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Formal vs. Informal Coach Education

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ABSTRACT
The training of coaches is considered central to sustaining and improving the quality of sports coaching and the ongoing process of professionalisation. Sports coaches participate in a range of learning opportunities (informal to formal) that contribute to their development to varying degrees. In this article, we present our collective understanding on the varying types of learning opportunities and their contribution to coach accreditation and development. The authors presented these views (from a sports pedagogy perspective) as part of a workshop entitled "Formal vs. Informal Coach Education" at the 2007 International Council of Coach Education Master Class in Beijing. These reflections seek to stimulate the on-going, and often sterile, debate about formal versus informal coach education/learning in order to progress scholarship in coaching.

Key words: Adult Learning, Coach Accreditation, Mentoring, Professionalisation, Sports Coaching

INTRODUCTION

Coach education/training and subsequent continuing coach development is considered to be essential to both sustaining and improving the quality of sports coaching [1]. Coach development is assumed as an all-encompassing term that refers to the process leading towards enhanced expertise. This learning occurs from accessing a range of opportunities (informal to formal). In an attempt to support this development, coach education systems around the world have been developed and are in a constant process of renewal and reconstruction. Moreover, in the context of its adult learning character (post-compulsory education, part-time, diverse in previous learning), there is an ongoing issue about the most efficient and effective means of aggregating and accrediting the coach's varied learning experiences. Of special interest is the level and nature of the contribution made by learning from all types of experiences to coach accreditation and development.

During the International Council of Coach Education Master Class in Beijing (2007), a workshop entitled "Formal vs. Informal Coach Education" was held. The authors, from three

countries (Australia, Canada, United Kingdom), were invited, based on their applied and academic experience in coach education, to present their individual perspectives on this topic and then to engage in discussion with the audience. At the end of the workshop, a list of unanswered questions was developed. These questions included:

- Should we be talking about formal/informal *learning*, rather than *education*?
- What are the advantages and limits of formal and informal education?
- How can we integrate formal and informal education?
- Is there a 'recommended order' for the formal/informal aggregation of learning?
- Are there some coincidental factors that make informal education more powerful (e.g., previous educational experience)?
- Should mentoring be considered to be formal or informal education?

In this article, we address these questions by presenting our collective understanding of the general topic that is coach education, with the objective of making some progress in the on-going and often sterile debate about formal versus informal coach education/learning. To reach this goal we have divided this paper into four sections: a) What terminology should be used?; b) What does the coaching literature have to say about coaches' learning; c) What are the benefits and limitations of formal and informal learning situations; and d) Is there a preferred sequencing of learning opportunities? In the conclusion, we identify some key statements that might provide guidance for coach development. The importance of furthering discussion on these broader questions is to provide first, clarity, enhanced understanding and useful insights into current thinking in coach education; and second, some direction for coach development and developers. Progressing scholarship on coach education can guide the conceptual framework underpinning coach education and its implementation.

WHAT TERMINOLOGY TO USE?

One of the main issues that contributes to the lack of resolution in this debate is the lack of a clear and consensual terminology. While discussion is not limited to the degree of formality, a cursory examination of recent documents in the education and coaching fields [2-5] identifies three basic terms, each used in many and varied expressions:

(a) *Formal*: formal education, formal educational institutions, formal learning, formal coach learning programs, formal learning institutions;
(b) *Nonformal*: nonformal education, nonformal environmental educational programs, nonformal learning settings, nonformal learning situations;
(c) *Informal*: informal learning, informal learning activities, informal learning experiences.

In considering these terms, we noticed that education and learning are often associated with formal or nonformal, while learning seems to be used only with informal situations. Formal learning situations are associated with institutionally sanctioned structures and (guided) delivery, whereas the informal situations may be assumed to provoke learning but are likely to be unguided and/or incidental. To clarify the situation further, it is necessary to explore our understanding of the relationship between education and learning. To address whether education and learning are synonymous, it is important to go back to the basic concepts. The framework proposed by Coombs and Ahmed [6] is often cited [4] as the first attempt to classify the different education/learning modes. This extended quote from Coombs and

Ahmed's book [6] is particularly revealing:

> In formulating these concepts we began with a *functional view* of education, in contrast to the structural and institutional approach used in most educational planning and administration. This obliged us to start our analysis with the learners and their needs, and to move only then to the question of what educational means might be most appropriate to meeting these needs. This, as we saw it, put the horse before the cart. We also began with the conviction (later underscored by UNESCO's International Commission for the Development of Education) that education can no longer be viewed as a time-bound, place-bound process confined to schools and measured by years of exposure. These considerations led us to adopt from the beginning a concept that equates *education with learning*, regardless of where, how or when the learning occurs. Thus defined, education is obviously a continuing process, spanning the years from earliest infancy through adulthood and necessarily involving a great variety of methods and sources. We found it analytically useful, and generally in accord with current realities, to distinguish between three modes of education (recognizing that there is considerable overlap and interaction between them): 1) *informal* education, 2) *formal* education, and 3) *nonformal* education. (p. 8)

In their attempt to describe the different educative forces that influence learning in developing countries, these authors have used the term education and used it as a synonym for learning. In Western countries, the term education has gained a meaning that differentiates it from learning: "Traditionally education has been regarded as the institutionalisation of learning – learning is the process which occurred in individuals and education is the social provision of the opportunities to learn (and be taught) formally" [7, p. 63]. The sometimes narrow conceptions of 'education' and 'learning' are problematic, which reflects to some degree the issue of 'languaging'; i.e., clarifying the intended meanings of the terms used [8-10]. Nevertheless, perhaps we should distinguish between education and learning. It is possible to achieve this using the two perspectives of the program developer (education) and the learner (learning).

Program developers (e.g., administrators of coach accreditation) assert significant control over curriculum design, delivery, content, assessment tasks and grading to award certification. However, research [e.g., 1, 11-14] has shown that coach education/accreditation is less valued than experiential learning and other less formal opportunities. From the education program developers' perspective, learning is intended to occur in formal situations within coach education programs. In this formal situation, learning is mediated [15] or guided [16] by some knowledgeable other. Learners in these formal situations have less control over what information is delivered which, in turn, influences what can be learned. That is, the program developers direct what is to be learned. Typically, assessment drives learning and consequently, the learner has little control of what they learn or at least what is most attractive or advantageous to learn.

We have seen in the last few decades a worldwide trend to establish large-scale national coach education programs in order to contribute to the development of coaching as a profession and to certify or accredit coaches (e.g., the United Kingdom Coaching Certificate, National Coaching Certification Program [Canada], the National Coach Accreditation Scheme [Australia], and the National Standards for Sport Coaches developed by the National Association for Sport & Physical Education [USA]). For both purposes, program developers have to advance a recognised and endorsed curriculum that specifies the

knowledge/competencies to be taught and mastered by coaches. Given their aims, these large-scale programs will be adjudged as effective only if the formal curriculum is relatively standardised and quality assured. Using Merriam et al.'s [3] definition of formal education, we can define formal coach education as "highly institutionalised, bureaucratic, curriculum driven, and formally recognized with grades, diplomas, or certificates" (p. 29). However, we need to dissociate the 'formal' in education from large-scale institutional provision only. For example, coaches might receive direct guidance from more experienced coaches in a formal or structured 'mentoring' relationship or continuing professional development workshop programmes. Therefore, it is appropriate to include formal educational opportunities at work.

Such formal coach education/accreditation programs have often been criticised for being very limited in the scope of their achievements [17-19]. To avoid losing potential volunteer coaches, the programs are often delivered over short periods of time with few, if any, entry standards. For the more elite coaches, the large-scale programs have been shown to be ineffective in providing them with all that they need to be a successful coach [1, 12-14, 21-23]. To compensate for these shortcomings, or what Brennan [24] calls "reactions to the limitations or failures of formal education" (p. 187), coaches are either invited (often by the local sport association, sport clubs or coaches associations) or through their own volition, to attend conferences, workshops, and or seminars. These activities can be classified as *nonformal coach education*, that is, "organized learning opportunities *outside* the formal educational system. These offerings tend to be short-term, voluntary, and have few if any prerequisites" [3, p. 30]. It should be noted that the short-term nature and general lack of prerequisites also feature heavily in criticisms of the large-scale, formal education provisions. Despite this, these nonformal coach education opportunities (continuing professional development) can be ongoing, highly varied and very extensive. However, these nonformal learning opportunities might be best conceptualised as slightly less formal, rather than nonformal, in light of the typically structured and relatively formal manner in which such opportunities are organised.

Characteristic of these nonformal forums for learning is the guidance by 'knowledgeable others'. Perhaps it is best to consider all forms of learning situations along an informal-formal continuum, with Cushion et al.'s [1] notion of nonformal coach learning (based on Coombs & Ahmed's 1974 classification) located closer to the formal end of the continuum. Even in nonformal opportunities there are informal learning situations (e.g., in the foyers outside conference presentations and in purposeful networking).

The recognition of everyday experiences as valuable learning opportunities has gained increased acceptance within the fields of education [e.g., 25], workplace learning [e.g., 26, 27], and sports coaching [e.g., 1, 4, 23, 28, 29]. In studies where coaches have been questioned on their learning, the results have often shown that coaches also learned without the direct guidance of others during their day-to-day activities [23, 29]. These coaching experiences, which are happening outside the formal and nonformal (less formal) coach education opportunities, are generally associated with *informal learning* [4]. Marsick and Watkins [30, 31], whose work in adult education has relevance to coach development, added the term *incidental learning*, which helps to nuance the definition of informal learning:

> Informal learning, a category that includes incidental learning, may occur in institutions, but it is not typically classroom-based or highly structured, and control of learning rests primarily in the hands of the learner. Incidental learning is defined as a by-product of some other activity, such as task accomplishment, interpersonal interaction, sensing the organizational culture, trial-and-error experimentation, or

> even formal learning. Informal learning can be deliberately encouraged by an organization or it can take place despite an environment not highly conducive to learning. Incidental learning, on the other hand, almost always takes place although people are not always conscious of it. [30, p. 12]

Given the diversity of parties interested in examining the education or learning of coaches, complete consensus regarding the terminology used to describe the ways in which coaches learn to perform their work is difficult. The development of shared understandings of key terms is paramount to quality debate [10]. The process of 'languaging' is therefore important, because it is the subtleties and nuances of coach learning that are of great interest.

We know that there are some key principles through which we can evaluate the likelihood of a positive learning experience [32]. These include the level of intrinsic motivation (how satisfying, relevant and meaningful the experience is), the degree of ownership of the process (autonomy), the element of engagement (learning by doing), and the extent to which the learner has the opportunity to apply/make sense of the learning. In the context of paid work, Billett [16], who has made significant contributions to understanding adult learning in various vocations, has demonstrated that these aspects of agency are central to the learning that is possible. Similarly, the characteristics of the educational provisions such as the amount and quality of feedback, degree of accessibility and other invitational qualities are similarly critical to the learning that is and is not possible [16, 32]. Of prime interest is the complementarity of learning opportunities that contribute to coach development and the added challenge of recognising these varying contributions particularly for coach accreditation.

WHAT THE COACHING LITERATURE SAYS ABOUT COACHES' LEARNING

Several recent studies in Australia, Canada and the UK have highlighted that coaches' learning in recreational [e.g., 33], developmental [e.g., 1, 33, 34] and elite [e.g., 23, 29, 35] environments is sourced from many different learning situations. Formal coach education programs have been shown to make varying but often-limited contributions. Overall, these studies on coaches' learning have highlighted the significant contributions of informal learning experiences.

