide a practical solution" while a canoeing coach described the importance of "knowing" when to change tack as necessary:

He seems to have an uncanny knack for knowing when something isn't going to work...he will persist and persist, often much longer than is reasonable. At what always seems to be the right time however, he will drop it and go with a new idea. Certainly, for many participants, the previous experiences of the role model as a high level performer were seen as an extremely positive feature. For example, an athletics coach said "been there; seen it, done it, got the T-shirt. Whatever the situation throws at him, X...and therefore his athletes know what to do." For others, however, a coach's previous limitations as a performer were seen as an advantage. A rugby coach was adamant that "because X had to work so hard to get there, he really understands and caters for the challenges his players face. They can have confidence that he understands..."

3.3.1.2 Communication. Clarity of expectation was seen as a desirable feature of role model coaches. A weightlifting coach said "X is a hard bastard. The athletes know where they stand and what he expects. They tend not to f*** about." Similarly, another rugby coach described the selection process implemented by their model coach and how that is communicated to their players:

All X's players know where they stand in the pecking order, what they need to demonstrate to move up, and the things they need to do to make that happen...he will always let you know where you stand. Selection is no longer a mystery.

The ability of role model coaches to communicate instructions and information in a clear and unambiguous way was also viewed as a key quality. For example, a hockey coach felt that:

The way he presents stuff is really good. Calmly and methodically he exposes the plan so the team are taken along with it. Questions are asked and counters made so, at the end of the meetings, everyone is confident in the master plan.

More specifically, participants consistently alluded to the utility of analogy as a method to deliver instructions and information clearly. A curling coach commented "one of his best features is the use of little stories, stick diagrams or examples from real-life…he can bring an idea to life, make it relevant and understandable." This view was also

reported by several individual sport coaches, including a tennis coach who said "she will always try to relate ideas through examples or stories. It gets the message across really well." Alongside this, almost all the participants referred to their model's ability to make comparisons with the historic or current performance of world-class performers or coaches in order to make their point. For example, a rugby coach explained "he will use contrasts with world class players to justify his advice...Jonny does it like this but if you had watched Jenks..."

Models were also seen as being adept at portraying confidence when communicating the decisions they had taken. A hockey coach stated "the players never seem in any doubt that X has got it taped. He doesn't show doubt publicly and they don't doubt his decision." Nevertheless, it was clear that, whilst overt confidence was seen as an essential component of the role model coach, the social construction of this was subtly but crucially different from setting to setting.

3.3.1.3 Motivation. Participants identified the dedication necessary to reach the highest levels of coaching, and related this to the choices often made by role models. In the majority of cases, role models were seen as being highly driven individuals, making big sacrifices to achieve. For example, a hockey coach said "X's life revolves around coaching. She has even changed jobs...quite literally gone down market, to give her more time for coaching and to do her PhD." An athletics coach further emphasised this point by saying "even before it was his job, X was completely committed to his athletes. Work was scheduled around their needs, on or off the track."

Participants also highlighted their role models' commitment to improvement and being as "good as they can be." For example, a judo coach suggested "X's commitment is second to none. She is always working to improve herself, and is voracious in seeking out new ideas to give her players the extra edge" while another judo coach commented "X is very self-critical, but it seems to be realistically so. He takes the positive and learns from the negative in any setting." Alongside this, a desire to work with and learn from other coaches or specialists was highlighted as a key characteristic of role model coaches. An athletics coach said "X has got some really good ideas on conditioning...some are from when (athlete's name) worked with Y and he's taken what he thinks is useful." Another tennis coach went further and suggested "when (athlete's name) worked with a psychologist, X was always there, watching, listening and adding to her armoury."

3.3.1.4 Ability to plan. Model coaches were seen as fervent goal setters, both in the long and short term. For example, a rugby coach said "X is religious in his goal setting. He sets targets and reviews his progress methodically against them. I think he even sets goals for his s****!" In working towards their goals, they were also seen as experts at planning, although perhaps less formally than some would like. Thus, early decision making about training and competition plans, an adaptability (coupled with the network to facilitate late changes), and the ability to change tack when necessary all emerged in sport-specific variants. Similarly, a weightlifting coach said "he knows what he is doing and why he is doing it…he then fights tooth and claw to get what he feels he needs." A hockey coach also alluded to this planning, saying "there is always a Plan B…even C and D as well. When things go t*** up, X always seems to have something up her sleeve."

Effective and goal-directed athlete selection was also seen as a feature of the planning process of model coaches, although the nature and philosophy of this varied from sport to sport. For example, an athletics coach stated "X can spot long term potential a mile off, and he is extremely proactive to 'recruit' it. We all hate poaching but he does it very well" while a rugby coach admitted "X would consider not only the player's skills but also what he brought to the team...what role he could play, how he influenced the others." Whilst there were some negative connotations, they seem very

much specific to the different sports. For example, the poaching comment is from athletics and was not mentioned by the other sports.

3.3.2 Phase Two

The themes that emerged from the inductive content analysis on focus group data are presented in Table 3.2. What follows is a selective summary of the generally expressed perceptions. Again, quotes are used to enable the reader to gain a better appreciation of the context in which the themes emerge from the data.

Table 3.2.

Results of Phase Two Inductive Content Analysis

Lower Order Theme	Higher Order Theme	
Messages are clear and intelligible		
Forthright with opinions and expectations		
Engages and inspires	Communication	
Egalitarian attitude		
Likeable person		
Attentive to the needs of individuals	Relationships	
Acts as a mentor		
Technical and tactical knowledge		
Depth and amount of knowledge	Knowledge base	
Passionate about coaching/being a coach		
Committed to pursuing a clear vision		
Eager to identify gaps/areas for improvement	Motivation	
Thirst for innovation		
Has won medals/championships	Delivers results	
Their athletes continuously improve		

3.3.2.1 Communication. As in phase one, effective communication was continuously cited as a key quality in role model coaches with specific focus on "delivery" and "what" they do. In particular, the ability to provide a clear message and

be easily understood was reported as highly desirable characteristic. For example, a golf coach said "I love the way X has got such a lovely easy delivery, it's very relaxed...I think that is such a big thing, very easy to listen to." When perceiving this capacity to "get their message across," participants appreciated the chameleon-like quality of role models in their ability to utilise and switch between a variety of methods and styles of communication. This was often discussed in relation to model coaches being adept at catering for the diverse needs of participants. It was also reported that this was often done in a way that instilled calm in athletes; as such, models were viewed as being aware and in control of "softer" communication skills such as body language. A rugby coach explained "I think of X, he'll tell you the same thing 5 times in 5 different ways, and he's hitting everybody's needs." While a hockey coach suggested "X never seems to be nervous, he's just able put across his point and then as a result the players can then feel calm and look at what they are doing."

The data showed that role models were perceived as being forthright in their views with both athletes and colleagues. Participants viewed their models' honesty in "saying what they think" and making their expectations clear and upfront a key characteristic of an elite coach. A rugby coach suggested "I mentioned and talked about X...that was one of his big things, really clear on what he wanted in his club." Another rugby coach shared this view when discussing a role model's honesty with players when it came to team selection:

The first thing X says to his players is you are not all gonna be treated the same way. They might have earned their stripes, can play badly and will get picked next week. You as a new player will play badly and you will be dropped, and you'll have to fight your way back in.

Participants also made consistent reference to models' ability to admit to their mistakes and limitations, not only with fellow coaching staff but also with the athletes themselves. A hockey coach said:

One big thing with X was he was prepared to put his hands up and say 'I've got it wrong'...and he wouldn't just share it with staff, he'd actually sometimes share it with his players and say 'look we got this wrong, I've tried this or I've reacted wrongly to this I'll speak to you all and we'll look at something different.'

Equally, the ability to engage and inspire was a highly valued characteristic of role model coaches. For example, a golf coach enthused "X was a great raconteur...he was just fabulous as a storyteller. You are inspired with things that he says and you think 'I'm going to use that myself'..." Another golf coach agreed with this view, saying "X is fascinating you know...he's a very inspirational guy. When we went on that course with them...he had us engaged for 2.5 hours...everyone came out of that room buzzing!"

The data also suggested that role models were very "egalitarian" in terms of their attitude toward communication with others. Models welcomed input and opinion to the coaching process from both athletes and colleagues. This was often framed in the context of the model finding value in their methods being challenged and questions being asked of "why" they did what they did. A rugby coach cited their experience:

I've worked with coaches who would have come in and just bawled you out of the room...get on that pitch and do this that and the other...you'd have left that training session thinking I couldn't wait to get away from there...whereas with X it's all by agreement.

It was also consistently emphasised that models were willing to "share" knowledge and information with other coaches. For example, a rugby coach recounted how "X would come and he would sit there...bearing in mind they'd trained all day...he'd sit there all

day and talk and talk and share that knowledge." Similarly, a golf coach observed how:

X almost had a constant forum with all of the guys who were teaching, so you are kind of exchanging ideas...some coaches are isolated and haven't got people to bounce stuff off and I think that is a bad thing.

3.3.2.2 Relationships. It was clear from the data that models were seen as experts at establishing and maintaining effective relationships with their athletes, coaching staff, and others. In many cases, this was outlined in the context of the model possessing the qualities participants associated with a likeable and "nice" person, although this was often explained in a generic way. For example, a rugby coach commented "X was one of the nicest guys you'd ever meet...you wouldn't sort of sometimes associate him with having the dynamics of somebody that could be a head coach...but, because he was a nice guy that worked in his favour." More specifically, another rugby coach suggested "whoever X runs into, he'll always spend a minute talking to them...and he knows what you do. You feel like he cares about the wider people involved in the game, and I think that's quite important."

A simple, but often stated characteristic was that of role models being "experts" at managing individual athletes. This was emphasised with a particular focus on an ability to cater for individuals' needs in order for athletes to reach their full potential. For example, a hockey coach argued "I think it's knowing how to handle individuals. Some people need a kick up the arse, some players need a cuddle...If you can do that then you can coach anybody." While a squash coach suggested that "X is not about being the answer to everything, but knowing the right direction to take that athlete...there is just a presumption that this player deserves their own brand of delivery because they are an individual with their own needs..."

Participants also consistently described model coaches as mentors for both athletes and other coaches. This was often viewed in terms of the model being a source of wisdom or advice for athletes as well as having an ability to challenge knowledge and enlighten more novice or inexperienced colleagues as outlined by a squash coach:

You go 'oh I've got that now', and then X will just go 'ah, but young one what about this?' and you go 'oh ya bastard, I didn't know about that', and then you know '... you understand this but do you understand that?' and you go 'ah!'

3.3.2.3 Knowledge base. The data highlighted knowledge in model coaches, both in terms of technical and tactical knowledge, and the sheer depth of this knowledge, as a highly valued characteristic. A hockey coach explained "the thing that attracted me to kind of be a disciple of X…was because of his technical knowledge. It was that technical knowledge that I got attracted to as a player." Another hockey coach stated:

The way X sets his team up they play to different systems...nobody could work out how to beat his team...the way he just gets his teams to adapt to their style of play is just something that the others can't do. They cannot figure him out.

Likewise, a golf coach said "I know he's not everybody's cup of tea, but X is a very talented coach. He's got amazing knowledge of everything, body, the whole lot..." while another golf coach agreed "the thing about X for me is, his information is fantastic, his knowledge is fantastic...I think that is really important. You've got to have great knowledge." This view was also shared by a squash coach who admitted "X didn't fill you with passion...he just had a ridiculous amount of knowledge, and when I went to him, he kind of blew me away really."

3.3.2.4 Motivation. It was clear that participants viewed a passion for their sport and a general enthusiasm for coaching as determinants of success in role model coaches. A rugby coach observed how "you can sense X's passion for the game...I

think the players can quite easily suss out those that are a bit more robotic. He's like a fan or supporter!" while a golf coach commented "enthusiasm is a massive thing...all these coaches that we aspire to, they are all enthusiastic about what they do...they are passionate about what they do, and as a result, they get better at what they do." When highlighting that, in general, model coaches did not "do it for the money," a squash coach also stated:

I think that's a key thing for X as well, do you genuinely in your bones just love the idea of being a coach. If a big offer came along to be a banker or something else then X wouldn't do it because he just wants to be a coach, it's what he likes.

The team sport participants (hockey and rugby league) in particular consistently reported that model coaches possessed a clear vision and philosophy that they were committed to working towards. Furthermore, role models were said to stick to this vision ruthlessly, often incurring criticism from others (particularly "outsiders") as a result. A hockey coach was typical in saying:

X gets criticism but has kind of stuck by his guns and said 'well this is what I believe in and therefore this is what my or our team believe'...it hasn't necessarily led to success, but there's a very clear way of doing things.

This "dedication to the vision" was seen as a key quality and it was suggested that model coaches are comfortable making "difficult" decisions in terms of playing and coaching staff when it is in the interests of the long-term vision. This was outlined by a rugby coach who said "when X took over he literally moved on the whole company. He kept the ones that he knew could add quality...would buy into his philosophies and move things forward, but real ruthless when it came to moving people on."

It was clear from the data that role models were seen as having served an apprenticeship as a coach, working their way through the ranks. Despite this, models were still perceived to be eager to improve and develop as a coach. As such, it was reported that models voraciously identify gaps in their knowledge and areas where they can learn more. A hockey coach argued that:

X must be sitting at home every night on the Internet...swotting away the whole time because nobody 'just knows it.' Some of the stuff he's talking about...he'll say 'I just know it; it's just one of those things.' And I think that's b*****s, he's got no kids and he studies the game for fun!

In the case of golf in particular, it was also reported that models often sought out areas for improvement by observing and learning from other coaches, as one coach noted "a lot of them have travelled around and studied with the best coaches, X and people like him, they've gone around and really tried to sample in their younger days so many different opinions."

The role of innovation and "trying new things" in coaching was consistently seen as a particularly important feature of model coaches. Models were not seen to rest on their laurels or become set in their ways; instead they were viewed as constantly trying to "push the boundaries" in order to improve the performance of their athletes. Perhaps paradoxically, this was often viewed as a comfort with making mistakes and accepting short to mid-term performance decreases in favour of long term goals. A rugby coach said "I think that's being prepared to lose…willing to take a chance, which some people don't do…X is prepared to take a chance…he's prepared to adapt." A golf coach also felt strongly that "a great coach has got to be an innovator…where are the improvements going to come from if we're all just copying each other? The improvements come from the guy who is innovating…the crackpot who is trying things."

3.3.2.5 Delivers results. Finally, the ability to demonstrate performance results was considered important. This was evidenced both in terms of model coaches' and their athletes' track record of winning tournaments and medals at the highest level. One

squash coach observed "he's almost brought a brand of coaching to the world...world numbers 1's and world champions, and lots of world top 20 players, and there's not many done that." Model coaches' methods were also perceived to achieve results, demonstrated primarily through their athletes' continuous improvement in performance. A rugby coach also suggested "X didn't always start off at high profile clubs, but one thing the guy did manage to do was he got 110% out of every player he worked with. He made ordinary sides very competitive." These views were also shared by golf coaches, with one stating:

X is very much of the opinion that the next shot has got to be better. He doesn't believe it's like six months and then you might half start to see a little bit of light at the end of the tunnel...within three balls he has everyone hitting it better.

3.4 Discussion

There were a variety of qualities reported by the coaches in the present study, notably however, participants appeared to focus on the apparent broad brush/outward facing behaviours and personality characteristics of their role model coach, as opposed to the ways in which s/he actually worked. In short, coach perceptions in both phases were predominantly associated with the "what is s/he like" or "what does s/he do" rather than the "how does s/he do it" which, it has been suggested, forms the basis of coaching skill (cf. Abraham & Collins, 1998). This finding is perhaps not surprising, and matches the "great man" (no misogyny intended) approaches that typified early work in leadership development (Chelladurai & Carron, 1978; Gill, 2007). Of course, this finding probably holds both positive and negative implications for the coaches' behaviour and performance. It is however, and to say the least, a little one-sided in ignoring the processes of effective coaching whilst emphasising (potentially disproportionately) the outward facing, image aspects. Consequently, it seems the results contradict earlier research (e.g., Abraham et al., 2006; Jones et al., 2003), which

has evidenced apparent higher-level coach support for the more crucial importance of design, structure and impact of the coaching environment; in short, the modus operandi of "how" the coach works. Consider the perceptions of the coaches in the present study, for example, against the support apparent for design, structure, and environment from a smaller but more elite group of coaches in Abraham et al.'s (2006) validation of a coaching schematic. Although there are contradictions, this is a key finding of the present study; in short, what the samples of mid-level coaches consistently *didn't* use as part of their "value schematic" is perhaps as important as what they did.

The point here is that the "body of the kirk" (i.e., the "average" coach) does not seem to acknowledge, or perhaps recognise what theory, and *some* of those at the top, think are the most effective and desirable components and characteristics that make coaches successful. For example, no coach in the present study referred to qualities representative of their model's decision-making processes (Cushion et al., 2003; Nash & Collins, 2006) or the problem solving procedures employed during the dynamic and complex process of coaching (Abraham & Collins, 2011a; Lyle, 1999). Similarly, there were few references to the pedagogy of the coaching process (i.e., methods of meaningful teaching and learning) or links made with the principles of skill acquisition (Abraham & Collins, 2011b; Cushion et al., 2012). Whatever the reasons for this, poor coach education, poor CPD or just entrenched views, it appears that demonstrably effective methods are overlooked, not encouraged, or not seen as relevant by the majority in this sample of sub-elite coaches. Significantly, social theory and previous research suggests that people are more likely to emulate the behaviour of those they themselves choose to value (e.g., role models) rather than people (e.g., coach educators) nominated for them (Christakis & Fowler, 2007). As a consequence, the informal communications, which have generated the impressions reported in the present study,

seem to focus on personal characteristics rather than the craft of coaching. Or to put it another way, are coaches "learning" how to be liked as opposed to how to be effective?

As a result, not only are the coaches in the present study perhaps limited in their ability to self-develop, or be developed, towards higher status/efficacy, but it may also be that any ambitious and upwardly mobile coach must "pass through unscathed" a social context which is, in some respects, not conducive to the ways in which s/he should develop. Specifically, many coaches seem to appoint and value their coaching role models on personality characteristics rather than technique. There are interesting similarities here with other professions that involve a "semi-permeable" barrier to intellectual development; the "canteen culture" within the police force that was outlined in Chapter 2 is one such example (Onifade, 2002). Of course, the extent to which this split will also inhibit the effective progression of performers is another important consideration; an efficient and seamless performance pathway is hardly facilitated by attitudinal and behavioural bifurcation! The need for further investigation as well as educational and developmental initiatives to address this appears obvious; furthermore, the degree of challenge imposed by the degree of difference is likely to vary sport by sport.

On a more positive note, there *are* "perceived expert features" highlighted here which could be exploited as ripe for development now. If the majority see these competencies as desirable characteristics of top coaches, there will be a healthy "social fillip" to initiatives that address them. The ways in which some of these areas are best developed is worthy of consideration. For example, content ideas are extremely useful, especially so when they employ "analogy learning" (cf. Poolton, Masters, & Maxwell, 2006). Ongoing evolution of such approaches, coupled of course with the requirement to present and consider underpinning theoretical justification, would seem to be a good way to generate the levels of professional deliberation (Evetts, 2002) and exchange that

have been shown to typify high performing environments in many other professions (e.g., Finance, Shanteau, 1995; Medicine, Patel & Ramoni, 1997; Nursing, Husted & Husted, 2008).

These ideas notwithstanding, sport differences in levels of interaction and perception remain the crucial considerations in the effective design and deployment of coach development. Clearly, providers must take time to embed themselves within the culture before deciding on the best ways in which to develop coaches (Butcher & Clarke, 2008). Additionally, however, genuine development should also look to remediate those environments that are not characterised by sharing and mutual reflection (Culver & Trudel, 2006). Whatever the limitation of the critical reflection process, there seems little doubt that "having access to knowledgeable and respected coaching peers is critical to the reflective process" (Gilbert & Trudel, 2001, p. 32). The fact that levels (or more probably usage) of access varies so much from social setting to social setting makes this an important factor for attention. These differences are reflected in so many constructs (for example, the crime of poaching specific to athletics) that the need for embedded and socially aware interventions, combined with subtle but explicit culture change is obvious. Add to this, the suggestion that there are some coaches whose "won't learn, won't change" attitude seems deeply entrenched (cf. Collins et al., 2012) and the complexity of the challenge is further clarified.

3.5 Conclusions and the Next Step

Whilst the findings of the study reported in this chapter cannot be considered definitive, they offer an effective preliminary insight into the constructs used by coaches in judging their own or their peers' coaching prowess. The current results suggest that the social milieu in which the interviewed developing coaches were embedded, which was described in Chapter 2 as being a potentially effective force for change in coach learning, may not be so effective for advancing coaching technique as opposed to

personality characteristics. As such, if the main source of encouragement for these coaches to improve was his or her peers, they might not necessarily receive very coherent, accurate or effective guidance. In fact, if the social milieu which a coach is embedded in is *not* conducive to effective and appropriate development, it seems reasonable to assume that it could be at least as likely to promote the spread of negative or less than optimal behaviours (Christakis & Fowler, 2007).

Therefore, this chapter identified that the coaching qualities and characteristics that coaches might aspire to, and that they might encourage each other to pursue, are not comprehensive across all the areas that might be required. Similarly, the characteristics that developing coaches might "need," they would not necessarily be aware of or pick up during informal learning situations within the social milieu. Consequently, an urgent need for further research in this area has been established if coach development initiatives utilising social learning based methods are to realise optimal change. In line with these implications, Chapter 4 now describes a larger scale study that sought to check these assertions and identify any mismatches between coaches' learning preferences, their perceived learning needs, and their recent knowledge acquisition experiences.

CHAPTER 4 - SOURCES, TOPICS AND USE OF KNOWLEDGE BY

COACHES

4.1 Introduction

In Chapter 3, insights were offered into the constructs that a sample of coaches used to pinpoint coaching prowess in their self-selected role model coaches. Whilst a range of characteristics were reported, it was clear that the coaching qualities the coaches identified, and therefore might aspire to (as well as encourage each other to aspire to), were not comprehensive across all the areas that might be required for coaching effectiveness. Therefore, despite coaches' stated preference for informal learning situations (Cushion et al., 2010), it appears that the spontaneous social milieu might not "act" in the right direction, or at the least, provide coaches with what they need. Nevertheless, whilst the study reported in Chapter 3 presented some useful preliminary insight into the potential influence of the social milieu on coach learning, this chapter aimed to build on those findings by investigating the broader aspects relating to how these social dimensions underpin coach development and might influence it for better and for worse.

For example, there remains a lack of literature looking specifically at what motivates coaches to seek and participate in particular educational opportunities, as well as what deters coach learning engagement (Cushion et al., 2010). Similarly, we need to know more about the knowledge sources that coaches view as being more or less important, and why (Irwin et al., 2004). For example, if other coaches are indeed (or are going to be) a primary source of knowledge, it is important to determine whether this source is actively selected by coaches, or is only accessed due to convenience or a perceived lack of availability of, or inherent weakness in, other options (Reade et al., 2008). Such information would help coach developers to provide the best learning environment for coaches (Werthner & Trudel, 2006) and design coach education and development interventions that better fit their perceived needs (Vargas-Tonsing, 2007).

In addition, our understanding of how informal sources of coaching knowledge interact with other contextual factors involved in the learning process (for good and/or ill) is still in its infancy (Deek, Werthner, Paquette, & Culver, 2013). It was suggested in Chapter 2 that the social milieu is a powerful driver in promoting and perpetuating the value and acceptance of certain types of knowledge and behaviour over others (Billett & Somerville, 2004; Cushion et al., 2003; Light & Evans, 2013). In essence, exposure to the subtleties of this milieu will guide what information coaches pay attention to, as well as influence what they think they need to and, ultimately, choose to learn from their experiences (Cushion et al., 2012; Jones et al, 2004; Werthner & Trudel, 2006). As such, whilst formal coach certification has been criticised for indoctrinating coaches into a "right" way of coaching (cf. Abraham & Collins, 1998), informal learning activities (such as CoPs) could be equally as powerful in developing and reinforcing particular perspectives on coaching, especially in terms of what is, or is not, considered "good" coaching (Cushion et al., 2010; Grecic & Collins, 2013).

Notably, there has been limited research examining these issues when developing coaching education programmes (Trudel & Gilbert, 2004); indeed, before we begin strategising ways to utilise and improve informal knowledge acquisition, we need to first understand how it is already taking place (Allee, 2000). For example, we need to know more about the types of knowledge that coaches currently pick up, what they *think* they need to know more about (i.e., their own perceived development needs), and the knowledge structures that underpin these perceptions and decisions. This information would help us to identify how coaches recognise their strengths and weaknesses, as well as highlight potential topics of relevance and interest for coaches (Vargas-Tonsing, 2007; Wiman, Salmoni, & Hall, 2010). Similarly, insight into these thought processes would help to identify the degree of congruence between what the

coaching research would suggest is the most pertinent knowledge for the development of coaches, and the knowledge that coaches themselves desire and acquire currently (Nelson, Cushion, & Potrac, 2013).

Finally, Chapter 2 described how coach learning is often at the mercy of socially mediated power relationships and (often deep-seated) values, attitudes, and beliefs, which are often anti-intellectual and conservative in nature (Abraham et al., 2010). As such, in the absence of a sufficiently focussed reflective and critical approach to the consideration of new ideas and the construction of professional knowledge (Hardy & Mawer, 1999), the potential exists for coaches to simply acquire and reproduce outcome-neutral or even potentially harmful ideological interpretations of knowledge and out-dated or ineffective practices (Cushion et al., 2012; Gilbert & Trudel, 2001; Mallett et al., 2009). Moreover, it has been proposed that coaches may gain greater benefit from informal learning situations if they have a clearer and more structured vision (e.g., a philosophical standpoint) of what type of coach they wish, and perhaps need, to become (Stephenson & Jowett, 2009). Indeed, Abraham et al. (2006) suggest that, in the absence of such relevant overarching knowledge structures, coaches are akin to "magpies not filing cabinets," whereby they will often uncritically pick up and mimic "shiny nuggets" from what they perceive as the successful practice of others (Grecic & Collins, 2013). Consequently, gaining insight into the ways coaches deploy and/or use the information that they are exposed to, and the knowledge that they acquire, was vital in order to determine the extent to which existing practice is simply reproduced at the expense of innovation and/or critical analysis (Reade et al., 2008).

Therefore, reflecting these theoretical and empirical considerations, and in an attempt to add to the findings reported in Chapter 3, this study aimed to answer three specific research questions, which served as guides in the data analysis:

1. What are coaches' self-reported actual and preferred methods of acquiring new

coaching knowledge, and why?

- 2. What knowledge do coaches perceive that they currently pick up, and what do they feel they need to know more about in order to be a better coach?
- 3. How do coaches perceive that they deploy/use the new coaching knowledge that they acquire?

4.2 Method

4.2.1 Participants

Data were collected using an online survey. Table 4.1 gives demographic details of the participants (N = 320) included in the present study. The sample came from some 26 different countries with 30 different sports represented, and participants reported a range of different levels of experience, participation contexts, and qualification. Nevertheless, western countries and sports were most prevalent, with highly qualified, UK based football coaches particularly well represented (see Table 4.1).

