

# Towards the reflective sports coach: issues of context, education and application

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The current demands faced by elite sports coaches and the nature of their educational experiences are outlined. Examination of current approaches to coach education are considered in relation to research evidence which describes the key skills required in elite sports coaching. Recently, reflective practice has emerged as a key skill with which to enhance coach learning and increase the value of coaches' educational experiences. In tracing this emergence, this study analyses the use of reflective practice and learning strategies within six governing body award coaching programmes. Results indicate that none of the programmes examined contained structures or processes for directly teaching or overtly nurturing reflective skills. However, almost all programmes offered a potential structure for this through completion of a coaching log or undertaking a period of mentoring. Finally, recommendations are made to coach educators for developing reflection within coach education programme structures.

*Keywords:* Modern sports coaching; Behaviour analysis; Reflective practice

## 1. Introduction

The typical picture of sports coaching is one in which coaches watch their performer during competition, identify key aspects of performance that can be improved and plan training sessions to address the problems that they have observed. The process of coaching is viewed as being episodic, with the coach working on a week-to-week basis to improve performance. In contrast with this lay view, the coaching profession itself sees elite coaching as a complex activity. The profession recognizes that the modern elite sports coach faces an array of demands emanating from the need to manage not only performers but also the performance environment, assistant coaches, support staff (e.g. sport psychologists) and funding agencies.

The modern elite coach is expected to take responsibility for the performer outside as well as inside the practice/competition environment. Coaches are increasingly expected to be aware of the performer's overall social and psychological development which extends

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beyond the coaching environment (Borrie and Knowles 1998). In a practical sense, elite coaches are now frequently expected to take on almost any task that creates a better working environment for the performer or the coach. In addition, in an environment where increased public funding has been made available to sport, specifically through lottery funding in the UK, coaches are increasingly held accountable for their management of all facets of the performers' development. Therefore coach education programmes are faced with the difficult task of trying to cater for the broad range of educational needs that stem from the role-set of the elite coach.

In looking for ways to support coach education one could suggest that coach educators turn to the academic research literature to help identify what factors should be targeted within elite coach education programmes. Unfortunately, many strands of coaching-focused research have not developed our understanding of what is required to be an effective elite coach and therefore what is required within coach education programmes, although more recent research has shown that it is the capacity of coaches to practice, reflect and then learn from their experience that is central to developing coaching effectiveness. The following sections draw these themes together by looking in more detail at the key components of coaching in the research literature, current coach education mechanisms and the potential educational gains that can be made through the development of reflective skills.

## **2. Coaching research: What do we know about elite coaching effectiveness?**

Approaches to the study of coaching have been diverse, and much of the research has been criticized for not being undertaken within the rubric of a commonly agreed framework or model for the coaching process (Lyle 1999a,b, 2002). Consequently, strands of research have evolved that are rarely interconnected despite their common claim to study the coach or the coaching process. Recently there has been growing consensus about the nature of performance coaching. Since the early 1990s there has been a growing body of research that has utilized qualitative research techniques to investigate the cognitive dimensions of sports coaching. The majority of this research has supported the view that expertise in coaching is based on the mental skills and knowledge that coaches has available rather than their behaviour in any given situation. Research focus has shifted from what coaches *do* to how coaches *think*.

The most widely used and cited model in the area is the Coaching Model of Cote *et al.* (1995). This model proposes that coaching is driven by a coach's cognitive representation of what is required to develop a player or team. This cognitive representation, or schema, is termed a 'mental model of athletic potential' and, in the Coaching Model, the mental model determines the action that the coach will take at any given stage of the coaching process. The proposal that cognitive skills are at the centre of coaching expertise has received considerable support. For example, studies of expert coaches and expert – novice differences in coaching have indicated that coaching expertise is linked to critical thinking and decision-making skills (Strean *et al.* 1997, Abraham and Collins 1998). In addition, the personal knowledge bases created through experience play a central role in coach decision-making. Saury and Durand (1998) found that expert coaches used their own personal experience as performers as well as their experiences of past coaching situations to interpret what performers were experiencing at a given moment and what effect alternative coaching actions would have on training. Effective elite coaching practice was based on appropriate use of tacit experiential knowledge and not just formal theoretical knowledge about coaching pedagogy, physiology or other bodies of knowledge (Saury

and Durand 1998). This finding is commensurate with research in other professions, which has found that expertise is based on construction and use of experiential tacit knowledge bases about specific working contexts (Sternberg and Horvath 1999).