Coach learning research has recently been conducted in Australia with the elite coaches of the Queensland Academy of Sport [23] and Australian Football League [29]. The nature of these studies necessarily took a workplace learning focus and in doing so, particular attention was paid to the affordances made by the workplace (structure) and the agency of the coaches. In both contexts, the workplaces provided, and the high performance coaches accessed, a range of sources that could be considered to be formal, informal or somewhere in between. Even prior to their employment with these organisations, the coaches accessed a range of learning opportunities. However, it was the informal learning involved in performing their everyday work activities that made the greatest contributions to their ongoing development as coaches. It should be noted that this could not always be considered to be the optimal situation and was not always by choice. The volatile, guarded, and fundamentally competitive nature of elite coaching work meant that they were often unable to access sources of learning that they identified as being of potential value to their development.

Recent studies on how Canadian youth volunteer coaches learn [33, 34] revealed the same learning opportunities as with the elite coaches in Australia. The youth coaches in these

studies reported varying access to several different learning situations. Using Moon's notion of mediated and unmediated learning situations, Wright et al. [34] found that unmediated (unguided, informal) learning provided the largest contribution to youth ice hockey coach development. Both studies also supported the view that the lack of collegiality was a significant barrier to coaches' learning.

Some recent coaching literature has focused on situated learning [1, 23, 29, 36]. Situated learning [37] places emphasis on the contexts that construct and constitute learning. Central to this understanding about learning is the notion that we learn through our lived experiences from participation in everyday life. In Lave and Wenger's [37] original conception, situated learning was a type of informal education. However, it wasn't really incidental, more of a loosely structured informality. It seems clear in their examples that learning was 'intended' to take place, in that the examples were 'guided', and were consequently structured in delivery and intent. Mallett et al. [29] and Rynne et al. [23] in two studies with elite coaches reported that much of these coaches' learning was consistent with the notion of informal learning that was mostly unguided. Therefore, we perhaps need to add the word 'guided' or 'mediated'[15] to our vocational typologies. The term 'guided' [16] and the phrase 'mediated informal learning' implies that someone (e.g., master coach) other than the learner deliberately facilitates learning in an informal way. This needs to be distinguished from learning that is incidental. Just to muddy the waters, we might also conceptualise learning that is unguided, that is when learning is self-directed. In unguided learning, some learning is deliberate (e.g., trial and error) and other learning more incidental (that is, unplanned), but thought likely to happen (albeit uncontrolled and unstructured). Perhaps, we should consider the terms 'guided informal learning' and 'unguided informal learning', with the latter deemed to include 'incidental informal learning'. Further work and more widespread debate are needed to come up with a clear terminology. Of key interest is the question of how those in charge of coach accreditation can embrace and account for such valued learning.

WHAT ARE THE BENEFITS AND LIMITATIONS OF FORMAL AND INFORMAL LEARNING SITUATIONS?

It is possible to aggregate these deliberations about learning from formal, nonformal and informal situations into a series of advantages and disadvantages. There may also be something about coaching that lends itself to a more weighted balance between these varying learning opportunities. It might be argued that vocational, occupation-specific education is typically characterised by a period of prior learning through formal education that is accompanied by applied practice, and a period of practice leading to professional recognition. In the professions, a continuing status may be dependent upon a further series of formal courses and appropriate practice. There is no doubt that sport coaching fits the occupation-specific training example, but the national sport organisation awards on which recognition is based necessarily begin with a relatively minimalistic provision and may require a period of experience before subsequent levels of award (i.e., certification) may be achieved. That is, eligibility for participating in a higher coaching award (level of certification or accreditation) is typically contingent upon coaches coaching for a specified time (e.g., two years).

Formal learning opportunities have the advantages of being packaged, having access to experts, formal assessment procedures, quality assurance measures, and recognition of achievement. It has also been argued that traditional formal education (e.g., tertiary education) has the capacity to lead to the development of critical thinking skills. This is an aspect that has been shown to be vital to continued success for coaches, at least in the area of high-performance sports coaching [13, 22]. However, in relation to the learning principles

adduced earlier, the formal opportunities may lack context and meaning, and the level of individualisation may be limited. On the other hand, less formal opportunities through apprenticeships, mentoring, workshops, everyday coaching tasks, and the like, score highly on authenticity, meaning and contextualisation. Less formal opportunities may suffer from a lack of quality control, direction, feedback, and innovation. In addition and as alluded to previously, coaches may have difficulties accessing some opportunities due to the contested nature of sport at all levels [23, 29, 33, 34].

Informal learning opportunities, regardless of whether they are intended to be part of a wider program or not, may demonstrate benefits and limits. Coaches are at liberty to consult any or all sources of information to help them address their own specific coaching issues. However, as indicated earlier, in some workplaces someone may facilitate learning by offering varying levels of guidance. The limitations in such guidance can result from the lack of quality assurance of the information received and the inability of coaches to search for new information; coaches cannot search for information on that which is unknown. At one end of the continuum is the structured, mentored experience, which is characterised by direction, feedback and a measure of evaluation. At the other end of the continuum is the unguided or unmediated situation from which valuable learning may be acquired, but which lacks quality assurance or the development of understanding (although this can be overcome through appropriate analysis and reflection).

IS THERE A PREFERRED SEQUENCING OF LEARNING OPPORTUNITIES IN COACH DEVELOPMENT?

Developers of coach education programs should consider and recognise a range of learning opportunities in designing the curriculum and accrediting coaches. Furthermore, the sequence in which coaches engage with learning opportunities to facilitate coach development is worthy of some discussion. Based on the literature [14], we can say that most coaches have a common starting point: being an athlete. At this starting point, the learning that occurs might be considered to be predominantly incidental. From there, the learning pathway is idiosyncratic, which seems congruent with the concept of 'lifelong learning', a term that has recently replaced 'lifelong education' [3]. Should it be otherwise? If we take the learner's perspective, probably not, because the catalyst, capacity and motive to participate in a coach education program, attend a conference, or to meet with other coaches to discuss/debate coaching issues will depend on perceived benefits, instrumentality, the career trajectory of the coach, and what he or she may already know about the topic. In this case, it is not only the availability of a range of learning opportunities, but the willingness of the individual to engage that will determine the 'sequence' of learning [38]. Indeed, a consideration of the part the individual plays in all learning situations is an important component of more recent theorising [e.g., 23, 29, 38].

Recently, using Moon's [15, 39] generic view of learning, Werthner and Trudel [40] presented a new theoretical (coach's) perspective to understand how coaches learn to coach:

> The coach's cognitive structure is at the centre of this figure and will change and adapt under the influences of three types of learning situations. In mediated learning situations, such as formalized coaching courses, another person directs the learning. In unmediated learning situations, there is no instructor and the learner takes the initiative and is responsible for choosing what to learn. Finally, there are the internal learning situations, where there is a reconsideration of existing ideas in the coach's cognitive structure. [p. 199]

In the model suggested by Werthner and Trudel [40], the mediated learning situations will regroup all the formal and less formal learning situations; and the unmediated learning situations will be the informal/incidental learning situations. The third learning situation can be seen as a nice complement since it refers to the process of reflection without necessarily any external new material to consider; it is working 'within' or in other terms a 'cognitive housekeeping'. In all learning situations, the learner (re)produces knowledge, dependent upon the interplay between a coach's agency and the affordances provided.

Apart from incidental learning (about coaching) that often occurs during sport participation, there is little to support a preferred sequencing of learning opportunities. However, what we can say is that a range of learning opportunities should be afforded coaches and the differential relationship between a coach and those affordances will determine the learning that does and does not take place.

CONCLUSION

The requirement for appropriate and systematic regulatory processes to ensure quality assurance in coach accreditation has probably fuelled the debate between particular forms of education/learning (e.g., informal vs. formal), because of the challenge of how to measure and what to accredit in relation to less-than-formal learning situations. Coaches need to access varying educational opportunities (formal to informal) that facilitate learning and subsequent coach development. Therefore, a debate between formal and informal coach education/learning really has little value. It is not a matter of which form of education/learning is superior, but acknowledging the unique contributions all forms may make to coach development and accreditation. All education/learning situations should be valued for their contribution to coach development, which is a lifelong process.

The growing evidence available [1, 12, 23, 29, 33, 34] suggests that coaches 'feel' that more learning is taking place in the 'informal' setting (or at the very least that it is valuable). This may be occasioned by the element of social scaffolding, contextualisation, relevance of domain, recognition of individual role frame, and a number of the learning principles identified in the introduction. Distinguishing between different forms of learning (formal to informal) might be less helpful than acknowledging their varying contributions to coach development. It is not the false debate between formal versus informal education, but how and what coach accreditation recognises from less than formal education/learning situations that is the more significant challenge.

We can identify a number of statements that provide guidance for coach development:

- Guided or mediated learning can accelerate coaching knowledge (re)production and subsequent coach development. However, formal learning situations cannot deliver all key learning principles;
- Formal educational situations cannot encompass all of the experiential learning required to 'embed' learning;
- The potential disadvantages of informal educational situations can be ameliorated by elements of structured mentoring and learning contracts;
- The experiential element of learning can be moved from work experience to apprenticeship by adding a degree of structure, reflection, and evaluation;
- Formal education needs extensive and variable experiences to convert situated learning to understanding.

REFERENCES

1. Cushion, C. J., Armour, K. M. and Jones, R. L., Coach Education and Continuing Professional Development: Experience and Learning to Coach, *Quest*, 2003, 55, 215-230.
2. Lohman, M. C., Factors Influencing Teachers' Engagement in Informal Learning Activities, *Journal of Workplace Learning*, 2006, 18(3), 141-156.
3. Merriam, S. B., Caffarella, R. S. and Baumgartner, L. M., *Learning in Adulthood: A Comprehensive Guide*, Jossey-Bass, San Francisco, 2007.
4. Nelson, L. J., Cushion, C. J. and Potrac, P., Formal, Nonformal and Informal Coach Learning: A Holistic Conceptualisation, *International Journal of Sports Science and Coaching,* 2006, 1, 247-253.
5. Taylor, E. W. and Caldarelli, M., Teaching Beliefs of Non-Formal Environmental Educators: A Perspective from State and Local Parks in the United States, *Environmental Education Research*, 2004, 10, 451-469.
6. Coombs, P. H. and Ahmed, M., *Attacking Rural Poverty: How Non-Formal Education Can Help*, Johns Hopkins University Press, London, 1974.
7. Jarvis, P., *Towards a Comprehensive Theory of Human Learning*, Routledge, London, 2006.
8. Kirk, D., *Languaging Physical Education Teaching*, Presentation to the AIESEP/NAPEHE Convention, Atlanta, GA, 1990.
9. Postman, N., *Conscientious Objections: Stirring Up Trouble About Language, Technology and Education*, Heinemann, London, 1989.
10. Tinning, R., Pedagogy, Sport Pedagogy, and the Field of Kinesiology, *Quest*, 2008, 60, 405-424.
11. Dickson, S., *A Preliminary Investigation into the Effectiveness of the National Coach Accreditation Scheme*, Australian Sports Commission, Canberra, 2001.
12. Gould, D., Giannini, J., Krane, V. and Hodge, K., Educational Needs of US National Team, Pan American, and Olympic Coaches, *Journal of Teaching in Physical Education,* 1990, 9, 332-344.
13. Lyle, J., *Sports Coaching Concepts: A Framework for Coaches' Behaviour*, Routledge, London, 2002.
14. Trudel, P. and Gilbert, W., Coaching and Coach Education, in: Kirk, D., O'Sullivan, M. and McDonald, D., eds., *Handbook of Physical Education*, Sage, London, 2006.
15. Moon, J. A., *A Handbook of Reflective and Experiential Learning*, Routledge-Falmer, London, 2004.
16. Billett, S., Relational Interdependence Between Social and Individual Agency in Work and Working Life, *Mind, Culture and Activity*, 2006, 13(1), 53-69.
17. Abraham, A. and Collins, D., Examining and Extending Research in Coach Development, *Quest*, 1998, 50, 59-79.
18. Campbell, S., Coaching Education around the World, *Sport Science Review*, 1993, 2(2), 62-74.
19. Lyle, J., A Review of the Research Evidence for the Impact of Coach Education, *International Journal of Coaching Science*, 2007, 1, 17-34.
20. Bowes, I. and Jones, R. L., Working at the Edge of Chaos: Understanding Coaching as a Complex, Interpersonal System, *The Sport Psychologist*, 2006, 20, 235-245.
21. Fleurance, P. and Cotteaux, F., Construction de L'Expertise Chez les Entraîneurs Sportifs D'Athlètes de Haut-Niveau Français [French Expert Coaches' Construction of Expertise], *Avante*, 1999, 5(2), 54-68.
22. Mallett, C., Rossi, T. and Tinning, R., *AFL Research Report: Coaching Knowledge, Learning and Mentoring in the AFL*, The University of Queensland, Brisbane, 2007.
23. Rynne, S. B., Mallett, C. J. and Tinning, R., *Learning in the Workplace: High Performance Sports Coaching*, Presentation at the 2008 Association Internationale des Ecoles Superieures d'Education Physique (International Association for Physical Education in Higher Education) Congress, Sapporo, Japan, 2008.
24. Brennan, B., Reconceptualising Non-Formal Education, *International Journal of Lifelong Education,* 1997, 16, 185-200.
25. Hodkinson, H. and Hodkinson, P., Improving Schoolteachers' Workplace Learning, *Research Papers in Education*, 2005, 20, 190-131.