Table 4.1.

Demographic Details of Participants

	Number of coaches		Number of coaches
Gender			
Male	289	Female	31
Age range			
18 or less	1	19-29	133
30-44	129	45-60	53
60 or more	4		
Country where participants a	are based		
UK	217	USA	28
Ireland	14	Australia	12
Canada	8	Germany	7
India	4	Switzerland	4
South Africa	3	Qatar	2
Austria	2	Norway	2
Poland	2	Sweden	2
United Arab Emirates	2	Spain	1
Finland	1	Netherlands	1
Nepal	1	Thailand	1
New Zealand	1	Hungary	1
Turkey	1	Ghana	1
Chile	1	China	1
Level as a participant in spor	rt coached		
Never a participant	5	Novice	37
Intermediate	170	Elite	107
Number of years coaching ex	xperience		
0-2 years	29	3-5 years	84
6-9 years	72	10 years or more	135
Age groups coached			
Ages 3-6	89	Ages 7-10	181
Ages 11-14	217	Ages 15-18	207
Ages 18-21	160	Ages 21 and over	162
Deployment status			
Paid	227	Voluntary	93
Current level of formal coac	hing qualificati	on	
No qualification	31	Foundation	47
Intermediate	108	Advanced	134
internicente	100		1.57

Level of academic qualification			
Below higher education	51	In higher education	68
Higher education degree	86	Postgraduate	115
Sport coached			
Football (soccer)	141	Golf	54
Rugby (union or league)	45	Cricket	28
Basketball	18	Hockey	11
Athletics/track and field	11	Swimming	9
Netball	6	Tennis	5
Muli-skills	5	Gaelic AA sports	4
Cycling	4	Ice hockey	3
Rowing	3	Squash	2
Baseball/softball	2	Weightlifting	2
Triathlon	2	Australian rules	2
Badminton	2	Gymnastics	2
Archery	2	Dodgeball	1
Rounders	1	Watersports	1
Volleyball	1	Horseriding	1
Figure skating	1	American football	1

Note. Coaches could select all options that applied. 50 participants reported coaching more than one sport.

4.2.2 Instrument

An initial survey, specifically designed for the purposes of the present study, contained nine items derived from a deductive analysis of the eminent coach learning literature (cf. Cushion et al., 2010). The survey was reviewed for face and content validity (Dillman, 2000) by a panel of experts consisting of an experienced university lecturer with a PhD in sports coaching, a NGB coach development manager, and a researcher in coaching and physical education. This process resulted in four modifications, with three items removed and one new item included. Next, to enhance trustworthiness (Cresswell, 2007), the revised survey was evaluated for clarity and comprehensibility though a pilot study with a small convenience sample of coaches (N = 12) from several sports. The survey took between 7 and 16 minutes to complete, and follow up cognitive interviews (Willis, DeMatio, & Harris-Kojetin, 1999) resulted in the rewording of four items in order to improve intelligibility and clarity. Following

these stages, the final version of the survey was comprised of two sections and 18 items. Section one comprised of seven open-ended questions designed to elicit qualitative responses about the sources the participants consult for coaching knowledge, the types of coaching knowledge they seek and acquire, and the ways they use and apply the knowledge they acquire. The second section contained 11 items designed to elicit demographic information including gender, age, location, coaching experience, and level of academic and coaching qualification. A copy of the final instrument is shown as Appendix B.

4.2.3 Procedure

Prior to data collection, the study received ethical approval from the university research ethics committee. Using opportunity sampling (Brady, 2006), the survey was initially distributed by email to existing networks of coaches and gatekeepers of sport (e.g., NGB staff, club staff, coach educators, colleagues). The email contained an explanation of the study aims and the voluntary nature of taking part, information about confidentiality and anonymity, and a web link to the survey, which was hosted by the online survey tool SurveyMonkey (www.surveymonkey.com). In an attempt to utilise snowball sampling (Morgan, 2008), the email also encouraged participants to circulate the web link to their own personal networks and coaching peers. In addition, the web link was circulated via online social networks (e.g., Twitter, LinkedIn), where it was shared and "retweeted" around 120 times. The first page of the survey repeated the information contained in the email, and explained that all answers would remain anonymous. Participants were notified that they should only "click" continue if they were actively coaching a sport, and that by doing so they would give consent for any submitted answers to be used as data in the study. It was also made clear that, because answers were anonymous, they could not be withdrawn once submitted. No names or identifying information were tracked or recorded at any stage of the data collection process, recruitment to which took place over a 10-week period, after which the web link became inactive.

4.2.4 Data Analysis

Following closure of the survey, responses to each item were transferred to separate Microsoft Excel 2010 spreadsheets for further analysis. The open-ended responses to items one to seven, which consisted of a mixture of short statements of less than five words (e.g., "Psychology"; "Tactical knowledge"; "Talking to another coach") and longer, more structured, sentences (e.g., "Two heads they say are better than one. Not necessarily true but through discussion, you pick up new ideas"), were read several times, before being subjected to an inductive content analysis (Patton, 2002) using the data analysis software Nvivo 10 and following the common three-stage process (Chesterfield, Potrac, & Jones, 2010; Côté et al., 1993; Nelson et al., 2013) that was reported in Chapter 3. During this process, the answers to questions were treated as standalone meaning units, unless they contained more than one self-definable point (e.g., "Discussion with peers and reading books or articles"), in which case they were separated accordingly. Answers that did not contain sufficient information to provide a piece of meaning (less than 1% of answers) were excluded from the analysis.

Given the large number of meaning units, validation of data was seen as especially important, and additional steps were taken in order to enhance the validity and trustworthiness of the data presented (Lincoln & Guba, 1999). The meaning units for each item were listed and labelled, before being compared for similarities and organised into raw data themes. The analysis then proceeded to a higher level of abstraction, whereby the raw data themes were built up into larger and more general themes in a higher order concept (Côté et al., 1993). Throughout this process, the constant comparative method (Glaser & Strauss, 1967) was used, whereby each meaning unit was compared to other meaning units, and then grouped with similar meaning units. When no similar meaning unit was apparent, a new theme would be generated. This process ensured that the meaning units in each theme, and the lower order themes in each higher order theme, were distinct and appropriately categorised, and allowed for the constant refinement of the results until theoretical saturation was met (Strauss & Corbin, 1998). This process also permitted the calculation of descriptive demographic data, and the quantification of response frequencies and percentages (Vergeer & Lyle, 2007). Recognising the risk for miscoding and/or misclassification of meaning units, a collaborative approach was taken as described in Section 3.2.1.3. This process resulted in a high level of agreement between researchers, with only a small number of analytic disagreements or issues of contention (less that 10% of data codes) requiring adjustment or further rationale (Krane et al., 1997; Sparkes, 1998).

4.3 Results and Discussion

The findings of the study are arranged in such an order as to provide answers to each of the original research questions. Percentages shown in the text refer to the percentage of the total number of meaning units generated for each item.

4.3.1 What are Coaches' Self-Reported Actual and Preferred Methods of

Acquiring New Coaching Knowledge, and Why?

Consistent with the findings of others studies on the learning sources of coaching knowledge (e.g., Erickson et al., 2008; Lemyre et al., 2007; Mallett et al., 2009), results highlighted that coaches reported primarily gaining recent ideas and information from a variety of informal, self-directed learning situations, with other coaches and colleagues being the predominant source (38.66%, see Table 4.2). Moreover, participants were very clear about the extent to which they preferred to acquire knowledge through informal, self-directed learning activities, especially as a result of social interaction with other coaches during their day-to-day coaching experiences (55.36%, see Table 4.3). This corroborates findings in previous studies

(e.g., Culver & Trudel, 2006; Irwin et al., 2004; Jones et al., 2004), and is consistent with other accounts of peer guidance being a valued source of learning in the workplace (Coetzer, 2007). Interestingly however, and in contrast to the large body of literature that highlights the limited impact of formal modes of learning on the development of coaching knowledge (Abraham et al., 2006; Jones et al., 2003; Lemyre et al., 2007), formal coach education courses were also reported relatively frequently as a source of the recent knowledge that coaches had acquired (24.65%, see Table 4.2). This highlights an apparent contradiction revealed by the data. Namely, that the vast majority of coaches suggested that they don't particularly like, or ascribe much importance to, formal learning (only 1.56% reported positive perceptions, see Table 4.3); yet, a sizeable proportion of them clearly still used it and had recently learned something from it. Notably, inspection of both these sub-groups suggested no pattern or discriminating factor across age, qualification or experience.

This finding brings into question whether the suggestion that coaches don't "like" formal learning is much less a comment about its effectiveness, and more about its quality/style and/or the way coaches "get it." For example, when reporting reasons for their learning preferences, coaches clearly valued the opportunity for social interaction (27.58%, see Table 4.4), reinforcing the view that they attach great importance to being able to participate in activities such as communities of practice (Cassidy & Rossi, 2006). This is perhaps unsurprising, especially if we consider the reported significance of convenience and ease of access (13.45%, see Table 4.4) in the present study (both common criticisms of formal qualifications, cf. Cushion et al., 2010). After all, coaches can get information relatively quickly and efficiently from the other coaches they interact with (Reade et al., 2008). Similarly, participants clearly attached more value to modes of learning that they viewed as being immediate to the realities of their own coaching practice (18.72%, see Table 4.4), another common

criticism of formal courses (e.g., Lemyre et al., 2007; Vargas-Tonsing, 2007; Wright et al., 2007). This begs the question; do we simply need to make formal learning more palatable and "real-world" impactful, perhaps by drawing more effectively on social interaction and real world experience during coach education courses (Cassidy et al., 2006; Cushion et al., 2003)? Alternatively, could it be that these opinions were simply the dominant social milieu opinion of formal courses manifest in coaches' perceptions, as opposed to genuine comment on its perceived usefulness? The picture provided by these data leaves these two ideas as tenable hypotheses deserving of greater examination.

Table 4.2.

Participants' Perceived Source of Last Thing They had Learned or Found Useful

Raw Data Theme	No. (%)	Lower Order Theme	No. (%)	Umbrella Theme ^a	No. (%)
Coaching course	48 (13.45)		00 (04 (5)		
University/college course	40 (11.2)	Formal coach education	88 (24.65)	Formal learning	88 (24.65)
Workshop/clinic	14 (3.92	Attending CDD estivities	22 (6.44)	Nonformal loaming	22 (6.44)
Conference	9 (2.52)	Attending CPD activities	22 (6.44)	Nonformal learning	23 (6.44)
Another coach	98 (27.45)				
Watching others	22 (6.16)	Other as school/as llas mas	129 (29 (6)		
Mentor	10 (2.80)	Other coaches/colleagues	138 (38.66)		
Sport scientist	8 (2.24)			Informal learning	246 (68.91)
Online social networks	16 (4.48)			-	
Internet unspecified	13 (3.65)	Internet	43 (12.04)		
Specific website	7 (1.96)				

YouTube	7 (1.96)	-	
Coaching experience	23 (6.44)		
Reflection	7 (1.96)	Practical experience	36 (10.08)
Use of coaching aids	6 (1.68)		
Books/magazines	23 (6.44)	Reading	29 (8.12)
Academic journals	6 (1.68)	Reading	2) (0.12)

Note. Numbers and percentages relate to standalone meaning units generated during data analysis. ^aSee Nelson et al. (2006) for conceptualisation of learning types.

Table 4.3.

Participants' Preferred Methods of Acquiring Coaching Knowledge

Raw Data Theme	No. (%)	Lower Order Theme	No. (%)	Umbrella Theme ^a	No. (%)
Coaching courses	7 (1.56)	Formal coach education	7 (1.56)	Formal learning	7 (1.56)
Seminars/workshops	21 (4.67)	Attending CPD activities	26 (5.80)	Nonformal learning	26 (5.80)
Conferences	5 (1.12)		()		
Peer discussion	186 (41.52)				
Watching other coaches	50 (11.16)	Other coaches/colleagues	248 (55.36)		
Mentor coach	12 (2.68)				
Coaching practice	22 (4.91)	Practical experience	30 (6.70)	Informal learning	415 (92.63)
Reflection	8 (1.79)	r i i i i i i i i i i i i i i i i i i i		6	
Websites	41 (9.15)			_	
Online social networks	22 (4.91)	Internet	76 (16.96)		
YouTube	13 (2.90)				

Books	53 (11.83)		
		Reading	61 (13.61)
Academic journals	8 (1.79)		

Note. Numbers and percentages relate to standalone meaning units generated during data analysis. ^aSee Nelson et al. (2006) for conceptualisation of learning types.

Table 4.4.

Participants' Self-Reported Reasons for Preferring Particular Methods of Acquiring Coaching Knowledge

Raw Data Theme	No. (%)	Higher Order Theme	No. (%)	
Facilitates peer interaction	89 (9.98)			
Can ask questions and seek advice	48 (5.38)			
Can learn from others' experience	39 (4.37)			
Permits sharing of ideas and best	31 (3.48	Social interaction	246 (27.58)	
practice				
Provides access to range of	27 (3.03)			
viewpoints	27 (3.03)			
Opportunity to network	12 (1.35)			
Good for learning	92 (10.31)			
Relevant and quality information	77 (8.63)	Perceived quality	215 (24.10)	
Interesting and enjoyable	46 (5.16)			
Convenience and ease of access	120 (13.45)			
Tailored to my needs	46 (5.16)	Logistics	172 (19.28)	
Cost	6 (0.67)			
Involves hands-on practice	77 (8.63)			
Can see "in action"	62 (6.95)	Grounded in reality	167 (18.72)	
Realistic	28 (3.14)			
Supplies new ideas	68 (7.62)			
Suggests next steps	24 (2.69)	Provides direction	92 (10.31)	

Note. Numbers and percentages relate to standalone meaning units generated during data analysis.

4.3.2 What Knowledge do Coaches Perceive that they Currently Pick Up, and What do They Feel They Need to Know More About in Order to be a Better Coach?

Positively, results indicated that the last thing participants felt they had learned or found useful spanned across the "ologies," sport-specific content knowledge, and pedagogical knowledge (see Table 4.5), which have all been highlighted as being necessary for coaching excellence (Abraham & Collins, 1998; Côté & Gilbert, 2009; Nash & Collins, 2006). Moreover, the topics that participants felt they needed to know more about broadly reflected this mix of topics (see Table 4.6), suggesting an element of coherence between the last things that coaches perceived they had learned, what they thought they needed to learn, and what the coaching literature suggests is most pertinent for them to learn. Interestingly, pedagogy was by far the most reported area of recent knowledge acquisition (66.04%, see Table 4.5), with "specific coaching methods and techniques" in particular being the most commonly reported topic of recent knowledge acquisition (31.46%, see Table 4.5). Similarly, pedagogy was the area of knowledge that coaches perceived they needed most (45.83%, see Table 4.6), with ideas linked to "how to coach" reported most commonly (23.51%, see table 4.6). This perceived need chimes well with other studies that have highlighted this domain as the most significant gap in coaches' knowledge sets (Abraham & Collins, 2011a). As such, it seems that this sample of coaches know what is good for them!

If we consider how this knowledge was most likely to have been acquired, however, some potential contrasts begin to emerge. For example, although the coaches in the present study seemed to assume that knowledge can be passed between coaches in the coaching environment unhindered, the primary purpose of this environment is not coach learning (Cushion et al., 2010); in fact, it may even be resistant to these processes (Abraham et al., 2010; Trudel & Gilbert, 2004). As such, how do coaches know that the information other coaches share, or the ideas they acquire through observation, is appropriate, or relevant, for their needs? Indeed, what the social milieu encourages coaches to pay attention to, and perceive as relevant for their needs, may not necessarily be in the "right" direction (Light & Evans, 2013; Nelson et al., 2013). For example, and as discussed in Chapter 2, much of the coaching practice that coaches observe and discuss in the coaching environment may well, in and of itself, have been influenced more by tradition, emulation and historical precedence in the sport (Cushion et al., 2003) than through critical consideration of the latest research. Therefore, just because a "successful" coach uses a specific method or technique, or coaches in a particular way, does not necessarily mean that it will be either appropriate or effective for another coach in another context (Abraham & Collins, 2011a; Cushion et al., 2012); nor will it necessarily represent the most up to date, state of the art practice. Likewise, it is not unrealistic to suggest that coaches are at least as likely to observe bad coaching methods, behaviours and techniques, as they are good (Cushion et al., 2003). This means that, although coaches in the present study viewed socially interactive learning episodes with high regard, there is likely to be, at the very least, a degree of variability in terms of what was learnt and how it was subsequently applied (Rynne & Mallett, 2014; Stephenson & Jowett, 2009). In short, it seems that although the coaches in the present study seemed accurate in their perceptions of what they needed (at least against some of the literature), they may not have been seeking this in a sufficiently critical fashion or through the best routes. Once again, further investigation is merited.

Furthermore, the extent to which it is possible to "learn" about many of the topics identified as necessary by the coaches in the present study (e.g., skill acquisition, psychology, athlete development) through informal learning episodes alone is questionable. For example, if coaches are to have meaningful discussions about a topic or subject with their peers, there is a primary knowledge base and/or set of theoretical

constructs that the coaches involved need "up front" to enable this to happen effectively (Nash & Collins, 2006). For example, although coaches might possess (or at least perceive they possess) procedural (doing) knowledge in relation to their coaching practice (Abraham & Collins, 1998), lacking the underpinning declarative knowledge (i.e., "why?" knowledge) necessary for understanding this content can limit critical discussion of the topic (such as skill acquisition) in sufficient depth so as to facilitate optimal learning. This is especially so if the coaches involved in the interaction already possess strong but incorrect procedural knowledge in the domain or topic. Consider, for example, the extent to which coaches in the present study reported a clear and coherent awareness of why they needed a particular piece of information or knowledge (see Table 4.7). Although many answers pertained to the fact that this new knowledge would "make sessions more effective" (20.70%, see Table 4.7), or "help meet needs of participants" (16.89%, see Table 4.7), very little justification was actually offered for why this would be the case and how the knowledge would help the coach. Indeed, previous research has highlighted that coaches often make decisions without any reference to an established coaching process model, and, instead rely largely on "feelings" and intuition (Cushion et al., 2010; Nash & Collins, 2006). These inconsistencies involve significant implications for coach development which merit more detailed investigation.

Table 4.5.

Last Thing Participants' Perceived They had Learned or Found Useful for Their

Coaching

Raw Data Theme	No. (%)	Higher Order Theme	No. (%)	
Specific coaching method or technique	101 (31.46)			
Communication	34 (10.59)			
Specific new drill	32 (9.97)			
Skill acquisition	16 (4.98)	Pedagogy	212 (66.04)	
Effective planning	11 (3.43)			
Performance analysis	11 (3.43)			
Coaching tool or technology	7 (2.18)			
Technical knowledge	29 (9.03)	Sport specific	45 (14 02)	
Tactical knowledge	16 (4.98)	knowledge	45 (14.02)	
Self-awareness	14 (4.36)	Development	29 (11 94)	
Athlete development	24 (7.48)	Development	38 (11.84)	
Psychology	20 (6.23)			
Physiology	4 (1.25)	"Ologies"	26 (8.1)	
Biomechanics	2 (0.62)			

Note. Numbers and percentages relate to standalone meaning units generated during data analysis.

Table 4.6.

Raw Data Theme	No. (%)	Higher Order	No. (%)
	50 (22 51)	Theme	
How to coach	79 (23.51)		
Skill acquisition	34 (10.12)		
Communication	29 (8.63)	Pedagogy	154 (45.83)
"Pedagogy"	6 (1.79)		
Performance analysis	6 (1.79)		
Psychology	31 (9.23)		
Physiology	19 (5.65)		
Biomechanics	11 (3.27)	"Ologies"	71 (21.13)
Child development	8 (2.38)		
"Sports science"	2 (0.60)		
Tactical knowledge	27 (8.04)		
Technical knowledge	18 (5.36)	Sport specific	59 (17.56)
Knowledge of the sport	10 (2.98)	knowledge	57 (17.50)
Knowledge of other sports	4 (1.19)		
Participant needs	37 (11.01)	Development	52 (15.48)
Self-awareness	elf-awareness 15 (4.46)		52 (15.70)

Participants' Perceptions of What They Need to Know More About to be a Better Coach

Note. Numbers and percentages relate to standalone meaning units generated during data analysis.

Table 4.7.

Raw Data Theme ^a	No. (%)
Would make coaching sessions more effective	76 (20.70)
Would help meet needs of participants	62 (16.89)
Lack of knowledge/understanding	61 (16.62)
Perceived requirement	45 (12.26)
Desire to improve /progress	33 (8.99)
Would help understand needs of participants	29 (7.90)
Current area of weakness	20 (5.45)
Lack of relevant experience	13 (3.54)
Needed to in order to stay up to date	13 (3.54)
Would help understand decision making	10 (2.72)
Would help athlete/team win	3 (0.82)
Feedback from others	2 (0.54)

Why Participants Perceive They Need the Knowledge Reported in Table 4.6

Note. Numbers and percentages relate to standalone meaning units generated during data analysis.

^aRaw data themes were somewhat unrelated and did not cluster into an obvious higher order structure.

4.3.3 How do Coaches Perceive that They Deploy/Use the New Coaching

Knowledge that They Acquire?

The apparent disconnect between the topics coaches reported they wanted information on, and the lack of structure to the reasoning for why they wanted those topics, suggests that many may have lacked an overarching knowledge structure, or schematic, against which they compared and contrasted new knowledge or information (Abraham et al., 2006). Indeed, the majority of coaches in the present study reported that they had immediately reproduced their most recently acquired knowledge in their own coaching practice (73.07%, see Table 4.8). Whilst Schön (1983) endorses the need for experimentation as a characteristic of professional practice, there is surely an equal need for this experimentation to take place against a significant knowledge structure, which enables the critical evaluation of both process and outcome against informed expectation or quasi hypotheses. Indeed, the lack of such structures has already been highlighted in other support professions (Cesna & Mosier, 2005; Martindale & Collins, 2013). Similarly, internal learning situations, that is, specific moments when coaches reflect on and reorganise what they already know (Werthner & Trudel, 2006), were very rarely mentioned as a source of (1.96%, see Table 4.2), or preference for (1.79%, see Table 4.3), learning. Only in the second factor was some discriminatory pattern apparent, with the eight coaches concerned weighted towards more experienced and more highly qualified participants.

Table 4.8.

Raw Data Theme	No. (%)	Higher Order	No. (%)	
		Theme		
Applied/used in practice immediately	175 (54.18)			
Altered coaching behaviour	43 (13.31)	Uncritical application	236 (73.07)	
Used in session planning	18 (5.57)			
Base for further thought/reflection	39 (12.07)	Considered	(1, (10, 00))	
Experimented and adapted for own context	22 (6.81)	further	61 (18.89)	
Haven't used yet	26 (8.05)	Haven't used yet	26 (8.05)	

How Participants' Perceive They Have Used the Knowledge Acquired in Table 4.5

Note. Numbers and percentages relate to standalone meaning units generated during data analysis.

This suggests that participants may lack a reflective orientation to their practice, despite a number of researchers (e.g., Gilbert & Trudel, 2001; Irwin et al., 2004) highlighting that critical reflection, whereby coaches' question and challenge current practice, habits, routines, values and beliefs *against clear and justifiable criteria*, is vitally important in the development of mental models (Cushion et al., 2012) and advanced practice (Yates & Tschirhart, 2006). In the absence of such a conscious evaluative process and critical approach to new ideas, there is clear potential for the coaches in the present study to simply become inculcated with the dominant culture (Jarvis, 2009; Stephenson & Jowett, 2009), especially if their main source of learning was other coaches in the coaching environment. Similarly, the use of the other self-directed learning activities reported in the present study (e.g., the Internet, books etc., see Table 4.2) must surely be approached with the application of appropriate filters and/or evaluative processes in order to prevent conservative repetition and reproduction of potentially undesirable practices and information simply being accepted at face value

(Jones et al., 2004; Rynne & Mallett, 2014). Indeed, it may be the development of this knowledge base a priori may serve to enhance the impact and validity of learning from informal experiences.

4.4 Conclusions and the Next Step

Offering some corroboration to the findings of previous research, the results in this chapter have highlighted that coaches' prefer, and reportedly mostly acquire coaching knowledge from, informal, self-directed learning sources, especially when they permit social interaction. Crucially, however, although the knowledge that coaches sought and picked up from these sources was broadly in line with what contemporary research would prescribe, self-reported evidence for critical justification for, and application of, this knowledge was largely absent. Based on these findings, it appears that before social learning activities such as mentoring and CoPs are placed at the centre of formalised provision (e.g., Culver et al., 2009; Gilbert et al., 2009; Nash, 2003), coach educators could beneficially enable coaches to better recognise and deal with the potentially mixed and unregulated influences of the social milieu on learning (Nelson et al., 2006). For example, the topics that coaches appear to want knowledge on, and the lack of reasoning as to why they want those topics, are, I feel, suggestive of the necessity for some element of "up front" formal learning, in order to equip coaches with the structures to ensure their informal development is sufficiently open-minded, reflective and critical (Gilbert et al., 2009; Wiman et al., 2010). A planned coach learning "episode," aimed at uncovering and challenging the (often unconscious) preexisting values and beliefs that coaches may have acquired on a specific topic (Cassidy et al., 2006; Cushion et al., 2012), and linking them with current coach practice and behaviour, could go some way to weakening potentially incorrect or misappropriate coaching knowledge (Abraham & Collins, 1998). Building on this, context specific theoretical knowledge and evidence could be introduced in a way so as to provoke

debate and raise awareness of potentially more appropriate or "effective" constructs in relation to that topic (Werthner & Trudel, 2006). Over time, in order to check, re-visit, and monitor the appropriateness of new beliefs and knowledge, periodic planned learning episodes could then be interspersed with the on-going interactions taking place in the practical coaching context (cf. De Lyon & Cushion, 2013). Using such declaratively based critical approaches, formal coach education would move beyond the simple transference of specific knowledge and skills, and instead, help coaches to move toward a more critical understanding of their thinking, reasoning, and behaviour (Abraham et al., 2010; Cushion et al., 2003).

Of course, I acknowledge the weaknesses inherent in the survey design utilised in the present study to categorically confirm some of these proposals, although the design has enabled a larger scale and perhaps more representative overview of coaches' perceptions. Nonetheless, the need for further research to explore how formal learning episodes can better develop complex skills such as reflection (Deek et al., 2013), while meeting coaches' perceived learning needs and their preferences for informal, socially mediated learning, was clear. Therefore, the logical next step for this thesis was to examine potential methods of meeting these needs while determining their efficacy. Online technologies (e.g., blogs, wikis, social networks) are one such tool that have been increasingly recognised and advocated as a method for accessing coaching knowledge (e.g., Dixon et al., 2013; Piggott, 2013; Sports Coach UK, 2013; Sports Coach UK, 2014), however, the full interactive potential of the Internet for the social construction of coaching knowledge alongside and/or during formal coach development activities is largely unexplored. Recognising this research need, Chapter 5 now seeks to explore the use of online blogs in facilitating the "training" of reflection, while supporting coaches in the use of such strategies (Mallett et al, 2009) in such a way that is both efficient and effective.