At a content level within coach education, if it is accepted that coaching expertise is a matter of cognitive skill a subsequent question has to be: 'How does the expert coach develop such skills?' Fortunately for the coach educator, the literature provides a relatively clear answer to this question. The notion that coaching is a 'learned trade' has been supported in a number of studies. Gould *et al.* (1990) investigated US coaches from a variety of sports and concluded that the coach's primary means of knowledge development was through experience and interaction with other coaches. This finding has been reinforced by Salmela (1995) who, in a smaller but more in-depth study of elite coaches, found that the coaches had followed diverse and ad hoc learning pathways to reaching expert status, with experience being the primary learning medium. It appears that coaching expertise cannot be created within formal educational courses alone but requires coaches to engage mentally with their own practice to learn and develop.

This 'cognitive' focus on coaching is also mirrored in other theoretical work, such as Lyle's attempts to construct a coaching process model to drive coaching research (Lyle 1998, 2002). In discussing the nature of the coaching process, Lyle (2002, p. 98) states that 'the defining feature of performance sports coaching is the strategic integration and co-ordination of the process. This defines sports coaching as a cognitive process'.

Recent research clearly suggests that effective coaching is founded upon the cognitive processes of building and using relevant knowledge bases. Such knowledge bases are created through a combination of practical coaching experience followed by a period of critical reflection. Therefore, given that this is how current elite coaches have developed their expertise, the research is indicating that effective coach education should focus on developing the coach's capacity to learn from, and understand, his or her own experiences. Furthermore, coaching scientists have recently shown that the direct teaching of reflective skills, alongside structured support programmes, allows coaches to generate more effectively the experiential knowledge required for more effective practice (Borrie and Knowles 1998, 2003, Borrie *et al.* 1999, Mayes 2001).

Knowles *et al.* (2001) considered the development of reflective practice in a sample of sports coaches ( $n = 8$ ) within a formal Higher Education based coach education programme. The programme consisted of a 60 hour placement in their specialist sport, individual journal writing, reflective workshops (with peers and an experienced facilitator) and the completion of a post-placement reflective writing exercise. A five-stage assessment model was used to monitor shifts in reflective development prior to placement at 30% and 100% of placement completion (Table 1). Six of the eight coaches studied were found to have developed reflective skills as demonstrated by the depth and extent of their reflection on practice. The study clearly demonstrated the potential effectiveness of reflective practice as a learning and development method in coach education. It was also noted that the facilitation of reflection was a complex process and there was clear variability in the coaches' responses to the structured development programme. Therefore coach educators cannot assume that the development of reflective skills will be a naturally occurring phenomenon that runs parallel to increasing coaching experience.

We believe that, when the literature is taken as a whole, the central question concerning coach education becomes one of whether UK national governing bodies (NGBs) have responded to the research literature and placed the teaching and development of reflective skills at the heart of coach education syllabi. In this study, six NGB coach education

Table 1. Summary of assessment model phases 1–5.

	1. Preparation stage	2. Early placement data collection	3. Workshop programme	4. Post-placement data collection	5. Researcher reflections
Purpose	1. Develop understanding of reflective practice 2. Subject recruitment	Investigation of reflective processes at 30% of placement completion	Facilitate reflective practice through workshop programme	Investigation of reflective development at 100% of placement completion	Post-study reflection on the role of first author: stages 2–4
Protocol and data collection	1. Lecture programme 2. Recruitment of subjects 3. Consent forms completed	Semi-structured interview	1. 5 × 1 h sessions 2. Researcher notes 3. Interview data through stage 4	1. Annual report 2. Semi-structured interview	'Confessional tale'
Analysis	Discussed through stages 4 and 5	1. Transcription 2. Content analysis 3. Level of reflection assessment	1. Transcription 2. Content analysis 3. Researcher reflections (stage 5)	1. Transcription 2. Content analysis 3. Level of reflection assessment	
Timescale	Semester 1 (Sept–Dec)	Pre-semester 2 (Jan)	Semester 2 Teaching weeks (Feb–April)	Semester 2 Examination weeks (May)	Post-semester (June)

Source: Knowles *et al.* 2001.

programmes were examined to ascertain whether they actively attempted to develop either reflective or critical thinking skills in coaches and thereby maximize experiential learning.

### 3. Methods

The purpose of this study was to explore the inclusion of reflective practice as a learning strategy within six NGB coach education curricula or post-course learning periods. In particular, the investigation focused on identifying strategies and methods of facilitation that were deemed as being key within a curriculum actively supporting the teaching and development of reflective skills and/or the role of tacit experiential knowledge in coaching practice. Using a positive sampling procedure (Patton 1990), we contacted six team and six individual sports from the UK Sport Priority 1 and 2 list. These sports had at least three levels of coaching award programme, and two NGBs had four structured levels of programme. All programmes corresponded to National Vocational Qualifications levels 1–4. The first three team and individual sports to respond to the authors were included, which gave a sample matrix of 20 NGB coaching award programmes.