26. Billett, S., Workplace Participatory Practices: Conceptualising Workplaces as Learning Environments, *Journal of Workplace Learning*, 2004, 16, 312-324.

27. Boud, D. and Garrick, J., *Understanding Learning at Work*, Routledge, London, 1999.

28. Gilbert, W. and Trudel, P., Learning to Coach through Experience: Reflection in Model Youth Sport Coaches, *Journal of Teaching in Physical Education*, 2001, 21, 16-34.

29. Mallett, C. J., Rossi, A. and Tinning, R., *Relational Interdependence between Agency and Affordances in How AFL Coaches Learn*, Presentation at the 2008 Association Internationale des Ecoles Superieures d'Education Physique (International Association for Physical Education in Higher Education) Congress, Sapporo, Japan, 2008.

30. Marsick, V. J. and Watkins, K. E., *Informal and Incidental Learning,* Routledge, London, 1990.

31. Marsick, V. J. and Watkins, K. E., Informal and Incidental Learning, *New Directions for Adult and Continuing Education,* 2001, 9, 25-34.

32. Race, P., *Making Learning Happen: A Guide for Post-Compulsory Education*, Sage, London, 2005.

33. Lemyre, F., Trudel, P. and Durand-Bush, N., How Youth-Sport Coaches Learn to Coach, *The Sport Psychologist*, 2007, 21, 191-209.

34. Wright, T., Trudel, P. and Culver, D., Learning How to Coach: The Different Learning Situations Reported by Youth Ice Hockey Coaches, *Physical Education and Sport Pedagogy*, 2007, 12, 127-144.

35. Salmela, J. H., *Great Job Coach: Getting the Edge from Proven Winners*, Potentium, Ottawa, Ontario, 1996.

36. Cassidy, T., Potrac, P. and McKenzie, A., Evaluations and Reflecting upon a Coach Education Initiative: The CoDe of Rugby, *The Sports Psychologist*, 2006, 20, 145-161.

37. Lave, J. and Wenger, E., *Situated Learning: Legitimate Peripheral Participation*, Cambridge University Press, Cambridge, 1991.

38. Rynne, S. B., Mallett, C. J. and Tinning, R., High Performance Sport Coaching: Institutes of Sport as Sites for Learning, *International Journal of Sports Science and Coaching*, 2006, 1, 223-233.

39. Moon, J. A., *Reflection in Learning and Professional Development*, Kogan Page, London, 1999.

40. Werthner, P. and Trudel, P., A New Theoretical Perspective for Understanding How Coaches Learn to Coach, *The Sport Psychologist*, 2006, 20, 196-210.

Formal vs. Informal Coach Education:

A Commentary

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INTRODUCTION

In their article on formal vs. informal coach education, Cliff Mallett and colleagues share their collective wisdom on the very timely and important topic of coach development. This is an impressive and authoritative group of scholars who have actively shaped current research on coach development. As they note in their article, there are unprecedented efforts around the world to develop and revise coach education programs. Sport coaching is moving rapidly towards formal recognition as a legitimate profession accompanied by national or vocational standards and countless coaching degrees, courses, texts and instructional websites. Mallett and colleagues' article provides a much-needed opportunity to pause and reflect on key issues such as shared understandings of basic terminology and the structure of coach education.

HOW CAN COACH EDUCATION PROGRAMS RECOGNIZE COACH LEARNING?

The authors identify two purposes in their article. The first purpose is to present their collective understanding of the literature on coach learning opportunities, and the second purpose is to describe the contribution of this literature to coach accreditation and development. The first purpose is clearly addressed by answering four questions that are used to organize the article. It is not clear, however, that the second purpose is equally addressed. The article provides an insightful overview of current thinking about coach learning – how the terminology is defined, what research has been done, and what we can learn from related topics such as adult learning, reflection, and communities of practice. How, though, has this vast body of literature informed actual coach education initiatives? A more practical question that was left unanswered is how *should* this vast body of literature inform coach education? The authors repeatedly state that coach education developers "should consider and recognise a range of learning opportunities in designing the curriculum and accrediting coaches" (p. 331), but no suggestions are provided on how to do this. Perhaps it is beyond the scope of the present article, but how can the ideas presented by Mallett and his colleagues be applied? Is this not the ultimate purpose of this line of research and discussion – to create better educational experiences for coaches and to improve coach development? In their concluding section, the authors state that "all education/learning situations should be valued for their contribution to coach development" (p. 332), but the authors stop short of explaining how this idea can be operationalized. Given their collective expertise on the topics of coaching and coach education, it would be of great service to the field to hear their practical suggestions for how coach education programs can recognize coach learning.

FROM THEORY TO PRACTICE

As a coach education instructor who regularly dialogues with administrators of local and national organizations responsible for designing coach education and hiring coaches, what is the message that I can share with them based on this article and the collective body of work on this topic? From a practical perspective, how can a sport organization recognize all of the various types of learning (informal to formal) for millions of coaches? The research on coach development is unequivocal – learning pathways are idiosyncratic and coaches value informal learning experiences much more than formal learning experiences. The challenge is to move from research and theory to practical application. However, from my vantage point as a researcher I'm not sure we have conducted the appropriate type of research that will allow for effective application to coach education.

EFFECTIVE VS. INEFFECTIVE LEARNING

Despite the tremendous increase in research on coach development in the past decade [1], studies using comparison groups are scarce. One way to conceptualize research on coach development is from an expertise model (i.e., how do coaches develop coaching expertise?). Of course, at present coaching expertise itself lacks conceptual clarity and is therefore difficult to define. But, if we look for a moment at how practitioners in other domains learn how to perform their roles (teachers, athletes, musicians, surgeons, etc.), the research is dominated by comparison group designs that help illuminate *effective learning* from *ineffective learning*. Should we not be asking the same question for sport coaches? Should we not be designing research studies that examine how groups of effective (expert) and ineffective (non-expert) sport coaches experience the multitude of educational/learning situations? We know from the vast expertise literature that a key difference between experts and non-experts is that experts are willing to invest considerably more time in high-quality learning experiences [2, 3]. Why would the development of sport coaches be any different? This then leads to the fundamental, as yet unanswered, question; What constitutes deliberate practice in sport coaching?

PRIORITIZING DELIBERATE PRACTICE

Another key difference between experts and non-experts appears to be how they perceive an experience, in other words, what they *see* in an experience [2, 4]. Experts are able to identify and focus on the important (highly relevant) cues in a situation. This superiour perceptual and decision-making ability is developed through thousands of hours (at least 10,000) of deliberate practice. The implications of this for coach devleopment are twofold. First, given the accumulation of thousands of hours of comparable experiences [5-8], do coaches who go on to become expert coaches *see* different things in these experiences? Do they focus on different cues in these learning experiences that would then qualify the experience as deliberate practice, versus simply accumulating experience (and then assuming that incidental learning is occuring)? Put another way, do expert coaches learn how to become experts by seeing learning experiences in a way that counteracts automaticity, what Eriscsson would refer to as remaining in a cognitive/associative phase of learning [9]? Assuming for a moment that those coaches who become experts do see experiences differently, what then are the practical implications for coach education programs designers who are encouraged "to value all learning situations for their contribution to coach development"? The expertise literature tells us that all learning situations should not be valued equally – priority should be given to those that constitute deliberate practice. It is those types of learning experiences, or at the very least how coaches *see* those learning experiences, that will optimize the coach development process.

CONCLUSION

Mallett et al. have provided us with a much-needed opportunity to critically examine our knowledge and assumptions about coach education. Their article will surely stimulate much thought among coaching researchers and help bring some clarity to the complex topic of coach learning. However, I do believe that much can be gained by looking more closely at how research on teacher learning has been shaped in recent years by expert-novice research designs.

REFERENCES

1. Gilbert, W.D. and Trudel, P., Analysis of Coaching Science Research Published from 1970-2001, *Research Quarterly for Exercise and Sport*, 2004, 75, 388-399.
2. Hodges, N. J., Huys, R. and Starkes, J. L., Methodological Review and Evaluation of Research in Expert Performance in Sport, in: Tenenbaum, G. and Eklund, R. C., eds., *Handbook of Sport Psychology*, 3rd edn., John Wiley and Sons, Hoboken, NJ, 2007, 161-183.
3. Colvin, G. *Talent is Overrated: What Really Separates World-Class Performers from Everybody Else*, Penguin, New York, 2008.
4. Williams, A. M. and Ward, P. Anticipation and Decision Making: Exploring New Horizons, in: Tenenbaum, G. and Eklund, R. C., eds., *Handbook of Sport Psychology*, 3rd edn., John Wiley and Sons, Hoboken, NJ, 2007, 203-223.
5. Erickson, K., Côté, J. and Fraser-Thomas, J., Sport Experiences, Milestones, and Educational Activities Associated with High-Performance Coaches' Development, *The Sport Psychologist*, 2007, 21, 302-331.
6. Gilbert, W., Côté, J. and Mallett, C., Developmental Pathways and Activities of Successful Sport Coaches, *International Journal of Sports Science and Coaching*, 2006, 1(1), 69-76.
7. Gilbert, W. D., Lichktenwaldt, L., Gilbert, J. N., Zelezny, L. and Côté, J., Developmental Profiles of Successful High School Coaches, *International Journal of Sports Science and Coaching*, 2009, 4(3), 415-431.
8. Lynch, M. and Mallett, C., Becoming a Successful High Performance Track and Field Coach, *Modern Athlete and Coach*, 2006, 44(2), 15-20.
9. Ericsson, K. A., Development of Elite Performance and Deliberate Practice: An Update from the Perspective of the Expert Performance Approach, in: Starkes, J. L. and Ericsson, K. A., eds., *Expert Performance in Sports: Advances in Research on Sport Expertise*, Human Kinetics, Champaign, IL, 2003, 49-83.

Formal vs. Informal Coach Education:

A Commentary.

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INTRODUCTION

My initial thought when reading the title of the article upon which I am commenting, was that the focus on "formal vs informal" would contribute to the maintenance of the dualisms prevalent in the study and practice of sport. I was reassured somewhat when, in the objective, Mallett et al. stated they wished to make "some progress in the ongoing and often *sterile* debate about formal versus informal coach education/learning" (p. 326, italics added). To achieve their objective the authors divided the article into four sections. In this commentary, I focus my attention on the first two sections: a) What terminology should be used? and b) What does the coaching literature have to say about coaches' learning? The reasons why I have limited my commentary to these two sections is due to personal interest and because the authors concentrate their discussion on section a). What is more, the authors concluded that "there is little to support a preferred sequencing of learning opportunities" (p. 332) and "a debate between formal and informal education/learning really has little value" (p. 332) (which reflect sections d) and c), respectively).