CHAPTER 5 - BLOGS: A TOOL TO FACILITATE REFLECTION AND COMMUNITY OF PRACTICE IN SPORTS COACHING?

5.1 Introduction

So far, this thesis has suggested that, when identifying coaching "quality" in their peers, coaches focus on the generic and outward facing behaviours and personality characteristics of *what* "good" coaches do, as opposed to *how* they work (Chapter 3). In addition, a distinct lack of evidence and critical justification for, as well as application of, the knowledge that coaches acquire from the informal and self-directed learning experiences and sources they explicitly prefer (e.g., peer discussion and watching other coaches) has been highlighted (Chapter 4). Therefore, a clear need to identify ways to develop the skills that coaches need to deal with the potentially mixed and unregulated influences of the social milieu on their learning, while simultaneously addressing their perceived learning needs and preferences, has been established. Indeed, it has been argued elsewhere that there is a pressing need for innovative coach education approaches that can better equip coaches with the professional competencies needed to deal with the problematic and dynamic nature of their work (Morgan, Jones, Gilbourne, & Llewellyn, 2013). Accordingly, this chapter forms the first of three consecutive chapters that focus on the potential utility of online blogs in coach education pedagogy.

5.1.1 Reflective Practice and Blogs

The language and value of reflection have become increasingly prominent in academic (and professional) coach education programmes, and a reflective approach to practice is now espoused as a key tool for understanding and enhancing coach learning and raising the vocational standards of coaches (e.g., Irwin et al., 2004; Knowles, Gilbourne, Borrie, & Neville, 2001; Lyle & Cushion, 2010). Nevertheless, due to a perceived lack of criticality and an over reliance on superficial and descriptive activities which are, in actual fact, inherently non-reflective as well as susceptible to a range of

social influences, numerous authors have drawn attention to the inadequacy of the strategies often labelled as reflective practice in the sports coaching domain (e.g., Cropley & Hanton, 2011). Although a number of authors offer structured guidance on the actual mechanics of reflection (e.g., Gibbs, 1988; Gilbert & Trudel, 2001) and even on how it may be taught (e.g., Gilbert & Trudel, 2006), it has been suggested that current reflective practice approaches often portray confusing agendas, with insufficient instructional guidance offered to coaches on "how" to engage in the process (Cropley et al., 2012; Cushion et al., 2010) or indeed, on what aspects they should reflect (Abraham & Collins, 2011a). As a result, Cropley and Hanton (2011) question whether the domain of sports coaching has simply "jumped on the bandwagon" of reflection, without properly considering and understanding the concept, and how it might be best implemented.

Within the literature, reflection is frequently depicted in a hierarchical representation of distinct levels or stages of reflection, ranging from shallow description at one end to critical reflection at the other (e.g., Day, 1993; Hatton & Smith, 1995; Sen & Ford, 2009). Crucially, it is the notion of critical reflection which is espoused as being the most empowering and transformational in nature, allowing individuals to become more responsible for their actions and providing a basis for practice that is ultimately emancipatory (Black & Plowright, 2010; Saylor, 1990; Sen & Ford, 2009; Thompson & Pascal, 2012). Critical reflection involves "looking beneath the surface" of a situation in order to identify and critique any assumptions that are being made, as well as challenge the values and beliefs that are being drawn upon (Mezirow, 1990; Saylor, 1990). Indeed, Thompson and Thompson (2008) highlight the importance of such critical "depth" in effectual reflective practice. However, they also stress the need for critical "breadth"; that is, the adoption of a wider lens in order to raise awareness of, and reduce susceptibility to, what Billet and Somerville (2004) term the "social press."

Explicitly, this includes the historical, social, cultural, and institutional factors that influence and shape behaviour (Jones et al., 2002). As such, critically reflective coaches should be able to apply reflective processes that go beyond the descriptive and harness the "why" and "what for" of coaching practice. For example, we would expect them to (a) provide a critique of an incident or issue, not merely a description of what happened (Ghaye & Ghaye, 1998); (b) step back and adopt a questioning approach when evaluating their experiences in order to understand "why" they coach the way they do (Cushion et al., 2003); (c) clarify and understand personal coaching philosophies and examine the underlying values and beliefs that shape their thinking and coaching practice (Jones et al., 2002); and (d) maintain an open mind and critically examine the values espoused by the social "milieu" and cultural context of their coaching practice (cf. earlier comments in Chapter 2).

Nevertheless, in order to become critically reflective practitioners, coaches first need to "learn" the complex skill of reflection, which Knowles et al. (2001) caution "is not a simplistic process even with structured support" (p. 204). As such, there is a clear need for practical tools and processes that might facilitate the development and measurement of "appropriate" reflective skills. Accordingly, it is to one such potential tool that the focus of this chapter now turns.

Traditionally, the most consistently heralded technique for promoting reflective practice in a variety of disciplines, including coaching, is structured written reflection, most commonly in the form of a reflective journal (Cropley, Miles, Hanton, & Anderson, 2007; Knowles et al., 2001; Moon, 2006). More recently however, a new wave of Web 2.0 technologies have emerged which provide alternatives to reflective journals and are said to have the potential to further strengthen and promote critical thinking and reflection in a range of learning environments (Boulton & Hramiak, 2012). Web logs (known as blogs), are a social media platform that have been employed as a

mechanism for increasing reflective capacity and facilitating deeper learning across a range of educational settings, including higher education (Churchill, 2009), teacher training (Stiler & Philleo, 2003), internships (Chu, Chan, & Tiwari, 2012), and medical education (Whitcomb, 2003). In its simplest form, a blog is an easily created website that resembles an online journal and allows an individual to frequently record and publish their personal thoughts, viewpoints, and reflections on the Internet (Downes, 2004; Sharma & Xie, 2008). Posts are made using a web browser and are subsequently archived, organised, and displayed in reverse chronological order, allowing users to refer back to earlier entries. In addition to straight text and hyperlinks, blogs can also incorporate other forms of media, such as images, audio, and video (Duffy & Bruns, 2006). As a result, a blog is said to be learner centred and full of authenticity, liveliness, and accountability (Kang, Bonk, & Kim, 2011). It has also been reported that blogs require no additional technical knowledge than that needed for basic word processing (Cold, 2006), that they are motivating learning activities in themselves (Pinkman, 2005), and that they promote greater ownership of content than paper-based journals (Downes, 2004; Godwin-Jones, 2003).

Furthermore, and perhaps more interestingly, one notable promise of "blogging" is that it promotes multi-layered social interaction and interpersonal communication by enabling readers to comment on blog entries. That is, readers can provide feedback on the ideas presented, as well as "prompt" further reflection and thought regarding a stated viewpoint or opinion (Duffy & Bruns, 2006; Top, Yukselturk, & Inan, 2010). Similarly, a number of authors have suggested that blogs provide the perfect platform for collaborative learning and reflective conversation (Freeman & Brett, 2012; Garrison & Akyol, 2009; Godwin-Jones, 2003). That is, "students" build knowledge together as they are responsible for one another's learning as well as their own (Dooly, 2008).

Consequently, blogs are said to have the capacity to develop into effective online or "virtual" CoPs (Hall, 2008; Killeavy & Moloney, 2010).

Moreover, shifting reflective journaling to an online medium such as a blog is said to allow for students to have richer and more meaningful interaction with their tutors (Wolf, 2010). Tutors can observe and identify students' learning experiences, struggles, and discomforts in order to make necessary accommodations during instructional activities (Yang, 2009). Alongside this, they can assess the validity of the knowledge being generated during the reflective process. Comments on blog posts can then be used to provide frequent support in developing reflective skills as part of a formative process by accessing the blog entries and sharing their expertise with the individual (Boulton & Hramiak, 2012). Crucially, blogs could therefore act as a platform to help coach educators direct and support experiential learning (Culver & Trudel, 2006) and provide coaches with the structures, issues, knowledge, and information they should reflect against, in order for their reflection to be sufficiently critical. As such, the tutor's availability as an experienced dialogical other with which to "do" reflection (Cushion, 2006) echoes Vygotsky's (1978) contention that an individual's learning may be enhanced through engagement with a more capable other. Indeed, several authors have concluded that the ongoing support and leadership of a dedicated facilitator (i.e., tutor) is crucial if CoPs are to work in sports coaching (e.g., Culver & Trudel, 2006; Culver et al., 2009).

Despite a variety of authors advocating the use of blogging to promote reflective practice (e.g., Bruster & Petersen, 2013; Downes, 2004; Yang, 2009), the research available on the use of blogs in different educational activities remains relatively limited (Sharma & Xie, 2008). Furthermore, there remains a paucity of empirical research investigating their application in the field of sports coaching. Indeed, at the time of writing, no published studies have been undertaken which investigate the reflective

affordances of blogs for coach development. It must also be noted that results in other fields often remain informal, unsystematic, and inconclusive (Kim, 2008; Sharma & Xie, 2008). In addition, the general assumption that blogs can facilitate peer and group interaction, and, therefore, encourage the social construction of knowledge, are yet to be supported by empirical findings (Halic, Lee, Paulus, & Spence, 2010). Instead, it seems that the supposed technical advantages and educational application of blogs have preceded evidence of their effectiveness (Halic et al., 2010; Tan, 2006).

Therefore, the primary purpose of this study was to answer the research question "Can blogs facilitate reflection and community of practice among a module cohort of sports coaching students?" In order to determine if participants could critically reflect on their coaching practice and participate in a community of practice (through the auspices of online blogs created specifically for reflection), three specific research questions served as guides in the data analysis:

- 1. What types of reflection were involved in students' blog posts, that is, were they descriptive or critical?
- 2. To what extent did blogs facilitate social interaction and the development of a community of practice?
- 3. What was the module tutor's role in the process of blogging?

5.2 Method

5.2.1 Participants

The sample in the present study consisted of 26 full-time undergraduate students (6 females and 20 males), who made up a module cohort on a Sports Coaching degree program during the 2012/13 academic cycle. The average age of the participants was 20.04 years (SD = 1.34) and the median coaching experience was reported as 2 years, with experience ranging from 1 to 5 years in a range of sports (See Table 5.1). All participants were concurrently coaching in the community (i.e., over and above any

practical coaching associated with their course of study) for a minimum of two hours per week and had completed at least one national governing body coaching award, with the highest awarded qualification translating to level two of the UK coaching certificate endorsed framework (Sports Coach UK, 2012a). Two participants had previous experiences with blogging.

Table 5.1.

Coach	Age (years)	Gender	Level	Experience (years)	Sport Coached
1	20	М	L2	4	Soccer
2	19	Μ	L1	2	Soccer
3	21	Μ	L1	1	Soccer
4	24	Μ	L2	5	Cricket
5	19	Μ	L1	2	Multisport
6	20	F	L1	2	Multisport
7	20	F	L1	3	Multisport
8	19	F	L1	1	Multisport
9	19	Μ	L2	2	Tennis
10	20	Μ	L1	2	Soccer
11	19	F	L2	3	Gymnastics
12	19	М	L1	2	Cricket
13	20	М	L2	3	Tennis
14	19	М	L1	3	Soccer
15	20	М	L1	2	Cricket
16	20	Μ	L2	3	Soccer
17	21	Μ	L1	2	Soccer
18	20	Μ	L1	2	Soccer
19	20	Μ	L1	3	Soccer
20	19	Μ	L1	1	Soccer
21	24	Μ	L1	2	Soccer
22	19	Μ	L1	1	Soccer
23	19	F	L1	2	Basketball
24	21	Μ	L1	1	Soccer
25	20	Μ	L1	1	Field Hockey
26	20	F	L1	1	Field Hockey

Participant Demographics

5.2.2 Procedure

Prior to data collection, the study received ethical approval from the university's research ethics committee. The module in question was titled "The Reflective Coach"

and was a compulsory component of the second academic year of the degree program. At the same time, students were undertaking five other modules, two of which were compulsory and specifically related to the pedagogy of coaching and professional practice. Their remaining three modules were option choices selected from a suite including sports science and the "ologies" of coaching (e.g., sport psychology etc.), and the development and sociology of sport (e.g., community sport development, talent development pathways etc.). An introductory lecture highlighted the module's aims, learning outcomes, and assessment procedures. Students were advised that the upkeep of an ongoing reflective blog was a necessary element of assessment (worth 60% of final module grade) and were instructed to set up their own blog using the externally hosted blog service of either https://wordpress.com or https://blogger.com. It was explained that they could customise the web address of their blog, select a design template, and make other layout customisations; as such, it was made clear that the ownership of the blogs lay with the user (Tan, 2006). The second week's session was split into two. The first half explored the conceptual and practical issues associated with reflective practice. Here, Gilbert and Trudel's (2001) structured model of experiential learning, which has gained credence in the extant literature (Cushion et al., 2010), was presented as an exemplar framework to guide the reflective process. The second half then focused on reflective blogging; its purpose, process, and pedagogical value. At the end of the session, students were given a reading list of academic literature pertaining to reflective practice and instructed to make the first post on their blog. The third week was then given over to the logistical procedures of the blogging assessment. It was explained that there was no length or subject requirement for posts, but students were asked to reflect on personally significant events or "critical incidents" (Cropley & Hanton, 2011; Holt & Strean, 2001) during their coaching/learning (both inside and outside of university). It was also explained that unlike most academic writing, which is

commonly in the third person, the use of first person was encouraged in order to promote ownership and personalisation of the entries (Moon, 2006). Based on the assessment marking criteria, students were advised of the requirement to contribute to their blogs regularly for the remainder of the academic year (26 weeks). This was stipulated as a minimum of 15 separate posts made in different weeks. Other criteria included the quality of written expression, level of reflection, analysis of material in relation to appropriate theoretical concepts/models, and citations/links to additional relevant material (i.e., appropriate academic literature). Finally, in order to encourage the emergence of a community of reflective practice, students were asked to read and provide constructive feedback on their peers' blogs for the remainder of the module by clicking on the "reply" or "comment" link on selected entries. As such, students were asked to maintain privacy settings that would allow their blog to be openly viewed by their peers. In addition, it was explained that the tutor would monitor blog posts and provide regular feedback via the same process.

Timetabled sessions for the remainder of the module (2 hours per week) primarily involved student-led practical workshops designed to explore pedagogical theories and concepts relating to coaching practice. Additional tutor support and feedback on blog entries was also provided during one-to-one tutorials each semester, as well as during informal discussions within timetabled sessions. Thoughts and perceptions emerging from these feedback processes and other observations of blogging activity were recorded in field notes for the full duration of the module, and often casually discussed with participants.

5.2.3 Data Analysis

Content analysis was used to examine each student blog in terms of the number of entries, the frequency of posts, the number of posts incorporating citations to other relevant material, and the word count of each entry. Following the research methodology of Kol and Schcolnik (2008), each blog was also examined using a webbased text analysis tool (http://textalyser.net/) in order to identify possible differences in lexical density (i.e., the complexity of posts) between semester one and two. This analysis was also applied in order to identify changes in the range of vocabulary used in blogs (i.e., the number of different words).

Then, a category analysis of all students' blog posts was conducted in order to identify the focus of the entries they had made and determine the reflective quality of the writing exhibited. First, each post was read multiple times and coded according to categories based on Yang's (2009) framework for qualitative research on reflective blogs. As Yang's (2009) framework focused on trainee teachers' reflections on the teaching process, it was modified to fit the aims of the present study, which resulted in the following categories and subcategories:

- 1. Theories of coaching. Postings by the students about the pedagogical theories relating to coaching practice taught on the course.
- Own coaching practice. Postings by the students referring to their own coaching practice and the approaches and methods employed, as well as their expression of beliefs and knowledge related to these practices.
- 3. Others' coaching practice. Postings relating to the coaching practice of others and the approaches and methods utilised, as well as their expression of beliefs and knowledge related to these practices.
- Self-awareness. Postings based on self-consciousness and self-evaluation of own skills and knowledge.
- 5. Blogging. Postings about; (a) the use of the blog, and (b) interacting with others online.

During this analysis, a single blog post could fit into more than one category.

Finally, all entries were reread and coded in line with Hatton and Smith's (1995)

reflective writing framework, which has been used previously to identify levels of reflection in student writing (Boud & Walker, 1998; Moon, 2006; Whipp, 2003). Hatton and Smith (1995) based this framework on an extensive literature review and refined the categories and definitions it employs over several trials (Rourke & Anderson, 2004). They identify four types of writing: unreflective descriptive writing, descriptive reflection, dialogic reflection, and critical reflection (see Appendix C). To support reliability when coding, Hatton and Smith (1995) provide detailed guidance for using the framework, including specific examples for each of the four categories (Poom-Valickis & Mathews, 2013). They also advise that within a single unit of writing (i.e., a blog post) students may employ a lower level of reflection in order to then progress to a higher level of reflective writing. As a result, each blog post was coded according to the highest level of reflection reached within that entry (Freeman & Brett, 2012).

Several steps were taken to safeguard the validity of the data presented. Recognising the risk for miscoding blog posts, and mirroring the procedures outlined in Chapters 3 and 4, a collaborative approach was taken in the above analyses. Following the recommendations of Krane et al. (1997), a reliability check was conducted by asking an independent investigator, trained in qualitative methodology but blind to the objectives of the study, to audit the assigned categories to ensure that they accurately reflected blog entries. On the very few occasions (seven) where minor coding discrepancies emerged, negotiation was pursued until a consensus of opinion was reached (Sparkes, 1998). In addition, I kept an electronic reflective journal using a webbased note organising application (https://www.evernote.com/) for the duration of the data collection and analysis phase. This allowed observations of blogging activity, decisions, and concerns (Henwood & Pidgeon, 2003) to be recorded in the form of voice memos and typed notes on a range of synced devices (e.g., mobile phone, tablet, desktop computer). These "notes" were subsequently "tagged" with appropriate key words and archived in chronological order, which allowed easy retrieval and re-reading over time. These notes also acted as an on-going record of the research process and highlighted the reflexivity of the researcher (Kuper et al., 2008).

5.3 Results

A total of 448 blog entries were analysed (217 in semester one, 231 in semester two), including 433 written posts and 15 containing speech based audio which were transcribed verbatim and coded. The total number of blog entries made by each student ranged from 10 to 31 (M = 17.23, SD = 4.51), with written posts ranging from a minimum of 81 to a maximum of 2481 words in length (M = 518.35, Mdn = 428, SD = 323.65), and audio posts ranging from a minimum of 46 seconds to a maximum of 204 seconds (M = 100.87, Mdn = 76, SD = 54.01). The focus of students' blog posts varied. Table 5.2 shows that students' own coaching practice was the most frequent topic, followed by self-awareness of their own skills and knowledge, and posts relating to the theories of coaching taught on the course. The least frequent topic was the process of blogging itself. The findings of the present study are now arranged by the three research questions presented earlier in this chapter.

Table 5.2.

Topic Categories and Number of Coaches' Blog Posts

Topic Category	Semester 1	Semester 2	Total Number	
1. Theories of coaching	88 (40.55%)	119 (51.52%)	207 (46.21%)	
2. Own coaching practice	143 (65.90%)	143 (65.90%) 147 (63.64%)		
3. Others' coaching practice	28 (12.90%)	30 (12.99%)	58 (12.95%)	
4. Self-awareness	96 (44.24%)	112 (48.48%)	208 (46.43%)	
5. Blogging	19 (8.76%)	17 (7.35%)	36 (8.03%)	
5a. The use of the blog	12 (5.53%)	12 (5.19%)	24 (5.35%)	
5b. Interacting with others online	7 (3.23%)	5 (2.16%)	12 (2.68%)	

Note. Total percentage exceeds 100% as a single blog post (n = 448) could fit into more than one category.

5.3.1 What Types of Reflection were Involved in Students' Blog Posts?

As Table 5.3 shows, 11.16% of blog posts were coded as unreflective descriptive writing according to Hatton and Smith's (1995) criteria. In these cases, the students simply described what had happened and how they had responded to an incident or situation. Beyond this, there was no discussion or analysis of the issue. For example, "The majority of the children engaged very well...However, there were one or two children in my group who just weren't interested in taking part and despite my best efforts, I couldn't get one of the children to take part." With regard to more "productive" posts, the largest proportion of coded units (56.47%) constituted descriptive reflection. These posts also involved students providing an outline of what had happened and how they had responded to a situation or incident from their own perspective. Notably however, they also evidenced attempts to give reasons or provide justifications for events or actions. Nevertheless, this was again reported or described in an uncritical way, as stated in Hatton and Smith's (1995) criteria. For example, "The tone of my

voice at times can be too low and I can at times speak too quickly when nervous. This is most common when I work alone as I can become nervous if I feel pressured."

The second largest proportion of students' blog posts (29.91%) were coded as dialogic reflection. As defined, this type of reflection is more analytical, and involves stepping back from, mulling over, or tentatively exploring reasons for events, for example:

It's really weird how much more confident I feel around this group than the coaching group at Uni. I think it could be because I'm not afraid to do something

wrong whereas in class I'm afraid of doing something wrong and looking stupid. In addition to description and analysis of the problem, the blog posts classified as dialogic reflection also evidenced attempts to report an understanding of the wider context and see things from alternative points of view, for example:

Why doesn't this type of session happen more often in schools? They learn transferable skills, which you can see improving in front of you as they get more tries at their game...I taught football in their school last year and I never saw the kids be as involved, keen or inventive as I saw them today.

Crucially, only 2.45% of blog posts corresponded to Hatton and Smith's (1995) criteria for critical reflection. As defined, this type of reflection demonstrates an awareness that actions and events are not only explicable by multiple perspectives, but are also located in and influenced by multiple historical, cultural, and socio-political contexts. For example, "As a developing coach, and having had experience of teaching within a secondary school, inclusion is a major aspect of the delivery process that is being pressed." Or, for example, "Sometimes I think that coaches can become entangled in the success and publicity side of competition. We rarely challenge the purpose of the competition or the impact it has on children's development..."

Table 5.3.

Level of reflection	Semester 1	Semester 2	Total Number
Descriptive writing	35 (16.13%)	15 (6.49%)	50 (11.16%)
Descriptive reflection	133 (61.29%)	120 (51.95%)	253 (56.47%)
Dialogic reflection	48 (22.12%)	86 (37.23%)	134 (29.91%)
Critical reflection	2 (0.92%)	9 (3.90%)	11 (2.45%)

Coaches' Blog Posts According to Hatton and Smith's (1995) Framework

Table 5.4 shows that 12 students posted on their blog 15 times (or less) during the year, the basic requirement for the module, suggesting minimal engagements in the process. Of those 12 participants, only six increased their number of posts between semester one and semester two, and 10 increased the quality of their reflection (see Table 5.4). Of the 14 other participants, six increased their number of posts and 13 increased the quality of their reflection. In sum, only twelve of the 26 participants increased their number of posts, but 23 demonstrated evidence of the development of a more reflective style and a clear difference in the reflective quality of their entries between the two semesters. Indeed, Table 5.3 shows that the number of posts coded as dialogic and critical reflection rose in semester two when compared to semester one. At the same time, the number of posts coded as descriptive writing and descriptive reflection fell during the same period. Similarly, during semester two, only one participant did not have dialogic or critical reflections, compared to 11 participants in semester one (see Table 5.4). Nevertheless, it seems that reaching the dialogic and critical reflection levels was difficult for many of the participants since half of them had, after two semesters, three or less of their posts at the level of dialogical or critical reflection. Interestingly, of the very few posts that were made using uploaded audio, 12 of the 15 were coded as dialogic reflection and the remaining three as descriptive

reflection.

Positively, the number of blog posts that integrated citations to appropriate theoretical concepts and academic literature within the discussion rose from an average of 3.88 per student blog in semester one to 5.08 per blog in semester two. Similarly, Table 5.2 shows that the number of blog posts that focused (at least partly) on the theories of coaching covered in class increased between the two semesters. This suggests that some students began to make more consistent links between theory and coaching practice, which would be expected with the development of less descriptive reflection. This was coupled with a rise in the average length of posts from 498 words in semester one, to 536 words in semester two, and a rise in the average number of different words used in student blogs from an average of 891 different words used in semester one to 1022 different words used in semester two. This is considered an indication of development in the expression and elaboration of thoughts between the two semesters. In addition, 19 out of the 26 students showed a reduction in the lexical density of posts made in semester two when compared to semester one. This suggests that blog entries became less complex and more easily understood as students used terminology surrounding core concepts more consistently.

Table 5.4.

Number and Quality of Blog Posts According to Hatton and Smith's (1995) Framework

Coach	Semester 1 DiaR + CriR / Total		DiaR +	Semester 2 DiaR + CriR / Total		$\frac{1 + S2}{CriR / tal}$	Increase number of posts (Total S2 - S1)	Increase quality of reflection (% S2 - S1)
1	6/13	46%	4/5	80%	10/18	56%	No	Yes
2	1/7	14%	4/10	40%	5/17	29%	Yes	Yes
3	0/6	0%	2/13	15%	2/19	11%	Yes	Yes
4	1/17	6%	4/14	29%	5/31	16%	No	Yes
5	0/6	0%	1/9	11%	1/15	7%	Yes	Yes
6	4/9	44%	6/8	75%	10/17	59%	No	Yes
7	2/7	29%	6/10	60%	8/17	47%	Yes	Yes
8	0/9	0%	4/6	67%	4/15	27%	No	Yes
9	3/6	50%	9/14	64%	12/20	60%	Yes	Yes
10	0/7	0%	1/6	17%	1/13	8%	No	Yes
11	0/9	0%	2/8	25%	2/17	12%	No	Yes
12	1/7	14%	6/8	75%	7/15	47%	Yes	Yes
13	4/10	40%	10/11	91%	14/21	67%	Yes	Yes
14	3/8	38%	5/8	63%	8/16	50%	No	Yes
15	2/8	25%	1/7	14%	3/15	20%	No	No

16	5/10	50%	6/7	86%	11/17	65%	No	Yes
17	0/5	0%	1/10	10%	1/15	7%	Yes	Yes
18	1/7	14%	2/8	25%	3/15	20%	Yes	Yes
19	0/7	0%	2/8	25%	2/15	13%	Yes	Yes
20	0/6	0%	1/8	13%	1/14	7%	Yes	Yes
21	1/7	14%	0/7	0%	1/14	7%	No	No
22	1/7	14%	4/7	57%	5/14	36%	No	Yes
23	15/16	94%	9/10	90%	24/26	92%	No	No
24	0/6	0%	1/4	25%	1/10	10%	No	Yes
25	0/5	0%	2/11	18%	2/16	13%	Yes	Yes
26	0/13	0%	2/13	15%	2/26	8%	No	Yes
TOTAL	50/218	23%	95/230	41%	145/448	32%	No	Yes

Note. DiaR = Dialogic reflection; CriR = Critical reflection; S1 = Semester 1; S2 = Semester 2

5.3.2 To What Extent did Blogs Facilitate Social Interaction and the Development of a Community of Practice?

At the start of the module, three students stated their reluctance to make their blog posts accessible for peer viewing and did not configure their privacy settings to permit this until half way through semester one. Of the 26 students that maintained blogs during the module, none provided direct feedback by leaving comments on the blog posts of their peers. Similarly, none of the 448 entries made were aimed directly at the blogging environment and creating a sense of community. Despite this, it was clear when surveying the students' blogs that they were making a conscious effort to read their peer's blogs. For example, this was evidenced in comments such as "One blog I looked at showed particular success from the blog style of reflection, this blog talks about their resistance to begin blogging but once the routine of posting was established they found it a useful tool for reflection." And, for example, "Reading through peoples' blogs; it's clear that confidence, or lack of, is one of the key concerns that a lot of people are focusing on improving throughout the year."