Documentation outlining each programme's content and structure was split into meaning units as defined by Tesch (1990), which related to the categories described in table 2. These categories describe the key concepts that the research team believed should appear in programme documentation if the programmes were actively supporting the teaching and development of reflective skills and/or the role of tacit experiential knowledge in coaching practice. The category structure was created through debate and discussion within the research team, all of whom have at least five years experience as practising coach educators and in teaching reflective skills within coaching.

The data were then subjected to deductive content analysis based on the protocol outlined by Scanlon *et al.* (1989) and Gould *et al.* (1993a–d). Triangular consensus was also achieved for this procedure through consultation and agreement within the research team who were all familiar with qualitative research techniques. Thus a high level of dependability (or reliability) was achieved. This comprehensive protocol had been used by two of the research team in a previous study investigating the use of reflective practice as a coach development strategy (Knowles *et al.* 2001).

### 4. Results and discussion

The effectiveness of coach education programmes has been identified as a key factor in the development of quality coaches. In recent years strategic appraisals of coaching and coach education have contributed to the emergence of national benchmarks/standards for practice in sub-elite coaching. The government has also commissioned the development of a strategy for coach development within the UK and committed itself to implementing that strategy (UK Sport 2001, DCMS 2002). However, whilst high-quality coaching is recognized as a key factor in maximizing the benefits of sport for the participants at every level, the data show that little attention has been paid to research in the design of coach education programmes.

The data in table 3 suggest a general consistency within coach education programmes to ignore the role of reflection in coach learning. The documentation showed that in only two cases did programmes show learning outcomes or aims specifically related to issues of reflection or personal learning.

Table 2. Themes and categories used to provide the deductive framework for an analysis of six NGB coach education programmes.

Themes	Categories	Definitions
Aims and learning outcomes relating to:	Critical thinking/reflection/reflexive skills	Wording within course aims showing that the course intends to develop critical thinking or reflexive skills
Content relating to:	Evaluation of coaching sessions	Content that teaches coaches how to evaluate the technical content of single coaching sessions or programmes in relation to developing player performance
	Teaching the underpinning concepts of reflection	Content that introduces the coaches to the underpinning concepts of reflection and reflexive skills as embodied within the academic literature
	Directly teaching reflexive skills	Content or processes whereby the educators specifically try to develop reflexive skills as the central part of the programme. NOT elements where reflexive skills might be developed as an indirect by-product of the programme (e.g. reflexive skills might be developed as by-product of a mentoring programme)
Subject focus on:	Technical content of coaching sessions	Elements where the focus of the content is on sport-specific coaching knowledge and the technical content of coaching programmes
	Values and beliefs	Elements where the focus is on exploring the values and beliefs that the coaches hold about coaching at their own level of practice
Programme activities	Logged coaching experience	Programmes where logged experience is a key part of the educational process
	Mentoring	Programmes where coaches are mentored in their own coaching environment by more experienced coaches or coach educators
Knowledge bases	Introducing the underpinning concepts of different knowledge types (e.g. declarative and procedural knowledge)	Elements in a programme where coaches are taught about different types of knowledge and the influence of these knowledge types on practice

Table 3. NGB coaching award programmes shown in relation to the presence of key concepts within their programme documentation.

Theme	Category	Appearance of categories in programmes					
		NGB-A	NGB-B	NGB-C	NGB-D	NGB-E	NGB-F
Aims and learning outcomes	Reflection/reflective skills				*		*
Content	Evaluation of sessions	*	*	*	*	*	*
	Underpinning concepts of reflection						
	Teaching reflective skills						
Subject focus	Technical content of sessions	*	*	*	*	*	*
	Values and beliefs						
Programme activities	Logged coaching experience		*		*		*
	Mentoring					*	*
Knowledge bases	Underpinning concepts of knowledge						

NGB-D: 'Coaches will be able to develop a greater responsibility for their own learning and development'.

NGB-F: 'the coach will show . . . an ability to be creative and reflective as a coach'.

Even in these two cases no overt connection was made between broad aims and distinct elements of the programmes in which reflective or learning skills were specifically taught. In terms of programme subject and content it was clear that the primary curriculum emphasis was on delivery of technical information, development of sport specific technical skills and evaluation of specific sessions. Programmes focused on the evaluation of sessions and programmes, with specific attention being directed to session construction and technical content. The following phrases were commonplace.

NGB-A: 'evaluate the quality of their coaching lessons'.

NGB-B: 'use evaluations of previous lessons for future planning'.