WHAT TERMINOLOGY SHOULD BE USED?

One possible reason why the authors spent so much of the article discussing the above question could be because they identified a "lack of a clear and consensual terminology" (p. 326) to be a contributing factor in the inability to resolve the informal vs. formal debate. The lack of clarity of terminology is an issue in many areas of scholarship in the field of sports coaching [1, 2]. As such, I believe it is a worthwhile endeavour to encourage members of the sports coaching community to become more cognisant of the language they are using and the consequences of its usage. However, our energies need to be selective. Given the authors conclude that "a debate between formal and informal education/learning really has little value" (p. 332), I am not convinced of the merits of focusing so much attention on classifying the "modes of education", i.e., informal education, formal education and nonformal education and emphasising a framework proposed in 1974 by Coomb and Ahmed, especially when the latter authors equate "*education with learning*" (p. 327, italics original). Nonetheless, one possible benefit of drawing on the framework was that it prompted the authors to state "it is necessary to explore our understanding of the relationship between education and learning" (p. 326) and "perhaps we should distinguish between education and learning" (p. 327). I totally agree and would go even further to say that distinguishing between education, learning *and* development is an imperative for the progress of coach education and coach development.

Drawing on the work of Tinning, Mallet et al. correctly identify that "complete consensus regarding the terminology used to describe the ways in which coaches learn to perform their work is difficult" (p. 329). Nonetheless, they do acknowledge that developing "shared understandings of key terms is paramount to quality debate" (p. 329). One way of developing a shared understanding is to conceptually map the work that focuses on the range of ideas, concepts, theories associated with, for example, education, learning and development and how they are used in coach education. Colleagues and I have previously described the benefits associated with "mapping the conceptual territory" of coach education research (see [3]). Another way of developing a shared understanding is to ensure that when the terms are used, they are not used interchangeably. One possible reason for the terms learning, education and development being used interchangeably is due to the limited engagement with the wider educational, and associated, literature.

WHAT DOES THE COACHING LITERATURE HAVE TO SAY ABOUT COACHES' LEARNING?

I have previously noted [4] that while learning has had an ambiguous status in the coaching literature, in the last few years this is beginning to change for the better. I am excited about this, but also have some reservations when too much focus is placed on what the coaching literature says about learning, rather than drawing on the educational literature, or as with the case of Mallet et al., the workplace learning literature. When authors draw on secondary, rather than original, sources it can lead to the situation where a concept becomes misrepresented or taken out of context. I suspect this was the reason behind Culver and Trudel [5] writing an article entitled "Clarifying the Concept of Communities of Practice in Sport". In this article, they drew on original sources *as well as* research from within the sports coaching community.

In the first section of the article, Mallett et al. suggested that it was "necessary" for scholars in the coaching community to explore the relationship between learning and education and that it could be beneficial to "distinguish between education and learning" (p. 339). Unfortunately, when the opportunity presented itself in the second section, which focused on coaches' learning, such an exploration was absent. Rather, the focus of the discussion was on the "modes of education", a debate the authors had earlier identified as "sterile". The authors concluded the second section with another plea for more work to take place on clarifying the terminology used to understand how coaches learn. I suggest that in order to clarify the terms being used, and understand the relationship between the terms, it is first necessary to acknowledge the theories and assumptions that inform the terms being used.

The above suggestion is illustrated in the following example of two terms that are often used interchangeably in the coaching literature, namely learning and development. In order to understand the relationship that exists between these two terms, it is necessary to make explicit the theories and assumptions that informs our understanding of each term. For example, if development is viewed from a Piagetian standpoint then development is viewed as preceding learning [6]. However, if development is viewed from a Vygotsky inspired standpoint then the process of learning leads to development [7]. Given the potential for various relationships to exist between learning and development, I would argue that it is important that those designing for, and judging, coaches' learning need to be explicit about what theories and assumptions they hold regarding the relationship between coach learning and development so there can be a shared understanding of expectations. This is especially important if, as Mallett et al. suggested, a "key" question for the sports coaching community

is – "how those in charge of coach accreditation can embrace and account" for coaches learning? (p. 330). Clarifying the theories and assumptions that inform how key terms are used will only enhance the chances that the members of the sports coaching community will develop shared understandings, which in turn will increase the possibility of coaches being provided with quality learning opportunities.

CONCLUSION

On a number of occasions within the article, Mallett et al. raise the point about there being a need, within the sports coaching community, to work towards developing a shared understanding of key terms. I totally agree that this is a necessary endeavour. However, I am not convinced that the "modes of education", i.e., formal, informal and nonformal, are the most important key terms from which to begin this endeavour. I suspect the focus on the "modes of education" was a consequence of the authors having participated in a workshop, at the 2007 International Council of Coach Education Master Class, which had as its focus "Formal vs Informal Coach Education". If the members of the sports coaching community agree that there is some merit in developing a shared understanding of key terms, then a possible strategy at future International Council of Coach Education conferences could be to have a forum where members can identify some of the key terms. Once these terms have been identified, then the work can begin to develop a shared understanding by focusing on the theories and assumptions that inform the terms and how these influence the relationship the terms have with associated terms.

REFERENCES

1. Cassidy, T., Jones, R. and Potrac, P., *Understanding Sports Coaching: The Social, Cultural and Pedagogical Foundations of Coaching Practice,* Routledge, London, 2004.
2. Nelson, L., Cushion, C. and Potrac, P., Formal, Nonformal and Informal Coach Learning: A Holistic Conceptualisation, *International Journal of Sports Science and Coaching,* 2006, 1(3), 247-259.
3. Cassidy, T., Mallett, C. and Tinning, R., Considering Conceptual Orientations of Coach Education Research: A Tentative Mapping, *International Journal of Coaching Science,* 2008, 2(2), 43-58.
4. Cassidy, T., Coach Education or Coach Development: A Paradigm Shift or More of the Same? Proceedings of Korean Coaching Development Center 10th Anniversary Global Conference and International Council for Coach Education Asian Regional Coach conference, Hoseo University, Asan, South Korea, November 2008.
5. Culver, D. and Trudel, P., Clarifying the Concepts of Communities of Practice in Sport, *International Journal of Sports Science and Coaching,* 2008 3(1), 1-10.
6. Ginsberg, H. and Opper, S., *Piaget's Theory of Intellectual Development: An Introduction,* Prentice-Hall, New Jersey, 1969.
7. Vygotsky, L., *Mind in Society,* MIT Press, Cambridge, 1978.

Formal vs. Informal Coach Education:

A Commentary

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INTRODUCTION

The authors of this paper are some of the most qualified and respected scholars on formal and informal coach education, and the timing of the contribution seems perfect given the current discussion among sport governing bodies of the relative contributions of formal and informal education to coach education, and how informal education might be recognized in coach accreditation. The validation of both formal and informal educational processes as central to a coach's ongoing education has been documented in the cited literature and to my knowledge is not being disputed. However, the extent to which coach education should be designed as a formal program, and the degree to which informal education should be included in coach education and accreditation, is less clear and is the central question in this article. The question is important because the sport world is debating not only how to educate coaches, but also how to accredit coaches. Part of the debate revolves around whether coaches should or can be given credit for the informal learning that they are engaged in while they practice.

INFORMAL EDUCATION

The authors explain that: "The growing evidence available…suggests that coaches 'feel' that more learning is taking place in the 'informal' setting (or at the very least that it is valuable)" (p. 332). To make sense of the evidence, I suggest that the coach education curriculum has been designed for a multi-sport educational environment, and since coaches work almost exclusively in single sport environments there is bound to be a degree of incongruence between the coaches' interests and the formal course content. The coaches' preference for learner-directed informal learning may be because it leads more directly to the required knowledge and the resolution of the coaches' problems.

It would, in any case, be unreasonable to believe that formal education could ever surpass informal education in terms of the volume of information and experiences a person acquires in a career. A comparison of the number of hours, days, weeks, months and years that a person invests in informal learning should certainly give informal learning an advantage over formal learning in the amount of learning that takes place in that context. However, researchers in coach education have made the case that informal, sport-specific learning through means such as experience and reflection is less effective in the absence of the foundational knowledge that coaches receive through formal learning.

Informal knowledge leaves content to chance, depending upon the opportunities and circumstances within the context. Other professions do not appear to leave foundational

knowledge to chance, nor do they assume the students have the understanding required to create or control their own learning in an informal setting. While informal learning may be able to teach a coach everything they need, the total informality of the process would mean that we shall never know.

SUBSTITUTING INFORMAL FOR FORMAL

Informal learning is valued and formally recognized by coach education programs. Evidence of this is that coach education programs require informal learning through a practical component as part of the coach education process with only the extent of the mandatory experience being debated. Additionally, coaches seeking formal certification have been allowed to challenge some of the content in introductory coaching programs (rather than having to complete the introductory courses) in recognition that informal learning through prior experience as an athlete or as a coach, or prior formal but indirectly related education, may be equivalent to the content or learning provided in formal coaching courses. The opportunity to challenge the introductory content is supported by a recently conducted study that revealed that 70% of the coaches who were taking an introductory coaching course had already been coaching for more than two years, and 35% had been coaching for more than five years[1]. The same study provided empirical evidence showing a difference between coaches who enjoyed the introductory program and those who perceived it to be a waste of time and the difference was mostly related to the former having more experience as coaches or athletes. Clearly, at least at the introductory level, past experience as an athlete or a coach (defined here as informal learning) has been accepted as a reasonable substitute for formal education.

However, an extension and escalation of the argument for the recognition of prior experience is being seen in that experienced coaches would like to gain entry to postgraduate coaching programs or advanced formal coach education based on that experience and possibly without the normal undergraduate preparation or equivalent prerequisites. If this is allowed, we are accepting informal learning as separate from and equivalent to formal or nonformal learning. Support for this idea appears to be gaining momentum within some coach education bodies, but is being resisted in many post-secondary institutions. The authors make a compelling case that one form of learning should not replace another, but that coach education should require formal, nonformal and informal learning to complete a program. The authors argue that all of these learning strategies are valuable, and if so then why would we argue that one should replace rather than complement another?

I think the formal 'academic pursuit' is not exactly the same as, but complements, the 'applied pursuit' in both understanding and examining the foundations for commonly held beliefs and the examination of those beliefs. I believe in educating a coach to be a good learner and a good consumer of 'knowledge' and 'information' and not necessarily a person who is only equipped with applying the 'cutting edge' practices. The difference between understanding cardiovascular physiology and the ability to administer cardio-pulmonary resuscitation (CPR) is a good example. Presumably a person with knowledge of cardiovascular physiology can administer CPR, but a person with only the ability to administer CPR would not necessarily understand why what they are doing works, but they are good at doing it. Do they know the 'right stuff" and can they explain why it is right?

I think a complementary value of informal education also lies in the field tests of 'formal'. We know that great innovations arise from the field. In medicine, many innovations arise

[1]The research was conducted by the author under contract to the Coaching Association of Canada.

from military doctors in the field because, in the absence of anything to support 'accepted practice' they have to make it up and get on with it. From this, new techniques that are just as good as the old ones emerge. However, this comes from a foundational knowledge of what they are trying to accomplish and therefore makes them better problem solvers. They are able to improvise because they know what the function of the activity is and so are not chained to the application of a particular technique. I believe this is what the formal education provides.

ASSESSMENT

In the debate over the role of informal learning, assessment may be at the root of the answer. Educators commonly believe that assessment drives learning. Assessment in coach education, and the coaching profession, is often lacking. The authors state that: "Of key interest is the question of how those in charge of coach accreditation can embrace and account for such valued [informal] learning (p. 330)". When the educational process is informal, how do we judge whether learning has occurred? Is it adequate to take the position that a coach should be given credit for having learned something based only on a measure such as the number of years of experience they have and their own satisfaction with their coaching practice? What can we make informal learning "formal"? I would suggest that assessment is required to translate informal learning to formal accreditation. This is where the authors equate the experiential learning of coaches to apprenticeship and recognize the value of mentorship, accompanied by some measure of evaluation.