Similarly, several students made regular reference to their peer's blogs within their own blog posts, indeed, often including direct links and "reflecting" on what they had read. For example, one student remarked "...after reading X's thoughts on this session (click here to view his post) it's interesting to see that he noticed our position when giving instructions to the kids, this is something I was not aware of..." Whilst another commented:

I don't agree with X's further comments about me being the favoured coach...He says it's because I get across information in a sneaky way. By this I think he means that I probe and probe until they really show an understanding.

5.3.3 What was the Module Tutor's Role in the Process of Blogging?

Getting five students "signed up" with their personal blog account took more

time than anticipated and the module tutor spent several weeks prompting these students to do this through direct emails. The tutor read all student blogs and provided feedback, encouragement, and questioning to students via the "comment" function on each entry. For example, "Well done, X. There is more depth coming through in this post…you are starting to get down into the 'why' and 'how' which is good." And, for example, "Very insightful post, Y. It would have been good to see a little more literature on reflective practice to help back up these points but you make links with your own practice well." In many cases, the tutor's feedback stimulated additional reflection, evidenced in subsequent "reply" comments by the student, for example:

Thanks for the comment! I do have a tendency of being too descriptive...I have been trying to add more analytical thinking. I really appreciate your help as this is something I struggle with, is there anywhere you would suggest I could go to develop this?

In addition, the feedback left by the module tutor would often prompt informal discussion with the student during timetabled sessions and tutorials. On these occasions, students would often ask for clarification on the comments made, or reaction to the subsequent posts made after tutor feedback. In addition, the tutor would, at times, attempt to encourage students to read the posts of others in order to stimulate further reflection. For example, "...this post (hyperlink inserted) on a similar theme might stimulate some thought, do you agree with the author?"

On each blog, the posts were dated and timed for the entry or upload of material. If a student had not posted to their blog for more than three weeks (13 instances), the module tutor would highlight this via comments on the blog, prompts "in person" and direct email. As a result, some students would "bulk" upload the equivalent of several weeks of entries at one time. When enquiring as to the reason for this, the tutor was often told that students preferred to construct posts in a word processed document in order to later "cut and paste" onto their blog, as opposed to composing posts directly on the blog itself.

5.4 Discussion

The findings of the present study are now discussed in line with the three research questions presented earlier in this chapter.

5.4.1 What Types of Reflection were Involved in Students' Blog Posts?

Consistent with the findings of other studies on the use of blogs for reflection (e.g., Lucas & Fleming, 2012; Parkes & Kajder, 2010; Yang, 2009), results highlighted that both descriptive and critical reflection was evidenced in students' blogs, with the number of descriptive reflections far exceeding those of a critical nature. Encouragingly, the majority of students exhibited a positive trajectory toward higher order thinking, giving weight to the suggestion that blogs might be a useful tool to foster the development of reflection in sports coaching. However, in line with other attempts to formally integrate coach reflection into university based coach education courses (e.g., Jones & Turner, 2006; Knowles, Tyler, Gilbourne, & Eubank, 2006), some students struggled to adopt a reflective practice orientation. That is, they did not move beyond sporadic use of their blog and reach the dialogic and critical reflection levels on a regular basis (see Table 5.4). As such, it is clear that the mere provision of a reflective tool is no guarantee that those using it will automatically reflect at higher levels (Hatton & Smith, 1995). The results also lend weight to earlier contentions that critical reflection is a skill that should be taught rather than assumed (Gilbert & Trudel, 2006).

It has been suggested that coaches find it difficult to engage in effective reflection unless they have the underpinning theoretical knowledge the reflective process requires (Peel, Cropley, Hanton, & Fleming, 2013). As such, it was recognised that whilst the participants in the present study were given instructional guidance on

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how to reflect on their coaching practice using blogs, with Gilbert and Trudel's (2001) structured model of experiential learning presented as a potential framework to guide the reflective process, this could have been insufficient to allow them to develop their understanding of the purposes and process of reflective practice. That is, although the introductory lectures in the present study provided participants with a structure to guide the mechanics of reflection, the actual reflective process of issue setting, unpacking, and solving was not operationalised fully (Abraham & Collins, 2011a). For example, participants were not encouraged to critically examine and analyse their role frames in order to identify and/or reduce potential biases that might otherwise have guided or influenced their behaviour (Gilbert & Trudel, 2004). Equally, whilst having sports coaches reflect on their day-today learning experiences in their own coaching context is important (Gilbert et al., 2009), it was recognised that by specifically asking participants in the present study to focus on "critical incidents" during their experiential learning, they may have been overly concerned with identifying or focusing on negative aspects, or perceived "problems" within their coaching practice (Dixon et al., 2013). In this regard, Smith and Jack (2005) suggest that individuals may "search" for problems on uneventful days in order to tick the assessment box, whilst Dixon et al. (2013) propose that coaches might neglect to focus on their strengths and "how" they do what they already do well.

Clearly then, if we are to utilise blogs to facilitate reflection in coach education, we may first need to put more explicit processes and strategies in place to both encourage participation and guide coaches toward higher levels of reflection (Peel et al., 2013). Indeed, the absence of sufficient structures to support reflective practice has been cited as an inhibitor of enhanced reflection in previous research (Larrivee, 2008; Otienoh, 2009), with Knowles, Borrie, and Telfer (2005) finding that none of the coach education programmes they examined contained processes to overtly nurture reflective skills. Accordingly, Gilbert and Trudel (2013) suggest that support devices such as reflection cards and critical reflection exercises might help coaches to reflect more critically on their learning. Similarly, it has been suggested that detailed rubrics or matrixes of descriptors characterising reflections might promote the development of critical reflection (Fernsten & Fernsten, 2005; Larrivee, 2008), whilst structured blogging "tasks" (e.g., instructor prescribed topics), have been said to lead to more focused and specific blogging without detracting from the personalised nature of content (Robertson, 2011). Nevertheless, it is important to remember that the development of reflective capacity is a complex process requiring time, effort and practice in order for it to be "learned" (Gelter, 2003; Knowles et al., 2001). Consequently, it must be noted that although the present study required participants to reflect using their blog for a period of 26 weeks, this timeframe might still be insufficient to engender familiarity with, and commitment to, the medium of blogging and the development of critically reflective skills (Cropley et al., 2012).

5.4.2 To What Extent did Blogs Facilitate Social Interaction and the Development of a Community of Practice?

The "social" influence of the blogging process was another factor which may require explicit development. Despite several researchers (e.g., Boulton & Hramiak, 2012; Hall, 2008; Hara & Hew, 2007; Yang, 2009) reporting that blogs have the capacity to promote social interaction and the development of virtual learning communities, and the results of the study reported in Chapter 4 describing how coaches perceived they learn through their social interactions with others, the present study found that participants did not take advantage of the collaborative and peer discourse features of blogs. Although students had direct access to peers' blogs (Wenger, 1998), and it was apparent that many of them made the effort to regularly read their peers' blog posts, overt dialogue and "reflective conversation" (Cropley et al., 2012) in the form of comments was conspicuous in its absence. As such, it is clear that a CoP was not an automatic consequence of the availability of a collaborative tool in the present study (Chan & Ridgway, 2006). This finding echoes the assertions of other researchers who have reported that participants can often find it difficult to "make the step" toward a stronger sense of community in an online environment (e.g., Killeavy & Moloney, 2010). Similarly, more dedicated "offline" studies have struggled to get coaches to interact with their peers and engage in the joint enterprise that characterises a functioning CoP (Culver & Trudel, 2006, Culver et al., 2009; Trudel & Gilbert, 2004). For example, Gilbert and Trudel (2005) suggest that, whilst having access to peer sounding boards is vital, the mere availability of peers is not enough. Furthermore, those peers must also be respected and trusted for their knowledge of coaching before coaches will seek their counsel. Crucially however, Mallett and colleagues (Mallett, Rossi, & Tinning, 2007) propose that the mutual trust and respect required to encourage social interaction between coaches can take many years to develop, something that the participants in the present study had not had. In addition, Lemyre et al. (2007) propose that facilitative peer interaction between coaches is never inevitable, as the "tradition" in coaching is not for coaches to share knowledge, but to conceal ideas in order to gain a competitive advantage. In short, both this literature and the current findings question the view of CoPs as a panacea in the coach development process, as apparent in the relative uncritical initiation and rapid promotion of such groups, without the clearly essential carefully staged evolution.

Importantly however, Romiszowski and Mason (2004) argue that a seldomchallenged assumption exists in online learning research whereby a lack of overt dialogue is perceived as learners being "passive recipients" as opposed to actively engaged in learning with others. In fact, Wenger (1998) suggests that the social construction of meaning does not always require others to be "present." It could be

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argued, therefore, that the participants in the present study were still capable of learning more from "lurking" (cf. Wright et al., 2007) and "just" reading the reflections posted by their peers than if they had simply recorded their own personal reflections (Boulton & Hramiak, 2012). This is perhaps similar to the assertions of a range of authors, who suggest that apprentice coaches spend time simply observing other coaches as they become socialised into a subculture and learn how things should be done (Lemyre et al., 2007; Nash & Sproule, 2009; Stephenson & Jowett, 2009). Crucially then, it must be acknowledged that the extent of the social interaction between the participants in the present study may have been assessed by potentially insufficient or overly simplistic quantitative measures, that is, the number of comments students made on peers' blogs (Hrastinski, 2009).

Nevertheless, to facilitate and encourage interaction between students and the purposeful discourse characteristic of collaborative learning and the co-construction of knowledge (Chan & Ridgeway, 2006; Garrison & Akyol, 2009), more specific guidance on both the process and value of peer-to-peer learning may have been needed. For example, Gilbert et al. (2009) suggest that a written protocol describing how coaches should operate in peer learning settings would increase the accountability of coaches in such a learning environment. Crucially, it must also be noted that previous studies that report significant levels of peer interaction and discussion on blogs required learners to complete directed tasks (e.g., Yang, 2009). Additionally, I recognise that the reflective affordances of the individual blogs operationalised in the present study might have been insufficient for promoting the social discourse necessary for collaborative reflection. For example, group blogging, whereby a single blog functions as a collective platform for a "small" group of people to contribute and simultaneously share learning experiences, is said to support the emergence of interactive online communities and collaborative reflection (e.g., Makri & Kynigos, 2007). This communal deliberation is

subsequently said to encourage each individual group member to become more critically reflective (Jarvis et al., 2005). Consequently, group based blogging might align more closely with social constructivist perspectives on learning (e.g., Vygotsky, 1978; Wenger, 1998), which many authors draw upon to stress the importance of dialogue with others in providing a "place" for the development of reflective practice and learning (Boulton & Hramiak, 2012; Reingold, Rimor, & Kalay, 2008). As such, the adoption of reflective group blogs as a more overt means of establishing online CoPs was an interesting area for further investigation within sports coaching, and is addressed in the study reported in Chapter 6.

5.4.3 What was the Module Tutor's Role in the Process of Blogging?

Attempts to systematically integrate reflection into coach education programmes have primarily focused on reflection that is socially supported and/or mediated (Gallimore, Gilbert, & Nater, 2014), with a trained "facilitator" who leads and supports the process said to be key (Cassidy et al., 2006; Lyle, 2002). Collectively, the results in the present study indicate that blogs were an effective platform for the module tutor to instigate and facilitate meaningful dialogue with students in order to support their experiential learning and guide the reflective process where necessary (Culver & Trudel, 2006). Crucially however, this was only the case with those students who fully engaged in and committed to the blogging process; a factor which must be considered and catered for both in future studies and practical applications.

Such issues notwithstanding, I was able to offer guidance on what elements of a coaching issue need to be attended to, suggest what additional knowledge might be required, and propose strategies that the coach might use to address the issue (Abraham & Collins, 2011a). Significantly, existing research has emphasised the importance of this type of intervention if reflection is to move beyond the basic level of description (Churchill, 2009). For example, significant empirical support has emerged for the

scaffolding of reflection through appropriate questioning from a mentor or more capable other (e.g., Reingold et al., 2008; Vygotsky, 1978; Whipp, 2003).

However, in retrospect, I recognised that my questioning comments could have been in and of themselves more critical in order to draw out and encourage higher levels of reflective thinking in the students. For example, when commenting on blog posts, I tended to encourage students to become more aware of their behaviours and develop a rationale for their behaviour by utilising "why?" and "what if?" questions (Cushion et al., 2003; Lyle, 2002). Yet, I rarely prompted students to be more aware of their role frames (Gilbert & Trudel, 2004) and the values and beliefs that might underpin their behaviour in a particular situation (Jones et al., 2002). Moreover, little reference was made to the social and cultural context of students' practice, all factors inherent within critical reflection. This is particularly important, if, for example, we again consider the social environment in which a coach works. As already discussed in Chapter 2, this environment is extremely complex, and coaches are faced with a diverse range of influences, which pressure them to behave in certain ways in order to conform and secure approval (Bowes & Jones, 2006; Collins et al., 2012). Consequently, the subtleties of this environment can promote and perpetuate the value and acceptance of certain types of knowledge and behaviour over others (Cushion et al., 2003) and guide what coaches choose to pay attention to as well as what they choose to learn (Werthner & Trudel, 2006). However, when considering the relative inexperience of some participants, I felt this level of questioning was perhaps beyond their current level of understanding. Indeed, several authors attribute the superficial nature of novice practitioners' reflections to less developed schema and a lack of appropriate theoretical knowledge due to insufficient experience (Moon, 2006; Tan, 2006). This raises the question of when is the appropriate time for this to occur and whether the journey

toward critically reflective practice is a linear journey through the distinct and progressive stages of reflection.

5.5 Conclusions and the Next Step

Generally, it was clear from the results that blogs hold the potential to facilitate reflection in coaches; however, in the present study they did not facilitate overt collaborative learning and the emergence of a CoP. Nevertheless, enough promise existed to warrant further investigation of their potential in coach education pedagogy (Morgan et al., 2013), particularly in utilising group blogs to provide coaches with the opportunity to enhance critical thinking skills by engaging in peer dialogue and collaborative reflection (Culver & Trudel, 2006; Dixon et al., 2013; Manouchehri, 2002). Promisingly, given that a recent four-year coach tracking study found that the cost, timing, and travel involved in accessing coach education are major barriers to uptake (Sports Coach UK, 2012b), it seems Web 2.0 platforms such as blogs could allow coach educators to provide ongoing support to those coaches undertaking certification courses at relatively little monetary and "time" expense to both parties when compared to face-to-face solutions (Piggott, 2013).

As with prior research into the use of blogs in learning however, several methodological issues remain and I recognise the limits of what can be accomplished by a relatively small scale and short-term study of this nature. For example, as the current study utilised a sample of undergraduate students in order to increase the level of "experimental control" over the process, as well as the homogeneity of participants, some readers may be concerned that participants lacked autonomy during the reflective process and that, as a result, engagement in the blogging process was mixed. I suggest the engagement levels in the present study were less a case of perceived student autonomy and more a case of some being more committed to learning than others, however, the findings clearly need extension and, if results so indicate, confirmation

into "mainstream" coaching. Indeed, Gallimore et al. (2014) make clear there is a need to determine whether guided reflection initiatives can endure beyond concept studies into wide scale implementation in sports coaching. Similarly, there is a need to test whether the reflective skills evidenced during the blogging process endure outside the constraints of a structured and assessed module (Knowles et al., 2006). Indeed, Hobbs (2007) even questions whether or not reflective practice can, in fact, be a required component of a course and still retain validity as genuine reflection. Additionally, there is also a need for better insight into coaches' perception and satisfaction relating to blog use for reflection and social interaction (Kim, 2008). Taking these findings into consideration, Chapter 6 now seeks to evaluate the use of group blogs in facilitating collaborative reflection. Furthermore, Chapter 7 attempts to build upon these findings by providing insight into coaches' perception and satisfaction relating to the use of groups blogs for collaborative reflection and learning.

CHAPTER 6 - USING SHARED ONLINE BLOGS TO STRUCTURE AND SUPPORT INFORMAL COACH LEARNING: A TOOL TO SCAFFOLD REFLECTION AND COMMUNITIES OF PRACTICE?

6.1 Introduction

The qualitative data presented in Chapters 3 and 4 described how coaches were susceptible to the potentially negative influences of the social milieu when learning during informal and self-directed learning situations. This highlighted a need to devise "better" ways for coaches to develop the skills needed to deal with these influences, with reflection outlined as one particularly useful construct requiring development in Chapter 5. The study results reported in Chapter 5 described how individually maintained online blogs were a useful platform for reflective thinking and the development of reflective skills in coaches. However, despite the collaborative and peer discourse features of blogs, overt dialogue and knowledge sharing between participants was entirely absent. As such, a CoP was far from being an automatic consequence of the use of blogs for reflection (Chan & Ridgeway, 2006), a finding perhaps in contrast to the perceived advantages of this approach assumed by some national coaching development structures (e.g., Sports Coach UK, 2015; UK Sport, 2013). Therefore, it appears that self-maintaining coach interaction representative of Wenger's (1998) original CoP concept may require a more deliberate and carefully staged evolution than the individually maintained open access blogs operationalised in Chapter 5. For example, group based blogging, whereby a single blog functions as a communal online platform for a "small" closed group of individuals to share their opinions and learning experiences, might better support the development of a sufficiently focussed and critical approach to the co-construction of professional coaching knowledge (cf. Abraham & Collins, 2011a; Boulton & Hramiak, 2012; Hall & Graham, 2004).

In addition, whilst the majority of participants in the study reported in Chapter 5 exhibited a positive trajectory toward higher order thinking; consistent with other studies on the use of blogs for reflection (e.g., Lucas & Fleming, 2012; Yang, 2009), descriptive reflections far exceeded those of a critical nature and some participants struggled to adopt a sustained reflective practice orientation. Therefore, these findings suggested that, if blogs are to be used to facilitate and nurture reflection in coach education, more explicit instructional strategies and support structures are needed in order to guide coaches towards higher levels of reflection and "teach" the skill of critical reflection (Gilbert & Trudel, 2013; Knowles & Saxon, 2010; Peel et al., 2013). Accordingly, the purpose of the study reported in this chapter was to answer two specific research questions:

- 1. Does structured group blogging increase collaboration and facilitate the emergence of CoP?
- 2. Does structured group blogging help coaches become more critically reflective?

6.2 Method

6.2.1 Participants

The sample in the present study consisted of a module cohort of 24 undergraduate students (5 females and 19 males) in the final year of a sports coaching practice degree programme during the 2013/14 academic cycle. The average age of the participants was 21.63 years (SD = 1.76) and the median coaching experience was reported as 6 years, with experience ranging from 4 to 8 years in a variety of sports (see Table 6.1). All participants had completed at least one national governing body coaching award, with the highest awarded qualification translating to level three of the UK coaching certificate endorsed framework (Sports Coach UK, 2012a). Accordingly, they were taken as representative of developing coaches, notwithstanding their status as students as well. As part of the module, all participants were undertaking a mandatory

work placement incorporating a minimum of 40 hours coaching practice, as well as concurrently coaching in the community in a variety of paid and voluntary roles (i.e., over and above any practical coaching linked to their course of study). Nine participants had previous experiences with blogging.

Table 6.1.

Participant Demographics

Group Blog	Coach	Gender	Age	Sport coached	Years experience	Highest coaching award
А	A1	М	22	Soccer	7	L1
	A2	Μ	21	Soccer	7	L2
	A3 ^a	Μ	26	Multisport	8	L2
	A4	Μ	22	Multisport	7	L1
	A5	F	20	Disability	5	L2
	A6	Μ	21	Multisport	5	L1
В	B1	М	22	Rugby union	5	L1
	B2	Μ	21	Rugby union	6	L1
	B3	Μ	20	Rugby league	6	L1
	B4	Μ	21	Rugby league	5	L1
	B5	Μ	25	Rugby league	6	L1
	B6	Μ	22	Rugby league	6	L1
С	C1	М	22	Soccer	7	L2
	C2	Μ	26	Soccer	5	L2
	C3	Μ	23	Soccer	7	L1
	C4	Μ	20	Soccer	7	L1
	C5	F	21	Soccer	7	L1
	C6	Μ	20	Soccer	5	L3
	C7	F	20	Soccer	4	L1
D	D1	Μ	21	Soccer	5	L2
	D2	F	21	Basketball	5	L2
	D3	М	20	Table tennis	4	L1
	D4	М	21	Soccer	5	L2
	D5	F	21	Gymnastics	7	L3

Note. M = Male, F = Female. Highest coaching award refers to level of UK coaching certificate endorsed framework.

^aCoach withdrew from course after 19 weeks due to personal reasons.

6.2.2 Procedures

Prior to data collection, the study received ethical approval from the university's

research ethics committee. The module in question was titled "Coaching Practice and Reflection" and was a compulsory element of the final academic year of the degree programme. The initial, introductory workshop was split into two. The first half of the session highlighted the module's aims, learning outcomes, and delivery method. The second half then focused on critical reflection, with a focus on its conceptual purpose, process, and pedagogical value (Thompson & Pascal, 2012). The following two weeks were then given over to tutor-facilitated discussion and debate, which aimed to both challenge and encourage each participant to question their existing and previously held values and beliefs in relation to their experiences, learning, and on-going practice (Cushion et al., 2003). This culminated in participants being asked to formulate their own structured vision (e.g., a philosophical standpoint) of what type of coach they wish, and perhaps need, to become (Stephenson & Jowett, 2009).

In the fourth week, students were advised that participation in an ongoing reflective group blog was a necessary element of assessment (worth 60% of final module grade). The participants were arranged randomly into four separate groups and introduced the externally hosted blogging platform WordPress to (https://wordpress.com), which is free of charge to use. It was explained that they would each receive an email invitation containing a link to join a purposely-designed closed group blog in the role of "author." This would mean they could publish blog posts and comment on the posts of others in their group, as well as upload files and links, without the need for moderation. Blog content could only be seen by other members of the group and two module tutors, and as such was private to each group (Boulton & Hramiak, 2012). Importantly, whilst allowing each individual to edit and delete their own posts, this role did not permit them to delete, change, or edit the posts of other group members, or any of the blog's administrative settings, which remained under the control of the module tutors. Next, the purpose of the group blog was clearly defined

(Johnson, 2001) and, in order to promote trust and a non-threatening online environment (Andrew, 2010), each group was asked to negotiate "rules of engagement" to guide use of the platform. This meant setting clear expectations of etiquette, shared practice, and knowledge exchange (Byington, 2011), which were subsequently combined into an overriding "code of conduct" that all participants were asked to abide by (see Appendix D). Then, in order to help set the scene for the other members of their group, and identify any technical issues, each participant was asked to make an introductory post on their group blog outlining their current applied coaching context/s.

In the fifth week, the first of five periodic two-hour workshops, focussing on separate theoretical perspectives or "themes" took place. The theme choices were driven by current but well-founded directions in coaching and a desire from the two module tutors to include topics they thought would be interesting and relevant (Jones, Morgan, & Harris, 2012). These comprised: (a) teaching and coaching styles (Mosston & Ashworth, 2002); (b) social role and impression management (Goffman, 1959); (c) the coach as a "more capable other" (Vygotsky, 1978); (d) shared leadership and athlete empowerment (Kidman, 2001), and; (e) assessing thinking and learning (Bloom, 1956). Each workshop was interactive and involved tutor facilitated debate and discussion in small groups, the aim being to question previous assumptions, raise current theoretical knowledge, and provide a foundation on which to base their subsequent reflections and blog discussion. At the end of each workshop, participants were signposted to appropriate theoretical literature and relevant material, and asked to use their group blog as a place to reflect on and discuss the theme in relation to their own experiences and on-going practice. As such, the adopted structure centred on collaborative group reflection through the discussion of situated learning, a process grounded in the CoP framework (Wenger et al., 2002). Each periodic workshop was separated by an average period of 32 days for the remainder of the academic year (23 weeks). Throughout this

time, both module tutors would read all of the entries that were made, and comment on the emerging discussion where appropriate in order to guide operation and progress of the blogs (Fontainha & Gannon-Leary, 2008) and "nudge" discussion and learning in the right direction (Johnson, 2001); as such, the focus was on participant-generated content with the tutors acting as partners in the learning process (Gunawardena et al., 2009).

6.2.3 Data Analysis

Content analysis was used to examine each group blog in terms of the number of entries (i.e., posts and comments), the frequency of entries, the word count of each entry, and the number of views each group blog received. Then, a group-by-group content analysis of all blog entries was conducted in order to examine the emergent participant behaviour in each group and to determine the reflective quality of the writing exhibited. First, in order to help clarify the anatomy of any discussions occurring in each group blog, each entry was read multiple times and coded according to a coding scheme based on Hara and colleagues' (Hara, Shachaf, & Stoerger, 2009) categories for classifying the types of activities apparent in online messages. The Hara et al. (2009) coding scheme had nine categories, of which two were removed (announcement and humour), due to their limited relevance in reflective blogs. In expanding on their work, one additional category was identified: acknowledgment. Thus, the final coding scheme was composed of eight categories and is described in Table 6.2. During this analysis, a blog entry could fit into more than one category.

Table 6.2.

Category	Definition					
1. Solicitation	Request for help, ideas, or feedback.					
2. Appreciation	Present the feeling of gratitude (e.g., by saying thank you).					
2	Tresent the reening of grantade (e.g., by suging thank you).					
3. Administrative	Provide administrative support for the group blog.					
3. Administrative	r tovide administrative support for the group blog.					
1 Clarification	Offen additional information when forther avections missed					
4. Clarification	Offer additional information when further questions raised					
	after someone responds to the original question.					
5. Knowledge sharing	Share any types of knowledge.					
6. Acknowledgement ^a	Short entry of two sentences of less, simply acknowledging					
-	a response or notifying of further elaboration to come.					
	1 , 5					
7. Misdirected entry	Entry posted by mistake or to rectify error (e.g., entry					
/ : Wilsuffected end y	simply containing reference missing from previous entry).					
	simply containing reference missing from previous entry).					
Q IImmoodoblo ontru	Entry is not readable due to technical problems					
8. Unreadable entry	Entry is not readable due to technical problems.					
Note. Adapted from Ha	Note. Adapted from Hara et al. (2009).					

Coding Scheme for Activities Apparent in Blog Entries

^aCategory emerged during inductive content analysis.

