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Applying Game Centered Approaches in coaching: a critical analysis of the ‘dilemmas of practice’ impacting change

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Despite its straightforward premise, coaching has found the implementation of Game Centered Approaches (GCAs) more difficult than is perhaps acknowledged. This paper outlines a theoretical analysis of GCAs in practice based on reflections from coaching practice, coach education and research. The application of the various GCAs are interrogated in light of their ‘constructivist’ assumptions, and situated within the ambiguities, tensions and compromises inherent within the coaching enterprise. Using Windschitl’s framework of conceptual, pedagogical, cultural and political dilemmas as a heuristic, critical questions and issues are raised to help coaches and coach educators understand the forces impacting change in coaching. Through the analysis of dilemmas, an alternative agenda for coach education is presented to develop infinitely skilled coaches equipped to apply innovative pedagogies such as GCA.

Keywords: coaching practice; coach education; games-based pedagogies; practice issues

Introduction

Coaching is increasingly understood as a social practice; not as a narrow or instrumental practice operating in social and political vacuums, but arising in, with, and from the culturally structured world (Cushion & Jones, 2012). In this sense, coaching is not taken as benign or unproblematic, the simple application of an instructional model, but resulting from the complex interaction of coach, athlete and context (Cushion, Armour & Jones, 2006; MacPhail, Gorley & Kirk, 2003; Potrac & Jones, 2009). Subsequently, it is the relationship between these factors that is of utmost importance, with the concerns and invested activity binding together in various ways to impact athlete learning (Cushion, 2011).

Taking coaching as a problematic activity, a sophisticated understanding of practice is required to illuminate some of its ambiguities, contradictions and compromises (Light, 2004). In this respect, Windschitl’s (2002) framework of dilemmas (conceptual, pedagogical, cultural and political) offers a means for grasping the complexity of coaching, as it views the coach, athletes, contexts and related learning, as being inextricably inter-related. ‘Dilemmas’ (Windschitl, 2002) are aspects of coaches’ intellectual and lived experiences that impact their coaching practice. The four-part model acts as a heuristic, moving from the individual coach (personal and intellectual) to more abstract views of coaching, including a broader organizational and cultural/historical perspective (social and structural) (Roberts, 2011a; Windschitl, 2002). This enables critical questions to be asked about coaches’ beliefs and practice, while understanding contextual and wider social forces that impact athlete learning.

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Viewing coaching in this way challenges ideas about learning as a linear unproblematic transfer of knowledge (Cushion, 2011; Light & Fawns, 2003; Light & Evans, 2010). Alternatively, it embraces socio-cultural and complex views of learning, allowing an exploration of other pedagogies. Game Centered Approaches (GCAs) are a broad conceptualization of a number of iterations of games based pedagogies (e.g. Teaching Games for Understanding [TGfU], Game Sense [GS], *inter alia*) (Oslin & Mitchell, 2006; Harvey & Jarrett, 2013). These are characterized by a shift from a coach/teacher-centred and skills-based approach to an athlete/student-centred approach aimed at developing skills in the context of games (Wang & Ha, 2012). GCAs focus on learning through game appreciation, tactical awareness, decision-making and skills execution (Light & Fawns, 2003), with a core belief of empowering learners (Butler, 2005) and placing the teacher/coach as a partner in learning (Davis & Sumara, 2003). Such a perspective challenges more traditional coaching, requiring changes to practice (Harvey, Cushion & Massa-Gonzalez, 2010). This not only means acquiring new skills, but understanding and making personal sense of learning, aligning the culture of coaching contexts with a GCAs philosophy, and dealing with the tradition and conservatism that can resist application (Blomqvist, Luhtanen & Laakso, 2001; Dyson, Griffin & Hastie, 2004; Light & Evans, 2010).

While the use of GCAs in coaching is not a new phenomenon, its underpinning approach to pedagogy and assumptions about learning have received relatively little attention from coaches and coach educators (Harvey & Jarrett, 2013; Harvey et al., 2010; Light & Evans, 2010). Yet, GCAs have established a toehold in coaching practice with their principles embedded, promoted and explored within many sports and coach education programmes (Galvan, Fyall & Culpan, 2012; Kidman, 2001; Light, 2004; Light & Evans, 2010; Roberts, 2011a, 2011b). However, a number of problems with the implementation and development of GCAs remain (Harvey & Jarrett, 2013), while little research has investigated their application within coaching specifically (Harvey & Jarrett, 2013; Kidman, 2001; Light, 2004; Light & Evans, 2010; Roberts, 2011a; Harvey et al., 2010). Indeed, a recent review (Harvey & Jarrett, 2013) showed limited literature systematically examining the challenges coaches face in implementing innovative coaching practices. Similarly, little research has explored the articulations between coaches' experiences, conceptual understanding, pedagogical practices, and the wider cultural and political realities of coaching, and their impact on the learner.

