

Institution: Leeds Beckett University (LBU)		
Unit of Assessment: 24 - Sport and Exercise Sciences, Leisure and Tourism		
Title of case study: Transforming policy and practice in sport coach development and education		
Period when the underpinning research was undertaken: 2011-2020		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s):	Role(s) (e.g. job title):	Period(s) employed by submitting HEI:
Dr Julian North	Reader	2011-present
Dr Sergio Lara-Bercial	Reader	2012-present
Professor John Lyle	Professor	2006-9; 2013-present
Dr Bob Muir	Senior Lecturer	2005-present
Dr David Piggott	Senior Lecturer	2012-present
Dr Andrew Abraham	Head of Subject	2008-present
Period when the claimed impact occurred: 2014-2020		
Is this case study continued from a case study submitted in 2014? No.		
1. Summary of the impact		
<p>Policy and practice in sport coach development and education has been undermined by a lack of underpinning clear, coherent, field-tested definitions, concepts, and tools. Without these definitions/concepts/tools, policymakers and practitioners have had to rely on inconsistent theoretical support, a dearth of coverage of important practical issues, problems with the relevance of the research agenda, and, consequently, limited impact on practice. Research conducted by Leeds Beckett University's (LBU) Research Centre for Sport Coaching (RCfSC), in the Carnegie School of Sport, has been instrumental in addressing and rectifying issues. Working with colleagues in key organisations, LBU academics have provided innovative definitions, concepts and tools that have redressed the absence of a coherent and consensual approach. These concepts and tools have challenged and changed coach development systems, curricula and delivery and impacted on 1000s of coaches worldwide and 100s of coach developers/educators. The change is corroborated by international/national agencies (e.g., UK Sport, UK Coaching, the International Council for Coaching Excellence, and the European Union) and major governing bodies of sport (e.g., the English Football Association, UEFA, Royal Yachting Association, Rugby Football League), and is evident in elite coach development practice (e.g., British Sailing, British Boxing, GB Hockey).</p>		
2. Underpinning research		
<p>Policy and programmes in sport coach education and development have been criticised for the absence of a coherent and consensual organising framework and a practice-based set of tools with which to support the development of sport coaches. This impacts on policy makers and practitioners' ability to perform their work effectively as a result of inconsistent messages from coaching theorists, a lack of attention to important practical issues, and problems with the relevance of the research agenda. The consequence has been a limited impact on the practice of education and development facilitators, and coaching practice itself. LBU research has established the necessary underlying frameworks and researchers have gone on to apply these tools in a variety of settings, making a substantial impact on the policy and practice of coach education and development. The research underpinning this case study has been driven by a collaborative team of sport coaching academics, policy and programme developers, coach developers/educators and coaches (notably North, Lara-Bercial, Lyle, Muir, Piggott and Abraham)</p>		

Critically challenging the concept of coaching

Having established the need for a clear framework for coaches and coaching [1,2,5], our research has conceptually established and empirically validated sport coaching as a goal orientated, reasoning and decision-making activity, enacted through strategies, based on individual and other resources, embedded within and developed through complex social ecologies, using critical realist and cognitive meta-theoretical perspectives [1,2,5]. This view of coaching has led to further conceptual research that views coach development and education as an exercise in enhancing individual and social resource to improve reasoning, decision making and strategies [1,5], a view that has been empirically validated and subjected to peer review [6].

Establishing modes of coach development and education delivery

Our work has progressed to demonstrating how coaching experiences (often the principal source of coach learning) can be augmented and critically challenged by the application of research-derived models and tools [1,3,5]. From this has evolved the development and dissemination of two main modes of coach development and education delivery:

- a more content-driven, focused, and time-efficient approach that uses research concepts to explore and unpack coaches' experiences [1,2]
- a problem-based/needs-led approach which draws initially on coaches' actions and experiences, evidenced in their practice, to highlight their reasoning and resources, with research concepts then used to underpin questioning frameworks and thinking tools, once problems/needs have been deconstructed [5]. This problem- and practice-based approach is seen as being more relevant and motivating for coaches but may take more resource/time.