Following this, any entries coded as "knowledge sharing" (see Table 6.2) were further coded according to Hew and Hara's (2006) framework of knowledge types, who in their study of on online CoP involving nurses, defined three broad types of knowledge, as described in Figure 6.1. During this analysis, a blog entry could again fit into more than one category. Although Hew and Hara's (2006) knowledge framework was used a priori, the coding categories were not forcefully imposed onto the data. Throughout the data analysis, new knowledge categories (if any) were also allowed to emerge inductively during the coding process. To increase the consistency of the coding process, exemplary entries that clearly illustrated the different types of knowledge were identified and used as initial codes to guide the continuing analysis (Hew & Hara, 2006).

Figure 6.1.

knowledge		
1. Book	Factual knowledge, general	"As Zeng and Gao (2012) explained
knowledge	regulations, or published	when examining Mosston and
into treage	works.	Ashworth's spectrum"
	Works.	
		"Try having a read of Whitmore
		(2009) coaching for performance
		chapter 5, this book helped me
		develop knowledge about how to
		word your questions"
2. Practical	The use of book knowledge	
knowledge	in practice, further classified	
	into three categories:	
a) Personal	Individual opinion not	"I think lower order questions are
opinion	necessarily representing best	good for identifying someone's
	practice.	knowledge, or lack of it."
b) Personal	Personal recommended	"I would suggest you keep going the
suggestion	solution to a problem or	way you are, just ask plenty of
	issue.	questions and let them do the
		talking."
c) Institutional	Knowledge related to what	"At most development centres and
practice	an institution currently	academies we take the players school
	practices or has practiced in	work into account to make sure we
	the past.	are not affecting their education."
3. Cultural	What it is like to practice in	"Coaches are mentors to young
knowledge	the field, including one's	children, whether that be in sport or
	philosophy toward a	in life."
	practice, as well as one's	
	professional responsibilities	
	in a practice.	
4. Experiential	A description of a	"By including them in the brief of the
knowledge	participant's own	session, I instantly received positive
	experiences as a coach or participant.	feedback from the players."
	1 I	"I was involved in academies from a
		young age and I found there was too
		much pressure and the enjoyment
		factor went, it felt like I was a robot."

Hew and Hara's (2006) framework of knowledge types.

Note. The fourth category (experiential knowledge) emerged inductively during the data analysis. The exemplary quotes emerged during the data analysis process.

Subsequently, blog entries were reread and coded in line with Hatton and Smith's (1995) reflective writing framework, which was used successfully in the study reported in Chapter 5 to identify levels of reflection in blog entries. The framework includes four types of writing, rising in ascending order of reflective quality: unreflective descriptive writing, descriptive reflection, dialogic reflection, and critical reflection, with each blog entry coded according to the highest level of reflective writing reached in that entry (Freeman & Brett, 2012).

Finally, in order to determine the extent to which each group possessed the characteristics of a functioning CoP, the blog data from each group were compared against the three main interconnecting structural elements of Wenger et al's (2002) CoP framework. The applied criteria were:

- 1. Domain. A CoP is not just a network of connections between people: it has an identity defined by a shared domain of knowledge.
- 2. Community. Members of a CoP engage in joint activities and discussions, they share information and knowledge; as a result of these interactions and the relationships that develop, they address problems and learn together.
- 3. Practice. A CoP is not merely a community of interest. Members of a CoP are practitioners; as a result of their sustained interaction over time, they develop a shared repertoire of resources (e.g., a body of practical knowledge, experiences, stories, tools).

During each of the above content analyses, in a process mirroring that reported in Chapters 3, 4, and 5, a collaborative approach was taken in the analysis of the data in order to increase the overall trustworthiness of the results (Maxwell, 1996). When there was disagreement about the categories in which an entry was placed (less than 5% of entries), negotiation of each researcher's interpretation was pursued until a consensus of opinion was reached (Sparkes, 1998). In addition, and following the recommendations of Krane et al. (1997), a reliability check was conducted at each stage by asking an independent researcher, trained in qualitative methodology but blind to the objectives of the study, to audit the assigned categories to ensure that they accurately reflected blog entries. No issues were found. Utilising the same processes reported in Chapter 5, a web-based reflective journal was maintained during the data collection and analysis to record observations of the group blogging process, decisions, and concerns (Henwood & Pidgeon, 2003).

6.3 Results

A total of 569 blog entries were analysed. Table 6.3 and Table 6.4 show that the participants in each group blog actively engaged with one another by making blog entries for the duration of the module (i.e., for all five themes), with the number of blog entries made by each participant ranging from 5 to 99 (M = 23.71, SD = 19.26), and the number of entries per group ranging from 71 to 277 (M = 142.25, SD = 92.14). Entries ranged from a minimum of 22 to a maximum of 1446 words in length (M = 264.04, Mdn = 220, SD = 183.91). Tutors made a total of 49 comments across all four blogs during the year, commenting on entries an average of three times per theme on each group blog. The findings of the study are now arranged in such an order as to provide answers to the two the original research questions in turn. An exemplar blog thread is included in Appendix E for illustrative purposes and to allow readers to immerse themselves in the findings.

Table 6.3.

Number and Quality of Blog Entries by Participant According to Hatton and Smith's (1995) Framework

Group blog	Coach	Number of entries	Entries coded for reflection	DesW (%)	DesR (%)	DiaR (%)	CriR (%)
А	A1	14	14	1 (7.14)	1 (7.14)	12 (85.71)	0
	A2	12	12	1 (8.33)	3 (25)	5 (41.67)	3 (25)
	A3 ^a	12	12	0	0	5 (41.67)	7 (58.33)
	A4	14	14	0	9 (64.29)	4 (28.57)	1 (7.14)
	A5	10	10	0	4 (40)	4 (40)	2 (20)
	A6	9	9	0	5 (55.56)	4 (44.44)	0
	Group total	71	71	2 (2.82)	22 (30.99)	34 (47.89)	13 (18.31)
В	B1	16	12	3 (25)	8 (66.67)	1 (8.33)	0
	B2	36	32	1 (3.13)	16 (50)	13 (40.63)	2 (6.25)
	B3	14	13	0	4 (30.77)	9 (69.23)	0
	B4	17	14	0	11 (78.57)	3 (21.43)	0
	B5	12	11	0	6 (54.55)	5 (45.45)	0
	B6	5	5	3 (60)	1 (20)	1 (20)	0
	Group total	100	87	7 (8.05)	46 (52.87)	32 (36.78)	2 (2.30)
С	C1	40	31	0	15 (48.39)	14 (45.16)	2 (6.45)

Study rep	orted in Chapter 5	448	448	50 (11.16)	253 (56.47)	134 (29.91)	11 (2.45)
	TOTAL	569	509	12 (12.20)	179 (35.17)	248 (48.72)	70 (13.75)
	Group total	121	113	0	25 (22.12)	60 (53.10)	28 (24.78)
	D5	24	22	0	8 (36.36)	8 (36.36)	6 (27.27)
	D4	11	11	0	4 (36.36)	4 (36.36)	3 (27.27)
	D3	27	25	0	8 (32)	15 (60)	2 (8)
	D2	34	30	0	0	17 (56.67)	13 (43.33)
D	D1	25	25	5 (20)	16 (64)	4 (16)	4 (16)
	Group total	277	238	3 (1.26)	86 (36.13)	122 (51.26)	27 (11.34)
	C7	12	10	1 (10)	7 (70)	2 (20)	0
	C6	34	34	0	18 (52.94)	14 (41.18)	2 (5.88)
	C5	25	22	1 (4.55)	11 (50)	8 (36.36)	2 (9.09)
	C4	24	19	0	7 (36.84)	9 (47.37)	3 (15.79)
	C3	43	42	1 (2.38)	15 (35.71)	22 (52.38)	4 (9.52)
	C2	99	80	0	13 (16.25)	53 (66.25)	14 (17.5)

Note. DesW = Descriptive writing; DesR = Descriptive reflection; DiaR = Dialogic reflection; CriR = Critical reflection.

^aCoach withdrew from course after 19 weeks due to personal reasons.

Table 6.4.

Number and Quality of Blog Entries by Theme According to Hatton and Smith's (1995) Framework

Group	Theme	Number of entries	Entries coded for reflection	DesW (%)	DesR (%)	DiaR (%)	CriR (%)
А	1	20	20	1 (5)	7 (35)	9 (45)	3 (15)
	2	11	11	0	2 (18.18)	3 (27.27)	6 (54.55)
	3	18	18	0	9 (50)	9 (50)	0
	4	11	11	0	3 (27.27)	6 (54.55)	2 (18.18)
	5	11	11	1 (9.09)	1 (9.09)	7 (63.64)	2 (18.18)
	Group total	71	71	2 (2.82)	22 (30.99)	34 (47.89)	13 (18.31)
В	1	33	27	1 (3.70)	17 (62.96)	9 (33.33)	0
	2	15	12	4 (33.33)	6 (50)	1 (8.33)	1 (8.33)
	3	23	21	2 (9.52)	17 (80.95)	2 (9.52)	0
	4	18	17	0	3 (17.65)	13	1 (5.88)
	5	11	10	0	3 (30)	7 (70)	0
	Group total	100	87	7 (8.05)	46 (52.87)	32 (36.78)	2 (2.30)
С	1	46	37	1 (2.70)	28 (75.68)	8 (21.62)	0
	2	28	26	0	10 (38.46)	10 (38.46)	6 (23.08)
	3	66	56	1 (1.79)	17 (30.36)	29 (51.79)	9 (16.07)

	4	69	54	0	8 (14.81)	42 (77.78)	4 (7.41)
	5	68	65	1 (1.54)	23 (35.38)	33 (50.77)	8 (12.31)
	Group total	277	238	3 (1.26)	86 (36.13)	122 (51.26)	27 (11.34)
D	1	17	15	0	4 (26.67)	8 (53.33)	3 (20)
	2	19	19	0	4 (21.05)	9 (47.37)	6 (31.58)
	3	27	25	0	6 (24)	16 (64)	3 (12)
	4	33	32	0	6 (18.75)	16 (50)	10 (31.25)
	5	25	22	0	5 (22.73)	11 (50)	6 (27.27)
	Group total	121	113	0	25 (22.12)	60 (53.10)	28 (24.78)
	TOTAL	569	509	12 (12.20)	179 (35.17)	248 (48.72)	70 (13.75)

Note. DesW = Descriptive writing; DesR = Descriptive reflection; DiaR = Dialogic reflection; CriR = Critical reflection.

6.3.1 Does Structured Group Blogging Increase Collaboration and Facilitate the Emergence of CoP?

Evidence that a functioning CoP emerged in each of the four group blogs can be seen by their ability to successfully fulfil all of the three characteristics put forth by Wenger et al. (2002). These are outlined below.

6.3.1.1 Domain. The participants in each group blog demonstrated a mutual interest in, and commitment to, the domain of sports coaching by being registered on the programme of study (i.e., they had chosen to study it volitionally). Therefore, the area of knowledge brought the participants together and helped them establish the common focus and scope of their interactions (Byington, 2011); as such, the domain defined the key issues that each group needed to explore and develop through the joint enterprise of shared online reflection (Wenger, 1998).

6.3.1.2 Community. The participants in all groups primarily engaged in the activity of sharing knowledge, with 93.50% of all blog entries coded as such (see Table 6.5). Analysis of the types of knowledge shared revealed that practical knowledge was the most commonly shared type of knowledge in blog entries (see Table 6.6). This was further classified into: (a) personal opinion (77.60% of entries); (b) personal suggestion (16.31% of entries), and; (c) institutional practice (3.54% of entries). The second most frequent type of knowledge was a new category emerging inductively from the data, experiential knowledge (72.10% of entries), which included stories and descriptions relating to a participant's personal experiences as a coach or participant. Book knowledge made up the next most frequent type of knowledge (44.01% of entries); this predominantly involved in-text citations to evidence-based literature, with entries usually accompanied by a reference list of citations, most of which were outside of any tutor directed reading, and some of which included a direct hyperlink to the article or publication. In addition, entries often included direct signposting to a book, article, or

video pertaining to the topic. The least frequently shared knowledge was cultural knowledge (8.06% of entries), which predominantly included statements relating to the general role of coaches and coaching in society.

The willingness to share ideas was apparent in the threaded discussion that characterised the knowledge exchange in all four groups (see Table 6.7); with 71.76% of new blog posts developing into a thread, which, on average, were 5.17 entries long (see Table 6.7), with the longest extending to 26 entries. Blog entries were characterised by use of greetings and first names, expressions of appreciation (13.53% of entries, see Table 6.5), and positive feedback, which evidenced a supportive environment (Ramondt, 2008). Nevertheless, it was apparent that interactions were not always entirely "harmonious" (Cox, 2005), and some discussions between participants would include challenge, disagreement, and criticism. Much of the observed peer interaction was initiated when participants posted a problem, or raised thoughtful and personalised questions; indeed, Table 6.5 shows that 57.47% of all blog entries included solicitation for help, ideas, or feedback. These interactions are indicative of sustained mutual engagement in collaborative enquiry (Bray, Lee, Smith, & Yorks, 2000) and the collective negotiation of learning; as such, each group formed a community around their domain and built supportive collaborative relationships with one another (Brown & Duguid, 2001). However, it was apparent that not all group members evidenced the same "overt" levels of engagement, with some participants making far fewer entries than others (see Table 6.3). Nevertheless, although some participants wrote fewer entries than others, it was clear that all participants were reading the content of their group blog on a regular basis, with each blog receiving over 1000 views in total (M =1804.25, SD = 1031.17). Interestingly, the size of each group (i.e., number of members) did not correlate with the number of blog entries; for example, the group with least

members (group D, five members) had the second highest number of entries across the four groups, highlighting differences in intra-group patterns of engagement.

Table 6.5.

Types of Activities Apparent in Blog Entries

Group	Number of		Category								
	entries	Sol (%)	App (%)	Adm (%)	Cla (%)	Kno (%)	Ack (%)	Mis (%)	Unr (%)		
А	71	44 (61.97)	10 (14.08)	0	14 (19.72)	71 (100)	0	0	0		
В	100	32 (32)	13 (13)	0	22 (22)	88 (88)	6 (6)	7 (7)	0		
С	277	177 (63.90)	24 (8.66)	0	113 (40.79)	257 (92.78)	38 (13.72)	1 (0.36)	0		
D	121	74 (61.16)	30 (24.79)	0	51 (42.15)	116 (95.87)	8 (6.61)	0	0		
Total	569	327 (57.47)	77 (13.53)	0	200 (35.15)	532 (93.50)	52 (9.14)	8 (1.41)	0		

Note. Sol = Solicitation; App = Appreciation; Adm = Administrative; Cla = Clarification; Kno = Sharing knowledge; Ack = Acknowledgement; Mis = Misdirected entry; Unr = Unreadable entry. Total percentage exceeds 100% as a single blog entry could fit into more than one category.

Table 6.6.

Group	1			actical knowled	CK (%)	EK (%) ^a	
	entries sharing		PO (%)	PS (%)	IP (%)		
	knowledge						
А	71	30 (42.25)	52 (73.24)	22 (30.99)	4 (5.63)	14 (19.72)	56 (78.87)
В	88	75 (85.23)	56 (63.64)	18 (20.45)	0	2 (2.27)	53 (60.23)
С	257	79 (30.74)	182 (70.82)	34 (13.23)	10 (3.89)	17 (6.61)	176 (68.48)
D	116	40 (34.48)	105 (90.52)	9 (7.76)	4 (3.45)	24 (20.69)	82 (70.69)
Total	532	224 (42.11)	395 (77.60)	83 (16.31)	18 (3.38)	41 (7.71)	367 (68.98)

Types of Knowledge shared in Blog Entries According to Hew and Hara's (2006) Framework

Note. BK = Book knowledge; PO = Personal opinion; PS = Personal suggestion; IP = Institutional practice; CK = Cultural knowledge; EK = Experiential knowledge. Total percentage exceeds 100% as a single blog entry could fit into more than one category.

^aNew knowledge category emerging from inductive content analysis.

Table 6.7.

Number and Quality of Blog Entries by Thread According to Hatton and Smith's (1995) Framework

Group	New blog posts	Number of pos into threa	1 0	Average thread length (SD)	DesW (%)	DesR (%)	DiaR (%)	CriR (%)
А	25	Threads	17 (68)	3.47 (1.5)	0	0	10 (58.82)	7 (41.18)
		Standalone	8 (32)		0	3 (37.50)	4 (50)	1 (12.50)
В	18	Threads	17 (94.44)	5.41 (3.36)	1 (5.88)	3 (17.65)	11 (64.71)	2 (11.76)
		Standalone	1 (5.56)		1 (100)	0	0	0
С	62	Threads	42 (67.74)	5.51 (4.54)	0	6 (14.29)	21 (50)	15 (35.71)
		Standalone	20 (32.26)		0	13 (65)	6 (30)	1 (5)
D	26	Threads	18 (69.23)	5.72 (3.49)	0	0	7 (38.89)	11 (61.11)
		Standalone	8 (30.77)		0	1 (12.50)	3 (37.50)	4 (50)
Total	131	Threads	94 (71.76)	5.17 (3.79)	1 (1.06)	9 (9.57)	49 (52.13)	35 (37.23)
		Standalone	37 (28.24)		1 (2.70)	17 (45.95)	13 (35.14)	6 (16.22)

Note. DesW = Descriptive writing; DesR = Descriptive reflection; DiaR = Dialogic reflection; CriR = Critical reflection.

^aA thread is defined as a post with at least one comment. Posts without comments are defined as standalone.

6.3.1.3 Practice. Each community was more than a community of interest in the domain. Each group blog fostered an online environment that enabled participants to mutually engage in the practice of shared inquiry and reflection on a professional activity (Hara et al., 2009). Through this shared practice, each group developed a shared repertoire of practical knowledge (Wenger et al., 2002). More specifically, the content of each group blog represented a significant body of collectively developed and maintained practical knowledge, which functioned as a communal resource that participants could draw upon when reflecting on their everyday field experiences, ongoing professional development, and when planning for future coaching practice (Gray, 2005). Similarly, the patterns of behaviour that characterised much of the observed blog interaction (i.e., the sharing of knowledge, experiences, and advice through threaded discussion) was indicative of a routine and/or method of shared problem solving, which participants developed together over time as a result of their history of mutual engagement (Culver & Trudel, 2006). Nevertheless, the content and routines of each group blog were unique to each group; as such, this "shared culture" distinguished each CoP from one another (Galipeau & Trudel, 2006).

6.3.2 Does Structured Group Blogging Help Coaches Become More Critically Reflective?

A total of 509 blog entries were coded in line with Hatton and Smith's (1995) reflective writing framework. This analysis excluded 60 blog entries that had previously been coded as "acknowledgement" or "misdirected entry" (see Table 6.2) due to their short length and/or inapplicable content. Table 6.3 shows that the number of entries coded at the two upper "levels" of Hatton and Smith's (1995) reflective writing framework made up the majority of entries, with 48.72% of entries constituting dialogic reflection, and 13.75% of entries constituting critical reflection. As Table 6.3 shows, the number of entries coded as descriptive reflection was 35.17%, whilst 12.20% of entries

were coded as unreflective descriptive writing (the lowest level of the framework). Interestingly, Table 6.7 shows that when new blog posts (i.e., a new standalone post by an individual) drew comments from other group members, and subsequently developed into threaded discussion, the highest level of reflection reached was higher than in standalone posts. For example, 16.22% of standalone posts were coded as critical reflection, whilst 37.23% of threaded discussions reached that level. Equally, descriptive writing (1.06%) and descriptive reflection (9.57%) represented the highest level of reflection in far fewer threaded discussions when compared to standalone posts (see Table 6.7).

Nevertheless, variability in levels of reflection was evident between both individual participants and between groups, and a minority of participants found it difficult to reach the critical reflection level. For example, of the 24 participants, eight failed to make a single blog entry coded as critical reflection; notably, however, five of those participants were members of the same group (i.e., group B, see Table 6.3). Similarly, Table 6.4 shows that levels of reflection did not develop in a linear process as the themes progressed during the year.

6.4 Discussion

The aim of the present study was to explore the extent to which structured group blogging resulted in increased collaboration between participants and the emergence of CoP, as well as the extent to which this activity helped groups of coaches become more critically reflective on their professional practice. The findings suggest that each shared blog functioned as a CoP, whereby participation served as a tool for reflective practice situated in the context of each participant's everyday coaching experiences (Gray, 2005). Additionally, the findings indicate that the levels of reflective thinking evidenced by the majority of participants were, on average, more critical and less descriptive than those in the study reported in Chapter 5, which employed individually maintained reflective blogs. As such, these outcomes suggest that online group blogging might be a useful tool to facilitate and compliment informal coach learning and development, which, it has been suggested in this thesis (cf. study results in Chapter 4) and elsewhere, coaches prefer (e.g., Erickson et al., 2008; Stephenson & Jowett, 2009). However, whilst there has been clear progression in the levels of interaction and reflective thought in the present study, it is important to unpick further potential reasons for the differences with the findings described in Chapter 5.

Firstly, it is not clear whether the positive effects in the present study are attributable to the use of shared group blogs alone, or the way in which the collaborative tool was used (Hew & Cheung, 2013). Still, it can be inferred that what generally seems to be better quality peer interaction and collaboration and, therefore, I would suggest informal learning, was primed by a certain level of formal scaffolding and explicit structure "up front." Indeed, several authors have suggested that, in order to involve coaches in effective reflective practice, it is essential to put some structure in place beforehand (Knowles & Saxon, 2010). For example, the formal priming and "set up" in the initial five weeks of the module appeared to equip coaches with the structures to ensure their ensuing blog interactions were sufficiently open-minded and reflective (Gilbert et al., 2009). Consequently, participants at least seemed to be more aware of the social norms and assumptions that might drive their behaviour (Abraham & Collins, 2011a), and, it could be argued, were therefore less likely to engage in the mere transmission of dogma, a potential danger of knowledge sharing in CoPs (Piggott, 2013).

Similarly, the initial workshop for each focussed theme, and the directed reading and tutor guidance that accompanied them, helped equip participants with a primary knowledge base and/or set of theoretical constructs to allow them to ask thoughtful questions, provide productive feedback, and/or engage in asynchronous discussion on the theme on a more meaningful level (Choi, Land, & Turgeon, 2005; Peel et al., 2013). This scaffolding of blog interaction also allowed tutors to monitor the appropriateness of new beliefs and knowledge that were being generated by participants, as well as raise awareness of potentially more "effective" constructs in relation to each of the directed themes (Werthner & Trudel, 2006).

Secondly, the finding that, perhaps unsurprisingly, threaded discussion generates more reflective thought than mere statements or single blog entries is an important one. For example, when the participants in the present study received different perspectives and/or personalised questions from other group members (and on occasion the tutors) about their explanations, they had to justify their positions, which may have helped them to move beyond mere information exchange (Gray, 2005) and identify differences in understandings, as well as weaknesses in their initial explanations (Choi et al., 2005). This was especially apparent when two or more participants holding opposing views would engage in critical discussion (Piggott, 2013). Goos and colleagues (Goos, Galbraith, & Renshaw, 2002) define this type of peer collaboration between individuals of equal status as "mutuality," whereby the varied reasoning and viewpoints build a shared understanding of the topic. Without this interaction (i.e., when reflecting individually), even with the priming of up front scaffolds, participants are limited by their own knowledge and understanding of practice (Cropley, Hanton, Miles, & Niven, 2010). Therefore, if our aim is to promote critical reflection in coaches, facilitation and active encouragement, maybe even the requirement, of thread like reflective conversations is needed.

Finally, in the present study, the fact that group blogs weren't open access, and information was confidential between group members, seemed to encourage interaction; another finding with important practical implication. Indeed, Hall and Graham (2004) argue that new knowledge generation is rare in open access communities, but more

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common in smaller and more closed groups. Similarly, the structured formation of each blog, and associated code of conduct, appeared to result in a certain degree of trust, rapport and empathy between participants (Johnson, 2001); which, it has been said, increase the likelihood of open exchange and knowledge sharing (Guldberg & Mackness, 2009). Nevertheless, whilst the majority of participants in the present study evidenced a willingness to engage in collaborative reflection, a minority of participants did not engage in blogging activity as much as others; instead, they tended to take a back seat, which Haythornthwaite and colleagues (Haythornthwaite, Kazmer, & Robins, 2000) refer to as "being absent." However, this is a common finding in many online and face-to-face communities, whereby an active core group of posters make the majority of contribution, while other group members read the contributions of others but post less, sometimes known as "lurking" (cf. Wright et al., 2007). Indeed, Wenger et al. (2002) outline three levels of participation in CoPs, whereby 10% to 15% of members form the core group and lead discussions, 15% to 20% are active participants and contribute to discussions, and the remainder of the members participate at a lower level of involvement, with more sporadic or no participation (Byington, 2011).

6.5 Conclusions and the Next Step

This chapter has provided important evidence-based practice concerning the educational affordances of Web 2.0 technologies for supporting the informal learning of sports coaches. From the current findings, it may be tentatively inferred that small group blogs, supported by sufficient formal priming and ongoing scaffolds, lead to the emergence of peer collaboration and functioning CoPs. Similarly, this structured reflection as part of a community suggests participants were capable of achieving more in terms of their levels of reflective thinking than if they had reflected on an individual basis (Boulton & Hramiak, 2012). Clearly, therefore, such a tool holds potential in coach education pedagogy, especially when we consider many of the barriers to the

uptake of face-to-face coach education solutions typically cited by coaches (e.g., cost, accessibility, timing, and travel, cf. Sports Coach UK, 2012b).

As with prior research into the use of blogs in learning, however, several methodological issues remain and I recognise the limits of what can be accomplished by a relatively small scale and short-term study of this nature. For example, as the present study used participants who were concurrently completing a formal course of study, it could be suggested that participants might have written strategically and "faked" reflection in order to fulfil the assessment requirements (Hobbs, 2007) and/or "perform" the role of the student (Ross, 2011), as opposed to treating group blogging as an authentic mechanism for developing their practice (Cropley et al., 2010). However, a linear trend to the progression of reflective thought was not apparent, and reflective blogging was not necessarily something participants warmed to over time; instead, it appears it was something participants engaged with when the topic was of particular interest, that is, mutual interest was not always apparent and certain themes gripped some participants and/or groups more than others. Getting improvement, therefore, could be down to, and may depend on, judicious and clever use of theme, as well as leadership by the blog administrator, in order to pose interesting questions. This suggests that greater interest and commitment may result from sport and level-specific CoPs, such as would be expected if these approaches were used by sports organisations and governing bodies. Nevertheless, and pressingly, a need to determine what makes an individual participate or not participate in a blog community has been established (Silva, Goel, & Mousavidin, 2008); as such, insight into coaches' views and perceptions relating to their use and experiences of structured group blogs is essential. Accordingly, Chapter 7 sought to investigate coaches' perceptions of their engagement in, and experiences of, structured group blogging for reflection and learning.

CHAPTER 7 - USING SHARED ONLINE BLOGS TO STRUCTURE AND SUPPORT INFORMAL COACH LEARNING: THE PARTICIPANTS' VIEW AND IMPLICATIONS FOR COACH EDUCATION

7.1 Introduction

Chapter 6 explored the potential of shared online group blogs for structuring and supporting the informal learning of sports coaches. Content analysis revealed that use of this collaborative and free to access online platform by four separate groups of practicing sports coaches resulted in increased collaboration and social interaction between participants, and the emergence of fully functioning, online CoPs (cf. Wenger et al., 2002). Additionally, each group blog served as a useful "space" for the development of a more critical approach to reflective practice. Accordingly, it was proposed that shared online blogs are a useful tool for coach educators to exploit in the design of coach education pedagogy.

