International Journal of Sport Policy and Politics

Publication details, including instructions for authors and subscription information:
http://www.tandfonline.com/loi/risp20

Understanding the impact of sport coaching on legacy

Patrick Duffy [a], Julian North [a] & Bob Muir [a]

[a] Carnegie Faculty, Leeds Metropolitan University, Headingley Campus, Leeds, LS6 3QS, UK

Published online: 27 Apr 2012.

To cite this article: Patrick Duffy, Julian North & Bob Muir (2013) Understanding the impact of sport coaching on legacy, International Journal of Sport Policy and Politics, 5:2, 165-182, DOI: 10.1080/19406940.2012.665380

To link to this article: http://dx.doi.org/10.1080/19406940.2012.665380

International Journal of Sport Policy and Politics, 2013
Vol. 5, No. 2, 165–182, http://dx.doi.org/10.1080/19406940.2012.665380

Understanding the impact of sport coaching on legacy

Patrick Duffy*, Julian North and Bob Muir

Carnegie Faculty, Leeds Metropolitan University, Headingley Campus, Leeds LS6 3QS, UK

The creation of a legacy from the London 2012 Olympic and Paralympic Games has been articulated by government in the form of five promises, some of which have implications for coaching (Department of Culture, Media and Sport 2008, *Before, during and after: making the most of the London 2012 Games*. London: Department of Culture, Media and Sport). The *UK Coaching Framework* (sports coach UK 2008a, *The UK Coaching Framework: a 3-7-11 year action plan*. Leeds: Coachwise) makes the case that sport coaching has a role to play in delivering legacy and policy objectives through the systemic development of active, skilled and qualified coaches. The status of the UK Coaching Framework as a complex intervention to support policy and legacy objectives is addressed in this article. The analysis is referenced against seven criteria derived from the realist approach to impact evaluation (Pawson *et al.* 2005, Realist review – a new method of systematic review designed for complex policy interventions. *Journal of health services research and policy*, 10 (1), 21–34; Pawson 2006, *Evidence based policy: a realist perspective*. London: Sage), with an emphasis on programme theories. The programme theories of the Framework position sport coaching as a generative mechanism for outcome patterns in participation and performance sport. In order to maximize the impact of this mechanism, the Framework proposes strategic action areas that include participant and coach modelling; workforce analysis, recruitment and deployment; support and education; regulation as well as research. The Framework proposes to integrate these action areas into implementation chains throughout the United Kingdom, supported by the progressive alignment of resources. The programme theories recognize the agency and responsibility of the coach, as well as the volition of participants in different contexts, with implications for the way in which coaching roles are defined. It is concluded that the UK Coaching Framework is a complex intervention, which is amenable to realist impact evaluation. It is suggested that such evaluation will provide a more robust basis to understand the impact of sport coaching on legacy.

Keywords: sport coaching; legacy; impact evaluation

1. Policy context

Sport has assumed an enhanced role within government policy in the United Kingdom in recent years. Policy objectives have been articulated in participation and performance-oriented sport in each of the home countries (Sport Scotland 2007, Department for Children and Schools 2008, Sport England 2008, UK Sport 2008, Sports Council for Wales 2009, Sport Northern Ireland 2009). Recent analyses have suggested that the driving force for sport policy in different countries is related to its cultural significance, its malleability to deliver non-sport

*Corresponding author. Email: p.duffy@leedsmet.ac.uk

objectives for government and its multidimensionality (Bergsgard *et al.* 2007). The varied policy aspirations for the role of sport coaching in the United Kingdom support this analysis (e.g. Department of Culture, Media and Sport (DCMS) 2002).

The economic and cultural significance of sport was evident in the bid to host the London 2012 Olympic and Paralympic Games, reflected in two pledges: 'to inspire a generation of young people through sport' and 'to transform the heart of East London' (DCMS 2008, p. 43, 36). These pledges were subsequently translated into five legacy promises, which included the creation of a world leading sporting system with high-quality clubs, coaches and facilities (DCMS 2008).

Coaching, therefore, is perceived to have a role in delivering a legacy from the Olympic and Paralympic Games. However, the mechanisms by which such a legacy contribution would be delivered and evaluated were not detailed (DCMS 2008). This reflects a wider challenge to quantify the potential role and benefits of coaching, supported by robust data relating to its efficacy in delivering policy objectives. In this context, the need for a more systematic approach to impact evaluation in coaching will be addressed in this article, with a particular focus on its contribution to legacy.

Despite a relatively recent and fragmented policy pedigree (Houlihan 1997, Bergsgard *et al.* 2007), the role of sport coaching in support of policy and legacy objectives has begun to consolidate in recent times. This process of consolidation commenced with the publication of the *UK vision for coaching* (UK Sport 2001), which proposed the establishment of coaching as a profession by 2012. Although the overall directions outlined in this publication had been signalled 10 years earlier in *Coaching matters* (Sports Council 1991), little progress was made in the intervening period in the absence of a wider policy impetus for coaching.

The policy context began to change following the publication of *Game plan* (DCMS 2002), where the need for a more systematic approach to the development of sporting talent was highlighted. Government also sought to enhance school sport and to increase social inclusion in and through sport. Following on from this, the requirement for a stronger policy focus on sport coaching was identified and a task force was established. The subsequent report (DCMS 2002) made a number of recommendations with a view to create a more effective coaching system. These recommendations formed the basis of 'the Coaching Project' and included provision for the employment of 3000 community sports coaches, the United Kingdom Coaching Certificate (UKCC), 45 coach development officers and research (North 2010). These initiatives led to new investment of £28 million for the period 2003–2007 and contributed to an evolving landscape within coaching, the composition of which was charted in workforce terms for the first time in 2004 (MORI 2004).

This landscape also included an increased policy focus on coaching in all four home countries, with a particular emphasis on the implementation of the UKCC. By 2005, combined expenditure on sport coaching across the United Kingdom exceeded £60 million annually (sports coach UK 2006a), and a process to establish a long-term plan for coaching was initiated leading to the publication of *The UK Coaching Framework* (sports coach UK 2008a). By this time, data on the coaching workforce suggested that 1.11 million adults were involved in coaching, with 76% classified as volunteers, 21% part-time paid and 3% full-time paid. Of the coaching workforce 53% reported that they had some form of coaching qualification (North 2009).

2. The role of coaching in support of policy and legacy outcomes

Although many of these advances marked important progress in coaching policy, there remained a need by 2005 to articulate a long-term programme for the development of

coaching across the United Kingdom. This need was amplified by the success of the London 2012 bid. Increasing clarity in the strategic objectives of the lead agencies across the United Kingdom also provided the challenge of more clearly articulating the policy contribution of sport coaching. These policy and legacy objectives were echoed a year later in the declaration of the first UK Coaching Summit. The summit called for an action plan for coaching in three phases (sports coach UK 2006b).