NGB-C: 'plan conduct and evaluate a series of *x* coaching sessions'.

NGB-D: 'plan conduct and evaluate individual coaching sessions'.

Issues of value and belief about coaching, which can have an immense impact upon practice, were not dealt with in any programme apart from discussions of coaching philosophy within lower-level coaching awards. No elements within the higher-level awards (levels 3 and 4), touched upon further or ongoing examination of value and belief.

Candidates for the NGB coaching awards were taught and examined on topics such as sport-specific technical knowledge, coaching and training principles, law and ethics or health and safety. At lower levels of the coaching awards the focus was mainly on planning, management and safe delivery of single coaching sessions rather than longitudinal programmes. The main focus within the education programmes was on skills to manage a single coaching session and in most cases teaching a single topic,

supporting previous observations by Abraham and Collins (1998). Equally, Miles (2001) noted that the advent of the competency-based NVQ process in coach education has increased emphasis on the importance of what coaches should be *able to do* rather than focusing on what they should *know*. In this respect the NVQ framework, whilst enhancing the national status of coaching qualifications, may have shifted coach education even further away from developing important cognitive skills that allow coaches to bridge the gap between an educational course and their own coaching situation.

In relation to any underpinning theory relating to theories of reflection or experiential learning, none of the examined programmes contained any relevant theoretical elements. Where learning was covered as a topic it was in relation to performers' learning styles and how coaching sessions can be adapted to individual learning preferences. Equally, none of the programmes had any structures or processes for directly teaching or overtly nurturing reflective skills. In contrast, in other disciplines, such as nursing, the need to develop a conceptual understanding of reflection within practitioners has been recognized. The use of conceptual tools such as landscape maps (Ghaye and Lilleyman 2000, Ghaye 2001) or models of reflection (Gibbs 1988, Smyth 1991, Murphy and Atkins 1994, Johns 2000) to underpin reflection is commonplace. These models, which depict the characteristics and process of reflection, enable the practitioner to 'know' what it means to reflect, and yet such models were not apparent in the coaching programmes studied.

In contrast, all programmes contained some form of post-course learning programme. Typically, this was achieved through completion of a coaching log alongside a mentoring period with a more experienced coach. There was a clear and positive recognition of the importance of the practice of coaching practice as the driving force within the learning process. However, practice elements appeared to be divorced from any framework for developing the coach's abilities to learn from coaching experience. Consequently, the quality of experiential learning in these practice situations is likely to vary according to the initial reflective skills of the coaches when they start the education programmes.

Previous authors have suggested that there has been a gap between coach education courses and coaching practice. For example, Galvin (1998, p. 5) suggested that:

a gap of form and context between a coach education course and the actual practice of coaching then exists. Things which seemed to make complete sense at the coach education course suddenly become more complex and difficult when coaches attempt to implement them with their own performers or team.

Furthermore, previous research has shown that coach education courses rarely improve coaches' effectiveness when they return to their own coaching situation (Haslem 1990, Douge and Hastie 1993). The inclusion of structured and monitored practice opportunities in the education programmes under scrutiny was to be applauded. However, the failure to provide a framework for enhancing the reflective skills of the coaches is likely to have diminished the impact of the experiences on learning and development. Within this framework, reflection is deemed central to learning and requires theoretical underpinning, structured support and active development of associated skills.

## 5. Conclusion

The UK Vision for Coaching (Stevens 2000, p. 20) states that coaching will 'have a culture and structure of innovation, constant renewal and continuous professional development'. In exploring this statement further, Ghaye (2001, p. 11) commented that:



it is our hope that that coaches will accept the pivotal role of reflection in making this vision a reality. It is my belief that reflective practices and reflective coaches will be potent parts of a joined up connected profession with the courage, clarity of thinking and sensitivities to work towards a sporting future for all.

When taken as a whole, the programmes that were assessed did not provide clear structures for the development of reflective skills alongside the delivery of sport specific technical knowledge. Given that research has shown experiential learning to be the primary determinant of developing coach expertise, such programmes do not maximize opportunities for developing coaching practice. A failure to provide an underpinning structure to support experiential learning is unlikely to allow coaches to explore the nuances of their own practice, access and develop tacit knowledge and be creative in their application of sport specific technical knowledge. Lyle (2002, p. 280) suggested that coach education must create opportunities for developing coaches:

that will enable the coach to move beyond existing practice, to innovate, to experiment, to adapt, to reflect, and to build underpinning knowledge and skills for the requirements of 'higher levels' of coaching.

In order to achieve this, coach educators must move beyond traditional education structures and processes to embrace what other professions already recognize, namely that reflection has to be actively developed to maximize learning.

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