Building on Roberts's (2011a) work with a single cohort of coaches, this paper uses Windschitl's (2002) framework of 'practice dilemmas' to build an analysis across coaching, examining the range and structure of coaches' experiences and practice. This approach provides a lens through which to investigate the experience of GCAs as constructed and embedded within authentic coaching contexts. Coaching and GCAs related research is utilized to build the case although limited empirical research exists (Harvey & Jarrett, 2013). Hence, the analysis, where necessary, draws on coaches' 'practice dilemmas' more broadly, and relates these back to implementing GCAs. This seeming limitation actually adds to the work's significance. It does so by allowing a framework for considering coaching and the implementation of GCAs, and by drawing on wider coaching research thus offering a broader critical vista. Used as a heuristic, such a framework holds the potential for coaches and coach educators to interrogate their own beliefs and pedagogy including and beyond implementing GCAs, while signposting an alternative agenda for coaching research, coach education and development.

Background: coaching and learning

GCAs can be linked to theorists such as John Dewey (Light & Evans, 2010; Philips, 1995), who argued that learning was principally social in nature, connected to prior experience, embedded in meaningful contexts, and related to an individual's understanding of content (Dewey, 1938). With GCAs, learners are active participants, with previous knowledge and experience impacting how they learn in a physical and social environment. Learners are thus situated in context, with social interaction central to the learning (Harvey et al., 2010; Light & Evans, 2010). Coaching within GCAs then involves much more than a refinement of technique and the internalization of objective knowledge. Rather, it is a player-led interactive contextualized process, where learners are required to solve tactical and technical problems (Evans & Light, 2007; Light & Evans, 2010).

In this light, GCAs are routinely conceptualized as 'constructivist' in their assumptions (Butler, 2005; Dyson et al., 2004; Light & Wallian, 2008; Roberts, 2011a). This can be problematic for practitioners, as a lack of conceptual clarity creates difficulty in understanding what 'constructivism' means. All learning activity is constructive, as even practice in drills or passive receipt of instruction 'constructs' knowledge (von Glaserfeld, 1993). Consequently, it has been argued that 'because all pedagogy results in some kind of "construction" it is technically inappropriate to identify particular approaches to teaching as constructivist' (Windschitl, 2002, p. 136). Practitioners need a clear focus on the pedagogy underpinning a GCAs approach; what is meant conceptually and practically by the term 'constructivist'?

In addition, while constructivism and social constructionism are separate concepts, they have often been subsumed under a generic and undifferentiated 'constructivism' in the literature (Davis & Sumara, 2008; Dyson et al., 2004; Young & Collin, 2004;). As Raskin (2002) points out, 'one comes across so many varieties of constructivism that even the experts seem befuddled. Terms like constructivism, constructionism and constructive, are employed so idiosyncratically and inconsistently that, at times, it defies definition' (p. 2). The differences lie in the emphasis on individual cognitive processes or the social co-construction of knowledge. It is a differentiation marking differing ontologies and epistemologies resulting in a variety of coaching practice (Cushion et al., 2006). Constructivism argues that individuals construct the world of experience through cognitive processes with a dualist epistemology and ontology (Young & Collin, 2004). These processes are internal to the individual, involving the integration of knowledge (or meaning) in pre-existing schemes, or changing the schemes to fit the environment (assimilation and accommodation respectively) (Piaget & Inhelder, 1969). Social constructionism, however, takes the view that knowledge has both individual and social components, and is sustained by social processes linked to knowledge (Cobb, 1994; Young & Collin, 2004). In constructionism, understanding and experience are in constant interaction and, through participation, persons, action and the world are connected in knowing and learning (Lave & Wenger, 1996). Constructionism rejects a dualist ontology and epistemology, with multiple constructed realities emergent in relational processes (Hosking, 2002). Knowledge is considered as historically and culturally specific, with language constituting rather than reflecting reality; a pre-condition for thought and a form of social action with a focus on learning in interaction processes and social practice (Young & Collin, 2004). Importantly, as Young & Collin (2004) suggest, constructionism is more than 'constructing' knowledge. Rather, it is positioned within the historical and cultural location of that construction. Therefore, a constructionist focus on learning shifts attention away from just individual coaches or athletes, to their interaction with the

location in which the learning takes place. Indeed, recent GCA research (e.g. Harvey et al., 2010; Light & Evans, 2010) describe aspects of learning as being more related to constructionism, but use the generic ‘constructivism’ label.

There are different ways of understanding learning (Hodkinson, Biesta & James, 2008), and these relate to how the person is perceived, the nature of reality, and knowledge. Therefore, an underlying philosophy informs that understanding, and it is this that frames theories, theoretical models, and subsequent practice (Light, 2008). Therefore, *both* researchers and coaches need what Windschitl (2002) calls ‘intellectual anchors’ to support their thinking on GCAs, how they can be applied to coaching practice, and what that practice should look like.