The resultant document, entitled *The UK Coaching Framework: a 3-7-11 year action plan*, proposed coaching as a mechanism to deliver sport policy, and by extension, legacy objectives (sports coach UK 2008a). Although there has been considerable debate over the role of coaching in supporting the achievement of policy objectives in participation (North 2008), repeated policy statements attest to its importance (Sport Scotland 2007, Sport England 2008, UK Sport 2008, Sports Council for Wales 2009, Sport Northern Ireland 2009). The framework took a positive view of the policy role of coaching and set out a vision of creating a 'cohesive, ethical, inclusive and valued coaching system where skilled coaches support children, players and athletes at all stages of their development and is world leading by 2016' (sports coach UK 2008a: Executive Summary).

A key feature of the UK Coaching Framework was the initiation of core strategic action areas that included participant and coach modelling; workforce analysis, recruitment and deployment; support and education; licensing and registration; research and development. Notably, a shift was proposed in the classification of coaching roles away from a solely performance-oriented paradigm to more strongly reflect the needs of participants in children's sport, participation and talent development as well as high performance.

The proposed implementation chain included a central role for governing bodies of sport, operating within the context of UK and home country sport policy and investment programmes. The Framework was formally recognized by key stakeholders as the reference document for the development of the UK coaching system up to 2016. Four resource pillars were identified for successful implementation: employment and deployment of coaches; education and professional development of coaches; governing body coaching infrastructure; coaching infrastructure within policy and other support agencies.

The UK Coaching Framework was, therefore, positioned as a strategic and operational change intervention for improving the quality and quantity of coaching to support policy and legacy objectives. Making the case that coaching plays a key role in guiding sports participants at all stages of their development, the Framework positioned itself as 'the backbone' of the coaching legacy (McGeechan and Duffy 2008). This case was made on the basis that the creation of a world-leading coaching system would provide a sustainable vehicle through which policy objectives in both participation and performance would be enhanced. The document also recognized individuals (participants and coaches) and organizations (such as governing bodies, sports councils, UK Sport, Skills Active, Youth Sport Trust, local authorities, schools and clubs) as central to the change and legacy-building process.

The coaching workforce required to deliver on the vision of the Framework was quantified in three potential scenarios (North 2009), while the elements of the proposed coaching system were laid out in detail (sports coach UK 2008a). This quantification was significant in that one of the risks associated with legacy pledges and promises is their intangible nature. In the case of coaching, which was not explicitly highlighted in the London 2012 bid, the future planning perspective generated following the announcement of the games, created the conditions in which a long-term and quantifiable programme such as the Framework might be contemplated. Although the detailed objectives and targets associated with the Framework were outlined, the ongoing process and methodology for the evaluation of progress was not fully defined (sports coach UK 2008a).

Despite the fact that the Coaching Task Force (DCMS 2002) had earlier initiated a strand of ongoing research, there has been an absence of impact analysis of coaching policy interventions. Indeed, there has not been a strong tradition in sport where the systematic and evidence-based evaluation of programmes informs policy. This is a limitation in other policy areas, leading Pawson (2006, p. 7) to observe 'There are precious few examples of it (evaluation) leading to actual decisions to "retain, imitate, modify or discard programmes". Evaluation research, in short, has reached industrial proportions but remains feudal in its capacity to create change'.

This article focuses on the status of the Framework as a complex intervention, with a view to the ongoing evaluation of its impact on policy and legacy objectives. This analysis uses a set of criteria that have been drawn from the realist approach to evaluation (Pawson and Tilley 1997, Pawson *et al.* 2005) and has been informed by the wider consideration of the potential contribution of a critical realist approach to the study of coaching (North in press). Prior to examining these criteria as they relate to the Framework, it is first necessary to consider recent trends in programme evaluation and their implications for impact assessment with particular reference to the UK Coaching Framework.

3. The evolving field of programme evaluation

3.1 Experimental, pragmatic, constructivist and pluralist evaluation

The evaluation of policy-related interventions has been subject to a variety of approaches since its beginning alongside social programmes of the United States in the 1960s. Pawson and Tilley (1997) have summarized these into four main categories: experimental, pragmatic, naturalistic and pluralist. They provide a comprehensive overview of the strengths and limitations of each, the detailed analysis of which is beyond the scope of this article (Pawson and Tilley 1997, Pawson *et al.* 2005, Pawson 2006). In the context of this article, the relative merits of each approach have been summarized, with a view to identifying a suitable methodology to apply to the evaluation of the UK Coaching Framework.

The first of these approaches, the experimental, places a strong emphasis on control and causation, with the express desire to 'exclude every conceivable rival causal agent from the experiment so that we are left with one, secure causal link' (Pawson and Tilley 1997, p. 5). In the case of the UK Coaching Framework, with many strands and a wide-reaching agenda, such a tightly controlled method of evaluation is problematic. For example, it would not be possible to chart direct causal links between the allocation of resources to coaching and the achievement of success in participation or other sport policy objectives. In addition, the tightly controlled methodology is not easily applied to the diverse range of sports and contexts within the coaching landscape.

The pragmatic approach is the second method outlined by Pawson and Tilley (1997) and highlights the importance of linking the programme and its evaluation to the objectives of policymakers. A limitation of this line of attack is the potential narrowness of focus and 'the more explicit the policy mandate, the more compressed and purely technical the researcher's role' (Pawson and Tilley 1997, p. 17). In the context of the current analysis, the danger would be to solely focus on the set of stated policy objectives relating to participation, performance and creation of a legacy through coaching. Many of the coaching-related objectives, such as the recruitment, education, support and quality assurance of coaches, would be marginalized in such analysis. In addition, the focus within the Framework on the creation of a sustainable system and process in coaching would likely take a back seat to the more pressing issues associated with the production of policy outcomes.

Pragmatic evaluation is at a very different place to the third perspective under consideration, that of constructivism which is at the heart of the naturalistic school of programme evaluation. To its credit, constructivism recognizes the complexity of human interaction and understanding the world, with a consequent focus on processes rather than outputs. This approach also claims to empower those engaged in the evaluation process, as part of consensus building. However, one of its key limitations is eloquently expressed by Pawson and Tilley (1997, p. 21): 'Since on this view there is no single objective reality to report upon, hermeneutic dialectic circles (not surprisingly) go round in circles, rather than constituting a linear advance in the truth'. This limitation is further compounded by 'the inability to grasp those structures and institutional features of society which are in some respects independent of the individuals' reasoning and desires' (Pawson and Tilley 1997, p. 23).