Creating development and education tools

Our research has evolved a number of specific tools, with which to analyse coaching practice and to support coach development and education programmes:

- understanding of coaching practice, and consequently coach development, has been greatly enhanced by what has become known as the 'Who, What, How' (WWH) model - this identifies the constitute elements of the sport coaching process and their interrelationships: the Who (participants and coaches in context), the What (sport and technical aspects of coaching) and How (pedagogical, planning and process skills) [3].
- informed by the 'WWH' model, a Coach Planning, Practice and Reflective Framework (CPPRF) assists practitioners to analyse practice and 'constructively align' goals and curriculum (content, delivery) [3].

The six broad domains of knowledge in the WWH model and the coaching practice planning and reflective framework have created a curriculum model and a basis for coaches' planning and decision-making.

Evaluating coach development and education

Our research has evaluated the impact of these frameworks and tools on coach development and education by utilising and applying innovative research philosophies and evaluation methodologies, through Realist Evaluation [4] and an Embedded, Relational and Emergent (ERE) [5] approach. In particular, we have drawn on a critical realist philosophy of science/social science and critically applied it to a sport coaching context [4,5]. These adapted philosophies and methodologies have been piloted and tested in a number of sports and settings [4,5]. For example, evaluation work for UEFA [1], UK Sport [Piggott, North & Rankin-Wright (2019). World Class Pathway Coach Accelerator Programme (PCAP): Evaluation study final report. Leeds, London, and Manchester: Leeds Beckett University, UK Sport, and the English Institute of Sport] and Sport Scotland [North & Lyle (2020). *High performance coach developer practitioner training evaluation*. Leeds Beckett University and Sport Scotland. Leeds and Glasgow]

3. References to the research

Selected outputs represent original research conducted by LBU academics. They are published in esteemed international journals and have been independently peer-reviewed by experts. Outputs 4 and 5 were linked to projects funded by the Football Association (£63,000), and UK Sport and British Canoeing (£44,500), respectively.

[1] Abraham, A., & Collins, D. (2011). Taking the next step: Ways forward for coaching science. *Quest*, 63(4), 366-384. <https://doi.org/10.1080/00336297.2011.10483687>

[2] Collins, D., Abraham, A., & Collins, R. (2012). On vampires and wolves. Exposing and exploring reasons for the differential impact of coach education. *International Journal of Sport Psychology*, 43, 255-271. <https://doi.org/10.7352/IJSP.2012.43.255>

[3] Abraham, A., Lorenzo Jimenez Saiz, S., Mckeown, S., Morgan, G., Muir, B., North, J., & Till, K. (2015). Planning your coaching: A focus on youth participant development. In C. Nash (Ed.), *Practical sports coaching*. London: Routledge.

[4] North, J. (2016). Benchmarking sport coach education and development: Using programme theories to examine and evolve current practice. In W. Allison, A. Abraham & A. Cale (Eds.), *Advances in coach education and development: From research to practice* (pp. 17-29). London: Routledge.

[5] North, J. (2017). *Sport coaching research and practice: Ontology, interdisciplinarity, and critical realism*. London: Routledge.

[6] Harvey, S., Lyle, J., & Muir, B. (2015). Naturalistic decision making in high-performance team sport coaching. *International Sport Coaching Journal*, 2(2), 152-168. <https://doi.org/10.1123/iscj.2014-0018>

4. Details of the impact

LBU research, leading to the development of an enhanced conceptual appreciation of sport coaching and a curriculum planning and decision-making framework, has had a transformative impact on the policy and practice of a range of key sporting agencies, programme designers and deliverers. Dissemination by LBU coaching group members through workshops, conferences, partnerships and coach development activities providing a 'go to' set of tools has permeated coach education and development. The testimonials provided and the range of organisations involved attests to the significance and reach of LBU research into policy and practice associated with coach education and development.