Conceptual dilemmas

While each dilemma is considered individually, Windschitl (2002) argues that the four dimensions together capture the range of challenges in pedagogical environments. Importantly, failure to attend to any one of the dimensions can compromise or doom implementation ‘[where]...addressing each of the dimensions is necessary but insufficient by itself to realize new visions of learning’ (Windschitl, 2002, p. 132).

Conceptual dilemmas are rooted in practitioners’ understanding of learning, their assumptions and beliefs, and their ontological and epistemological underpinnings. Coaches’ assumptions about learning, acting often implicitly, informs their practice and the degree to which they understand and apply an approach to pedagogy such as GCAs. Recent research (e.g. Cushion, Griffiths & Armour, 2011; Harvey et al., 2010; Light & Evans, 2010; Partington & Cushion, 2011; Roberts, 2011a) suggests that coaches’ understanding of learning can be confused and superficial. For example, Cushion et al. (2011) found coaches had conflated philosophies and ideologies under a broad banner of ‘coaching’ and ‘learning’, resulting in 14 different descriptors of the latter; what Grant (2007) coined ‘a conceptually incoherent smorgasbord of esoteric positions, methodologies and ideologies’ (p. 24). Such a position is exacerbated when, as Light & Evans (2010) highlight, there is a lack of interest in the underpinning learning and pedagogy related to GCAs.

Coaching practice and knowledge is largely uninformed by research (Lyle, 2007), being instead developed overwhelmingly by informal sources, particularly observation and experience (cf. Cushion, Armour & Jones, 2003; Trudel & Gilbert, 2006). This leads to a self-referenced anecdotal approach to practice based on ‘what works’, and a way of coaching that ‘gets results’. Bruner (1999) describes such implicit theories as ‘folk pedagogies’; i.e. strong views about how people learn and what is ‘good’ for them. Typically, these are based on ‘tradition, circumstance and external authority’ (Tinning, 1988, p. 82; Harvey et al., 2010; Light & Evans, 2010; Williams & Hodges, 2005), are characterized by highly directive, autocratic and prescriptive practice, and underpinned by a linear, process-product approach to learning where mastered ‘skills’ form the basis for games play (Cassidy, Jones & Potrac, 2009; Cushion, Ford & Williams 2012; Harvey et al., 2010a; Light, 2004). Coaching ideologies, dogma or doxa are the frameworks producing and reproducing such ‘folk pedagogies’ (Piggott, 2011; Cushion & Jones, 2012) resulting in practice and practitioners becoming, as Piggott (2011) suggests, ‘dogmatic and petrified because they are protected’ and resistant to ‘criticism from within and without’ (p. 8).

‘Folk pedagogy’ or self-referenced approaches can result in coaches abstracting parts of a GCA from its whole, resulting in distorted understanding and application (Cobb &

Yackel, 1996; Roberts, 2011a). For example, elements of GCAs may be inserted within a traditional and direct/behavioural model. Indeed, Light & Evans (2010), Ford, Yates and Williams (2010), Partington & Cushion (2011) and Cushion et al. (2012) all identified elements of GCAs within coaches' practice repertoire. Games were a valued and important aspect of existing training, but only as an intermingling of new and old practices. Importantly, coaches often fail to recognize or understand the contradictions in conceptions of coaching practice and athlete learning from GCAs versus a direct/behavioural approach (Light & Evans, 2010; Roberts, 2011a). Indeed, several authors describe the existence of a coaches' 'epistemological gap', the language of an alternative approach but with limited conceptual or practical understanding of it (Davis & Sumara, 2003; Harvey & Jarrett, 2013; Light, 2008; Partington & Cushion, 2011). Similarly, Fullan (1991) argues that for teachers (*[sic]* coaches) who attempt to implement innovative pedagogies:

... it is possible to change on the surface by endorsing certain goals, using specific materials, even imitating the behaviour without specifically understanding the principles and rationale for change. [Likewise] ... it is possible to value and even articulate about the goals of change without understanding the implications for practice'. (p. 40)

Another outcome of folk pedagogy is what Prawat (1992) describes as a 'naïve constructivism'. Here learners receive little or no guidance, placing an inordinate faith in the ability of the learner to structure their own learning (Davis & Sumara, 2003; Windschitl, 2002). This misunderstanding can result in a 'roll out the ball' (Light, 2004; Metzler, 2011) or the 'game is the teacher' mentality, where 'coaching' is prohibited (Roberts, 2011a). This equates learning exclusively with activity, and to a belief that involvement alone is a sufficient and necessary condition for drawing on prior experiences and constructing knowledge (Kirschner, Sweller & Clark, 2006; Windschitl, 2002). Thus, taking such concerns into consideration a paradox occurs in trying to stay true to GCAs and their requirements (i.e. modified games, inquiry activities, opportunities for players to demonstrate their understanding, players accepting responsibility for their own learning) (Metzler, 2011; Roberts, 2011a).