However, whilst potential reasons were posited for the outcomes in Chapter 6 (i.e., sufficient levels of "up front" structure and the formal priming of reflection, as well as the on-going "scaffolding" of blog activity), detailed insight into participants' perceptions of their learning experiences, as well as reasons for, or barriers to, their engagement in blog discussion, was needed in order to shed more light on the process of facilitative shared group blogging for coach learning. For example, to enable coach developers to refine and optimise the approach for their own educational contexts, explanation for the observed intra and inter group differences in the patterns and levels of engagement and/or participation in reflective blogging between participants was needed. Similarly, insight into the potential reasons for the lack of a linear progression in the levels of participants' reflective thought as the academic year progressed was required. Based on these considerations, the purpose of the present study was to provide an increased understanding of participants' perception and satisfaction relating to their

use and experiences of structured group blogs for collaborative reflection and learning.

7.2 Method

7.2.1 Participants

The sample in the present study consisted of 23 (5 females and 18 males – demographics as per the study reported in Chapter 6, see Table 7.1) final year undergraduate sports coaching practice students who, while undertaking a work placement based module incorporating a minimum of 40 hours coaching practice, as well as concurrently coaching in the community in a variety of paid and voluntary roles, reflected on their on-going practical experiences in relation to a series of theoretically driven "themes." This reflection was undertaken collaboratively in small groups, through the auspices of shared (yet not publicly viewable) online blogs.

Table 7.1.

Participant Demographics

Focus Group ^a	Coach	Gender	Age	Sport coached	Years experience	Highest coaching award
А	A1	М	22	Soccer	7	L1
	A2	М	21	Soccer	7	L2
	A4	М	22	Multisport	7	L1
	A5	F	20	Disability	5	L2
	A6	Μ	21	Multisport	5	L1
В	B1	Μ	22	Rugby union	5	L1
	B2	Μ	21	Rugby union	6	L1
	B3	Μ	20	Rugby league	6	L1
	B4	Μ	21	Rugby league	5	L1
	B5	Μ	25	Rugby league	6	L1
	B6	Μ	22	Rugby league	6	L1
С	C1	Μ	22	Soccer	7	L2
	C2	Μ	26	Soccer	5	L2
	C3	Μ	23	Soccer	7	L1
	C4	Μ	20	Soccer	7	L1
	C5	F	21	Soccer	7	L1
	C6	Μ	20	Soccer	5	L3
	C7	F	20	Soccer	4	L1
D	D1	Μ	21	Soccer	5	L2
	D2	F	21	Basketball	5	L2
	D3	Μ	20	Table tennis	4	L1
	D4	Μ	21	Soccer	5	L2
	D5	F	21	Gymnastics	7	L3

Note. M = Male, F = Female. Coach A3 withdrew from the study prior to focus group interviews. Highest coaching award refers to level of UK coaching certificate endorsed framework.

^aFocus group interviews involved the same participants from each group blog in the study reported in Chapter 6.

7.2.2 Procedures

Ethical approval for the study was granted from the university's research ethics committee and informed consent was obtained from all participants. An interpretive research design was employed to elucidate the student coaches' views of their learning experiences and strengthen understanding of related experiential and contextual influences (Turner & Nelson, 2009). During the final timetabled session of the module, four separate semi-structured focus group interviews (one with the members of each blog group) were conducted to gather data, with each one lasting an average of 56 minutes (range = 47-64 minutes). As such, focus group interviews were a convenient way to simultaneously collect data from several student coaches in a relatively short space of time before the end of the academic year. The use of focus groups interviews also encouraged student coaches to question, challenge, and comment on each other's experiences (Kitzinger, 1995), which complimented the ethos of the module and served as a useful end of module "debrief" for each blog group. In addition, the focus group method allowed the examination and exploration of not only what student coaches thought about their learning experiences, but *how* and *why* they thought that way (Jones & Gratton, 2004).

An interview guide, designed around the learning outcomes of the module, was used to structure the discussion and explore participants' educational experiences when using a shared group blog for reflection (see Appendix F). In an attempt to enhance trustworthiness, the guide was crosschecked for its potential to elicit relevant responses through discussion between the research team (Cresswell, 2007). The original set of open-ended questions was deliberately broad so as not to lead participants' answers in any way (Abraham et al., 2006) (e.g., "How has the module impacted on you as a coach?" and "How would you improve the group blogging process?").

To prepare participants for the interview, and enable them to ask preparatory questions, they were sent the interview guide five days prior to the interview (Christensen, 2014). All interviews were conducted in a relaxed atmosphere using a small seminar room at the university. Each interview started with rapport building conversation and a general introduction, whereby the purpose of the study was explained to the participants, as well as their rights and a declaration of confidentiality (White & Thompson, 1995). The role of the moderator was also explained: to seek elaboration but stay neutral, and participants were assured of no "repercussions" in relation to any contentious issues raised (McLafferty, 2004). During each interview, open-ended prompts and follow-up elaboration and clarification probes (e.g., "Can you provide us with a specific example of that?" and "Why do you think that is the case?") were used to help evocate rich discussion, draw out clear and comprehensive descriptions, and confirm or correct the interviewer's understanding of what was being said (Gratton & Jones, 2004; Kamberelis & Dimitriadis, 2013). Although the same questions were asked in each group interview, the order of their presentation varied slightly between groups depending on the direction each discussion took (Patton, 2002). All interviews were audio recorded.

7.2.3 Data Analysis

All interviews were transcribed verbatim, with word-processed transcripts checked twice against the audio recording to ensure they were representative of what was said. Each transcript was read at least twice before the unstructured group interview data were submitted to an inductive content analysis (Patton, 2002) using the data analysis software Nvivo 10 and following the same process for organising and interpreting unstructured qualitative data described in Chapters 3 and 4 (Côté et al., 1993; MacNamara, Button, & Collins, 2010; Nelson et al., 2013). First, each interview transcript was read at least twice, before being analysed line by line to identify

standalone meaning units (i.e., raw participant quotations or tutor comments of varying length that exemplify a meaningful thought, point, or piece of information). This allowed for thick description to be reflected in the results (Creswell, 2003). The meaning units were then labelled with a provisional description of the topic. Second, the meaning units were compared for similarities and organised into raw data themes. Third, the analysis then proceeded to a higher level of abstraction, whereby the raw data themes were compared and contrasted, and built up into larger and more general themes in a higher order concept (Côté et al., 1993). This process allowed for the constant refinement of the results until theoretical saturation occurred (Strauss & Corbin, 1998).

The trustworthiness and validation of the data was considered in the same manner to that reported in Chapters 3, 4, 5, and 6. At regular intervals during the data analysis, sample data sets were examined by an independent investigator, with any issues of contention discussed until a consensus of opinion was reached. To further increase the validity of the analysis, the coding process was also discussed on three separate occasions with a colleague, knowledgeable about coach development, and trained in qualitative methodology, but blind to the objectives of the study (Krane et al., 1997; Wright et al., 2007). In a further reliability check (Scanlan, Ravizza, & Stein, 1989), a third independent investigator was asked to match all the raw data themes with their first order themes, and the second and third order themes with their umbrella theme. In all cases, this discourse resulted in a high level of agreement between individuals, with only a small number of minor discrepancies (six) requiring adjustment or further rationale. A draft summary of results was also emailed to participants to review, all of whom confirmed the results to be an accurate representation of their educational experiences while using shared group blogs (Miles & Huberman, 1994). In addition, detailed handwritten field notes and memos were made during and after each

interview, as per the process described in Section 3.2.2.3 (Bryman, 2008; Wolfenden & Holt, 2005).

7.3 Results and Brief Discussion

The purpose of the present study was to investigate coaches' perceptions of their use of group blogs as a professional development tool. The themes that emerged from the inductive content analysis of group interview data are presented in Figure 7.1 and discussed below. Quotes are used to enable the reader to gain a better appreciation of the context in which the themes emerge from the data.

Figure 7.1.

Results of qualitative analysis of raw group interview data displaying hierarchical

themes that become progressively larger and more general.

Raw data themes	First-order themes	Second-order themes	Umbrella themes
A specing helit of as seelen asflection	themes	themes	themes
Acquire habit of regular reflection	Reflection	Learning	Outcomes of group blog use
More questioning of practice			
Greater self-awareness			
Learn more	Knowledge		
Enhanced understanding of theory			
Better ability to justify opinions			
Evidence base for practice			
Better planning	Perceived		
Better sessions	improved practice		
Tutors help keep content "on track"	Tutor support		
Tutors can set bespoke challenges	r dior support		
Sharing feedback/ideas	Peer support	Support	
Posting of useful material			
Learning through peer discussion			
More relaxed style of writing	Format		Reasons for
Easier to write bite size chunks			
Less "academic"			outcomes
Reduced need for attendance			
Can undertake when convenient	Accessibility		
App available for phone/tablet			
Practice based	Integrates theory		
Encourages application of theory	with practice		
Other work/life commitments	Competing	– Commitment	
Other assignments	commitments		
Time management	Attitude		
Requires a desire to learn			
Use of constructive criticism	Group dynamics		Potential limiters
Confidence to post on blog			of engagement
Feeling of shared responsibility			
Inclusion of questions	Structure of entries		
Overly long/boring entries			
Ambiguous content			

7.3.1 Outcomes of Group Blog Use

7.3.1.1 Reflection. Consistent with the findings of Churchill (2009), Ellison and Wu (2008), and Halic et al. (2010), participants were generally very positive about their

blogging experiences and acknowledged the value of group blogging as a professional development activity. Participants believed enhanced reflection to be an outcome of participation in structured group blogging, a factor that participants recognised in terms of both the amount and regularity of reflection they engaged in. In the words of C5, "reflection was something that I just wasn't doing...I assess things differently now, I review my sessions more, and ensure I actually do a bit of reflection after it." Furthermore, participants highlighted a perceived greater depth of reflective thought than usual, with a focus on self-awareness and the questioning of both current and previous practices particularly prevalent, as illustrated by A2:

Normally when I coach, I just do what comes naturally, but in writing these blogs, it enabled me to take a step back and actually view my coaching from a different view...this really put things into perspective and it made me think about the effect I actually have upon my environment by adopting these methods and sustaining my beliefs.

Similarly, C6 felt that group blogging made him "more aware of what I actually do when I'm coaching, more reflection on myself as a coach...because we might not know that we are actually doing that kind of thing until you actually reflect on it."

Whilst, in a similar vein, C2 added:

It challenges your beliefs doesn't it, and sort of what you think already. A couple of the themes, I've gone on their thinking 'right, I know what this is about,' but then I've been thinking 'well do I actually know as much as I thought I did?'

7.3.1.2 Knowledge. Participants commented in detail on how knowledge acquisition was a key outcome of group blog participation. In particular, and in line with previous research that suggests coaches learn most during less formal and self-directed learning activities (e.g., Erickson et al., Côté, 2008; Lemyre et al., 2007; Wright et al., 2007), data showed that they felt they had learned more as a result of

group blogging than they had done in other modules and external modes of coach education. B2 summed up this perception when he stated "it's probably the best assignment that I've done in terms of learning...it's debateable if you actually learn anything with the other assignments...I've actually learned stuff out of this one, whereas I don't think I have in many others."

Participants also emphasised an improved awareness and understanding of theoretical concepts, particularly in relation, but not limited to, the five "themes" that were covered during the module. For example, A1 commented on his growing awareness of the theoretical concepts that underpinned some of his practice:

Some of the themes, you have been doing it to some extent before, but you maybe didn't have a name for it...like the theme on Bloom, you might have been asking questions, but you didn't know the theory or aim behind it.

Moreover, the data highlighted that, as a result of their increased theoretical knowledge, participants felt better able to justify their opinions, as well as provide evidence for, their coaching practice when challenged by others. B3 exemplified this when he commented "before, if someone asked me why I did something, I could never explain it...I could never properly come back to them and say 'well this is why,' but now I think I could." Similarly, C4 described his interactions with the parents of his participants, and how he was better able to justify his decisions and methods by underpinning them with evidence:

I can say 'actually, I'm doing it this way because this is what I'm going to get out of it in 6 weeks time,' and they'll accept that...they look at me as a coach and think 'he knows what he is on about'...they just leave me to the sessions and just let me go with it.

7.3.1.3 Perceived improved coaching practice. A key determinant in measuring the effectiveness of reflective activity is the ability to bring about meaningful

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change to practice (Alterio, 2004). In the present study, a simple but crucial and oftstated concept was the perceived improvement of coaching practice, both in terms of participants becoming more adept at planning sessions, and their actual coaching sessions being more effective. C5 highlighted this:

I think I approach my sessions differently now...I went in with a very strict plan

of how I wanted things done...now I accept flexibility with the sessions, so I adapt to what the participants need and not what I want from them.

Whilst C3 added "I think every theme that we have gone through was relevant and it's helped my coaching massively...I feel like I'm more flexible because of it, I'm not just directing and one-dimensional."

7.3.2 Reasons for Outcomes

7.3.2.1 Support. Data highlighted that the support that was available during group blogging was crucial in facilitating learning. Reinforcing suggestions that moderators play an integral role in enhancing and nurturing the functioning of online communities (e.g., Andrew, 2010; Gray, 2005; Johnson, 2001), participants emphasised the important role that tutor support played in guiding the learning process, especially in terms of keeping blog discussions on track. For example, B5 noted "if someone was going off topic, Rob (a tutor, pseudonym) would say it's a bit irrelevant this...and then they'd pose a question to get us back on track...keeping us on our toes." Likewise, participants found that the challenges tutors would set in blog comments from time to time would help to instigate and guide reflective thought. D1 commented on this when recounting his experiences, "Rob set a challenge on ours, he gave us a scenario, so 'what would you do if this?' and it made you stop and think about what you'd do, so it was good, really useful." This finding is resonant of Vygotsky's (1978) concept of "scaffolding," whereby a scaffold offered participants guidance on what elements of a

problem needed to be attended to and what knowledge may be required (Abraham & Collins, 2011a).

It has been noted that coaches predominantly learn informally from each other coaches (Culver & Trudel, 2006; Erickson et al., 2008; Lemyre et al., 2007), and previous research into the use of blogs for learning has highlighted the valuable role of peer interaction in learning (e.g., Churchill, 2009; Kerawalla, Minocha, Kirkup, & Conole, 2009). In the present study, all participants were quick to acknowledge the central role played by peer support in sustaining their learning, particularly with regards to the sharing of feedback and ideas between group members. In C1's words:

It's picking up tips off each other as well, just the way different people go about things, you go 'oh I might have a try of that' and then you experiment with it in your next session and see if it works...then you can come back on the blog and say 'well I used your tip' and discuss how it went.

This is despite suggestions that the formalising of membership and participation in a community hinders the creation and sharing of knowledge (Silva et al., 2008). Relatedly, the different content and material that group members would often share and signpost each other to (i.e., videos, articles, literature) was viewed as being valuable for learning. D5 highlighted the benefits of this and commented:

Quite a few times within ours, people were saying 'try looking at this' and then they'd post you to a book or a video or something like that, so that enabled you to learn from reading that...that helped quite a lot within our blog.

Nevertheless, there was also a clear view that the willingness of group members to go beyond mere information exchange, and engage in meaningful peer discussion on a topic, was particularly important for learning. Indeed, Choi et al. (2005) note how multiple perspectives can help learners identify differences in understandings and weaknesses in their explanations. D3 reinforced this view by saying that, "the good thing is we don't always agree...instead of just going 'yeah I completely agree, I think it's fantastic,' we kind of said well 'no, actually I don't really agree with that,' and it's playing devil's advocate."

As such, through their blog interactions, participants became both the teacher and the learner as they engaged in reflective practice (Byington, 2011). These findings again echo Vygotsky's (1978) contention that an individual's learning can be enhanced through engagement with others, therefore enabling the extension of that individual's proficiency to a new level (Fontainha & Gannon-Leary, 2008). Indeed, the comments from participants appear to describe what Goos et al. (2002, pp. 197-198) term a "collaborative zone of proximal development," whereby learning is "scaffolded" by peer-to-peer mentoring (Gray, 2005; Gunawardena et al., 2009).

7.3.2.2 Format. It was reported that the format of group blogging better facilitated learning, especially in terms of the writing style being more "relaxed" than other formats. C4 stated "it just seems less pressured...more laid back compared to other assignments where you're concerned about word counts and stuff like that and third person all the time," whilst C7 agreed, adding that "it's good to have that freedom, it's not like a 3000 word essay or something...you don't feel afraid to write stuff that otherwise you feel would get pushed aside." Similarly, the writing format of group blogging was explicitly viewed as being less "academic," which encouraged participants to contribute and facilitated intelligibility. For example, A4 remarked how being able to "write little bits at a time is so much easier...you are not stuck in front of a computer for a day writing it." Similarly, D4 summed up the general consensus of the group well when he stated:

I'm absolutely rubbish at writing assignments, but I can write on a blog all day because you can write how you speak, so it was quite useful in that way...I found this so much easier to be able to explain what I meant. **7.3.2.3** Accessibility. Previous research has concluded that coaches often resist educational opportunities due to logistical constraints such as location and timing (Turner & Nelson, 2009; Vargas-Tonsing, 2007). Encouragingly, the data in the present study suggest that blogging was more accessible than other modes of coach education, especially due to the decreased reliance on attendance; as such, group blogs were viewed as being convenient, which participants felt better-facilitated learning as they felt able to engage in the process when it was most appropriate for them. For example, C6 recounted how he would switch off in lectures, whereas "when you're at home, you can do it in your own time when you feel in the correct state of mind to do it." Similarly, C2 felt the increased convenience and accessibility of group blogging as a learning activity led to him engaging and contributing more, stating:

You can pick the time when you work best. So if you work better at night...then it's better for you isn't it...I think that brought out better responses from people, it's like they went with a better attitude to their phone or their computer to write something on the blog.

It has been suggested that mobile and/or handheld technologies are important tools supporting the educational application of blogs (Churchill, 2011). Indeed, participants reported that convenience and accessibility was enhanced as a result of the blog platform being available as an application on mobile telephones and tablet computers. B4 surmised the views of the group well when he suggested:

It's just dead accessible...you can get it on your phone, like an app. You can just whack it on if you're on your bus or you're on the train and just do it there and then...everyone has got Internet and laptops and iPads, so it just makes it dead easy for everyone.

7.3.2.4 Integrates theory with practice. Nash and Sproule (2009) suggest that contextually relevant material and activities in coach education courses helps to increase

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students' interest in learning. Participants in the current study emphasised the extent to which the blogging process was grounded in, and inherently linked to, the realities of their everyday coaching practice; hence, they felt better able to experiment with, and apply theoretical concepts. For example, A6 commented how group blogging was a "way of reflecting on your own coaching practice when you are out there coaching...that aspect of it is brilliant in terms of you're reflecting on your own coaching," whilst D2 felt that her group blog had been:

The most relevant assignment in terms of my coaching...because all the rest it's completely theory based and you never get a chance to implement anything. Whereas this one, it's like 'go and try this in your coaching and come back and tell us what you thought'...and that works better for me.

Indeed, when asked to elaborate on an earlier comment relating to his blogging experiences, C4 added:

I found that supporting what I was saying with academic literature really opened my eyes to what theorists had to say about a specific theme...maintaining each theme for a month really gave me a good amount of time to link my experiences with that topic.

7.3.3 Potential Limiters of Engagement

Each group blog was not without its challenges, and participants identified some potential limiters of engagement and deterrents to participation.

7.3.3.1 Competing commitments. A minority of participants expressed frustration with the on-going nature of group blogging, and the fact it required regular participation over an extended period of time. This was usually reported as a result of their engagement being impacted on, and mediated by, competing commitments. For example, A5 described how her commitments outside of the course would take up her time and limit her participation at certain times during the year; "personally I found it

very hard to keep logging on...because I have three jobs as well as playing hockey, and a life! I've enjoyed doing it and I've learned from it, but I struggled with that a little bit." Likewise, some participants admitted that their levels of engagement would drop at specific points during the year when they had deadlines for assessed work in other modules. This was exemplified when A1 admitted, "I struggled before Christmas because I had so many assignments...and obviously everyone has got research and stuff due in in the second semester."

7.3.3.2 Attitude. It was clear from the data that the attitude with which participants approached group blogging was important. Some individuals recognised that their ability to manage their time affected their participation, especially with regards to being proactive and making blog entries in a timely manner. B6 perhaps best summarised this when he admitted:

I'm just not very good at time management...I'm terrible for it, everything I do I will do last minute. If I was to get more involved with it I feel I could learn quite a lot from it...it's not the structure of it, it's myself...I'm not engaging as much as I possibly should have to get the most out of it.

Equally, a number of participants stressed that meaningful engagement in blogging required an inherent desire to learn and improve, with D3 concluding that "it comes down to what D2 said before...you're either here for the qualification and just getting by, or you actually want to learn and develop and you want to engage and get discussion going."

7.3.3.3 Group dynamics. It was clear from the data that the dynamics between group members played a key role in facilitating or limiting engagement and interaction. For example, it was reported that group members needed to be willing and able to provide each other with constructive criticism, but that this had to be framed in a way so as not to be interpreted as being "offensive." C3 described how it was important that

group members didn't "go in there all guns blazing just putting them down, because they won't reply" adding that "it's definitely about putting it across in a manner that you're not trying to be offensive to that person." Participants also suggested that this required the development of an online environment that instilled group members with the confidence to post on the group blog, without fear of being judged for their ideas. Participants intimated that this took time to develop, which would result in some group members taking a back seat initially. A5 alluded to this when she said:

Once I saw that a lot of other people were starting to go into more depth about how they felt about it and how their coaching was going, I think it made it a lot easier to express how I felt and why...I knew they wouldn't judge me.

Gunawardena et al. (2009) would confirm this view, suggesting that participation in collaborative discourse can be influenced by an individual's self-efficacy (Bandura, 1997). Indeed, Ardichvili (2008) suggest that fear of criticism and "losing face" is often a barrier to the development of online CoPs. For example, those who put forward a novel idea might fear providing knowledge that is not valued by their peers, leading to embarrassment (Neelen, 2009). Nevertheless, it is important to recognise that some participants may be psychosocially isolationist by preference (Andrew, 2010), whilst it has been suggested that people are more likely to collaborate and/or take risks in groups when they already know each other (Kling & Courtright, 2003). As such, groups that develop of a high level of trust are likely to encourage a greater measure of "risk," and when risk is rewarded, more trust is likely to develop (Kling & Courtright, 2003).

Furthermore, Wenger et al. (2002) refer to CoPs needing a "rhythm" of events and rituals that reassert their presence over time (Gray, 2005). In the present study, the dynamic between group members was often referred to in terms of the importance of an attitude of shared responsibility to instigate and maintain blog interaction. For example, C6 highlighted the importance of group members being committed to posting early in each theme to ensure enough time for valuable interaction to emerge when he said "you've got to get the ball rolling early within the themes and get that discussion going early. If you get it going early, you can get it going and going and going." Similarly, D1 alluded to the importance of cultivating a feeling of give and take between participants, when he commented:

I've maintained a sense of pride and personal reward for having the ability to potentially influence and assist people, but also benefit from what other people can offer me to improve me as a coach...we were assisting one another to enhance ourselves and expand our knowledge...making us into the best coaches we could possibly be.

7.3.3.4 Structure of entries. The data suggest that the structure of individual blog entries would often facilitate or hamper blog interaction and discussion between group members. For example, entries lacking a discursive quality, especially in terms of the inclusion of suitable questions for others to respond to, were seen as a barrier to garnering discussion. B4 noted how the make-up of one particular post encouraged him to comment back, saying "it wasn't talking about the same thing all the way through, I think there was like four questions in it that you could respond to...and they were good questions that made me think about it." Johnson (2001) notes that different types and lengths of message can cause problems for asynchronous discussion and effective channels of communication in CoPs. Indeed, in the present study, participants drew attention to the length of some entries, as well as the extent to which they stimulated the reader. In particular, it was clear that entries that were overly long and "boring" were a big deterrent to interaction. Instead, it was suggested that shorter, punchier entries prompted and encouraged better debate. For example, B1 expressed frustration at the length of one post:

No one commented because I don't think anyone could be bothered reading it...and it was so boring as well, there was nothing there where I thought 'yeah I could use that,' that might be in the middle somewhere but I couldn't get there...You need two paragraphs, three tops...short and catchy.

Finally, it has been suggested that the use of technology such as blogs can result in the misinterpretation of messages due to the absence of the non-verbal cues and feedback, that are otherwise present in face-to-face interaction (Fontainha & Gannon-Leary, 2008). In the present study, participants viewed blog entries that contained ambiguous content as limiters of collaboration and engagement, whereby readers would simply ignore entries that weren't clear in the points they were making. Indeed, A6 was acutely aware of how ambiguity in his own writing style would influence the other members of his group from time to time, admitting "some of mine were really weird to read, and not everyone understood where I was coming from sometimes...I know some people had to put it into other words, almost like a translation!" Nevertheless, as outlined above, the group blogs appeared to eliminate many of the constraints of faceto-face coach education and learning by providing a convenient, accessible and highly interactive environment (Byington, 2011; Dubé, Bourhis, & Jacob, 2006). In addition, Johnson (2001) suggests that the lack of face-to-face contact in text-based communication can actually be an advantage as it supresses traditional group norm behaviour.

7.4 General Discussion and Conclusions

The results reported in Chapter 6 and the current chapter suggest that, when appropriately structured and managed, group blogs have the potential to effectively support collaborative coach learning and development and the emergence of CoP. Moreover, all participants positively perceived group blogging as a tool to facilitate reflection and learning, and believed it led to improvements in applied coaching practice. Therefore, it appears that group blogs hold great potential in coach education as a pedagogical tool to encourage collaborative learning and the emergence of CoPs as part of a professional development strategy, especially when we consider the barriers to formal coach education that are commonly reported (e.g., cost, accessibility, timing, geographical dispersal, cf. Cushion et al., 2010), and the increasing calls for national governing bodies of sport to increase the opportunities for coaches to engage in informal learning opportunities that permit social interaction (Lemyre et al., 2007; Nelson & Cushion, 2006; Piggott, 2013). Nevertheless, the findings in the present chapter and Chapter 6 also suggest that, in order to maximise coach learning using group blogs, there are some key considerations that national governing bodies and coach educators must bear in mind in order to maximise the potential of such a tool.

Firstly, it is important to remember that blogs are an enabling technology, rather than technology that directly results in the learning of particular knowledge and skills (Churchill, 2011); therefore, the positive results reported clearly cannot be attributed to the use of group blogs alone. In particular, careful use of the terminology of CoP is needed, as CoPs cannot simply be designed or established, they can only emerge (Roberts, 2006; Wenger, 1998). More specifically, coach educators might use group blogs as a tool to support the informal learning and growth of coaches, but fully functioning CoP is not an *automatic* result of utilising such a tool (Roberts, 2006; Silva et al., 2008). In the study reported in Chapter 6, the concept of CoP was used successfully as a descriptive model for the observed social practices that emerged as a result of group blog use; however, that does not mean group blogs are a prescriptive model for CoP in coach education *per se* (Piggott, 2013).