Coach development and education design and delivery

The principal example of an impact on a major sporting organisation is the incorporation of the WWH framework into the coach education and development work of the Football Association (FA). Conceived and delivered by LBU, the FA's PG Diploma for coach educators is explicitly centred on the WWH framework. The FA's Head of Professional Game Development suggests the following: "*The Diploma, and indeed, increasingly our whole approach to coach education, is directly based on the 'who, what, and how' and 'constructive alignment' framework published in Abraham et al. (2015), and a development methodology based on exploring practical experience overviewed in Abraham and Collins (2011). This is evidenced by our adoption of the 'who, what, and how' framework as guiding philosophy – recently pictured on our walls at our national centre St George's Park*" [A, B]. An evaluation report on the PG Dip., commissioned by the FA., and conducted by Northumbria University [C] is very positive about the impact of the work: "*The research has highlighted three core influences of the PGDip. (1) The PGDip has been successful in delivering relevant training to coach developers which has impacted upon and shaped emerging coach development practices, such as engagement methods with coaches. (2) It has also been successful in bringing together coach developers in order to develop a more cohesive workforce through group work practices which have influenced a shared*

understanding. (3) Finally, it has brought about shift in the way coach development as a profession is viewed, providing a level of credibility to the role”.

The WWH framework has also been central to the development of the UEFA’s new C-diploma, impacting on the 1000s of coaches, and 100,000s of players across Europe. UEFA’s Head of Football Education Services suggests: *our “new C diploma aimed at grassroots coaches has been developed. This work was based on the ‘who, what and how’ framework published in Abraham et al. (2015), and the ‘primary functions of the coach’ framework published in Lara-Bercial et al. (2017) [Lara-Bercial, S., North, J., Hämäläinen, K., Oltmanns, K., Minkhorst, J., & Petrovic, L. (2017). European sport coaching framework. Champaign, Ill.: Human Kinetics.] ... these texts have been instrumental in steering our thinking and in our ability to engage our member associations. As a reference, please find enclosed the Curriculum builder: UEFA C diploma [https://editorial.uefa.com/resources/025d-0f8430a3fa11-5122cbe26f9c-1000/uefa_coaching_convention_2020.pdf]. Research arising from the work of LBU’s Research Centre for Sport Coaching has facilitated change and positive development across European football. These changes are benefiting coaches from UEFA’s 55 national associations at all UEFA-endorsed coaching levels and, ultimately, players all over Europe, from grassroots level upwards” [D].*

The WWH framework has also been used to inform directly the development of new Chartered Institute for the Management of Sport and Physical Activity (CIMSPA) coach developer standards. UK Sport’s Head of Coach Development suggests: *“This work, developed by UK Sport, in partnership with UK Coaching, Sport England, sportscotland and The English Institute of Sport, has used the ‘Who, What, How’ framework developed by Dr Andrew Abraham, Bob Muir and colleagues at LBU, through various research documents, and published in Abraham et al. (2015). The standards set the professional benchmark for coach developers at a UK level and will impact on 100s of coach developers and 1000s of coaches across the UK” [E].*

The problem-based/needs-led approach, identified through our research, which draws initially on coaches’ actions and experiences to highlight their reasoning and resources, has also underpinned an established and very well-regarded programme of 1:1 coach development activity led by Dr Bob Muir. In addition to numerous contributions to UK bodies, Dr Muir has worked intensively with over 50 coaches in boxing, cricket, cycling, football, golf, hockey, rugby league, rugby union, and sailing over a 10-year period. This includes work with 16 Olympic, 16 Podium Potential, and 22 England National age group coaches. The coaching practice planning and reflection framework (CPPRF) is central to this programme of work. The British Sailing Team and the Royal Yachting Associations’ Coaching and Leadership Development Manager suggest: *“that our World Class Coaching Continuing Professional Development strategies for 2017-2018, 2019-2020, and 2020-2024 (all available on request), and a great deal of our operational coach development delivery, has been directly underpinned by research conducted by colleagues at Leeds Beckett University. Notably, the ‘Who, What, How’ model and the Coaching Practice Planning and Reflective Framework (CPPRF) (both in Abraham et al., 2015), have been central to our coach development work” [F].*