EMPLOYERS

While the authors have illustrated the importance of all types of learning, the reality is that national sport organizations (certainly in sports that have professional athletes) in many countries have hired national team coaches with professional athletic experience but no formal coaching education and certification. Professional sports have frequently chosen retired professional athletes as their coaches regardless of their educational qualifications. However, coach education and certification bodies have historically been critical of the disregard for formal education exhibited by these sport organizations. The reality, however, is that if those employing the coaches have little regard for a coach's formal education providing they have extensive coaching or playing experience, then the debate will be decided to some extent by the employers of the coaches. Coaches will pay particular attention to the hiring practices of employers and will prepare themselves accordingly. If employers appear to value formal education more highly than informal education, then coaches will pursue formal education.

As an example, very recently one of Canada's foremost research intensive universities hired an individual as a full-time head coach for an elite men's ice hockey program (in Canadian Interuniversity Sport) who does not hold an undergraduate degree in any field. The individual's reputation, experience and record as a hockey coach capable of consistently producing winners were seen to be a reasonable proxy for formal education in a sport organization in which an undergraduate degree would be a minimal requirement and a graduate degree would be preferred. The university in question, ironically, offers an undergraduate and a graduate program in coaching and their own hiring decision could be argued to work against the attractiveness of this program to other coaches with their sights set on similar jobs. On the other hand, this is surely good news for the proponents of the informal education process. The decision was not without its critics and must certainly be viewed in the hockey coaching world, and the world of coach education, as precedent setting.

Formal education clearly has its place, but informal education (as measured by coaching experience) may be more important to those hiring coaches. We will never know (due to the counterfactual argument) whether this coach, highly qualified in applied terms, might be even better with the foundational knowledge that is believed to come with an undergraduate education.

It may be that the definition of a coach and the delivery of coach education are too generic. Coaches dealing directly and solely with introductory-level athlete development (using coaching practices that are prescribed or formulaic) might require a different type of education from coaches who are expected to teach or mentor other coaches, or to function as a productive contributor to sport development. Coaches of high-performance athletes may need more formal education and the employers of coaches of professional athletes may be looking for coaches with more informal education derived from playing experience. It may be that some of these contexts can be served adequately by predominantly informal education.

A STERILE DEBATE?

The concern over what appears to be the coaches' preference for informality is being weighed against the benefits of a formal education. The authors make reference to this as a sterile debate, but if I am to interpret a sterile debate to be one which is not productive, I would like to argue that in fact the debate, including the authors' article, is very active and effective in changing the way we think and talk about coach education in many countries. Sterility may be at issue due to the lack of success that research has had in resolving the debate and to thereby impact practice in the domain of coach education.

It could be argued that scholarship has simply failed to arrive at any definitive answer as to how to educate coaches. Perhaps coaching researchers need to go back to some theoretical foundations on knowledge acquisition and really look at the contributions of formal and informal knowledge to performance excellence. I would argue that more research evidence of the connections between formal and informal experiences to 'success' is needed. The social and socio-cultural approaches to studying coach preparation and education are of value, but more progress toward answering some basic questions about knowledge acquisition might be made through the cognitive sciences which would complement some of the extant literature.

CONCLUSION

It may also be the case that we have not been successful in arguing that coaches need to be accredited in the same way as other professions, with formal education that includes experiential learning and rigorous assessment followed by some form of "apprenticeship" experience. As in every profession, the formal educational content may vary depending on the context, as is the case in most coach education programs. However, professional programs supplement rather than substitute formal education with informal learning. Both are needed. Many believe that formal education is required to legitimize a professionally certified group of individuals and that professionalization will never occur as long as informal education is accepted as a substitute for formal education and a better way for coaches to learn. Certainly the debate is not sterile.

Formal vs. Informal Coach Education:

A Commentary

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INTRODUCTION

Mallett et al. offer an insightful discussion of the various forms of learning opportunity (formal, non-formal and informal) open to sports coaches. They compare these forms of opportunity in terms of the degree to which they might be structured and guided (and so open to professional accreditation) and their significance in contributing to the development of coaching expertise. In doing so, they highlight the training conundrum posed to the coaching profession by non-formal and informal learning opportunities, which can be experienced as highly meaningful by coaches but are widely variable in quality and not readily amenable to accreditation. They argue that coaches at all levels of professional development can benefit from access to all of these forms of learning. They conclude by offering some proposals for enhancing the quality, and structuring, of coaches' learning in less-than-formal settings.

Their article touches on a dilemma faced by all professions; namely, how to ensure that accreditable standards of performance are maintained while allowing professional members the freedom to design and pursue personalised career trajectories. It is this tension between institutional and individual control over professionals' learning that I wish to explore here. To begin with, I will consider some relevant theoretical perspectives drawn from the contemporary literatures on workplace learning (WL) and organisational learning (OL). I will then refer to relevant literature on professionalisation, before considering the implications of these various bodies of literature for coach education.

THEORISING WORKPLACE LEARNING

The contemporary literature on WL draws heavily on Lave and Wenger's [1] seminal work on situated learning and 'communities of practice'. A primary concern of writers in this field is to identify the features of work settings that might be conducive to rich and meaningful learning, and Mallett et al. draw on this literature very effectively in formulating their argument; for example, when they refer to the need to structure learners' ownership, engagement and opportunities for sense-making, and to on-the-job learning initiatives such as apprenticeships. However, what I want to consider here is how this literature theorises individual learners' trajectories. Authors who have explored this issue include Fuller and Unwin, who distinguish between 'expansive' and 'restrictive' learning environments; that is to say, work settings that are either highly conducive or minimally conducive, respectively, to workers' learning [2]. This expansive-restrictive dichotomy is worth exploring here, because of its emphasis on learner choice and independent learning. Fuller and Unwin characterise expansive learning environments as those which offer learners: a wide variety

of learning experiences, including opportunities to explore multiple communities of practice and opportunities to reflect on personal learning; a choice of routes to attaining mastery; transparent and extended forms of career progression, leading to ‘rounded’ rather than ‘partial’ expertise; and organisational recognition of individual learners’ desire for autonomy, reified in systems and procedures designed to align individual and organisational learning goals. In contrast, they tell us that restrictive working environments offer learners: a limited range of learning experiences and learning pathways; limited career progression; and a requirement that workers subjugate personal learning priorities to those of their organisation. They suggest that such restrictive settings will lead to the development of narrow and incomplete forms of expertise, in which employees become proficient in routine, day-to-day tasks, but remain only partial masters of their craft, and have only limited interest in further learning. Other writers on WL have explored the ways in which individual learners negotiate, or fail to negotiate, opportunities to direct their own learning. For example, this issue has been discussed by Hodkinson and Hodkinson [3] who emphasise the need to acknowledge individuals’ personal perspectives on what and how they want to learn, arguing that the institutional structuring of learning opportunities may run counter to such learning dispositions and so be potentially demotivating for many learners (see also [4, 5]).

This body of literature would seem to offer confirmation for an important point made by Mallett et al. in relation to sports coaching; namely, that the route to expertise is likely to be via idiosyncratic and learner-directed learning pathways (for further confirmation, see [6]). It also suggests that, while the close specification of a curriculum might be an effective means of standardising performance for accreditation purposes, it may not necessarily be a route to performance excellence. Conclusions can be drawn, also, about the ways in which workplaces might be structured to promote workers’ learning. For example, Fuller and Unwin [2] recommend that: named individuals should be assigned to watch over learners’ progress; workers should be encouraged to reflect on their personal learning; and they should be allowed to gain a wide range of work experiences, including access to alternative communities of practice. However, situated learning theory is inclined to be aspirational in tone, and it is arguable that the WL literature under-represents the difficulty of structuring learner emancipation in the face of institutional power relations [7, 8]. Indeed, Mallet et al. make this point themselves when they refer to the high levels of competitiveness among sports coaches and the problems this poses for structuring collaborative learning. To obtain a clearer picture of what might be achievable in sports coaching, it is instructive to turn to the literature on OL, where we find greater emphasis on issues of power and control. In doing so, attention will be paid to writers who have drawn on Elias’s figurational theory of social development [9], which may offer us a means of conceptualising the power relations between coaches and their sport’s national governing bodies.

THEORISING ORGANISATIONAL LEARNING

Elias was concerned to explore the reflexive interplay of social practices and societal power relations. While his primary interest lay in charting the development of societies over very long time spans, his ideas are equally applicable to social groups of all forms and sizes, and therefore offer an alternative theoretical perspective on experiential learning. From an Eliasian perspective, organisations are seen as conflictive bodies, composed of individuals and groups who are bound to one another in complex networks (or figurations) of interdependence. The power relations within figurations are assumed to be in permanent states of tension, as individuals and groups work continually to lessen their dependence on one another and improve their relative social positions. Writers who have applied Elias’s

ideas to OL view employee development as the working out of figurational tensions. Consequently, when they intervene formally in learning processes, they begin by mapping the figurations within which learners are located before seeking to design interventions that are compatible with, and take advantage of, existing power relations. For example, Stacey [10] has considered how organisations might promote learning among senior managers, a professional group who, like sports coaches, work in highly contested settings. He stresses the need for facilitators to build learners' security and trust by guaranteeing confidentiality and, where necessary, working with them on a one-to-one, rather than a collective, basis. In contrast, Mastenbroek [11] has written about organisational development strategies. He argues that, while an organisation's managers need to promote interdependence amongst their staff (since this is necessary for their collective success), its employees are likely to be continually pulling against such interdependence as they work to improve their personal power opportunities. Consequently, he suggests, managers must try to achieve a 'balanced articulation' [11, p. 56] between structuring worker interdependence and allowing worker autonomy. Mastenbroek suggests that this is best achieved through an integrated set of design measures. For example, closer interdependence can be promoted through strategies such as: minimising organisational hierarchies, introducing forms of horizontal job rotation and structuring forms of co-operative working. Meanwhile, worker autonomy can be promoted by ceding control over ways of working to departments and teams, while at the same time setting goals and monitoring outcomes, and ensuring that key decision makers remain within lines of managerial responsibility. In this way, he suggests, managers can maintain light-touch control over the activities of a workforce, while harnessing its members' autonomy for their organisation's benefit.

There are some obvious parallels between the Eliasian perspective and that of situated learning. For example, in both cases, we are presented with a theorised tension between institutional and individual development. There are identifiable similarities, too, between the learning solutions implied by the two perspectives. For example, job rotation (a Mastenbroek proposal) appears analogous to the crossing of boundaries between communities of practice (as suggested by Fuller and Unwin). However, as we have seen, Eliasian theory gives more consideration to the ways in which organisations can retain strategic control over individuals' learning. Applied to the particular case of sports coaching, it suggests that the introduction of initiatives such as mentoring and learning contracts would need to be accompanied by the monitoring of learning outputs (possibly through the submission of continuing professional development records) and some structured (albeit light-touch) means of keeping those charged with coaches' support and guidance, such as mentors, within the profession's sphere of influence (this might imply the need for training and licensing arrangements). However, the question of who might take such strategic control over coaches' workplace learning is a difficult one to answer. Currently, outside of Higher Education, and in the absence of an overarching governing body for the profession as a whole, coaches' conditions of work are governed by individual sport governing bodies, for whom this may not be a high priority.