Secondly, it seems that the self-directed learning and collaborative reflection in the study reported in Chapter 6 was facilitated and significantly enhanced by the formal structures that were put in place (i.e., prescribed themes supported by up front workshops and on-going tutor support) to "scaffold" and direct use of the online tool (Hew & Cheung, 2013). For example, as outlined in Chapter 2, coaches possess complex and deeply-held values and beliefs about what constitutes good and bad coaching practice, and they might not have considered or explored the social norms or underlying assumptions that influence the personal coaching theories and philosophies that drive their behaviour (Abraham & Collins, 2011a). As such, the preliminary workshops described in Chapter 6 played an important role in outlining the importance of critically reflective practice, and providing participants with the underpinning theoretical knowledge the process requires in order to help them uncover and challenge of established or ineffective thinking (Peel et al., 2013). This, I feel, helps to ensure that participants would be less susceptible to the transmission of dogma or irrational beliefs when the process of group blogging began (Piggott, 2013). Indeed, CoPs are by no means "benign" and do not develop and function in a vacuum (Cox 2005; Roberts, 2006); indeed, as described in Chapter 2, the social "milieu" is potentially a major factor when coaches co-create and transfer knowledge. As such, the benefit of the use of structured group blogs is as much about developing the craft and tacit knowledge required in order to reflect FOR action, as opposed to merely reflecting ON practice (Dixon et al., 2013).

Similarly, meaningful peer interactions (such as those reported in Chapter 6) rely on thoughtful and personalised questions or critical and contextualised feedback; however, question-askers need a certain level of domain or metacognitive knowledge to be able to propose such questions or feedback (Choi et al., 2005). Therefore, coach educators must consider the impact of relevant "client characteristics" (e.g., personality, skill sets etc., cf. Groth-marnat, Roberts, & Beutler, 2001) on blogging success and how they can best help coaches acquire the knowledge needed to scaffold and guide meaningful online collaboration (Choi et al., 2005), without losing the attraction of what

was clearly perceived to be a "less formal" mode of coach education in the present study. Moreover, coach educators planning to use group blogs to develop CoP must consider the leadership role of the moderator or coordinator in creating and sustaining an effective learning environment (Fontainha & Gannon-Leary, 2008). The role of this person is to act as a "gentle guide" who facilitates and nudges the discussion and learning between group members (Cox, 2005), and they are likely to be very busy behind the scenes. Key characteristics of this person include technical competence with the platform, an understanding of developing social connections, and sufficient knowledge in the areas under consideration to demonstrate credibility (Gray, 2005) and lead debate. As such, careful selection of these individuals is most probably required, alongside evidence based training that, if it is to impact on practice, leads to a personalised deepening of knowledge and enhanced practical skills (Abraham et al., 2013).

Finally, the size of a group blog (i.e., number of participants) is an important consideration, as are a plethora of factors (e.g., cohesion, collective efficacy, group roles, communication styles, leadership experience etc., cf. Baron & Kerr, 2004; Johnson & Johnson, 2012) that are likely to influence both individual and group blog participation. In the interests of scale and efficiency, coach educators may be tempted to try and establish larger and more open online communities than the small closed groups of participants utilised in the current study. However, further research and active experimentation may be needed to in order to determine the "optimum" group size needed to encourage the collaboration and knowledge generation more common in smaller and more closed groups (Hall & Graham, 2004). For example, information overload and ephemeral social relationships are potential negative consequences of larger online communities (Von Krogh, 2002); indeed, Wenger et al. (2002) suggest that very large CoP are structured into subgroups (e.g., by region) in order to encourage

active participation and contribution by all group members. In addition, it is important to note that the initial discussions between group members in the study reported in Chapter 6 were predicated by face-to-face contact during initial, up front workshops (i.e., before group blogging began) and supplemental periodic workshops; therefore, some group members had met each other before commencing their "online" interactions. Whilst participants in the present study made no mention of this as a contributory factor to their learning experiences (either positively or negatively), the existing literature holds a mixed view, with a number of authors suggesting that multimodal learning (i.e., face-to-face contact mixed with online learning) makes it easier to build trust and rapport between members in online groups (e.g., Borthick & Jones, 2000; Kling & Courtright, 2003). Interestingly, Dubé et al. (2006) suggest that temporary or time limited online CoPs (such as those operationalised in Chapter 6) may undergo less difficulty when face-to-face contact is lacking, as a high level of energy is likely to be invested by group members from the start due to the narrow focus and certainty of aims and objectives of the venture. Additionally, online only communication has been said to reduce or "equalise" the potentially negative impact of the traditional group norms caused by face-to-face contact (e.g., voice, stature, physical reactions), which influence and shape social interaction (Roberts, 2006). Nevertheless, this is an especially relevant consideration when, for example, we consider coaches' often less than optimal perceptions of traditional formal learning methods and processes (cf. Cushion et al., 2010). The ways coach developers balance coaches' preference and desire for informal coach learning, whilst providing the necessary "formal" structures highlighted above, are therefore crucial.

CHAPTER 8 – CONCLUSIONS, IMPLICATIONS AND

RECOMMENDATIONS

8.1 Introduction

There is an increasing acceptance within the coaching literature that much of a coach's development occurs outside of formal educational settings (Cushion et al., 2003; Nelson et al., 2006), with coaches preferring to learn and "construct" knowledge through their everyday coaching practices and informal interactions with others. Whilst there has been an increasing focus on the social aspects of coach learning as a result, with social constructivist approaches towards education commonly discussed and recommended (e.g., Callary, 2013; Cassidy et al., 2006; Culver & Trudel, 2006; Piggot, 2013), there remains a scarcity of research into *how* these concepts can influence both coach learning and behaviour. In particular, we need to know more about how coach developers might exploit social learning as a legitimate tool in coach development provision. As such, the aims of this thesis were to address and inform the significant gap between current sports coaching research, knowledge and practice relating to informal coach learning and development.

To address this gap, the objectives of this thesis were fivefold:

- 1. To identify what the social milieu in coaching currently encourages coaches to aspire to, focus on and learn.
- To check these assertions and identify any mismatches between coaches' learning preferences, their perceived learning needs, and their recent knowledge acquisition experiences.
- To explore the use of online blogs for facilitating and supporting a critically reflective approach to knowledge acquisition while meeting coaches' preferences for informal, socially mediated learning activities.

- 4. To refine and improve the use of online blogs in order to improve levels of reflection and encourage the emergence of fully functioning CoPs.
- To explore coaches' perceptions of their engagement in, and experiences of, online blogging for reflection and learning.

8.2 Summary of Results and Implications

The study described in Chapter 3 addressed the first objective of the thesis. A two-part qualitative approach was employed in order to explore the constructs a sample of British sub-elite coaches from a variety of sports used to identify coaching quality in their own self-selected role model coaches. Interestingly, results in part one suggested that coaches' perceptions were predominantly associated with the outward facing image aspects of their role model coach as opposed to coaching technique; a finding at odds with existing research, which has highlighted the more crucial importance of recognising how "successful" coaches work (e.g., Abraham et al., 2006; Jones et al., 2003). Building on these findings, the second part of the study attempted to delve deeper into the coaching qualities and characteristics that coaches might aspire to. Results again showed that, when identifying coaching prowess, coaches appeared to focus on the outward facing behaviours and personality characteristics of what their role model coaches did, as opposed to the ways in which s/he actually worked. Consequently, this study highlighted that the coaching qualities and characteristics which the social milieu might encourage coaches to aspire to and pursue, were not comprehensive across all areas. Similarly, it was concluded that the characteristics that coaches might "need" to develop, they might not necessarily be aware of or pick up during informal learning situations within the social milieu.

Chapter 4 addressed the thesis' second objective. Whilst still maintaining a predominantly qualitative approach, in contrast to the smaller samples utilised in Chapter 3, a both broader and larger questionnaire methodology was adopted in an

attempt to provide some element of quantification of the collected data. In line with existing research (e.g., Culver & Trudel, 2006; Erickson et al., 2008), results revealed that coaches' preferred and mostly acquired coaching knowledge from informal, selfdirected learning sources, especially when these permitted social interaction with other coaches. Crucially, however, self-reported evidence for critical justification for, and application of, this knowledge was largely absent. These combined findings suggested that, before social learning activities such as mentoring and CoPs are placed at the centre of formalised provision, coach educators need to help coaches to better recognise and deal with the potentially mixed and unregulated influences of the social milieu on learning in order to ensure their informal development is sufficiently open-minded, reflective and critical. Thus, the need to explore how formal learning might better support the development of these skills, while still meeting coaches' perceived learning needs and their preferences for informal, socially mediated learning activities, was established. Accordingly, the efficacy of online blogs, a tool purported to have a high potential to meet this need, became the focus of the investigation in the chapters that followed.

Chapter 5 addressed the thesis' third objective. The individual online blogs of twenty-six undergraduate sports coaching students, who reflected on their ongoing coaching practice via blogs created specifically for reflection, were subjected to category and content analysis in order to determine both the emergent reflective quality of posts and the extent to which an online community of practice emerged. Findings revealed that descriptive reflection exceeded that of a critical nature, however, bloggers exhibited a positive trajectory toward higher order thinking and blogs were an effective platform for supporting tutor-student interaction. Nevertheless, and despite the peer discourse features of blogs, collaborative reflection was conspicuous by its absence and an online community of practice did not emerge. Therefore, whilst results indicated that blogs held the potential to facilitate reflection in coaches, the need for further investigation into how blogs might better promote and/or facilitate the social discourse necessary for collaborative reflection was identified (Objective 4).

Accordingly, Chapter 6 examined the use of shared online blogs as a tool to promote reflection and CoP in a cohort of undergraduate sports coaching students. Four group blogs, purposely designed to support informal workplace learning, were subjected to content analysis in order to determine the emergent reflective quality of blog entries, and the extent to which functioning online CoPs emerged. Findings revealed that shared blogs, when supported by sufficient formal priming and ongoing scaffolds, were a useful tool to promote peer collaboration and fully functioning online CoPs. Similarly, this structured reflection as part of a community suggested participants were capable of achieving more in terms of their levels of reflective thinking than if they had reflected on an individual basis, as per the methodology utilised in Chapter 5 (Boulton & Hramiak, 2012). It was clear, therefore, that shared blogs held potential in coach education pedagogy, especially when considering many of the barriers to the uptake of face-to-face coach education solutions typically cited by coaches (e.g., cost, accessibility, timing, and travel, cf. Sports Coach UK, 2012b). Nevertheless, insight was required into coaches' views and perceptions relating to their use and experiences of group blogs, especially with regards to the factors that made an individual participate or not participate in a blog community (Silva et al., 2008).

Finally, in addressing the thesis' final objective, Chapter 7 offered insight into student coaches' perceptions of their use and experiences of structured group blogging for reflection and learning. This was achieved by inductively analysing interview data from four semi-structured focus group interviews with student coaches purposely sampled from the study described in Chapter 6. Results revealed that the student coaches were generally very positive about their learning experiences and the

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pedagogical approach employed. This was especially apparent in terms of perceived increases in levels of reflection, knowledge acquisition and improvements in coaching practice; changes corroborated by the data presented in Chapter 6. A range of reasons emerged for these outcomes, alongside several potential limiters of engagement in shared group blogging as a learning endeavour. Whilst these findings supported recent, and growing proposals to systematically incorporate Web 2.0 technologies such as blogs into coach education pedagogy (e.g., Dixon et al., 2013; Piggott, 2013), several key considerations for the process of using such tools in coach education pedagogy were outlined.

8.3 Specific Recommendations: Implications for Practice

Although the studies reported in this thesis have met the objectives set out in Chapter 1, there is still a need to consider how this research should inform applied practices in coach development. Indeed, the questions regarding the design and delivery of formal coach education programmes, and the implications for practice that emerge, are positively substantial. Furthermore, it is important to note that the evolution and support for these ideas can be tracked. For example, many implications for coach education practice were identified early on in the thesis in Chapter 2, and subsequent empirical chapters served to exemplify evidence of ways to meet the needs of coaches and facilitate learning in a more progressive and engaging way.

The obvious "first step" that the research in this thesis has pointed to, is the need to provide those in charge of coach development with easier and more structured access to resources and guidelines for the optimisation of individual and organisational outcomes. This initiative could involve the development of workbooks, websites, workshops, and resources aimed at providing those working at the coalface in coach development, both within specific sports and generic organisations (e.g., Sports Coach UK), with practical ways to examine and exploit the social milieu in order to encourage coaches to develop themselves in the direction of the notion of an effective coach (Jacobs, Claringbould, & Knoppers, 2014). Therefore, it is essential that developing coaches receive consistent positive messages as to his/her evolution, behaviour and action, and sports organisations need to look more broadly at how this can be done within their own sporting culture. For example, practical guidelines for the use of the general and specific media to "sell" the research evidenced characteristics, consequences, and actions of effective coaching practice would be a useful starting point in changing perceptions.

Similarly, in recognising the apparent prevalence of coaches' negative attitudes towards coach education (e.g., Cushion et al., 2003; Gilbert & Trudel, 2006), these resources could be used to raise awareness of the relevance of conceptual changes in the way formal coach education is "delivered," and to help ensure that attitudes and beliefs are supportive of such change and innovation. This should help coaches to recognise where and why the value in informal, socially mediated learning endeavours such as CoPs lies, and encourage "buy in" and active engagement in complimentary activities. Furthermore, and as an essential addition, coach educators and NGB structures should take account of these approaches, and incorporate them within the systems used for the promotion and evaluation of coach development.

For example, experiential learning or peer discussion is more than just doing, and coaches (and, therefore, coach educators) must be made more aware of the importance and value of activities like *structured* critical reflection in order for them to garner maximum value from their social learning experiences. Similarly, the social milieu should be used in a systemic format to encourage and promote the coaching environments and structures within which socially mediated learning activities can prosper (Jones et al., 2012). Nevertheless, changing attitudes and beliefs is a notoriously difficult exercise as anti-smoking campaigns and exercise promotions have

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demonstrated (cf. Abraham et al., 2010). As such, coach educators also need to be assisted in devising ways to track and/or monitor changes in coaches' perceptions over time – the type of analysis that tools like the online blogs utilised in this thesis lend themselves to readily.

Secondly, whilst it has become "fashionable" in coach development to call for the establishment of activities purported to be in line with Wenger's (1998) CoP conceptual framework, it is clear from the findings in this thesis that the successful implementation of these activities requires a lot more than "just" setting up a blog or arranging a few coaches' breakfast meetings! By taking a reductionist stance to looking at one element, I have been careful to emphasise the broader implications and other actions that need to be taken in parallel. For example, and hopefully echoed throughout this thesis, collaborative, critically reflective, and progressive coach discussion, grounded in applied practice and theoretical concepts, does not occur automatically and requires a significant amount of structure and "up front" priming work first. By providing appropriate guidance resources, and perhaps training in their use, coach educators will have coherent and systematic parameters for moving beyond "gimmicky" approaches and incorporating genuinely impactful social learning initiatives into their coach development programmes (Abraham et al., 2010).

Thirdly, the findings in this thesis suggest that, if innovative coach education pedagogies (such as online CoPs using blogs) are to have a meaningful and positive impact, they are highly dependent on the skills of the coach educators using them to facilitate coach learning. That is, a pedagogical tool will only ever be as good as the skills of the people deploying it. For example, the tutor's role in facilitating and maintaining deliberative learning using online blogs is crucial. It involves challenging coaches to intellectually deconstruct, explore and explain their practice and previously held assumptions through progressive dialogue (Chesterfield et al., 2010), as well as

providing new evidence to challenge coaches' existing knowledge structures and help them to understand and better deal with the complex and socially negotiated nature of their work (Bowes & Jones, 2006). These amended demands on coach educators when using such constructivist pedagogical approaches will require a potentially different skill set to that of a deliverer of content or transmitter of knowledge. Instead, coach educators will need to better approximate themselves with Vygotsky's (1978) notion of "more capable others," where the role of the tutor is more akin to that of a "supportive facilitator" of knowledge creation. As such, success is likely to be dependent on tutors being both willing and able to commit to this role (Bowes & Jones, 2006), and coach education providers will need to invest the time and work necessary to train and support tutors in developing these new skills (Morgan et al., 2012). This is not an easy process, however, particularly when sports are unprepared for the change. Indeed, Savin-Baden (2003) suggests that a change away from long practiced pedagogies which have deep roots is not always easy, and can result in resistance, frustration and discord, especially if the new methods are imposed upon people. Nevertheless, it is a change process that coach education providers should be committed to over the long term and, as discussed above, manipulation and exploitation of the social milieu in order to ease tutor transition to these new methods would likely be useful.

Relatedly, the ways in which the "up front" theoretical knowledge and understanding of relevant concepts that coaches need is acquired might require a significant departure from the usual methodologies through which coach education activities are currently delivered. For example, NGBs may benefit from moving away from sport-specific delivery and, instead (and reflecting the original epistemology of coach education in the UK, cf. Sports Council, 1991) could seek input from external experts and appropriate professionals (e.g., practicing sport/social scientists, other coaches, business leaders) across a range of organisations and disciplines in the delivery of foundational knowledge (cf. Nash & Sproule, 2009). The potential for clubs or governing bodies and academic institutions to work together to disseminate knowledge on relevant topics and theories (e.g., skill acquisition, coaching pedagogies, child development) is one such example. Academics could help to devise and deliver appropriate learning curriculums of up front face-to-face workshops, with the content then "applied" by coaches in their specific context, and tools such as blogs then used post learning following a face-to-face course to nurture, support and monitor the application of this new knowledge. The academics involved in the initial delivery of content could then periodically input into online coach discussions over time to ensure that knowledge is being transferred from research to applied practice effectively, as well as to provide a stimulus for continued exploration and the generation of new knowledge (Abraham et al., 2010). In this way, theory and practice can become mutually informed and constructed by coaches in action (Jones, et al., 2012).

Fourthly, coaches' existing experience and knowledge base will be a limiting factor in any learning activity; crucially, however, coach educators could use the blogging approach outlined in Chapter 6 to facilitate the identification of specific knowledge gaps and areas for attention in the coaching workforce. As opposed to the topics that coaches "need to learn" being entirely directed from above, this approach is based more around the individualised wants and needs of coaches, which Nash and Sproule (2012) suggest governing bodies need to be better at recognising if they are to ensure coaches feel supported and valued. Coach educators could also use this approach to counter the potentially negative aspects of attempting to introduce complex topics during the short, "superficial" learning episodes that have tended to typify formal coach education initiatives (Cushion et al., 2010; Trudel & Gilbert, 2006). Instead, approaches using tools such as blogs (as outlined in Chapter 6) would advocate and encourage a longer-term approach to formal education, where breathing space is provided for

coaches to experiment with theoretical concepts and ideas outside of the formal environment in their own coaching contexts. As described above, the correct understanding and application of these ideas can then be checked, re-checked, and monitored by coach educators over an extended period of time. The important function of such inputs as challenge as well as support should be highlighted and ensured, however!

Finally, if professional sports bodies are committed to establishing reflective practice as a core component of coaching practice, online blogs could be a useful tool to ensure this is indeed occurring on an ongoing basis. Indeed, Knowles et al. (2006) suggest that once formal training has finished, coaches have a tendency to stop reflecting in a formal way. Therefore, structured peer discussion using online blogs could be made a minimum standard requirement for obtaining and maintaining a license to coach (Partington & Cushion, 2012), or at least as an access requirement to higher levels, therefore guaranteeing that coaches commit to and continue to engage in the process. Alternatively, as discussed earlier, the social milieu could be manipulated in order to motivate coaches to reflect in a self-determined way as opposed to being forced to reflect as a requirement of the coach education process (Cropley et al., 2012).

8.4 Specific Recommendations: Future Research in Coach Development

The largely exploratory nature of the studies reported in Chapters 5, 6 and 7 constituted only the initial stages in testing and refining online blogs as a potentially useful tool in coach development. Indeed, at the time of writing, this thesis reports the first two studies using blogs in coach education. As such, it is important to note that the findings of this research *by no means* provide all the answers. In fact, and in keeping with the rationale of the majority of such inputs, I generate more questions than answers, and future studies can build on and look to improve the protocols and procedures utilised. Furthermore, I recognise the limits of what can be achieved by, and

claimed for, the pedagogical frameworks employed in the small-scale and short duration studies in this thesis. In spite of these limitations, and in addition to the practical recommendations outlined in section 8.3, the findings in this thesis highlight how further research is warranted in this area and provide empirically based recommendations for such research.

Firstly, the empirical studies utilising blogs in this thesis were grounded in a higher education context. As such, the relatively small groups of generally engaged undergraduate students are not entirely reflective of a wider coaching cohort. Clearly then, and perhaps most pressingly, these findings need extension into more typical "real world" settings and coaching environments before the findings from this research can be generalizable and/or treated as anything but tentative signposts (Cushion et al., 2012; Jones et al., 2012). Therefore, more studies of social learning activities, especially using tools like blogs, are needed across different cultures, different sports, and at different levels of development.

Secondly, the ways in which coach development activities are evaluated needs to be better considered than simply obtaining coaches' opinions and perceptions of their experiences (Cushion et al. 2010). For example, better insight is needed into different modes of socially mediated learning and their correlation with coaches' performance and their ability to understand and apply theory in the complex and adaptive activity of coaching (Ollis & Sproule, 2007; Threlfall, 2014). Likewise, detailed investigation of the impact of these learning activities on the experiences and development of athletes is vitally important if we are to provide evidence in support of what works, why and for whom (Wayne, Suk Yoon, Zhu, Cronen, & Garet, 2008). However, learning is non-linear and difficult to quantify, which means measuring these factors in experimental or causal studies is inherently difficult (Cushion et al., 2010). In addition, the ability to follow developmental coaches over an extended period of time in what is primarily a

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voluntary activity, presents many challenges (Woodburn, 2013). As such, future research will require more nuanced, systematic and longitudinal investigation than the relatively small scale and short in duration investigation operationalised in this thesis.

Finally, it is imperative that researchers find better and more practical ways of presenting their research evidence to meet the needs of all stakeholders in coach development (e.g., national sports organisations, clubs and coaches). For example, research papers need to be made more easily available; currently, they are often published in academic journals behind pay walls and written in a style not easily understood by those outside of academic circles. Accordingly, findings need to be presented in easily digestible and pragmatic ways (e.g., that is what we have found and so we can recommend the following action, cf. Giacobbi, Poczwardowski, & Hager, 2005), so that organisations such as NGBs are provided with clear guidelines on how and why evidence could and should be put into practice. Where possible, this material should also include examples of applied, research-evidenced practice by other sports organisations and nations in order to identify and promote agreed "gold standards" for coach development (North, 2010). If successful, the results from the aforementioned future research directions will go a long way to determining how coaches can best learn to perform their difficult and demanding work and, in parallel, help to inform and direct how coach educators can best optimise both individual and organisational outcomes in this regard (Rynne, 2014).

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APPENDIX A

A1. Project Information Sheet

Project title: Exploiting social learning as a legitimate tool in coach development

Why is this study being done?

Careful investigation is currently lacking on precisely how social learning can influence both coach behaviour and learning for better *and* for worse. This PhD research project aims to determine how social pressures can both liberate and constrain coach development. In tandem, it will raise awareness of the social processes acting upon coaches during their development and outline how these may be exploited by coach developers to improve coaching performance. The researcher, John Stoszkowski, is a university lecturer and qualified coach.

Why have I been invited to participate?

In this particular study, we will attempt to explore why coaches value the types of knowledge they do. You have been selected because of your qualification, experience and expertise. It is hoped that your involvement will help our understanding of coaches' beliefs, their priorities and how they rationalise their behaviours.

What will I be asked to do?

You will be asked to participate in a focus group interview alongside other sub-elite but experienced coaches. The aim of these interviews is to identify the qualities you value in your self-selected role models and why. The interviews will last around 1 hour and will be recorded and transcribed verbatim. You will then be given the opportunity to comment on the key issues/themes that emerge (with any revisions/comments to be returned within 2 weeks of receipt) to ensure an accurate representation of your views and opinions.

What will happen to the data?

The data (e.g., field notes, interviews) will be retained in secure storage for five years, after which it will be destroyed. The results of the project may be published or recorded in thesis, journal papers, books and related magazines. Your anonymity will be preserved through the use of a pseudonym; for example coach X (County Coach, 6 years experience).

Who has approved the study?

The study has been approved by the University of Central Lancashire Research Ethics Committee.

Are their any risks in participating?

We can perceive of no such risks.

If I take part, can I change my mind?

Yes. You retain the right to refuse to answer any questions and you are free to leave the focus group or withdraw your consent to further involvement in the research project at any time. However, it will not be possible to remove any of your comments after the focus group has completed.

What are the benefits of involvement?

Social learning approaches, if managed incorrectly, could pose a significant threat to effective coach development and may simply serve to magnify and perpetuate many of the issues that coach developers should endeavour to nullify. If we are to accept and embrace more "informal" methods of coach development (e.g., Communities of Practice) as an alternative to the training and certification of coaches via formal coach education, and wish to encourage coaches to become truly autonomous learners, identifying and acknowledging the social processes at play in coach learning is essential. If, on the other hand, formal coach education opportunities could be "socially situated" within the milieu, the benefits that this compulsory stage of progress holds could be optimally exploited. Participants could therefore become more adept at recognising the processes that underpin and influence their coaching beliefs, and subsequently, their approach to developmental activities.

What happens next?

If you are happy to be involved in the project, you will be asked to read and sign a consent form to confirm this. If you do not want to be involved, thank you for your attention.

What do I do if I have any concerns or questions about this study?

If you have any concerns about this study or questions regarding your involvement in the research project, or if you would like more information, please contact a member of the research team via the means below:

Research Team Contact Details

John Stoszkowski (Researcher)	Prof Dave Collins (Project Supervisor)
Email: JRStoszkowski@uclan.ac.uk	Email: DJCollins@uclan.ac.uk
Tel: xxxxx xxxxxx	Tel: xxxxx xxxxxx

A2. Project Informed Consent Form

Project Title: Exploiting the social side of coach development

I have been briefed concerning this project and understand my commitment and role in it. All my questions have been answered to my satisfaction. I understand that I am free to request further information at any stage and can withdraw from the project at any time.

Please initial the boxes to indicate agreement with each statement:

	Initial	
1. I confirm that I have both read and understood the participant		
information sheet dated for the above study and have had the		
opportunity to ask questions.		
2. I understand that my participation in the above project is entirely		
voluntary and that I am free to not answer any questions, or leave/stop the		
focus group interview at any time, without giving a reason and without any		
disadvantage.		
3. In light of point 2 made above, I understand that it will not be possible		
to remove any of my comments after the focus group interview has		
completed.		
4. I agree to the discussion being audio-recorded (as well as notes being		
taken during the discussion) and transcribed at a later date.		
5. I understand that anonymised quotes may be taken from the interview		
and used to illustrate general themes.		
6. I understand that the data [field notes, interviews] will be destroyed at		
the conclusion of the project but any raw data on which the results of the		
project depend will be retained in secure storage for five years, after which		
it will be destroyed.		
7. I agree to anonymised quotes being used within any publications or		
presentations resulting from this work.		
8. I understand that I will be able to receive a copy of the study's		
conclusions when it is completed.		
9. I agree to take part in the above study.		