Coach development and education system evaluation/review

Our methodological research [4,5] has contributed to good-practice benchmarks and evaluation and review methodologies that have made recommendations for, and had impact on, coach development and education activities across world- and European-level sporting organisations. For example, LBU research for UEFA on its European-wide coach education framework, the Coaching Convention, which impacts 55 national country systems and 1000s of football coaches across Europe [North, J., Piggott, D., Lyle, J., Lara-Bercial, S., Muir, B., Petrovic, L., ..., Shaw, W. (2016). Research study on the UEFA Coaching Convention: A research report for UEFA. Leeds: Research Institute for Sport, Physical Activity and Leisure. Leeds Beckett University. This was a UEFA funded project to the sum of £90,000]. This

work has resulted in UEFA reviewing its provision for coach development activities, the further education of coaches, and coach educators. UEFA's Head of Football Education Services suggests: "The report's findings were used to shape the future direction of the UEFA Coaching Convention. In particular, 3 priorities were identified in the report: reality-based learning – preparing coaches for the everyday realities of their job; the development of coach educators – enhancing their qualities to nurture high-calibre coaches; and further education – maintaining and developing UEFA licence holders' competence as football coaches" [G]. The methodology has also been used to undertake evaluation work for UK Sport (E & H) and Sport Scotland [North, J., & Lyle, J. (2020). High performance coach developer practitioner training evaluation. Glasgow and Leeds: Sport Scotland and the Carnegie Research Centre for Sport Coaching, Carnegie School of Sport, Leeds Beckett University].

UK and worldwide dissemination

LBU research has been incorporated into resources that have had impact both in the UK and more widely. LBU has strong partnerships with the International Council for Coaching Excellence (ICCE) and the European Coaching Council (ECC), which include representatives from the main international coaching stakeholders. ICCE and ECC staff have drawn explicitly on LBU research to author/co-author a number of influential resources (the ICCE's *International Sport Coaching Framework*, the *International Quality in Coaching Model*, the *International Coach Developer Framework*, and the *Standards for Higher Education Sport Coaching Bachelor Degrees* [<http://www.icce.ws/projects/international-sport-coaching-framework.html>; <http://www.icce.ws/projects/icce-quality-in-coaching-qic-model.html>; <http://www.icce.ws/projects/international-coach-developer-framework.html>; <http://www.icce.ws/assets/files/icds-draft-2-final-08-07-16.pdf>]. A testimonial from the ICCE confirms the role of LBU research and its incorporation into coach development and education systems in Germany, Italy, Japan, Norway, Poland, Portugal and the USA [I]. The WWH model is also drawn upon in the *European Sport Coaching Framework* document [<http://www.coachlearn.eu/european-sport-coaching-framework.html>]. This is a European Commission funded project to the sum of £380,000, which has significantly influenced the work of the European Commission. Crucially, it has impacted on the development of its *Work Plan for Sport 2017-2020* and *2020-2023*, which now specifically identifies and acknowledges coaches as a central element of the sport system in Europe [J].

5. Sources to corroborate the impact (indicative maximum of 10 references)

[A] Testimonial from the Head of Professional Game Development, the English Football Association.

[B] Photograph taken at the English Football Association, St George's Park, HQ showing the WWH framework.



[C] Redgate, S., Potrac, P., Boocock, E., & Dalkin, S. (2020). Realist Evaluation of the Football Association's Post Graduate Diploma (PGDip) in Coach Development. Burton on Trent and Newcastle.

[D] Testimonial from the Head of Football Education Services, UEFA, 23/10/2020

[E] Testimonial from the Head of Coach Development, UK Sport.

[F] Testimonial from the Coaching and Leadership Development Manager, British Sailing Team and Royal Yachting Association.

[G] Testimonial from the Head of Football Education Services, UEFA, 10/09/2019

[H] Testimonial from the Senior Coach Developer at UK Sport, on behalf of the English Institute of Sport and UK Sport, 27/10/2020.

[I] Testimonial from the International Council for Coach Excellence Chief Executive.

[J] Testimonial from the European Commission's Head of the Sport Unit.