Meaningful learning occurs when the learner is able to connect to, and make sense of, what is to be learned, identify relevant knowledge and information, organize it into a coherent structure, and integrate it with other knowledge (Mayer, 2004). Just playing a game does not guarantee connection with the to-be-learned material, and some form of guidance is required (e.g. from rules and/or structure of a modified game, the coach, peers, etc.). Learning is not 'just playing games' (Metzler, 2011), but requires 'skilful and progressive instruction' (Hopper, 2002; Harvey, Cushion, Wegis & Massa-Gonzalez, 2010). Indeed, reviews have consistently demonstrated that unguided or pure discovery learning does not work (see Mayer, 2004; Kirschner et al., 2006). Curiously, while often advocated as 'player-centred', and appearing to emphasize the individual, coaching by just 'playing games' presents a 'one size fits all' approach to learning (and does not meet the 'benchmarks' of GCAs [Metzler, 2011]). That is, regardless of individual learner differences, the same approach to learning, with very little variation in practice, is deemed sufficient for all. However, not all learners are the same, nor are circumstances and contexts and advocating a singular approach to coaching seems to contradict athlete centredness, and deny, or minimize, individual difference. Coaching using GCAs on the other hand should reduce the power differential between player and coach through joint involvement in decision-making (Light, 2004). Arguably, coaches' who engage with this naïve constructivism as the only method of practice are in danger of inadvertently

imposing arbitrary ideology and values through their practice, rather than providing that which will best meet learners' needs.

Huberman (1995) uses the terms 'bricolage' and 'tinkering' to describe the way that changes to practice can occur, not through wholesale alterations but 'through serendipitous methods...[coaches] are magpies' (Abraham, Collins & Martindale, 2006; p. 560). Coaches, tutors and organizations have a tendency to 'cherry pick' ideas that fit their beliefs, while rejecting or resisting others that are more challenging (Harvey et al., 2010; Light & Evans, 2010; Roberts, 2011a). This enables coaches and coach education to adopt seemingly novel or original aspects of GCAs while at the same time preserving their underlying fundamental beliefs about coaching and learning. Hargreaves (1994) describes this as 'safe simulation', with imitations of GCAs practiced with minimal disruption to coaching norms and traditions (Light & Evans, 2010).

Folk pedagogies and coaching ideology informed by naïve constructivism results in fragmented GCAs or practice mutation based on a limited or superficial understanding of learning (Windschitl, 2002). The application of pseudo-principles and coaching myths are not only evidenced in coaching practice ideology, but are also included in coach education ideologies and rhetoric (e.g. Roberts, 2011a). These include, for example:

- Questioning is the *only* coaching behaviour used with GCAs. Direct instruction has no place (Kidman, 2005; Roberts, 2011). Questioning has transgressed from becoming *an* appropriate strategy (Turner, 2005), to the *most* appropriate (Kidman, 2005), to the *only* strategy (Roberts, 2011a).
- There is *no* place for technique or skill practice. 'A common misconception that surrounds the TGfU model is the exclusion of technical and skill based instructional approaches' (Roberts, 2011a, p. 34).
- GCAs is nothing new, just discovery learning (Harvey et al., 2010).
- Athletes must *always* be physically or socially active to learn (Kirschner et al., 2006; Light, Harvey & Mouchet, 2012; Mayer, 2004).

Pedagogical dilemmas

Pedagogical dilemmas refer to coaches' behaviour and all related activity contributing to the design of a learning environment (Windschitl, 2002). Pedagogical dilemmas intersect to a lesser and greater degree with each of the other dilemmas. In particular, coaches do not realize the influence of their personal experience, nor appreciate the ways in which powerful assumptions inform and guide their pedagogy/coaching (Cushion et al., 2012; cf. Harvey et al., 2010a).

At the core of GCAs is empowering learners (Butler, 2005), with the coach as a co-learner or partner in that learning (Davis & Sumara, 2003; Harvey et al., 2010). For coaches with a 'traditional' focus, GCAs will require a fundamental shift in how they coach (Dyson et al., 2004; Light, 2004; Light & Evans, 2010), to better appreciate a more interactive, complex and unpredictable learning environment (Darling-Hammond, 1996; Light, 2004; Light & Wallian, 2008). The application of GCAs means that coaches are repositioned to stand back and observe more, act as facilitators and be less directive; paradoxically, they have to come out of their 'comfort zone' to be able see the big picture and to learn when to ask and when to tell (Dyson et al., 2004; Harvey et al., 2010; Howarth, 2005; Metzler, 2011). Consequently, where coaches have employed GCAs coaching becomes more complex, requiring greater preparation, more concentration and 'noticing', and an overall greater pedagogical responsibility (Light, 2004; Harvey et al., 2010).

Facilitation requires more than providing 'hints' to unambiguous right answers. Rather, to develop autonomous learning, the coach may be required to model, scaffold, question, guide, advise, de-brief, converse, as well as offering heuristics or conceptual structures to generate the desired learning (Dyson et al., 2004; Light & Fawns, 2003; Windschitl, 2002).