In the context of the UK Coaching Framework, the constructivist emphasis would likely be on the identification of meaning for the multitude of actors involved in the intervention. Although such an approach has its merits through the provision of rich insights and individual empowerment, it does little to build the kind of robust conceptual framework required for systemic change, impact evaluation and the ongoing creation of more effective structures for coaches and the participants with whom they work. Sport- and country-specific differences, coaching domains and participant categories and strategic action areas provide important organizing concepts that require analysis taking into account wider social and economic influences. Thus, while it is recognized that many of the concepts used in the UK Coaching Framework have emerged from an intensive process of interaction and the creation of shared meanings within the coaching community, the constructivist approach does not offer the perspective or full range of tools required to evaluate such a multifaceted intervention.

Pawson and Tilley (1997) identified the pluralist approach as the fourth category of programme evaluation, which is also referred to as comprehensive evaluation. This approach includes analysis and synthesis of initial concepts and design, monitoring implementation and assessing the utility of the programme. Although the strengths of this approach are acknowledged, particularly the emphasis on impact, the intimidating resource implications to 'research everything' have rendered this approach impracticable. Within coaching, a landscape that includes over a million coaches, more than 70 formally recognized governing bodies and 4 home countries, the feasibility of conducting a comprehensive impact evaluation is beyond reach. Like the other approaches above, comprehensive evaluation has much to offer. However, the need to seek alternatives to these methods became apparent in order to fully address the range of policy and implementation issues that were signalled in the UK Coaching Framework.

3.2 Realist review

Realist review has drawn from the lessons of the approaches outlined in the previous section and looks upon 'interventions as whole sequences of mechanisms that produce diverse effects according to context, so that any particular intervention will have its own particular signature of outputs and outcomes' (Pawson 2006, p. 171). Recognizing the key building blocks of social science 'such as the nature of causation, the constitution of the social world, the stratification of social reality, the emergent nature of social change', Pawson (2006, p. 18) emphasizes the 'open system' nature of the social world where historical and institutional forces play a strong role. It is for this reason that he speaks of interventions as 'complex systems embedded in complex systems'. Although recognizing these historical, social and institutional influences, Pawson (2006, p. 18) notes that 'behavioural regularities

are, of course, also influenced by the volition and choices of the people who act them out' noting that 'a ceaselessly changing complexity is the norm in social life'. Crucially for coaching, this approach recognizes the salience of the choices and actions of coaches and participants in the front line.

Recognizing the complexity of social interventions, the essence of realist review is its focus on what works through the application of a generative model of causation. Its trademark is 'to look for causal powers within the objects or agents or structures under investigation' (Pawson 2006, p. 21). The building blocks of this approach are outcome patterns, generative mechanisms and contextual conditions. Outcome patterns recognize the limitations of attempting to impose regularity, suggesting that 'It is the totality of outcomes – successful, unsuccessful, bit of both – that may act as the initial empirical guide for future optimal locations' (Pawson 2006, p. 22).

The strength of this approach for coaching is that it recognizes that there will be a varied range of outcomes in the multitude of different contexts within which coaching occurs. For example, the delivery of coach education programmes may work well where there exists a cost-effective model that is accessible to and meets the needs of coaches on the ground. However, even where such a system exists, sport-specific and local circumstances are likely to become manifest and the realist approach seeks and recognizes these nuances. Notably, the delivery of the UKCC has been subject to a very wide range of sport-specific, national and regional influences, which have made it difficult to assess the optimal model for delivery and the consequent impact on coaches.

Within the realist methodology, generative mechanisms are used to explain the propensity of systems to make certain things happen: 'the rhythms and associations of natural and even social science are constant enough that we can navigate our way through them . . .. We rely on mechanisms to tell us why interconnections occur' (Pawson 2006, p. 23). Crucially, it is argued that programmes only work 'if people chose to make them work' and 'the development of cumulative knowledge about "what works" requires sustained investigation of the generic mechanism, namely the operation of choices under the inducement of programme resources' (Pawson 2006, p. 24). The achievement of the vision of the UK Coaching Framework relies on increasing numbers of coaches making choices to further develop their skills and qualifications. The Framework also assumes greater accessibility to quality coaching by participants. It is posited that the combination of the strategic action areas, operating as part of a coordinated system, will create the conditions to motivate and support coaches, employers and participants to act in a way that enhances the quality and quantity of sporting experiences.

One of the strengths of realist review is its commitment to provide explanation of what works in given contexts. There is an inherent recognition that contextual constraints will have a bearing on implementation because 'interventions, by definition, are always inserted into pre-existing conditions' (Pawson 2006, p. 24), with recognition that there will be successes and failures in every programme. In this context, Pawson (2006) refers to a process of 'enlightenment' as a result of realist review. The realist has a modest opinion of the role of the research in gathering definitive evidence. In the case of a complex programme, the research process is seen as 'producing a sort of highway code to programme building, alerting policy-makers to the problems that they might expect to confront and some of the safest measures to deal with them' (Pawson 2006, p. 170). The nuances associated with this approach also pose challenges within the policymaking process, where clear-cut and less complicated solutions are sought by politicians (Pawson 2006).

3.3 Application of realist review to coaching

It is for these reasons that the realist review methodology, already applied within the health sector (Pawson *et al.* 2005), would appear to hold merit for application to sport policy in general and coaching in particular. The essence of this methodology is that it seeks to provide 'an explanatory analysis of what works for whom, in what circumstances, in what respects and how' (Pawson *et al.* 2005, p. 22). This involves making the programme theories of the intervention explicit, as well as the assumptions about how it should work and the expected impacts.

Evidence is then collected to 'populate this theoretical framework, supporting, contradicting or modifying the programme theories as it goes' (Pawson *et al.* 2005, p. 1). The review then seeks to combine the theoretical and evidence-based components and focuses 'on explaining the relationship between the context in which the intervention is applied, the mechanisms by which it works and the outcomes which are produced' (Pawson *et al.* 2005, p. 1). Decision-makers are thus provided with the opportunity to more fully understand the intervention and the ways by which it can be made to work more effectively.

Pawson *et al.* (2005) outline seven defining features of complex interventions to include: the existence of a theoretical basis, the active input of individuals, the length of the intervention journey, the non-linear nature of implementation, fragility and social context, proneness to leak and borrowing and finally the intervention as an open system that feeds back on itself. The application of these criteria to the UK Coaching Framework provides a useful basis for an assessment of its status as a complex intervention. This is an important first step in moving to a more systematic and periodic review of the Framework in the context of legacy and sport policy objectives. The scope of this article does not allow for exhaustive treatment of each of the criteria, so particular emphasis has been placed on the programme theories.