THEORISING PROFESSIONALISATION

Further lessons can be drawn from the literature on professionalisation, which is heavily influenced by Eliasian theory [12]. Here, there is general agreement that, in the interests of enhancing their social power (for example, in the form of social influence, wealth and employability), professions need to build and protect specialist areas of knowledge and skill [12, 13]. As we know, they seek to achieve this by developing integrated systems for

educating and assessing their members. In so far as they share their profession's ultimate goals (of remuneration, influence, etc.), it is reasonable to expect that their members will submit to such rigorous training and will subsequently seek to maintain high standards in their professional work. However, we know that not all will do so, and (so the Eliasian argument goes), to uphold their professional standards, governing bodies also need to find ways of controlling members' behaviour, hence their use of disciplinary mechanisms to enforce codes of practice and, increasingly, their monitoring of members' continued professional development. Even so, it may not be in a profession's strategic interests to prescribe members' learning and working too closely, since, once a profession's specialist knowledge and skill are clearly codified and open to public inspection, it becomes possible for other occupational groups to claim them for themselves. For example, it seems that this is currently happening in the accountancy and medical fields [14, 15]. Consequently, professions may be best advised to keep a proportion of their specialist curriculum 'indeterminate' [14]; that is to say, as uncodifiable knowledge and skill that can only be acquired experientially, through members' everyday participation in practice.

THE CASE OF SPORTS COACHING

So what are the implications of these various bodies of literature for sports coach education? It currently faces many challenges. As Mallett et al. point out, many coaches are unpaid volunteers, often with other full-time jobs, who may not want, or be able to afford, lengthy formal training, or be looking for career progression. As a result, certified training is often shorter than ideally desired, and is designed to extract maximum benefit from trainees' on-the-job learning. At the same time, many of the collaborative forms of intervention that might be employed to give structure to experiential learning settings, such as structuring action learning sets or communities of practice, are likely to have only a limited appeal to trainee coaches because of the competitive nature of their work. The literature on professionalisation implies that, while professions need to monitor members' learning, it may not be advisable for them to do this too thoroughly. Situated learning theory reminds us that, in structuring learning initiatives, it is important to take individuals' choice and aspirations into account. Eliasian theory stresses the need to find a balance between structuring interdependence between colleagues and promoting worker autonomy. It also reminds us of the need to work with, rather than against, existing power relations. What we have here, then, are a series of arguments in favour of setting coaches agreed standards for accreditable learning whilst at the same time encouraging them to learn in idiosyncratic, independent ways. The first of these objectives is unremarkable, since this is what contemporary coach education is largely about, but the second may appear counter-intuitive. However, there may be much to be gained by the profession if they can work with, rather than against, coaches' competitiveness. For example, competitive coaches who are looking to forge professional careers are highly motivated to learn. It can be argued, also, that their idiosyncratic and independent learning trajectories may be a very suitable form of preparation for the complex, context-dependent and pressured forms of work that many will eventually come to engage in [6, 16, 17].

But what forms of structured learning intervention might be best suited to independent learners? Two possibilities come to mind, both of which are referred to briefly by Mallett et al.: promoting coaches' capacity for reflection on personal learning (Mastenbroek would view this as promoting their capacity for autonomous working) and the use of mentoring programmes (this would be seen by Mastenbroek as building professional interdependence). These two forms of intervention, and their respective strengths and weaknesses, will now be considered in turn. While it is not yet commonplace in sports coaching, the requirement that

professionals should take time out to reflect on personal learning is now established in many professions; for example, nursing, counselling and forms of applied psychology. However, training in reflective practice may offer benefits to coaches. Knowles [18, 19] suggests that it assists in the building of key knowledge and skills, that it improves self awareness, and that it may also offer a means of helping newly certified coaches to engage with the realities of their everyday professional work. However, on the debit side, it seems that coaches find the practice time-consuming and may be less likely to engage in it if working in isolation [19]. In contrast, mentoring by senior members of the profession is a well-established – though still often informal – development activity in sports coaching. Research indicates that coaches value the opportunity to discuss work problems with professional role models, and that mentoring improves their self-confidence, creativity and capacity for independent thinking [20]. Potentially, it also offers coaches a way to build professional contacts, reduces their isolation and enhances their professional loyalty. To work effectively, however, mentoring has to be built on a relationship of mutual trust and respect. Formalising such relationships therefore presents problems, since the compatibility of mentor and protégé cannot be guaranteed. Furthermore, there is evidence from professions that have introduced compulsory forms of mentoring to suggest that mentor-protégé relations can be characterised by an analogous form of expansive-restrictive dichotomy to that identified by Fuller and Unwin [21]. There is an ever-present risk, therefore, that protégés can find themselves in uncongenial and unhelpful mentoring partnerships. Evidently, neither form of intervention would be problem free. Nevertheless, if used in combination, they could offer the coaching profession a means of achieving a balanced articulation between the interdependence and autonomy of its membership. However, as Knowles [19] points out, to bring them into use across the board as a standard feature of coaches' lifelong learning might be difficult in the absence of an overarching regulatory body.

CONCLUSION

It has been argued here that there is value both in structuring and accrediting sports coaches' learning and in promoting their idiosyncratic routes to mastery. It is suggested that, while situated learning theory has much to offer, in its prioritising of coaches' learning through working, it is also important to consider the power relations of their work settings. Here, Eliasian theory is of value, and suggests that learning interventions need to be tailored to the power relations operating at both micro and macro levels within the profession. In particular, there seems to be a need for intervention strategies that work with the competitiveness inherent in the sector rather than against it. Particular ways forward may lie in the promotion of reflective learning, on the one hand, and structured mentoring programmes, on the other. Both of these initiatives hold out the promise of enhancing coaches' lifelong learning. However, opportunities for putting them into effect may be limited in the absence of formal regulatory mechanisms.

REFERENCES

1. Lave, J. and Wenger, E., *Situated Learning: Legitimate Peripheral Participation,* Cambridge University Press, Cambridge, 1991.
2. Fuller, A. and Unwin, L., Learning as Apprentices in the Contemporary UK Workplace: Creating and Managing Expansive and Restrictive Participation, *Journal of Education and Work*, 2003, 16(4), 408-426.
3. Hodkinson, H. and Hodkinson, P., Improving Schoolteachers' Workplace Learning, *Research Papers in Education*, 2005, 20(2), 109-131.

4. Billett, S., Relational Interdependence between Social and Individual Agency in Work and Working Life, *Mind, Culture and Activity*, 2006, 13(1), 53-69.

5. Perkins, D., Jay, E. and Tishman, S., Beyond Abilities: A Dispositional Theory of Thinking, *Merrill-Palmer Quarterly*, 1993, 39(1), 1-21.

6. Werthner, P. and Trudel, P., A New Theoretical Perspective for Understanding How Coaches Learn to Coach, *The Sport Psychologist*, 2006, 20(2), 198-212.

7. Contu, A. and Willmott, H., Re-Embedding Situatedness: The Importance of Power Relations in Learning Theory, *Organization Science*, 2003, 14(3), 283-296.

8. Owen-Pugh, V. A., Theorizing Sport as a Community of Practice: The Coach-Athlete Relationship in British Professional Basketball, in Hughes, J., Jewson, N. and Unwin, L., (eds), *Communities of Practice: Critical Perspectives*, Routledge, London, 2007.

9. van Iterson, A., Mastenbroek, W., Newton, T. and Smith, D., eds., *The Civilized Organization: Norbert Elias and the Future of Organization Studies,* John Benjamins Publishing Company, Amsterdam, 2002.

10. Stacey, R. D., *Strategic Management and Organisational Dynamics: The Challenge of Complexity*, 4th edn., Pearson Education Ltd., Harlow, 2003.

11. Mastenbroek, W. F. G., Organizations as Parties in a System: A Concept and its Practical Relevance, *Research in the Sociology of Organizations*, 1991, 9, 49-78.

12. Johnson, T., *Professions and Power*, Macmillan, London, 1972.

13. Kirkpatrick, I. and Ackroyd, S., Archetype Theory and the Changing Professional Organization: A Critique and Alternative, *Organization*, 2003, 10(4), 739-758.

14. Currie, G., Finn, R. and Martin, G., Professional Competition and Modernising the Clinical Workforce in the NHS, *Work, Employment and Society,* 2009, 23(2), 267-284.

15. Armstrong, P., Changing Management Control Strategies: The Role of Competition between Accountancy and Other Organisational Professions, *Accounting, Organisations and Society*, 1985, 10(2), 129-148.

16. Mallett, C. and Côté, J., Beyond Winning and Losing: Guidelines for Evaluating High Performance Coaches, *The Sport Psychologist*, 2006, 20(2), 213-221.

17. Bowes I. and Jones R. L., Working at the Edge of Chaos: Understanding Coaching as a Complex Interpersonal System, *The Sport Psychologist*, 2006, 20(2), 235-245.

18. Knowles, Z., Borrie, A. and Telfer, H., Towards the Reflective Sports Coach: Issues of Context, Education and Application, *Ergonomics*, 2005, 48, 11, 1711-1720.

19. Knowles, Z., Tyler, G., Gilbourne, D. and Eubank, M., Reflecting on Reflection: Exploring the Practice of Sports Coaching Graduates, *Reflective Practice*, 2006, 7(2), 163-179.

20. Bloom, G. A., Durand-Bush, N., Schinke, R. J. and Salmela, J. H., The Importance of Mentoring in the Development of Coaches and Athletes, *International Journal of Sport Psychology*, 1998, 29, 267-281.

21. Gazzola, N. and Theriault, A., Super- (and Not-So-Super-) Vision of Counsellors in Training: Supervisee Perspectives on Broadening and Narrowing Processes, *British Journal of Guidance and Counselling,* 2007, 35, 2, 189-204.

Formal vs. Informal Coach Education:

A Commentary

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INTRODUCTION

Mallett et al. present an engaging account on a topic, which, I agree, can be considered ‘sterile’. The nub of their critical perspective on professional delivery issues seems to be about utility. The contributors to the ICCE Master Class in Beijing clearly identified with different elements of the respective approaches. Individuals seeking coach education may be similarly fragmented. Ultimately this means that the appeal of respective approaches will depend on how clearly programmers express the utility of their programmes for meeting coaches’ interests, whether in sport or business, with novices, intermediates or experts. Systems providing coach education must walk the particular tight-rope that meets both individual and system needs.

A DEBATE ABOUT UTILITY AND LOCALITY

The debate emphasises that locality influences learning. Given this understanding, it is surprising then that the *power* of context, *aka* ‘localism’, seems to have been broadly consigned to the publication bin marked ‘recognised but assumed to be a second-order issue’. Clearly this is not what some ICCE discussants thought.

Perhaps with a dual concern for ‘standards’ and for ‘quality control’ (potentially dubious concepts in their own rights) formal educational approaches, based in Higher Education, have typically emphasised their theoretical, and often policy, contributions. Often, but not universally, this was (and is) done very well. At the same time, we must also recognise that some have aggressively denied any involvement in, or responsibility for, practical – or contextual – application. Yet, this situation is changing. What was previously termed ‘applied’ has been repackaged as, for example, ‘situated learning’ or as reflecting ‘communities of practice’. These reformulations are increasingly seen as having created viable domains for the newly redefined systems of Higher Education to show that their (formal?) scholarship has worth and relevance in applied/community settings [1].

This development has a history which should not be overlooked, not least because it may uphold anachronistic and distorted views of any approach. With coaching as a subject area, context may have been avoided because of the level of complexity it introduced. Complexity produces uncertainty, which in turn stalls ‘doing’ in favour of (seemingly inactive) ‘thinking’. The term ‘paralysis by analysis’ summarises the least helpful expression of this understanding. Where underpinning ‘science’ was unable to create substantive levels of predictability, as in the early days of coaching, this weakened the position of this field among so called ‘serious academics’. This may also help to explain why informal/nonformal venues

more willingly took up the slack. Yet, these types of fragmentation do not seem to have served coaching science well (whether we understand this as a basic, applied or a social science); theory and practice remain awkward bedfellows and the debate seemed to emphasise this estrangement.