Over 50 years ago speaking about education, Cremin (1961) noted that 'in the hands of first rate instructors, innovations work wonders; in the hands of too many average teachers, however, they led to chaos' (p. 348). In coaching too, the overall quality of practice can be poor (Gearity, 2012) with coaches unable to facilitate well or conduct instructional conversations, having never experienced sufficient guidance in coach education, nor seen effective models in action (Partington & Cushion, 2011; Light & Evans, 2010; Roberts, 2011a). Indeed, Partington & Cushion (2011) noted that coaches wanted to be more effective at facilitating learning and less directive, but did not possess the necessary skills.

Requiring or acknowledging the need for additional pedagogical expertise is not only a dilemma for coaches. Additionally, utilizing a GCA approach also requires an in-depth knowledge of the game (Howarth, 2005; Roberts 2011a; Harvey et al., 2010) which can be significantly challenging (e.g. Harvey et al., 2010). Indeed, as Shulman (1987) notes, knowledge and understanding are even more critical than for more traditional didactic alternatives. Coaches not only need to be aware of 'coaching points' and the principles underlying them, but also the variety of ways these can be looked at and developed (Lauder, 2001). The coach must create and manage an effective learning environment to allow the players to engage in the 'ongoing conversation' of games that involves the interplay between action and language (Harvey et al., 2010; Light & Fawns, 2003). For example, in Harvey et al.'s (2010) study, the coaches' lack of underpinning knowledge was exposed in the planning process when designing activities and appropriate instructional strategies, and also during practice sessions when some of the coaches struggled to step back and observe game play. They subsequently found the manipulation of the training environment difficult, becoming 'lost in the chaos' (Light, 2005).

The outcome of these pedagogical dilemmas is that coaching and the application of GCAs become limited by coaches' role frames (Schön, 1983); that is, coaches' knowledge, experience, what is seen, and the potential for learning (Cushion, 2006). Consequently, pedagogical dilemmas shape how coaches engage with coaching practice and the possibilities for implementing GCAs. This reflects an important interplay between knowledge, experience and practice. Limited knowledge constrains 'seeing' and diminishes action. Coaches are also more likely to stick with traditional methods, coach-led and coach-controlled practice sessions that are less dialogic, with the athletes' passive receivers of information (Potrac & Cassidy, 2006). In this case, a retreat to traditional approaches is based on a lack of pedagogical knowledge rather than specific opposition to GCAs (Light & Evans, 2010; Roberts, 2011a). Limited knowledge can also result in coaches being much more passive; i.e. 'rolling out the ball' (Metzler, 2011) thus abdicating responsibility and ownership for athlete learning to the athletes.

Cultural dilemmas

Coaches' pedagogical practices are always situated in a larger context that is more than the 'container' into which coaches are simply dropped (Cushion, 2011). This includes the histories, cultures, races, genders, and physical abilities of coaches and athletes; their roles and responsibilities, their prior knowledge and experiences, the programme design, curriculum, and the learning activities, in addition to the history, culture and structure of the sport (Alfred, 2002; Cushion, 2011). The interaction of these factors influences the

meaning that coaches and athletes make of the learning process. Such factors impact the learning environment in overt and covert ways, and can be powerful in terms of a 'hidden curriculum' forming a tacitly understood framework of norms, expectations and values; a coaching culture (Cushion & Jones, 2012).

Coaching has a persistent and resilient culture that provides images about how to be coaches (knowledge holders) and athletes (passive receivers) (Cassidy et al., 2009; Light & Fawns, 2003). It is a culture that generally features high levels of instruction and a predominance of training-form practices, in which coaches talk most of the time and athletes engage in repetitive activities. There is an extraordinary sameness in coaching as findings of contemporary research mirrors work conducted three and a half decades earlier (e.g. Lacy & Darst, 1985; Potrac, Jones & Cushion, 2007; Ford et al., 2010). This culture acts in direct opposition to a learning approach underpinned by social constructionist theory. Utilizing an approach underpinned by constructionism and creating patterns of beliefs and practices that enable application of GCAs (or any innovative pedagogy) will inevitably run counter to existing ideology (Cassidy et al., 2009).

'Traditional' coaching appears natural and unchangeable, 'what is expected' within the coaching role by coaches, athletes, parents and clubs (Light, 2004; Potrac et al., 2007). Anything else is often considered 'not coaching' and, therefore, contested. For example, observing for long periods during modified or conditioned game practices has been perceived as lacking interest, or misinterpreted as being off-task (Roberts, 2011a; Light, 2004; Partington & Cushion, 2011). Coaches feel pressure to interject with instruction in order to be seen to be 'coaching' (Chesterfield, Potrac & Jones, 2010; Light, 2004; Partington & Cushion, 2011). Similarly, received wisdom dictates that coaching sessions *never* start with a game they should only end with games (if the players are lucky, worked hard enough, and behaved appropriately).