4. The UK Coaching Framework as a complex intervention

The publication of *The coaching workforce* (North 2009) demonstrated the value of quantifiable data in charting progress in coaching at a system level. However, such data are primarily descriptive and predictive at this stage and will not provide the level of precision and understanding of what is working, for whom, in what circumstances and why. Clearly, there is a need to study the experiences of participants, coaches, administrators and other key stakeholders in a range of coaching contexts. Such research will provide a robust analysis of the impact of an intervention such as the UK Coaching Framework.

As seen in the previous section, the application of realist review methodology to coaching is seen to hold significant potential, given its focus on outcome patterns, mechanisms and context. A further strength is the recognition of human volition as an ingredient in considering the successes and failures of interventions. By emphasizing the significance of context and explanation rather than uniformity and solutions, realist review provides an appropriate method for the evaluation of the complexities associated with the coaching landscape. In the United Kingdom, this landscape consists of over 1 million coaches, 2.75 million guided sport hours per week, 8 million regular sports participants, 70 UK-wide governing bodies, 4 home countries and a multitude of delivery agencies in school, club, local authority, further and higher education and other environments (North 2009).

The current analysis, therefore, seeks to establish the status of the UK Coaching Framework as a complex intervention that is amenable to ongoing review using realist evaluation methodology. The seven defining criteria for complex interventions that follow

have been drawn from Pawson *et al*. (2005) and Pawson (2006) for the purpose of this analysis, with the strongest emphasis on programme theories.

a. The UK Coaching Framework is based on the theory that coaching is a mechanism to generate sport policy outcome patterns. This mechanism is optimally activated through the sport-specific development and implementation of participant and coach development models which form the basis for action within five strategic action areas. Implementation should occur within a delivery chain where the roles of governing bodies, central and other organizations are defined

The underlying theories of the UK Coaching Framework were derived from previous policy documents, literature reviews, research, consultation with the sport coaching industry and reference to emerging international trends (sports coach UK 2008a). Although the theories underpinning the document were not explicitly labelled as such, there exists considerable documentation from which a retrospective analysis and key theories can be drawn (sports coach UK 2006a, 2007, 2008a,b, North 2009).

At a macro policy level, the UK Coaching Framework drew its origins from a theory that sport coaching itself is a mechanism that generates outcome patterns in both participation and performance-oriented sport. Although some evidence exists to support this theory (North 2008), its application at national programme level remains to be tested in a concerted fashion. Much of the demand for a more coherent and sustained approach to coaching emanated from the policy documents referred to earlier, which expressed a need for coaching for children; teenage and adult participants; talented, high-performance and elite athletes (Sport Scotland 2007, Sport England 2008, UK Sport 2008, Sports Council for Wales 2009, Sport Northern Ireland 2009). Discussions on investment in the Framework involved the alignment of coaching with the policies and programmes of the key agencies, thus formalizing the theory that coaching is a generative mechanism (Duffy 2009). Figure 1 provides an example of this alignment process in England.

The UK Coaching Framework was also based on the theory that the provision of skilled, active and qualified coaches on a sustained basis to the front line would best be achieved through governing bodies of sport, working within the context of the policies and investment programmes of UK Sport and the home country sports councils. This theory positions governing bodies as pivotal to the implementation chain for the intervention. There were a number of caveats to this theory, the first of which related to willingness, capability and resource alignment. Although most governing bodies attest to the importance of coaching, the internal policy, organizational and resource conditions were found to be varied. A further caveat to the lead role of the governing bodies of sport was the recognition that a large proportion of the 1.11 million coaches that are active throughout the United Kingdom do not operate with close or any links to such governing bodies (North 2009). Indeed, it was recognized that just slightly over half of all those who classify themselves as coaches hold some form of governing body coaching qualification.

This relatively weak position in terms of 'market penetration' was broadly accepted by the governing bodies themselves, and agreement was reached in the first year of full operation of the Framework on the need for coaching support networks within each of the home countries. Such networks consist of organizations other than governing bodies that play a role in identifying, communicating with and supporting coaches (e.g. local authorities, county sports partnerships, educational institutions, regional and national agencies that have reason to come into contact with coaches). The Framework further posited that there is a

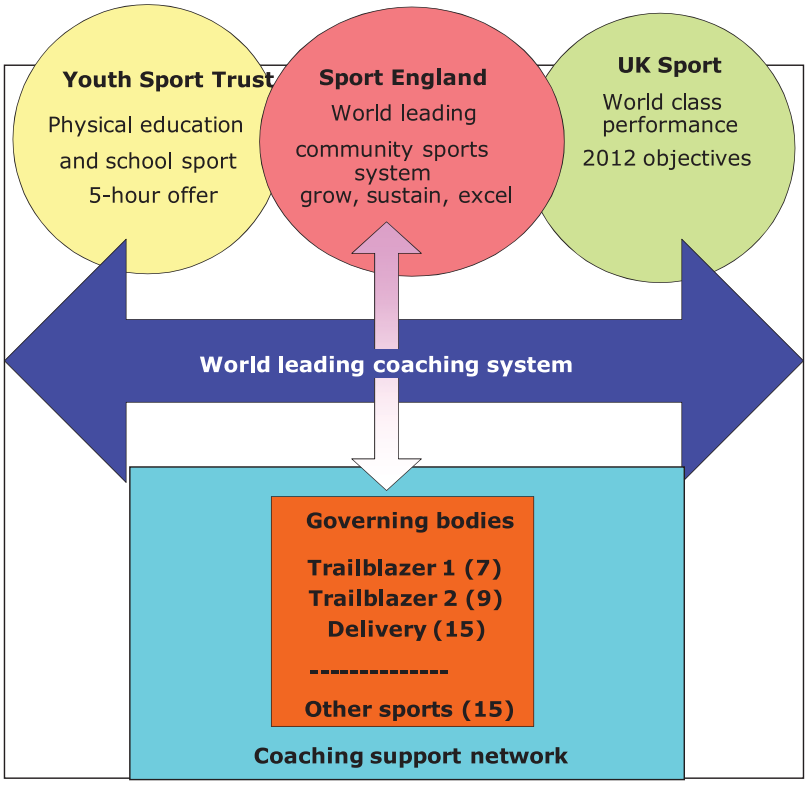

Figure 1. Alignment of the UK Coaching Framework with sport policy objectives in England.

range of actions and services required to act interdependently to develop a cohesive coaching system.