Name of participant (Print):

Signature of participant:

Date:

Thank you for reading this information and taking part of this study.

If you have any questions regarding your involvement in this research please ask myself (John Stoszkowski) or contact Professor Dave Collins on xxxxx xxxxx or DJCollins@unclan.ac.uk

APPENDIX B

B1. Survey used in data collection

Section One

1. State the main thing you feel you need to know more about in order to be a better coach.

2. Why do you feel that is the case?

- 3. State the last thing you learned which you found useful for your coaching.
- 4. Where did this idea or information come from?
- 5. How have you used the idea or information since you got it?
- 6. What would you say is your most preferred way to gain coaching knowledge?
- 7. Give 3 reasons why you prefer this method of gaining coaching knowledge

Section Two

- 1. Gender
- 2. What is your age?
- 3. In which country are you based?
- 4. Are you a volunteer coach or paid?
- 5. What is the highest level of coaching qualification you hold?
- 6. What is your current level of academic education?
- 7. How long have you been coaching?
- 8. What sport or sports do you predominantly coach?
- 9. What level of participant were/are you in this sport?
- 10. What age groups do you coach?
- 11. What level of participants do you coach?

APPENDIX C

C1. Hatton and Smith's (1995) Criteria for the Recognition of Evidence for Different Types of Reflective Writing

Descriptive Writing

- -- Not reflective.
- -- Description of events that occurred/report of literature.
- -- No attempt to provide reasons/justification for events.

Descriptive Reflection

-- Reflective, not only a description of events but some attempt to provide reason justification for events or actions but in a reportive or descriptive way. For example, "I chose this problem-solving activity because I believe that students should be active rather than passive learners."

-- Recognition of alternate viewpoints in the research and literature which are reported. For example, Tyler (1949), because of the assumptions on which his approach rests suggests that the curriculum process should begin with objectives. Yinger (1979), on the other hand argues that the "task" is the starting point.

Two forms:

(a) Reflection based generally on one perspective/factor as rationale.

(b) Reflection is based on the recognition of multiple factors and perspectives.

Dialogic Reflection

-- Demonstrates a "stepping back" from the events/ actions leading to a different level of mulling about, discourse with self and exploring the experience, events, and actions using qualities of judgements and possible alternatives for explaining and hypothesising. Such reflection is analytical or/and integrative of factors and perspectives and may recognise inconsistencies in attempting to provide rationales and critique, for example, "While I had planned to use mainly written text materials I became aware very quickly that a number of students did not respond to these. Thinking about this now there may have been several reasons for this. A number of students, while reasonably proficient in English, even though they had been NESB learners, may still have lacked some confidence in handling the level of language in the text. Alternatively, a number of students may have been visual and tactile learners. In any case I found that I had to employ more concrete activities in my teaching." Two forms, as in (a) and (b) above.

Critical Reflection

-- Demonstrates an awareness that actions and events are not only located in, and explicable by, reference to multiple perspectives but are located in, and influenced by multiple historical, and socio-political contexts. For example, "What must be recognised, however, is that the issues of student management experienced with this class can only be understood within the wider structural locations of power relationships established between teachers and students in schools as social institution based upon the principle of control" (Smith, 1992).

APPENDIX D

D1. Participant Generated Code of Conduct

- Check blog at least weekly
- Reply to comments in a timely fashion
- Be specific and stick to the relevant theme
- Try and contribute to each post
- Don't over-post (i.e., too often)
- Be positive and constructive try to avoid negativity
- Try not to be argumentative
- Use clear and understandable language
- No abuse, swearing, threatening or overly judgemental language
- Try to justify comments
- Respect the views of others at all times
- Try not to take comments personally
- Approach discussions with an open mind
- Upload a profile picture or 'avatar'
- Try to signpost others to relevant content
- Try to use a variety of media

APPENDIX E

E1. Exemplar Blog Thread

An exemplar blog thread is shown below for illustrative purposes and to allow readers to immerse themselves in the findings. This material has been "cut and paste" from the online group blog. In transferring to a Microsoft Word document format, colours and online design layout are lost. Pictures, names, places, and other identifying information have been redacted in order to protect the anonymity of participants.

Assessing Thinking & Learning

Posted on March 21, 2014 by Coach C2

Following on from Thursday's lesson, I was involved in a discussion involving the deeper thinking research of taxonomy.

I wanted to get your guys opinion on this.....

"Do you think there is a certain age limit as to the terminology you can use and the depth of questioning that can be applied to the player's critical thinking of certain situations?"

So for example **REMEMBER:** ages 5-10? **UNDERSTAND:** ages 5-15? **APPLY:** ages 10-15?

I ask this because I'm simply not sure, it could be associated with the Long Term Athlete Development continuum, so as the players become older the more thought is required to critically analyse a situation. In an ideal world I believe we all want to players to learn and develop at the same rate collectively, would you agree? This is sadly not the case, which requires us as coaches to adapt, simplify, and complicate instructions or drills. So to contradict the previous statement does it take a deeper level of thinking for a more intelligent (*by intelligent I mean a more technically able, game understanding)* player. This could highlight the need for more rigorous observation research to address if a range of questions regarding the impact of terminology on learning and understanding. Would you agree, Evaluation systems will be most eff ective if they include feedback loops to shape improvements? It is also thought that if children understand the need for in-depth critical thinking which as Hylén (2010) suggests they do not yet fully comprehend, would also support the need for critical thinking at an earlier age than thought possible?

References

Hylén, J. (2010) Can Digital Learning Resources Spur Innovation? (pp.45-64) In. OECD (ed.) *Inspired by Pedagogy, Driven by Technology*, OECD, Paris.

14 THOUGHTS ON "ASSESSING THINKING & LEARNING"



Hi

Coach C3 on March 22, 2014 at 2:10 pm said:

I think that's a very good discussion to start off with and I would agree in regards to wanting the players to develop at the same rate, however like you said this isn't the case when coaching. Although, I believe we should utilize all levels of the thinking order and tailor it to the right situation and player. As coaches I don't think there is any reason why we shouldn't be encouraging are players to critically think, after all when the players in a match they have to work out decision for themselves, so by implementing it in training we should hopefully see are players become better decision makers and problem solvers, would you agree?

In regards to your last paragraph could you please elaborate on when said "Evaluation systems will be most effective if they include feedback loops to shape improvements?". I think I kind of understand where you are coming from, however I'm not entirely sure if my thinking is correct.

<u>Reply</u>↓



Coach C2 on March 22, 2014 at 4:30 pm said:

Hi

2

I agree in time we would see a more intelligent player but do you think we place too much pressure on players at a young age? We sometimes ask them questions at a depth that some adults would be incapable of answering. This is what got me thinking about the age related questioning, to support what I am trying to say Mischo & Rheinberg (1995) and Köller (2001) found positive effects in several experimental and field studies where facilitators observed student progress over time through age related questioning and strategies. These included academic understanding, reinforcement theory and self learning methods.

In response to the last question, I was just asking your opinion of evaluation systems, and if they are at their most effective when they entice feedback from players. So using open questioning basically and allowing input from players to aid improvement. Although this could go back to the level of depth when asking players in regards to their age?

Bibliography

Köller, O. (2001) Mathematical World Views and Achievement in Advanced Mathematics: Findings from the TIMSS Population III, Studies in Educational Evaluation, 27,65-78. Mischo, C. & Rheinberg, F. (1995) Erziehungsziele von Lehrern und individuelle Bezugsnormen der Leistungsbewertung, Zeitschrift für Pädagogische Psychologie, 9,139-151

Reply ↓

3.

Coach C3 on March 23, 2014 at 3:05 pm said:

I think there is positives and negatives to applying pressure, however we were having a similar discussion in elite coaching practice the other day, we were talking about in some countries the coaches set challenges for their players which are basically impossible to achieve, I personally think this is quite cruel, although it does make sense and does divided the players who have mental toughness and the players without. What I'm trying to say is that sometimes we can delay progress through being too worried about applying too much pressure, now don't get me wrong I'm not saying pressure the players till breaking point, but I do believe we should be challenging are players from a young age, and from that create an environment which is rich in thinking.

My thought on the order of thinking is that we should be use all the level no matter the age. I can't understand why we judge are players on age and treat them all the same in regards to intelligence. Everybody is different and developments in diverse ways, I think we as coaches need to find a balance and treat are players as individuals rather than age related. So in regards to different levels I think we should be tailoring to the specific situation and player.

I think the lecture which I have attached has been a big inspiration in regards to my opinion on age related (even though it is not sports related). I don't know if you've seen it yet or even if you'll take much from it, but I thought it is worth putting on as it has helped me a lot in regards to my thinking.

http://www.ted.com/talks/ken_robinson_changing_education_paradigms



I believe In general, there is a need for more of a deeper understanding critical thinking when involving children i.e. what works and why (or why not), for whom and under what circumstances. Beatty & Gerace (2009:146-162), for instance, call for more systematic research to "...*define, ground, justify and thoroughly explicate coherent pedagogies*" for coaching and the people involved. I, as everyone else on here have a good Idea of what their players are capable of, and I think asking them questions and using terminology which is above their ability, can only frustrate them when they cannot understand. When I started

using what I would class as simple terminology for example, "goal side" or "between the lines" it took a long time for the players to understand this. So I ask the question "Should we only ask relevant age questions?" or at least wait until they fully understand a depth questioning before progressing on?

References

Beatty, I.D. & Gerace, W.J. (2009). Technology-Enhanced Formative Assessment: A Research-Based Pedagogy for Teaching Science with Classroom Response Technology, *Journal of Science Education and Technology*, 18,146 – 162.

<u>Reply</u> ↓

Coach C3 on March 24, 2014 at 6:57 pm said:

I understand what you are saying and I totally agree everyone on here has an idea of what their individual players are capable of, however, in regards to my team there is a quite a divide amongst my players ability, that is why I suggest the utilization of the taxonomy with individual players and for the specific moments. For example one of my players has an unbelievable attitude towards learning and I feel by using higher levels with this player I will receive a positive response and progression. Although there is some players which struggle to obtain the information which I am coaching, so I personally think by using the low levels it would be good in order to create a good foundation to work off.

So to answer your question I don't believe we should ask relevant age questions, we should treat the players on ability rather than age. However this is my opinion off what I have read and from the seminar, I am planning on attempting this approach to questioning in this week's training session, and hopefully I'll receive a good response.

Have you been able to try it in a training session yet? If so how did it go?

Reply ↓

Coach C2 on March 25, 2014 at 12:40 pm said:

When using taxonomy I believe that you probably should use it for individuals but is there any evidence to suggest that it works as well as we think? From what I have read it is only opinions of authors (almost like ourselves on this blog, yet just because it works for some it might not work for others). I do think in certain situations you could use taxonomy with more intelligent players, but is it right to almost favour certain players with specific questioning? It's like presuming the less abled cannot answer them wouldn't you agree? I think the only way to know this is by rewording the same depth of questioning.

Ok so here is a question, how long do you think it would take your players at the ages of 6 to 7, learn how to close the "corridor of uncertainty" is, and "how do we deal with zonal marking with a view to neutralise recovery runs" are?, I am going to guess longer than somebody who is older and has more experience.

To answer your question, I have not made a special effort to include the additional depth of questioning as discussed on this blog, simply because myself, the other coach and the players are comfortable with the way we are progressing already, before you ask, I know this because I have asked. Although this is interesting and the discussion is great, I still think we should not forget these are children and although they do have these "windows of opportunity" for enhanced learning we should not overload them with information.

Take a look at this:<u>http://www.unchainedfitness.com/blog/windows-of-opportunity-and-athlete-development</u>

The conclusion in a way supports my theory of that when training (both mental and physical) does occur outside of these windows, there is no evidence to suggest that it increases learning (Ford et.al, 2011). Also the term "window" suggests that these opportunities for learning open and close, which I believe is not the case.

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4

Coach C1 on March 23, 2014 at 5:15 pm said:

Really interesting conversation there, just reading **converse**'s last post it just got me thinking about how long term goals affect how we question our players, and in turn encourage them to think? and if we see our players progressing in a different way does this influence how we get them to think, for example if one player is playing very well and showing sings of a higher level of thinking, so therefore we look to encourage that....whereas another player might be lower down the spectrum so do we tend to settle with the fact that that player may not be able to deal with the higher level, and if so, how do you get that player to progress further up?

I have personally found that there is sometimes a tendency to push the more "excelling" players with a higher level of thinking and then almost accept that others who aren't necessarily as high up cant handle these questions. I think i have been guilty of this at times, and now im challenged to not do that. Have you both found this in any of your sessions before? and how would you go around trying to develop a higher level of thinking in those less developed players?



Coach C2 on March 24, 2014 at 12:21 pm said:

When thinking routines become part of the coaching environment through repeated practice, they create patterns of thinking and learning that become part of the child's intellectual character (Ritchhart, 2002). This could potentially assist in critical thinking? Would you agree that set routines work (so age related questioning?) or do you believe that more developed players should be asked more challenging questions? I think for the player to make a mistake could help the player to critically analyse the situation and possibly trigger that depth of thinking we are expecting of them, although I think this is a problem in itself..... that "we expect".

I rarely use terminology players cannot understand, I would only use it when rewording a simple question to see if they understood. I don't think we should really try to push deeper thinking on less developed players because it could have a negative effect. Research has shown that critical thinking is an active, purposeful, and organized cognitive process which can be explicitly taught (Barahal 2008; Salmon 2010). I also believe by having a routine both practical and to engage in questioning can help encourage players, a coaches' use of routines is significant, not only to give children a sense of security and self-confidence, but also to generate habits of mind as they develop an ethos of thinking (Salmon, 2010). Thinking routines are simple, easy to use and when age appropriate they can stimulate past knowledge to expand on potential options, this in time could allow coaches to progress with critical thinking.

It's a difficult one **determ**, I admit. What is your opinion of that in order to develop this level of deeper thinking in children (which I think still should be age appropriate), we as coaches need to do this ourselves, in order to come up with the questions in the first place?

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Barahal, S. (2008) Thinking about thinking: Pre-service teachers strengthen their thinking artfully. Phi Delta Kappan. 90,4, 298–302.

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<u>Reply</u> ↓

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Coach C6 on March 24, 2014 at 8:47 pm said:

This is a very interesting discussion. My personal opinion is that I would use simple terminology so the participants understood what I was saying. However I would break down all the technical aspects into questions such as (If I was doing a passing/receiving session) I would pose questions such as "What part of the foot would you receive with &

why, also could you tell me what we would do before we would receive the ball" In this case the answers should be generally straight forward depending on the ability level. I used those questions in a previous session and got really detailed answers back, the children was only 6/7. I also find that posing a question and letting players work in small groups to answer it is also a good way of them learning because they begin to value others opinions and work as a team. Maybe you could try this if you haven't done so already? Furthermore from the use of providing questions like this, it offers a greater scope of answers. Don't you think? Additionally Barkley (2010) says that "A consciously skilled coach is able to break down one of his or her own complex skills into teachable steps. This mirrors what a skilled teacher does when explaining concepts or breaking down information for students" Allowing participants to understand the session/practice in place. Have any of you used this technique before? I have briefly used this before and it really helps participants to learn, as I am constantly assessing their thinking and learning.

Bibliography

Barkley, S. G. (2010). The Observation. In S. G. Barkley, Quality Teaching in a Culture of Coaching (pp. 101-107). United Kingdom: R&L Education.

<u>Reply</u> ↓

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Coach C2 on March 25, 2014 at 1:02 pm said:

I support the idea of using simple terminology so the players understand, because after all they are children and we should not overload them with information and critical thinking. From reading your next paragraph, you ask the same question which are reworded to encourage deeper thinking, is that right? I personally think that this is the best way forward to encourage deeper thinking as it then involves all the players.

I do have one question, you say this helps you assess what the players are thinking. How are you so sure that the taxonomy is helping you do this and that the players do not already know the answers to your questions?

I ask this as I was speaking with a fellow coach at the academy, and he said to be at an academy you have to have a good/advanced understanding of football and already be thinking of your next move before you play your first, like chess I suppose.

As I coach at grassroots and academy, like yourself, do you find you question players more simply than with your man city team where they are already at a more advanced stage in their development?

<u>Reply</u> ↓

Coach C6 on March 26, 2014 at 5:20 pm said:

From my perspective, it is crucial as a coach to allow players to self asses themselves. They may not know they are doing such a thing but from providing them with correct questions, suitable answers will be given as feedback towards the session. I wouldn't expect them to

know the answers immediately, however as the session progressed and I reviewed each part (technique, skill and game) I would hope the participants had a better understanding of the "aims and objectives/key points" of the session.

And that is correct, I try to learn my players this all the time as you said "like chess" it is important to implement this decision making aspect into their sessions. And I always encourage grassroots players to think like academy players. After all, all academy players started off playing grassroots football somewhere. However if they did struggle I would break the session down so it became more understandable.

How do you compare this towards the players you coach ?? They are a lot older which means you could advance your questions more, is this true?

Reply ↓

Coach C2 on March 26, 2014 at 9:24 pm said:

To a certain extent possibly, but I rarely do ask critical thinking questions as I personally prefer to get down to training and have all players playing at once so nobody is stood around becoming bored. When I do ask, I usually ask the question to several player but reworded. For me this tells me they understand and understand different terminology used.

I do always however ask questions at the end, as a recap, but as also as part of the remembering stage. I have come up with a good way which I find really effective. The players are stood in a circle with myself in the center with a ball, I then ask a question and pass to a player who I want the answer from. They answer then, pass the ball back and we go again. It's good fun for the players I have found, give it a go? See what you think.

I still believe regardless of the ability of a child, they are still children and we should just let them play with minimal interference. I think this improves the players better than we can coach them sometimes, as they learn from their mistakes plus receiving guidance from the coach.



6.

Coach C1 on March 25, 2014 at 11:40 am said:

I really agree about what you say about with thinking routines and i really value that in my coaching, and i do think that does assist in critical thinking for the players, because they get used to it and in turn are thinking within their practice about what they are doing and why they may be doing it. Where i think it does become a bit clouded is the whole area of age appropriate questioning, i do think there are a "core" group of questions that will sufficiently challenge the group as a whole.

However i do think on an individual basis the more developed players should be challenged to think at a higher level simply because i think that improves them and challenges them more. I do think for the lesser developed players that practical learning from mistake approach is more applicable, because it is on a much more simple level for them, so they make a mistake and the coach may ask them "ok, what happened there?" the player reflects (remembers) then suggests how they could improve next time, and then they go and try it. I think that is the easiest way for a less developed player to think a little more about their performance.

Well i think its a real skill of coaches to be able to intervene and ask the right questions at the right times to be able to develope that deeper level of thinking in children. My own process is to be more individual. I try to understand some of the individual needs in my group, and assess their level before actually intervening, i find the real struggle is really nailing the concepts down over a long term basis, in the short term it can be easy but really challenging the players to think highly up the scale can be really difficult, as children are unpredictable. I often find that in terms of thinking, some weeks some players do it, and others those players may not. What my experience has taught me though, is that the better players will show signs of this every week and have a level of consistency to how they think and play the game.

What do you think about the question you asked ? im interested to hear how you take your age appropriate ideas into your sessions? Thanks for the question

<u>Reply</u> ↓

Hi

Coach C2 on March 25, 2014 at 1:14 pm said:

To answer your question, I left **a** a comment (please read) which should hopefully explain my beliefs on this subject. As you say deeper questioning should be encouraged for more developed players, which I totally agree with but it should be age related.

I have noticed that throughout this blog nobody has ever mentioned coaching players with disability. I think this is down to choice rather than opportunity because there are so many disability teams available to coach. I personally have coached a deaf team for several months and it really is a shock to the system and does stretch your coaching abilities, so how could I ask for a deeper level of thinking when I have players who cannot even hear me? From my experiences I simply could not do this, I just made sport as enjoyable and safe as possible.

So my question to you is "*Does taxonomy apply to disability teams?* If so on what *level?*" As it is apparent from the posts so far (including mine) deeper thinking for situations is encouraged in ALL children. Do we encourage disability players in this? If so to what extent?

This is to all on this post as I would like to know your view/beliefs on taxonomy and disability players!

APPENDIX F

F1. Project Information Sheet

Project title: Exploiting social learning as a legitimate tool in coach development

Why is this study being done?

Careful investigation is currently lacking on precisely how social learning can influence both coach behaviour and learning for better *and* for worse. This PhD research project aims to determine how social pressures can both liberate and constrain coach development. In tandem, it will raise awareness of the social processes acting upon coaches during their development and outline how these may be exploited by coach developers to improve coaching performance. The researcher, John Stoszkowski, is a university lecturer and qualified coach.

Why have I been invited to participate?

In this particular study, we will attempt to explore why coaches value the types of knowledge they do and how they perceive participation in online blogging as a tool for coach development. You have been selected because of your qualification, experience and expertise. It is hoped that your involvement will help our understanding of coaches' beliefs, their priorities and how they rationalise their behaviours.

What will I be asked to do?

You will be asked to participate in a focus group interview alongside other student coaches. The aim of these interviews is to identify the advantages and disadvantages you perceive when engaging in reflection and discussion via online blogs. The interviews will last around 1 hour and will be recorded and transcribed verbatim. You will then be given the opportunity to comment on the key issues/themes that emerge (with any revisions/comments to be returned within 2 weeks of receipt) to ensure an accurate representation of your views and opinions.

What will happen to the data?

The data (e.g., field notes, interviews) will be retained in secure storage for five years, after which it will be destroyed. The results of the project may be published or recorded in thesis, journal papers, books and related magazines. Your anonymity will be preserved through the use of a pseudonym; for example "Coach 1."

Who has approved the study?

The study has been approved by the University of Central Lancashire Research Ethics Committee.

Are their any risks in participating?

We can perceive of no such risks.

If I take part, can I change my mind?

Yes. You retain the right to refuse to answer any questions and you are free to leave the focus group or withdraw your consent to further involvement in the research project at any time. However, it will not be possible to remove any of your comments after the focus group has completed.

What are the benefits of involvement?

Social learning approaches, if managed incorrectly, could pose a significant threat to effective coach development and may simply serve to magnify and perpetuate many of the issues, which coach developers should try to nullify. If we are to accept and embrace more 'informal' methods of coach development (e.g., Online Blogging) as an alternative to the training and certification of coaches via formal coach education, and wish to encourage coaches to become truly autonomous learners, identifying and acknowledging the social processes at play in coach learning is essential. If, on the other hand, formal coach education opportunities could be "socially situated," the benefits which this compulsory stage of progress holds could be optimally exploited. Participants could therefore become more adept at recognising the processes which underpin and influence their coaching beliefs, and subsequently, their approach to developmental activities.

What happens next?

If you are happy to be involved in the project, you will be asked to read and sign a consent form to confirm this. If you do not want to be involved, thank you for your attention.

What do I do if I have any concerns or questions about this study?

If you have any concerns about this study or questions regarding your involvement in the research project, or if you would like more information, please contact a member of the research team via the means below:

Research Team Contact Details

John Stoszkowski (Researcher)	Prof Dave Collins (Project Supervisor)
Email: JRStoszkowski@uclan.ac.uk	Email: DJCollins@uclan.ac.uk
Tel: xxxxx xxxxxx	Tel: xxxxx xxxxxx

F2. Project Informed Consent Form

Project Title: Exploiting the social side of coach development

I have been briefed concerning this project and understand my commitment and role in it. All my questions have been answered to my satisfaction. I understand that I am free to request further information at any stage and can withdraw from the project at any time.

Please initial the boxes to indicate agreement with each statement:

	Initial	
1. I confirm that I have both read and understood the participant		
information sheet dated for the above study and have had the		
opportunity to ask questions.		
2. I understand that my participation in the above project is entirely		
voluntary and that I am free to not answer any questions, or leave/stop the		
focus group interview at any time, without giving a reason and without any		
disadvantage.		
3. In light of point 2 made above, I understand that it will not be possible		
to remove any of my comments after the focus group interview has		
completed.		
4. I agree to the discussion being audio-recorded (as well as notes being		
taken during the discussion) and transcribed at a later date.		
5. I understand that anonymised quotes may be taken from the interview		
and used to illustrate general themes.		
6. I understand that the data [field notes, interviews] will be destroyed at		
the conclusion of the project but any raw data on which the results of the		
project depend will be retained in secure storage for five years, after which		
it will be destroyed.		
7. I agree to anonymised quotes being used within any publications or		
presentations resulting from this work.		
8. I understand that I will be able to receive a copy of the study's		
conclusions when it is completed.		
9. I agree to take part in the above study.		

Name of participant (Print):

Signature of participant:

Date:

Thank you for reading this information and taking part of this study.

If you have any questions regarding your involvement in this research please ask myself (John Stoszkowski) or contact Professor Dave Collins on xxxxx xxxxxx or DJCollins@unclan.ac.uk

F3. Interview Guide

1. Perceptions of the module/impact on practice

QUESTION	POTENTIAL PROBES	WHAT AM I INTERESTED IN
How has the module impacted on your coaching?	 Do you feel you are a better coach as a result of doing it? Why do you feel this is the case? What, if anything, have you used or done differently as a result of the module? Has your coaching practice changed as a result of the module? HOW has your coaching practice changed? Can you give me an example of that? 	 Did they see it as a positive/negative learning experience? Has the process impacted upon their coaching practice?

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2. Social Interaction

QUESTION	POTENTIAL PROBES	WHAT AM I INTERESTED IN
How useful was it to discuss ideas with others?	 How/why did it help? Can you give me an example of that? If it got in the way, how/why did it get in the way? Could this process have been improved to aid your learning? If so, how? 	 What are their perceptions about learning <i>with</i> others? Were there any barriers to engagement?

3. Knowledge/structure

QUESTION	POTENTIAL PROBES	WHAT AM I INTERESTED IN
Did you feel sufficiently well equipped with knowledge to start a discussion (on each theme)?	 <i>If so</i>, where did this come from and what sorts of knowledge were useful? <i>If not</i>, what else would help enable this to happen? What else would you need to know and where, ideally, would THIS come from? 	 The extent to which structure was useful or essential to guide their discussion. Were the workshops sufficient as a start point for discussion? What role did self-directed reading/research play?

4. Potential improvements to the process and focus

\mathbf{N}	
1	
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QUESTION	POTENTIAL PROBES	WHAT AM I INTERESTED IN
How would you improve the process undertaken during the module?	 How relevant to your coaching practice did you find the 5 themes covered? If relevant, why/how? If not, why not? What else could we have focussed on? Why do you think that would be relevant? Was there other knowledge which would have helped you fully exploit and learn from the process? Would you utilise this approach in future to aid your development as a coach? 	 How could we improve the process? Are there any themes they feel are more relevant?