As the overly controlled and coach-led culture is supported, in part, by coaches' epistemological assumptions, and the 'simple and seductive premise of being-right', 're-culturing' requires coaches to overcome their own experiences as coaches and learners (Light & Evans, 2010; Windschitl, 2002). Coaches' come to accept and value certain types of knowledge over others and perpetuate these perspectives through practice (Cushion et al., 2003) creating a highly contextual discourse with an imposition and enforcement of a 'correct way' to coach (Cushion & Jones, 2012). As a result, coaches authenticate certain types of collective knowledge, with the resulting discourse helping to create and re-create the coaching field, giving certain practices an entrenched legitimacy (Cushion et al., 2003; cf. Cushion & Jones, 2006, 2012). Prior socialization along with established beliefs and traditions reinforce this 'valid' image of 'effective' practice which, in turn, reproduces an 'instructional' and directive approach (Cushion & Jones, 2006; Potrac et al., 2007).

Arguably, coaching has a disproportionate emphasis on technical themes such as maximizing performance and winning; it has become strongly associated with performance success (Light, 2004; Light & Evans, 2010), thus fulfilling the 'requirements' of the coaching role. The pressure to succeed in sport and the accountability and kudos for such success (real or perceived) sees the coach attempting to control as many variables as possible (Light & Evans, 2010; Potrac et al., 2007). 'Responsibility for the outcome of performance is a notable determinant in understanding a coach's desire to be in control of his or her respective athletes and coaching situations' (Potrac, Jones & Armour, 2002, p.191). So, despite perhaps supporting GCAs and their pedagogical ideas, 'coaches are, understandably, reluctant to take risks or depart too far from the status quo of accepted practice' (Light & Evans, 2010, p. 113). According to Potrac et al. (2007, p. 40), 'the consequence of such action is that athletes are increasingly socialized into expecting

instructional behaviours from coaches, and thus resist other coaching methods'. Coaching becomes an historical and traditional thread where experiences are powerful, long lasting, and have a continual influence over pedagogical perspectives, practices, beliefs and behaviours (Cushion et al., 2003; Potrac et al., 2007). Hence, the driver for current practice has often been related to tradition or uncritical inertia (Cushion et al., 2003; Fernandez-Balboa, 1997).

Political dilemmas

Political dilemmas refer to those aspects of practice that are linked with the exercise, distribution, preservation, or redistribution of power among participants in an educational enterprise (Windschitl, 2002). Any innovative pedagogy such as GCAs can generate controversy and possibly conflict from the wider coaching and sporting community (Harvey & O'Donovan, 2011; Light, 2004; MacDonald, 2003). Cushion & Jones (2012) recently highlighted that a coaching environment can be made up of the club, the coaches, the players, the league, and the sport's governing body, whom all influence curriculum and practices therein. They also demonstrated that coaches' practice refracts wider social forces from other interested parties such as parents, club stakeholders, producers of knowledge, and the wider economy (Cushion & Jones, 2012). Thus, the application of GCAs, and establishing a coaching environment conducive to their implementation, has wider political implications.

Researchers have called for the development of 'imaginative, dynamic, and thoughtful coaches' (Cushion et al., 2003, p. 216) who are capable of pushing back the boundaries of theory and practice and are, as a result, better prepared to respond to the realities of their work (Cassidy et al., 2009). Viewed in this way, coaching invests considerable authority and autonomy in coaches. However, while under the auspices of autonomy, sport policy, particularly that directed at coaching, seeks to standardize and control practice rather than make coaching more autonomous and sophisticated (Lyle, 2002; Taylor & Garret, 2010). So, while sports appear to earn autonomy, coaching 'models', 'plans', 'core competencies' and targets, act to homogenize practice under the banners of modernization and professionalization (Taylor & Garret, 2010). Indeed, the so-called 'professionalization' of coaching, through certification, bench-mark standards and accreditation, appears hugely problematic (Taylor & Garret, 2010; Piggott, 2011). Coaches become 'technicians' transferring knowledge, with coaching curricula and athlete development controlled and defined higher up the administrative chain (Cushion et al., 2003; Piggott, 2011). Not unlike physical education teachers experiencing regulative discourses (Harvey & Jarrett, 2013), coaches are often given standardized knowledge and a battery of strategies to work effectively. This works against GCAs with coaching being reduced to the application of a generic set of rules easily presented as a predictable linear process (Cushion et al., 2006; Cushion, 2011). This logic has been seized upon by coalitions of coach educators, scholars, policymakers, and those with strategic economic and political interests in coaching. The result has been a loss of control by coaches of decision-making responsibilities to so-called 'experts' (Sicilia-Camacho & Brown, 2008). Paradoxically, while sports clamour for innovative, sophisticated player-centred coaching pedagogies such as GCAs, local and national policy actively discourages such coaching, or denies coaches the freedom to develop and innovate.