The Framework also proposed the theory that for sustained and effective implementation, there was a need for strategic and policy leadership. The creation of a Coaching Strategy Group was proposed, notably to replace the previous Coaching Steering Board, which had been set up to oversee the expenditure of the £28 million new investment in coaching following the Coaching Task Force report. The purpose of this strategy group was 'to coordinate coaching policy within the UK' with representation from each of the home countries, UK Sport and the governing bodies (sports coach UK 2008a).

The document assigned the strategic leadership function to sports coach UK, recommending that the 'mission, structure, operation and funding of the organisation should reflect this leadership and system building role' (sports coach UK 2008a, p. 32). The Framework also placed the requirement on sports coach UK that 'The operating structures and business plans of the sports coach UK Group (sports coach UK and Coachwise) will be revised in line with directions (sic) of the UK Coaching Framework and reflected in a new strategy for the Group' (sports coach UK 2008a, p. 32). The creation of stable and long-term systems, terminology and ways of working, with a system-building emphasis was a key finding in the consultation process associated with the development of the Framework. Equally, the development of robust models, underpinned by appropriate theory and research, was called for by governing bodies, with the plea that such models (and the associated implementation) should not be arbitrarily changed or set aside.

One of the key interventions proposed was the creation of participant and coach development models based on the needs of each sport, adapted from core principles and guidelines developed through the specialist and coaching advisory groups convened by sports coach UK (Duffy 2009). This approach was based on the theory that participant need and development should be at the centre of a guided process of improvement within coaching. Consequently, a participant development model was drawn up, informed by the perspectives of the stakeholders and integrating some of the strongest features of the model of long-term athlete development (Balyi and Hamilton 1995, Stafford 2005) and the developmental model of sports participation (Côté and Fraser Thomas 2007). A sport-specific interpretation of this model is outlined in Figure 2 (Duffy 2009).

A key feature of the model is that it challenges the conventional practice of viewing coaching within a high-performance-oriented paradigm. In focusing on participant need, the Framework suggested a diversification in the way coaching roles are described, supported, rewarded and certificated. The result has been the production of a coach development model that has become known (unofficially) as the '4 × 4' (Duffy 2009). As the name suggests, there is a need for an expanded breadth and depth of coaching roles across four key coaching domains (children, participation, performer development, high performance as outlined in Figure 3), reflecting emerging research and practice on the nature of coaching roles and expertise (Lyle 2002, National Coaching and Training Centre 2003, Côté *et al.* 2007, European Coaching Council 2007, Côté and Gilbert 2009).

The Framework proposed that the implementation of the strategic action areas across a critical mass of governing bodies in each of the home countries would provide the basis for creating a world leading coaching system by 2016. The essence of this programme theory was that active, skilled and qualified coaches would make a significant contribution to policy

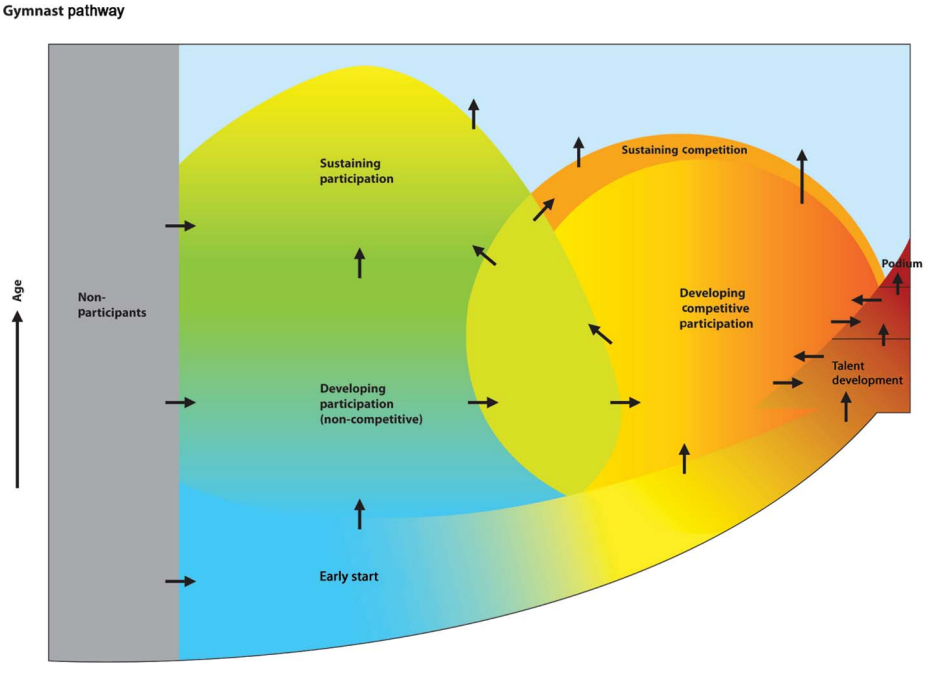

Figure 2. Participant development model (sample gymnastics application of core model).

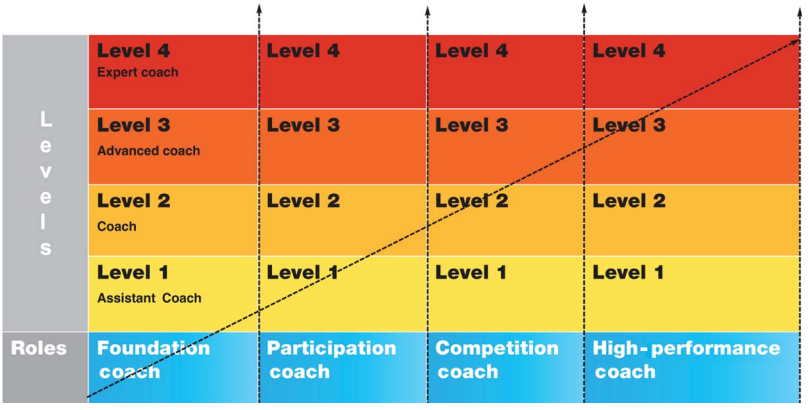

Figure 3. Coach development model.

objectives in children's sport, participation, talent development and high performance. In order to maximize the recruitment and development of these coaches, clear participant and coach development models operating within sport- and country-specific coaching systems were deemed as essential building blocks. These models 'for' the sport challenge each sport to clarify and refine their own programme theories and lay the basis for sport-specific application of the wider set of principles outlined in the Framework.

b. Participants, coaches, governing bodies and others are active in applying, adapting or ignoring the principles of the Framework

Realist review recognizes the significance of agency by all stakeholders in any complex intervention. Thus, although the originators of an intervention operate on the basis of stated intentions and outcomes, there is a process of interpretation and adaptation among those responsible for implementation at various levels. Recognizing the significance of agency, a key theory within the Framework is that the delivery of quality coaching is primarily the responsibility of the coach. This theory recognizes the professional responsibilities and decision-making of coaches, operating within a social and organizational context.