CONFLICTING IDEAS ABOUT UTILITY

In formal programmes, it is potentially easier to identify that standard systemic concern; return on investment. Overlap this with concerns for coach accreditation and quality control, and the nature of the elephant in the room starts to become clear. Such issues matter when investment becomes scarce. Yet, organisations may prefer in/nonformality because the scale of investments are often hidden (by dint of only rarely being recorded). Here, negative motivations may be: i) to avoid acknowledging high costs and investments (as in volunteer sports coaches); and/or ii) to allow assumptions of higher-than-actual investments. Such issues operate with considerable potency at the individual and systemic levels.

In my experience, expectations for change are often unrealistically large when informal educational approaches are the sole approach. Even allowing for different motivations, informality makes outcomes less predictable, even though they may be very powerful. In business, the maxim that 'What gets measured gets done' holds considerable weight. For mandated issues; e.g., codes of practice or new legislative requirements, these may favour traditional educational environments because they can ensure and record exposure if not responsiveness. However, what is the value of exposure if inappropriate, ineffective or even harmful behaviour continues? Clarity about the scale of change that results from different interventions seems to be at the heart of debates about utility. Within that debate are further issues regarding who must meet the costs of such programmes, what income streams that 'education' might interrupt, and what expectations are created for those who meets these costs.

Unlike informal/unformal approaches, the formal approach might also be endorsed – perhaps to the point of lacking spontaneity or responsiveness – for actively discriminating over what qualifies as 'information', and as important 'actionable information'. Equally, informal/unformal approaches, like autobiographies of coaches, or business leaders may well house important lessons, but their veracity can also be questioned. Using the recent UK example surrounding Brian Clough, mercurial soccer manager in the 1980s, the book *The Damned United* [2] details practices that would stand no scrutiny in any evidence-based coach education climate. Many autobiographical accounts can also be seen as hagiographic and self-serving. Today's economic climate will cast a similar pall over much of what that popular business and organisational literature endorses too. Among others, peak-end theory [3] helps to interrogate retrospective accounts, especially those relying on both recall and self-report. In either domain, what price power, efficiency (including the removal of redundant themes), authority, influence, coherence, authenticity, integrity and sincerity?

(DIS)ENGAGEMENT MATTERS

Any learner's preferences for communication style and for rates or areas of progression, may differentiate leanings toward any approach. Preferences for close, perhaps even one-to-one relationships with known specialists, might favour informal approaches. Often, meeting these preferences in the early stages of engagement will be more important than what follows in terms of student (dis)engagement.

However, because of their growing flexibility, most formats can lay claim to the self-determined and anonymous learning that emerges through reading, electronic searching and,

possibly, to the serendipity of witnessing vicarious exchanges. Carefully-crafted scenarios also offer the opportunity for *in situ* feedback on coaching practice, perhaps based on peer observation. Wherever it occurs, the timing and depth of observer engagement, the quality of feedback and follow-up to responses to feedback are what matter in changing behaviour. In medical consultants, whose development is often characterised as learning-on-the-job, change in professional practice was attributable to three styles of in-service learning: i) personal interactions with influential others; ii) specific recommendations from an important journal; and iii) the 'drip-drip' effect of accumulating evidence [4].

Coaches, or aspirant coaches, who prefer on-the-job education, or training, do so because it helps them to learn the nuances of working (possibly under realistic forms of pressure) with performers in context. For others, learning new practices, for example, may be best integrated – in a 'suck-it-and-see' approach – into their daily successes. Indeed, the relative appeal of any approach may stem from the emotional intensity (not to say complexity) that individuals may want to experience or handle. Hitherto many formal educationalists have eschewed any notion that emotion has any part to play in their educational concern. For them, the uniqueness of each given situation is precisely what drives their interest in coaching processes rather than in those being coached or doing the coaching. More recent theoretical developments in education, including Broaden and Build theory [5, 6] increasingly accept that emotional experiences are at the core of personal growth, including in the workplace [7]. In part, this explains the growing interest of formal educational approaches for mandating practice placements.

Mallett et al. also point to a number of challenging semantic issues regarding definitions. Perhaps it may be useful to consider some other issues rather than trying to clear water that is irretrievably muddied? For example, Shinn and Toohey [8] offer a useful set of comments that might also be helpful here. Their frame of 'multifinality' (where individuals start in the same place yet end in diverse end points) and 'unifinality' (individuals from many different places yet arrive at the same endpoint) seems to capture the exquisite complexity of the gordean knot that is 'Education and learning'. Equally, perhaps ideas of levels of professionalism should be reconsidered? For example, in Education, Hoyle has long used the term 'professionality' to distinguish those who are either subject- or learner- oriented (e.g., [9]). This may be another helpful framework for refining delivery, however it is differentiated.

WHAT NEXT?

A smart approach, surely, is to capitalise on the utility of the different approaches, not least because for many potential candidates, only one option is reasonable or even possible. Neither can all systems offer both options; institutional guardians face the challenge of demonstrating a commitment to their employees' development (in business/organisational scenarios), while also wanting to improve local performance. Although these are relatively short-term concerns, researchers need to refine their longer-term capacity to predict what will optimise sequences of individual development.

For all these reasons, the respective strengths of the respective delivery approaches need to be optimised. For example, on-the-job learning can be limited by the range of practices from which to learn. This underlines the value of moving between learning contexts, being clear about the specialist learning that can occur in each, and learning about optimal timing and exposure. New research will more clearly identify how the setting and the delivery specifics interplay in pursuing specific coaching outcomes and behaviours.

Unsurprisingly then, for better balance, a stronger focus on empirical and experiential

studies should address two core notions; 'What works at all?' and then 'What works best?' Although randomised controlled trails (RCT) offer an ideal response, the practical issues of comparing say, a formal with an informal programme, fundamentally changes how each is normally delivered. The impracticality of assigning coaches to specific delivery approaches also denies that delivery in the field is typically self-correcting and innovative [10], with techniques being adopted as needed [11]. This would undermine the scale of researcher control needed to successfully execute the RCT design; imagine the difficulty of characterising an informal delivery approach so that it could be replicated once the trial is completed. Yet, there remains a need to identify programmes' most 'active ingredients'. Many of the features that appear in such analyses in workplace health promotion also characterise educationally-oriented interventions, meaning that existing examples might provide useful templates, at least in the early stages of this endeavour.

We must also be cautious about over-investing in any single form of evidence about utility and value. Qualities like joy, personal growth, wisdom, resilience and human flourishing all need to be both celebrated and valued as much as hard outcomes as they are for structuring subjective accounts of experience. Here, after all, is where the 'ordinary magic' [12] coaching and of living as a coach may lie. On the other hand, we need to be wary of the unorthodox, especially when it seems to heighten achievement. When unorthodoxy supports behaviours that directly contravene expectations regarding ethics, investment, trust, transparency and/or organisational justice, then problems are incubating.

CONCLUSION

My final thought relates to the complimentary nature that formal and in/nonformal approaches might confer. To pursue this further, we can challenge the assumption that formal learning provides the essential bedrock on which to base tacit, performance-based, insights. This is made even more complex when we consider the previous experience of learners, both in terms of coaching and education. My expectation is that an integrated research approach that does not initiate a falsity about pre-existing coach education will ultimately highlight the inseparability of many of such factors. This may even support the conclusion that a 'horses for course' approach may be the best way to improve the outcomes of modern-day coach development.

REFERENCES

1. Boyer, E.L., *Scholarship Reconsidered: Priorities of the Professoriate*, The Carnegie Foundation for the Advancement of Teaching, New York, 1997.
2. Pease, D., *The Damned United,* Faber and Faber, London, 2006.
3. Kahneman, D., Objective Happiness, in: Kahneman, D., Diener, E. And Schwartz, N., eds., *Well-Being: The Foundations of Hedonic Psychology*, Russell Sage, New York, 1999, 3-25.
4. Armstrong, D., Reyburn, H. and Jones R., A Study of General Practitioners' Reasons for Changing their Prescribing Behaviour, *British Medical Journal*, 1996, 312, 949-952.
5. Fredrickson, B.L., The Role of Positive Emotions in Positive Psychology: The Broaden-and-Build Theory of Positive Emotions, *American Psychologist*, 2001, 56, 218-26.
6. Fredrickson, B.L. and Losada, M.F., Positive Affect and the Complex Dynamics of Human Flourishing, *American Psychologist*, 2005, 60, 678-86.
7. Jackson, D., Firtko, A. and Edenborough, M., Personal Resilience as a Strategy for Surviving and Thriving in the Face of Workplace Adversity: A Literature Review, *Journal of Advanced Nursing*, 2007, 60, 1-9.
8. Shinn, M. and Toohey, S.M., Community Context of Human Welfare, *Annual Review of Psychology*, 2003, 54, 427-459

9. Hoyle E., Professionality, Professionalism and Control in Teaching, *London Education Review*, 1974, 3, 13–19.
10. Rimer, B.K., Glanz, K. and Rasband G., Searching for Evidence about Health Education and Health Behaviour Interventions, *Health Education and Behaviour*, 2001, 28, 231-248.
11. McKenna, J. and Davis, M., The Problem of Behaviour Change, in: Weitkunat, R., Moretti M. and Kerr, J., eds., *ABC of Behaviour Change*, Elsevier, London, 2004, 29-40.
12. Masten, A.S., Ordinary Magic: Resilience Processes in Development, *American Psychologist*, 2001, 56, 227-38.

Formal vs. Informal Coach Education:

A Response to Commentaries

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INTRODUCTION

The commentaries we received represented diverse perspectives and convinced us that the debate we had begun was far from sterile. Not only was the debate relevant to an emerging professionalisation of sports coaching, but colleagues provided excellent insights and identified a number of ways in which the debate should be taken forward. We are pleased to have the opportunity to respond to some of these issues. In the period since submitting our paper, we have each been involved in coach education and development initiatives. One of these was a request from a National Sporting Organisation (NSO) for assistance in giving formal recognition to its senior coaches' *in situ* experience. The coaches felt that they were learning from this experience, and the NSO wished to 'convert' this to accreditable licensing points. This brought home to us the relevance of the debate. In our article we labelled the debate sterile because we felt that the dislocation of the scientific knowledge taught to coaches on one hand, and tacit knowledge developed through experience on the other hand, was not being informed by a consideration of the advantages and limitations of each, and how they might complement each other. Similarly, acknowledgement of the challenges of providing system-wide educational opportunities alongside the personalisation of learning needs to be mediated by more nuanced insights into how informal and formal opportunities may be used to best effect and for each purpose.

CLARITY OF LANGUAGE AND CONCEPTS

Overall it seems that we were correct in assuming that the concepts, languaging and practical realisation associated with formal, non-formal and informal learning opportunities needed further attention. Our colleagues clearly felt that we had made a useful contribution to bringing some clarity to the language and concepts, and we were perhaps rightly criticised for not offering much further assistance to coach developers in how they should aggregate and integrate these different forms of learning experiences. Although there are some concepts that still need to be clarified (e.g., guided informal learning, unguided informal learning) the commentators seem to be at ease with what was the core of our article, the 'languaging'. There was similar consensus amongst the reviewers about the two issues that at the same

time serve to stimulate and muddy this debate: how to enhance the learning of coaches and how to recognise formally (accredit) this learning. We feel strongly that there is limited value in the fairly 'detached' prescriptions offered in lieu of effective practice. Lessons have to be learned from the successes and failures of implementation, from experimentation, from case studies, and from the reflections of those coaches and coach education and development practitioners who have attempted to balance the varying contributions of the formal, non-formal and informal.

RESEARCH ON EFFECTIVENESS OF COACH EDUCATION

We favour research into education and development practice, rather than fairly anodyne comments about how programmes can be designed. Although commentators were correct when they said that we strongly recommended that sport organisations should consider and recognise a range of learning opportunities in designing the curriculum and accrediting coaches, without suggesting how it could be done, we need to put this in context. We point to the fact that there is a dearth of studies on coach education effectiveness on which we could base a valid argument on how to proceed. Trudel et al. [1] have found only 16 empirical studies for the period of 1998-2007 and none of them looked at how a sport organisation could change its coach education/training programmes to make it a lifelong learning process that will facilitate learning in formal, nonformal and informal situations. In the interim and without this empirical research, the onus is currently on researchers, like commentator Wade Gilbert, who are able to work with specific provincial and national sporting organisations to guide and assist coach education practitioners and administrators, and to report on their activities.