Debate among policymakers, researchers, coach education and coaches about the logic of the means (how and what) of coaching also diverts attention from more fundamental questions about the nature and aims of coaching (why and what for) (Cushion, 2011;

Fernandez-Balboa & Muros, 2006). These may be deeply held pre-existing norms with unquestioned ends that directly impact coaching and its methods. For example, Cushion & Jones (2012) highlighted the transformation of the athlete as subject to object (a resource for the next level of the sport). Coaching moves from developing athletes, an end in itself, to supplying athletes to the broader sporting field, a means towards other ends (Cushion & Jones, 2012). This objectification of players arises from, and is controlled through, coaching practice. Coaching has a curriculum designed to deliver such ends imposed on the coach directly or indirectly, and this compromises the position of coaching authority and downplays development and learning (Harvey & Jarrett, 2013). These messages are passed through the daily (re)production of practice, to the extent that they become accepted as legitimate. Thus, beliefs and behaviours come to be unquestioned as the 'way things are' (Cushion & Jones, 2012; Piggott, 2011).

Coaching norms provide an overriding, powerful, and historical view of what coaches *should* do and what coaching *should* look like (Cushion et al., 2003; Light, 2004). One such norm suggests that the coach *should* be positioned as the authority and responsible for decision-making (Light & Evans, 2011; Roberts, 2011). As this paper has argued throughout, this runs counter to the principles of GCAs yet continues to have a pervasive influence on implementation (Harvey & Jarrett, 2013; Light & Evans, 2010; Roberts, 2011). In addition, as Windschitl (2002) suggests, innovative pedagogy (GCAs) suffers an underlying disadvantage as it can be viewed as a questionable alternative to existing practice. The durability of this notion is evidenced through GCAs in that despite more than 30 years of history, they remain a coaching 'alternative' (Harvey et al., 2010; Light, 2004; Light & Evans, 2010) still seeking legitimacy (Griffin, Brooker & Patton, 2005). Indeed, coaching discourse (of which this paper is a part) privileges the status quo by associating direct/behavioural models where skills are mastered first with 'traditional', 'historical', 'basic', and 'fundamental' coaching, while GCAs are labeled 'alternative' or 'innovative' (Griffin et al., 2005). Importantly, such perspectives form a subtle but coherent set of rationalities, techniques and instructions that underpin coach education (Piggott, 2011). Therefore, far from being benign activities, coaching practice, coach education and coaching research, always contain and advance values and agendas (Cushion & Jones, 2012; Fernandez-Balboa & Muros, 2006). As such, implementing GCAs and critically examining and challenging beliefs, practices, and discourse becomes political. GCAs challenge existing assumptions about learning (Harvey et al., 2010; Light & Evans, 2010), repositioning coaching knowledge as less absolute, forcing coaches to confront their own uncertainties and inadequacies (Harvey et al., 2010). In doing so, they also make other (powerful) stakeholders uneasy, uncomfortable and even resistant (Lemyre, Trudel & Durand-Bush, 2007; Light, 2004; Piggott, 2011).

Understanding dilemmas: implications for practice

Windschitl's (2002) dilemmas are a useful heuristic to illustrate the complexity of coaching, and the multiple and layered issues coaches must confront to implement change. The categories show the precarious nature of implementing GCAs, and the danger of innovative pedagogies being 'washed out' (Cushion et al., 2003). This paper has argued that 'knowledge' of GCAs, even their applied principles, is insufficient, and that implementation involves more than simply providing coaches with a 'toolbox' of skills (Cushion, 2011). Operationalizing GCAs requires a host of knowledge, understanding, practices, strategies, coherent arguments and critical thinking, all of which are conspicuously absent from utilitarian, technocratic and idealized coach education and

the rhetoric of coach development (Cushion, 2011; Piggott, 2011). Indeed, recent research points out the limitations of large-scale formal coach education courses (e.g. Trudel, Gilbert & Werthner, 2010), while Piggott (2011) has classed the majority of coach education as ‘useless’ (p. 11). However, practitioners utilizing traditional models of coaching are ‘functionaries of the hegemony’ (Fernandez-Balboa & Muros, 2006, p. 208), largely ignoring the issues raised here, leaving their assumptions about learning and coaching untouched. Arguably, implementing GCAs and, for example, starting practice with a game, is so conspicuous, so unlike a typical coaching session that it becomes subjected to an unwarranted level of scrutiny and the coach subject to an intensification of accountability (Light, 2004). Traditional approaches, meanwhile, do not face a similar level of contestation and, as Windschitl argues, ‘although perennially ineffective, are rarely subjected to fundamental critique’ (2002, p.160).