Reflecting the ecological perspective of Bronfenbrenner (1979) and later adapted into a sport context by Carlson (1988, 1993), a series of layered interactions were identified within the overall coaching system as part of the process to develop the UK Coaching Framework. Although the theoretical terms were not made explicit in the document itself, these include the participant and the coach (the micro system), the immediate environment within which the coach and participant operate such as clubs and schools (the endosystem) and the wider system of regional and national agencies (the exosystem). Notably, this approach has a strong resonance with the contextual layers identified by realists: individual capacity of the key actors, interpersonal relationships supporting the intervention, the institutional setting and the wider infrastructural system (Pawson 2006, p. 31).

At the different levels of the coaching system, the Framework suggested that effective decision-making would be promoted, informed by the needs of participants, guided by coaches of varied skill level and motive in the four coaching domains and operating within organizational structures at local, regional and national level as appropriate. This represents one of the greatest challenges of the Framework, in that it at once seeks to establish a

common reference point for the development of the coaching system, while recognizing that high-quality coaching is situation, context and sport specific. This approach leaves much to the perception, interpretation and actions of all of the actors and stakeholders throughout the coaching system. Pawson *et al*. (2006, p. 22) note that 'we should expect that, in tracking the successes and failures of interventions, reviewers will find at least part of the explanation in terms of the reasoning and personal choices of different actors and participants'.

Governing body personnel were assigned a particularly significant role in applying the methodologies and models of the Framework to their sport-specific contexts. The decisions made within each sport relating to their needs, current context, participant and coach development models, resource allocation and delivery mechanisms have a critical bearing on the effectiveness of their coaching systems. In turn, the front-line arrangements that are in place for the recruitment, deployment and support coaches have an impact on whether the coaches themselves have the opportunity to apply participant-centred practices in the context of their own coaching philosophy and capabilities.

c. There is a long spatial, temporal and organizational journey in the application of the Framework to the needs of participants, coaches, governing bodies and others

Pawson *et al.* (2005) highlight the organizational, spatial and temporal journeys of complex interventions. The origination of the UK Coaching Framework itself was a long journey, with the process taking over 2 years in total and including three UK Coaching Summits between 2006 and 2008. The process also involved extensive engagement with governing bodies, home country sports councils, UK Sport, Youth Sport Trust, Skills Active and other stakeholders. In order to maximize the integrity of implementation and to oversee the translation of core models into practice, the need for coordinated action and aligned resources was emphasized. Three key layers were identified: strategic/policy level, programme/management development and implementation. The core roles of each of the main agencies were defined. Pawson *et al*. (2005, p. 22) emphasize that one of the functions of a review process should be to 'explore the integrity of the implementation chain, examining which intermediate outputs need to be in place for successful final outcomes to occur, and noting and examining the flows, blockages and points of contention'.

The length of the journey for the successful implementation of the Framework has substantial organizational, spatial and temporal components. As outlined earlier, the intervention seeks to impact at all levels of the coaching system, ultimately to enhance the quality of the experience of the participant at the front line. Spatially, the implication is that the Framework will ultimately seek to impact all corners of the United Kingdom, reaching over 1 million coaches and creating a sustainable infrastructure for the recruitment, deployment, support, development and quality assurance of the coaches. The potential dilution of the message within the overall organizational journey has also been signalled in evaluation reports of one aspect of the Framework, the UKCC (Lyle 2007).

Short-, medium- and long-term targets were established within the Framework as part of the 11-year plan. Clearly, given the various 'distances' to be travelled by the initiative the need for clarity of function, effective leadership and coordination, appropriately resourced and committed governing bodies and support agencies are all central to the creation of an effective implementation chain. In a policy and legacy context, the length of the implementation journey highlights the need for a combination of consistency, adaptation and resilience in the application of the programme theories over time.

d. The implementation chain is non-linear and can even go in reverse

Experience from other domains highlights the non-linear nature of interventions (Pawson *et al.* 2005), suggesting that top-down initiatives can become bottom up in the course of implementation. The UK Coaching Framework recognizes the need for top-down intervention on the one hand and the central role of the sport and the coach in responding to participant need on the other. Inherent in this recognition is that many of the solutions advocated by the Framework are already evident to varying degrees. Many coaches demonstrate excellent practice on a daily basis and have no great need for further support or interest in policy interventions. Furthermore, even before the emergence of the UK Coaching Framework, governing bodies, funding and other agencies were demonstrating elements of best practice. It is evident therefore that while the Framework sought to provide a methodology for the creation of sustainable coaching systems, the emergent process will be subject to constant refinement and adaptation based on the circumstances and needs of the governing bodies and others involved in implementation.

Notably, Pawson *et al*. (2005) suggest that the shape of interventions is influenced by the power of the different agencies. A key implication for policy and legacy objectives is the recognition that the final outcome may not look like that which was first anticipated. In addition, the role of organizations in mediating and influencing the initiative means that there is likelihood that more influential organizations will shape the initiative to suit their interests. Where there is congruence between these interests and policy or legacy objectives, this may not be problematic.

The corollary is that there may be a conflict between the intentions of the originators of the intervention and powerful vested interests. Tensions may emerge between conservative forces seeking to retain the status quo and transformative forces seeking to pursue change. One example of this phenomenon is the difficulties associated with achieving a meaningful realignment of the UKCC with the core principles of the Framework and the coach development model. Pawson *et al*. (2005, p. 23) suggest that the review process should examine 'how the relative influence of different parties is able to affect and direct implementation'. Over time, such analysis will provide a perspective on the 'force field' and competing interests operating within policy (Rose 1973) and across coaching contexts (Jones *et al*. 2005).

e. The intervention is fragile and embedded in multiple social systems

It should not be expected that interventions will be applied in the same way in all contexts. What works, for whom, in what contexts and why are central to the required analysis, recognizing that 'rarely, if ever, is a programme equally effective in all circumstances because of the influence of context' (Pawson *et al.* 2005, p. 23). The UK Coaching Framework has taken account of the need for unique solutions to emerge in face-to-face coaching interactions as well as in the different contextual layers within and between each sport and home country. As stated, it is already apparent that the impact of the initiative to date is varied across sports and countries. Even within sports and home countries, there are significant variations, in line with the realist observation that differences exist between 'policy timing, organizational culture and leadership, resource allocation, interpersonal relationships, and competing local priorities and influences' (Pawson *et al.* 2005, p. 23).

f. The intervention is leaky and prone to be borrowed

Regardless of the level of clarity and detail provided in interventions, dialogue among those responsible for its implementation is both desirable and inevitable. Pawson *et al*. (2005,

p. 23) observed that 'we should expect the same intervention to be delivered in a mutating fashion shaped by refinement, reinvention and adaptation to local circumstances'. This will particularly be the case when snags occur and in the interpretation and application of labels. A feature of the development and early stages of the Framework was the high level of interaction between governing bodies with a view to identifying priorities, sharing best practice and identifying optimal solutions to some of the implementation issues that have occurred.