FORMAL EDUCATION AND CONTINUOUS PROFESSIONAL DEVELOPMENT

We detected a common theme in the commentaries. Our colleagues' comparative examples invariably came from other professions in which there was a more distinctive threshold level of entrance to the profession, and an imperative to provide evidence of continuing development. In preparation for entry into these professions there is a weighty formal education (that is, accredited and with acknowledged standards of achievement), but this education comprises many learning opportunities including supervised experience. Once qualified, the practitioner is assumed to be practising in order to maintain status, and must often demonstrate evidence of engagement in non-formal 'maintenance' opportunities. Perhaps more significantly, the practitioner is subject to a raft of legislative and other monitoring controls on the service provided, which are not yet present in sports coaching. The more general point is that sports coaching has embraced all stages and levels of 'career' development from the one or two day initiation to a first award (albeit with some variation in prior experience) to the more substantial education and development at later stages. Not only is this lack of considerable formal education and continuing professional development a significant barrier to professionalisation, it impacts on what can reasonably be expected from the formal, non-formal and informal learning opportunities that are provided, mediated or experienced at each stage.

In medicine, as with other professions, society does not allow the individual to 'practise' before qualifying. However, the 'formal' period of education and training is extensive. Formal in this sense refers to the period of time that it takes, the 'standards' around which it is built, the occupational mores that are absorbed, and the curriculum content itself. However, the 'formal' will be comprised of a mixture of knowledge delivery, practicums,

many mediated sessions, purposeful ‘application’, immersion in the field, and interaction with more senior colleagues. In other words, the formal award will have considerable flexibility in its learning opportunities. Despite this, we know that the emerging professional will not yet have developed fully the tacit knowledge and reliance on routines that will later characterise practice. We illustrate this to point to the challenges for the coach developer in providing this (we might say, almost inherent) mix of learning opportunities when coach education does not conform to this model of professional education and training.

EDUCATION, LEARNING AND DEVELOPMENT

In relation to languaging, we make the point that a consensus on terminology is required to facilitate communication and understanding, and to inform research design, not simply for the neatness of a typology. Tania Cassidy’s call for the term ‘development’ to be added to the discussion dealing with the differentiation of learning and education has merit. Given that we have previously proposed different perspectives as a means of differentiation (programme developers in relation to ‘education’ and learners in relation to ‘learning’), it is interesting to consider what perspective ‘development’ most closely represents. Whatever the decision, Cassidy’s reminder that it is necessary to ground our ideas in a wider literature (including an acknowledgement of the underlying assumptions) has much appeal.

We don’t take the view that the terms education, learning and development should be used interchangeably. We acknowledge the danger of assuming that education refers to that which is ‘provided’ or facilitated whereas the internalisation of the individual’s lived experience constitutes ‘learning’. The danger is that this encourages the notion that learning is associated only with informal (or rather, incidental) educational opportunities. We perhaps need to acknowledge that ‘development’ has a socio-cultural meaning (rather than the enhancement of personal qualities); i.e., it refers to ‘purposeful attempts to facilitate the growth of expertise in the coaching workforce’. This is part of an NSO’s workforce management responsibilities, and is generally associated with an ‘upskilling’ agenda or assisting individuals to progress through a career progression ladder. This is assumed to contribute to the achievement of policy objectives.

LEARNING, COMPETENCE AND EXPERTISE

As one of the possibilities to better understand coach learning, Wade Gilbert suggests using an expertise model to help illuminate effective learning from ineffective learning; i.e., deliberate practice. Notwithstanding the issues associated with identifying expertise in coaching, tracking the learning pathways of our better coaches and how they approach different learning situations will provide additional information to what we already know (i.e., to become expert, coaches need not only to invest time, but to invest ‘deliberate learning time’). However, we argue that most of the coach education/training programs are not designed with the intent of developing expert coaches for at least two good reasons. First, the large majority of coaches are volunteers and they will retire at best half way to the threshold of 10 years of coaching experience, contrary to most of the participants in studies on expertise (teacher, musicians, surgeons). Second, given the huge number of coaches trained every year and the limited time they can invest in their training, programmes are designed to make sure that coaches will receive the minimum of what they need to get by. In other words, NSOs will certify *competent* coaches not *expert* coaches – at least until the later stages of the certification ladder.

The expert model might be more appropriate for studying coaches at the high-performance level; i.e., what the best of the best coaches are doing that the other best are not

doing. In doing such studies, it will be important to remember a few things. First, although coaches at that level share a few common characteristics such as past experience as athletes, pressure to win, investment of time, and so on, these coaches still have their own biography which will influence what they want to learn and how they want to learn [1]. Therefore, it is still likely that idiosyncrasies will exist within this small and elite group of coaches [2]. Given the assumed emphasis on accumulating certain hours or years of deliberate practice in an expert model approach, we need to take into account that studies of current high-performance coaches have shown great variation in the volumes and types of coaching experience accumulated [e.g., 3-5]. As noted by Gilbert in his commentary, the type of coaching experiences that can be considered to be deliberate practice is open for debate and compounding this is the uncertain degree to which previous athletic experiences contribute to coaching ability. Second, to conduct studies comparing expert coaches with non-expert coaches, researchers will have to define what an expert coach is. Ian Reade's story about a university hiring a coach on the basis of his winning record, without consideration of his formal education, is a clear example that some people involved in the field define expertise differently to researchers.

STRUCTURE AND CONTEXT OF THE WORKPLACE

We were also struck very forcibly by the realisation of the role played by the 'employer' and the workplace in mediating learning experiences, as so ably demonstrated by Valerie Owen-Pugh. The concept of 'expansive and restrictive learning environment' is most useful. Her comments were entirely appropriate, but highlighted for us the distinction between coaches and most other professionals in their working environments. Most coaches do not operate in a well-structured, multi-professional context in which the employer's responsibilities are extant. This perhaps explains the absence of in-house, non-formal provision; fewer incidental learning opportunities; less community interaction; and a more general absence of scrutiny of continuing expertise development.

UTILITY AND LEARNING TO LEARN

Jim McKenna drew our attention to the issue of utility. This was couched in terms of a conflict between system-wide provision and the desire to individualise learning, between standardisation and individual relevance. His warning that the assumed benefits of informal learning should not be over-estimated is an appropriate reminder of how little we know about the effectiveness of coach education and development in general. Wade Gilbert also recognises the practical problems of facilitating education and training on a large scale and the obvious predilection of individual coaches for the 'situatedness', meaning, relevance, attachment (and accountability) of informal learning. (In passing, we note that we ourselves, and our colleagues' commentaries, refrained from using the word 'training'.) However, it may be useful to distinguish between the 'minimally trained' (perhaps the appropriate word!) initiate into coaching and the more experienced coach for whom commitment, learning trajectory, idiosyncratic pathways and reflection of experience is meaningful. It is a valuable point that for the committed (perhaps implying having 'learned to learn') practitioner, informal learning is rarely incidental. We may find that significant informal learning characterises our better coaches. However, it highlights the issue raised by all commentators; how do we encourage and facilitate this 'learning to learn'. Although we can write almost glibly about mentoring, reflection, guiding and mediating, the lessons from successful practice must surely form part of an urgent research agenda.

KNOWLEDGE AND LEARNING

Ian Reade raises the issue of 'substitutability' of the informal for the formal. In our experience this may happen in the early stages of certification, but the substitution is usually possible because the technical knowledge that has traditionally dominated early stages in formal education can be assumed. It does raise two further issues that we wish to highlight. First, is the question of any distinction between the 'technical' (sports-specific and performance enhancement) knowledge required, including the 'ology' knowledge underpinning it, and the craft knowledge of 'how' to coach. Would the benefits and limitations of different forms of education and training apply differentially to these elements of coach education and development? Second, is the issue of foundation or underpinning knowledge (which we assume to be gleaned from formal and non-formal learning) and the extent to which it can be acquired through experiential informal learning, which opens the unwelcome basket of theory and applicability in education. Nevertheless, the issue of 'substitutability' and the basis for innovative practice needs to be addressed.

LEARNER PREFERENCES AND CHOICES

Finally, we go back to the tension between meeting the needs of the individual coach and those of the coach education and development 'system'. Jim McKenna advocated a consideration of learner preferences when discussing formal and informal coach education. Similarly, Valerie Owen-Pugh drew attention to the issue of learner choice through a consideration of Fuller and Unwin's [6] expansive-restrictive dichotomy regarding learning environments and in her discussion of Hodkinson and Hodkinson's [7] emphasis on individual personal perspectives in learning. Part of the difficulty is that the original paper and this response are intended to serve the dual purposes of informing both coaches and coach educators. While learner preferences should certainly be considered and incorporated to a greater degree (and these have been articulated clearly), there is also a need for those who are well informed (e.g., highly experienced researchers and education practitioners) to make suggestions that may run counter to individual preferences but which nonetheless may have a significant impact on the abilities of a coach.

Valerie Owen-Pugh suggests that we have a need for "setting coaches agreed standards for accreditable learning whilst at the same time encouraging them to learn in idiosyncratic, independent ways" (p. 350). This makes sense for our more senior coaches, those working towards expert or mastery status. In our experience, coach education systems already acknowledge that more diverse pathways and experiences are required for 'advanced programmes'. However, in future we may need to be more precise and specific about the education and training contexts about which we write.

CONCLUSION

At no time did we suggest that the outcomes of the debate were sterile, more the way that the debate was constructed. Our colleagues in their commentaries have shown that conceptual debate about degrees or categories of formality can be linked very clearly to the context in which coach education, training, learning and development takes place. Cast your eye across the references that each of the commentators has drawn upon and you will have some indication of the variety of fields and domains that may have something to contribute to this continuing debate. The editor is to be congratulated on having the insight to see the value of a set of commentaries on this subject. As we read and re-read them we are struck by the agenda that has been created for giving more detailed, and very welcome, attention to coach education and development.

We can say that the rich discussion on coach development is far from resolution. Our view is that the discussion is essential to the professionalisation of coaching and further dialogue should include coaches, researchers, sports organisations, program designers, and in a variety of public forums.

REFERENCES

1. Trudel, P., Gilbert, W. and Werthner, P., Coach Education Effectiveness, in: Lyle J. and Cushion, C., eds., *Sports Coaching: Professionalisation and Practice*, London, Elsevier, In Press.
2. Werthner, P. and Trudel, P., Investigating the Idiosyncratic Learning Paths of Elite Canadian Coaches, *International Journal of Sports Science and Coaching*, In Press.
3. Erickson, K., Côté, J. and Fraser-Thomas, J., Sport Experiences, Milestones, and Educational Activities Associated with High-Performance Coaches' Development, *The Sport Psychologist,* 2007, 21, 302-316.
4. Gilbert, W., Côté, J. and Mallett, C., The Talented Coach: Developmental Paths and Activities of Successful Sport Coaches, *International Journal of Sports Science and Coaching,* 2006, 1(1), 69-76.
5. Lynch, M. and Mallett, C. Becoming a Successful High Performance Track and Field Coach, *Modern Athlete and Coach,* 2006, 22(2), 15-20.
6. Fuller, A. and Unwin, L., Learning as Apprentices in the Contemporary UK Workplace: Creating and Managing Expansive and Restrictive Participation, *Journal of Education and Work*, 2003, 16(4), 408-426.
7. Hodkinson, H. and Hodkinson, P., Improving Schoolteachers' Workplace Learning, *Research Papers in Education*, 2005, 20(2), 109-131.