So, the challenges to change coaching practice seem significant. Of course, some coaches are able to consistently and successfully employ GCAs and, with help, reflect upon and change the nature of their practice (Evans & Light, 2007; Harvey et al., 2010; Harvey, Cushion, Wegis et al., 2010). So, how can coaching (more generally) ensure the implementation of innovative pedagogy and the development by design of ‘infinitely skilled coaches’? The dominant model for coach education is ‘train and certify’ (Cushion, 2011; Gilbert, Gallimore & Trudel, 2009; Trudel & Gilbert, 2006;), with standardized ‘curricula’ privileging technocratic rationality providing a ‘tool box’ of professional knowledge (Cushion, 2011). Coaches are assumed to acquire concepts, skills and behaviours (Cushion, 2011; Sfard, 1998; Fenwick, 2008) that are seamlessly assimilated and transferred (Gilbert et al., 2009). This model is inadequate in giving coaches an awareness of their own beliefs and assumptions about coaching, and does not address the social, cultural and political complexities of practice. Existing coach education or coach educator training does not address issues related to beliefs and assumptions about coaching and learning in a meaningful way (Cushion & Nelson, 2012). For example, Trudel & Gilbert (2006), McCullick, Schempp, Mason, Foo, Vickers and Connolly (2009) and Cushion et al. (2010) *inter alia* all noted that coach education is not influenced by scholarship from coach learning. Lyle (2007) has argued that coach educators are unaware of frameworks to underpin and guide their practices. Consequently, there remains a considerable challenge to address embodied and unarticulated beliefs about learning (Light, 2008) and coaching (Harvey et al., 2010). Coach education and educator training, therefore, needs to provide an environment where practice and the practice of others can be interrogated and assumptions made explicit (Cushion & Nelson, 2012). Uncovering assumptions and beliefs emancipates practitioners from their dependence on habit and tradition providing them with resources to enable reflection and to critically examine the inadequacies of different conceptions of practice (Carr & Kemmis, 1986). However, learning in this way is largely beyond existing conceptions of coach education (Cushion & Nelson, 2012), which is additive (grafting new ‘skills’/knowledge onto an existing repertoire) rather than critically transformative (deconstructing taken-for-granted beliefs, assumptions, knowledge and habits, and rebuilding practice) (Thompson & Zueli, 1999).

To problematize ideas about coaching, coaches could benefit from case history examples or stories from other coaches illustrating the lived-experiences of those who have attempted to change practice and culture (Christensen, 2011). Currently, guidance about GCAs is, although compelling rhetoric, too idealized, tending to only provide prescriptive lists, abstract principles, and decontextualized examples (e.g. Mitchell, Oslin & Griffin, 2006). To improve this situation, coach education should model context specific GCAs, whilst helping coaches to understand the differences between their existing

practice, attempts at GCAs, and authentic GCAs. One possible means of assisting this is to recognize the distance between existing practice and understanding, and practice when assisted by, or collaborating with, more experienced people (Vygotsky, 1978). This allows learning for coaches with initial support given for tasks that are later performed alone.

In developing GCAs, and in addition to education and development opportunities, coaches must also speak with others (Harvey & Jarrett, 2013). In this respect, 'communities of practice' (CoP) (Wenger, 1998) have been advocated as a means to understand and structure teaching in relation to GCAs (e.g. Griffin et al., 2005; Nash, 2009; Wang & Ha, 2012). However, while the rhetoric of CoPs is appealing the reality of coaches' often isolated lives make them difficult to sustain (Culver & Trudel, 2006; Gilbert et al., 2009). Additionally, where coaches are able to discuss coaching, this largely remains at an instrumental level, merely passing on 'survival tips' or 'tricks of the trade' leaving contextual norms and institutional culture unexamined and unchallenged (Cushion, 2006). Ways to initiate and mediate new kinds of conversations are needed, and to this end Fernandez-Balboa & Muros (2006) argue for partnerships and coalitions to create a critical mass within a community to advance ideas and thinking.

Conclusion

The very features that render any innovative pedagogy such as GCA effective in coaching practice are those that also provide most challenge (Harvey et al., 2010; Windschitl, 2002). Some perceive innovative pedagogy such as GCAs as a 'fad' that simply attaches new rhetoric to old ideas (Light & Evans, 2011; MacDonald, 2003; Windschitl, 2002). When used in an uncritical or unsophisticated way, or fragmented and promoted with pseudo-principles, any innovative pedagogy deserves this reputation (Light, 2008; Windschitl, 2002). However, when practice is premised on authentic GCAs, it can be an important catalyst for change (Butler, 2005; Harvey et al., 2010; Howarth, 2005). Challenging existing practice and associated dilemmas requires a 'jointly fashioned vision of transformation' (Windschitl, 2002) from researchers, coaches, and coach educators (Roberts, 2011a). Such an alliance could provide the theoretical knowledge and know-how to convert dilemmas into attributes that facilitate the development of coaching and the realization of GCAs in practice. This is a vision of practitioners that Windschitl (2002) describes as having conceptual understanding, pedagogical expertise, cultural consciousness and political acumen.

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