Pawson *et al*. (2005) also suggest that reviewers take account of 'label naiveté' (Øvreteit and Gustafson 2002) where the programme theory will carry titles that do not necessarily reflect the experiences or language of practitioners or managers, or the outcomes of empirical studies. The issue of labelling is of particular salience to the UK Coaching Framework, as the consultation process highlighted the need for a more common language to describe key elements of coaching and the coaching system. Time will only tell if the concepts and labels have a resonance with those responsible for implementation.

g. The intervention is an open system that feeds back on itself

'As interventions are implemented, they change the conditions that made them work in the first place' (Pawson *et al.* 2005, p. 23). Within the context of the UK Coaching Framework, the process itself brought about early changes in the way policy agencies and governing bodies in sport interacted. There was also a substantial level of discussion and engagement around participant and coach development models, much of which has resulted in activation by governing bodies around their sport-specific versions. As mentioned earlier, this work raised significant questions about the nature, delivery and cost issues associated with the UKCC, with the need for further enhancement of the technical basis of the certificate also being identified with a closer focus on participant need and coaching domains (sports coach UK 2008a). The recent amendments to the National Occupational Standards (Skills Active 2011) do not appear to have taken the directions set out in the Framework fully on board, particularly in relation to the different coaching domains, while concerns about the costs associated with the UKCC, particularly for volunteers, have endured.

A key implication for the programme and for sport policy and legacy objectives is the need to incorporate open and ongoing feedback mechanisms, as well as recognizing the fluid and changing nature of the initiative. The UK Coaching Framework has made provision for systematic reviews and adjustments at the end of each of the three main phases, albeit without a clear specification of how this should happen. The work of Pawson *et al*. (2005) suggests that ongoing and responsive interaction will be necessary to reflect the openness and fluidity that is inherent in an initiative such as the UK Coaching Framework. An evident implication for policy and legacy objectives is that at the very least adaptation of the methods and processes of the Framework will be required, as well as adjustment to programme and policy objectives along the way.

It is apparent from the foregoing analysis that the application of a realist approach to programme evaluation provides fertile ground for the assessment of the impact of the UK Coaching Framework on policy objectives and on the quality of coaching over time. Given the range of sports, coaching domains and home country contexts the seven criteria reviewed here suggest that not only is the Framework amenable to such review, but it will benefit significantly from the associated rigour and precision.

5. Summary

This article has suggested that the role of coaching within wider sport policy objectives in the United Kingdom has begun to consolidate in recent years. This policy position, which is still at an early stage, has focused on the contribution that coaching makes to core sport objectives, such as participation, performance and the creation or extension of opportunities for children in school and/or community contexts. Within this canvas, the emergence of legacy policy objectives since the success of the London 2012 bid in 2005 has placed further expectations on coaching as part of a macro sport policy agenda (DCMS 2008).

Although sport coaching is referenced in the high-level policy statements associated with the London 2012 legacy pledges, the integration of actions into the detail of the five legacy promises has been shown to be less specific. Notably however, coaching is referred to in the context of the creation of a world leading sport system (DCMS 2008). The nature of this contribution is not defined and it has been left to the UK Coaching Framework to map out a plan to maximize the impact of sport coaching up to 2016 (sports coach UK 2008a). Coaching would also appear to have an implicit role in other legacy promises such as inspiring a generation of young people and promoting inclusive, positive attitudes towards and active participation of disabled people in sport (DCMS 2008).

A key challenge from this emerging scenario is evaluating the impact of coaching as part of the sport policy agenda and in support of legacy objectives. The analysis outlined in this article suggests that the UK Coaching Framework is a complex intervention that is amenable to analysis using a realist review methodology (see Figure 4). There is a clear need for such review, in order to chart the progress of this sport coaching policy programme and to identify what works, for whom and in what circumstances and why. Realist review offers discipline and structure to the evaluative process, by placing an emphasis on outcome patterns, mechanisms and context. In seeking to explain rather than solve problems, it offers a

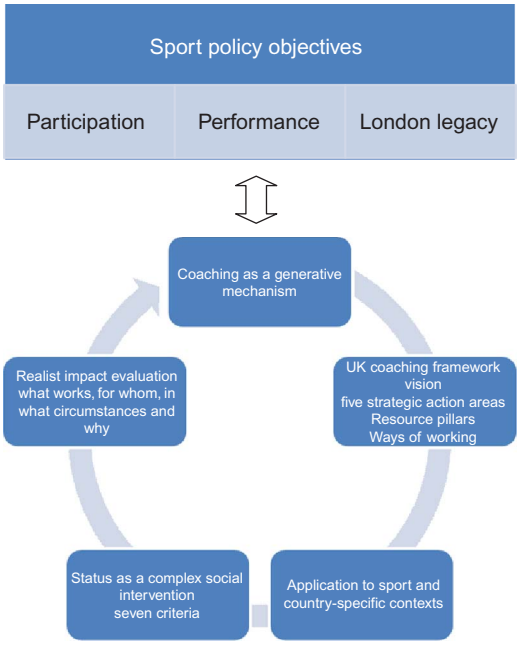

Figure 4. Application of realist methodology to the review of the UK Coaching Framework.

discriminating and sophisticated toolkit to get closer to the pulse of what makes coaches, participants and the coaching system tick.

Much of the legacy discourse relating to the London Games (and indeed other major games) has focused on the direct and observable impact on elements such as economy, infrastructure and regeneration. A feature of the London legacy promises has been the prominence of longer term agendas that offer the prospect of linking with sport development and system-building objectives. This longer term focus, which has the potential to be quite intangible, begs several questions in terms of programme evaluation and efficacy at a general level and specifically in relation to sport coaching. Realist review provides a robust methodology for charting progress over time, taking into account the initial policy and legacy aspirations, the stated intentions of the UK Coaching Framework and the perspectives of the wide range of stakeholders in the conception, delivery and consumption of the intervention.

6. Conclusion

The realist approach to programme evaluation provides the basis for a firmer analysis of the mechanisms that generate outcome patterns in coaching and in the development of high-quality coaching systems. Realist review provides the basis for studying these and other emergent mechanisms across the wide range of contexts found in the four main coaching domains, sport-specific delivery and each of the home countries. The commissioning of such reviews remains an open question, as there has not been a history of systematic impact evaluation to date.

In providing a methodology that can be applied to the analysis of impact in different sports, coaching domains and countries, the realist sensitivity to the significance of context is congruent with the core aspirations of the UK Coaching Framework. Although the vision of the Framework speaks of the creation of a world leading coaching system, it is the recruitment, development and deployment of skilled coaches to the front line in a diverse range of sports, coaching domains and contexts that rests at the heart of the intervention. The realist focus on what works, for whom, in what circumstances and why holds out the possibility of providing an analysis that has the capability of interrogating the core programme theories and their impact at the front line, as well as applying this methodology at the macro level. There is also a need to further research the impact of the intervention within specific sports and in each of the home countries.

It has been argued that there is a sound basis upon which the UK Coaching Framework should be viewed as a complex intervention that is amenable to the application of realist review. Realist review provides a robust basis for the evaluation of such an intervention and can assist in more clearly ascertaining the role of coaching as a mechanism to support the delivery of legacy objectives in a range of contexts. In the case of legacy objectives for London 2012, it will mean that in sport coaching at least, longer term legacy pledges and promises can be subjected to the foil of rigorous analysis and impact evaluation.

References

Balyi, I. and Hamilton, A., 1995. The concept of long-term athlete development. *Strength and conditioning coach: the official magazine of the Australian Strength and Conditioning Association*, 3 (2), 5–6.

Bergsgard, N., *et al*., 2007. *Sport policy: a comparative analysis of stability and change*. Amsterdam: Elsevier.

Bronfenbrenner, U., 1979. *The ecology of human development: experiments by nature and design*. Cambridge, MA: Harvard University Press.
Carlson, R., 1988. The socialization of elite tennis players in Sweden: an analysis of the players' backgrounds and development. *Sociology of sport journal*, 5, 241–256.
Carlson, R., 1993. The path to the national level in sports in Sweden. *Scandinavian journal of medicine and science in sports*, 3, 170–177.
Côté, J. and Fraser-Thomas, J., 2007. Youth involvement in sport. *In*: P. Crocker, ed. *Sport psychology: a Canadian perspective*. Toronto, ON: Pearson.
Côté, J. and Gilbert, W., 2009. An integrative definition of coaching effectiveness and expertise. *International journal of sport science and coaching*, 4, 307–232.
Côté, J., *et al*., 2007. Towards a definition of excellence in sport coaching. *International journal of coaching science*, 1 (1), 3–16.
Department for Children and Schools, 2008. *Physical education and sport strategy for young people*. London: Department for Children and Schools.
Department of Culture, Media and Sport, 2002. *The coaching task force-final report*. London: Department of Culture, Media and Sport.
Duffy, P., 2009. Opening address. *UK Coaching Summit*, 28–29 April, Glasgow.
European Coaching Council, 2007. *Review of the EU 5-level structure for the recognition of coaching qualifications*. Koln: European Network of Sport Science, Education and Employment.
Houlihan, B., 1997. *Sport, policy and politics: a comparative analysis*. London: Routledge.
Jones, R., Armour, K., and Potrac, P., 2005. *Sports coaching cultures: from theory to practice*. London: Routledge.
Lyle, J., 2002. *Sports coaching concepts*. London: Routledge.
Lyle, J., 2007. *United Kingdom coaching certificate impact study*. Leeds: sports coach UK.
McGeechan, I. and Duffy, P., 2008. Foreword. *In*: sports coach UK, ed. *UK Coaching Framework: a 3-7-11 year action plan*. Leeds: Coachwise.
MORI, 2004. *Sports coaching in the UK*. Leeds: sports coach UK.
National Coaching and Training Centre, 2003. *Building pathways in Irish sport: towards a plan for the sporting and health well-being of the nation*. Limerick: National Coaching and Training Centre.
North, J., 2008. The role of coaching in increasing participation. Unpublished sports coach UK document.
North, J., 2009. *The coaching workforce 2009-16*. Leeds: sports coach UK.
North, J., 2010. Using 'coach developers' to facilitate coach learning and development: qualitative evidence from the UK. *International journal of sports science and coaching*, 5 (2), 239–256.
North, J., in press. *A critical realist approach to theorising coaching practice. Handbook of sports coaching*. London: Routledge.
Øvreteit, J. and Gustafson, D., 2002. Evaluation of quality improvement programmes. *Quality and safety in health care*, 11 (3), 270–275.
Pawson, R., 2006. *Evidence based policy: a realist perspective*. London: Sage.
Pawson, R. and Tilley, N., 1997. *Realistic evaluation*. London: Sage.
Pawson, R., *et al*., 2005. Realist review – a new method of systematic review designed for complex policy interventions. *Journal of health services research and policy*, 10 (1), 21–34.
Rose, R., 1973. Comparing public policy. *European journal of political research*, 1 (1), 1.
Skills Active, 2011. *National Occupational Standards* [online]. Available from: http://www.skillsactive.com/skillsactive/national-occupational-standards/level-2/item/3169/3169 [Accessed 30 June 2011].
Sport England, 2008. *Sport England strategy 2008-11*. London: Sport England.
Sport Northern Ireland, 2009. *Strategy for sport and physical recreation for Northern Ireland*. Belfast: Sport Northern Ireland.
Sport Scotland, 2007. *Reaching higher – building on the success of Sport 21*. Edinburgh: Sport Scotland.
sports coach UK, 2006a. *Targets and resources in coaching*. Leeds: sports coach UK.
sports coach UK, 2006b. *Declaration of the first UK coaching summit*. Grantham: sports coach UK.
sports coach UK, 2007. *The UK action plan for coaching: consultation document*. Leeds: sports coach UK.
sports coach UK, 2008a. *The UK Coaching Framework: a 3-7-11 year action plan*. Leeds: Coachwise.
sports coach UK, 2008b. *Declaration of the third coaching summit*. Coventry: sports coach UK.

Sports Council, 1991. *Coaching matters: a review of coaching and coach education in the United Kingdom*. London: Sports Council.
Sports Council for Wales, 2009. *Corporate plan 2009-2012*. Cardiff: Sports Council for Wales.
Stafford, I., 2005. *Long-term athlete development*. Leeds: sports coach UK.
UK Sport, 2001. *UK vision for coaching*. London: UK Sport.
UK Sport, 2008. *UK Sport 2007 annual review*. London: UK Sport.