Introduction

Unlike participation coaching with its emphasis on episodic interactions, performance sports coaching is now accepted as a process. COTE et al saw coaches working in a complex reality, described by CROSS & LYLE as multivariate, eclectic, interpersonal and contested, and thus difficult to fully understand and evaluate.

Authors have tried to explain this difficulty in varying terms. JONES sees the work of the coach in terms of ‘multidisciplinary, unique, uncertain social demands’. LYLE regards the coaching process as ‘complex, interdependent, co-acting and interacting’ and underlines the difficulty of trying to fully integrate all of the variables involved. The difficulty in establishing these variables was highlighted during the introduction in Great Britain of the National Vocational Qualification (NVQ) system into coaching, when the lack of agreement on coaching competencies was exposed.

One way of trying to unravel what is involved and analyse the coaching process is through the use of models. Coaching models can be of...
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two forms: a ‘model for’, which is an idealistic conception of practice; and a ‘model of’, which is formed from a deductive process based on an analysis of practice. Both forms use diagrams to simplify phenomena in order to make them more easily understood. The use of models is helpful to describe, understand, analyse, evaluate and possibly to predict what could happen in future situations and they illustrate different aspects of the coaching process. However, it must be remembered that models are two-dimensional representations, which limits their capacity to describe the full complexity of the process.

This brief exploration of coaching models described in the current literature is intended to be a starting point on the topic for practicing coaches who seek a deeper understanding of their craft. It begins with consideration of the early ‘models for’ of FRANKS et al\textsuperscript{10} and FAIRS\textsuperscript{2}, which approach the subject as a process. This is further expanded in an examination of the various works of Lyle before moving to the views of COTE et al\textsuperscript{7} and SAURY & DURAND\textsuperscript{11}, who suggest the alternative ‘model of’ approach. The final model considered is the sociological / pedagogical approach taken by a number of authors who view coaching as a ‘social and learning enterprise’\textsuperscript{12}. It concludes with an assessment of the models most likely to offer value in coaching practice.

‘Models for’

A number of models have been produced focusing on coach leadership and behaviour. Examples are the multidimensional ‘model for’ of CHHELLADURAI\textsuperscript{13}, shown in Figure 1, and the Cognitive Mediational Model of SMOLL & SMITH\textsuperscript{14}, later modified by KENOW & WILLIAMS\textsuperscript{15}, shown in Figure 2. Whilst these are attempts to illuminate the process of coaching, it can be argued that they do not achieve what they set out to do as they focus on only a small part of the much bigger picture of the coaching process.

The coaching ‘model for’ of FRANKS et al\textsuperscript{10}, Figure 3, is not of the whole coaching process either as it focuses on an episodic skill development session and thus on the direct interventional aspect of coaching. However, in this model some key performance criteria are identified and planning and progression for the coach do feature.

![Figure 1: The multidimensional model of leadership (CHELLADURAI\textsuperscript{13})](image-url)
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Figure 2: Cognitive mediational model of coaching behaviours (SMOLL & SMITH modified by KENOW & WILLIAMS)

Figure 3: Coaching process model (adapted from FRANKS et al)
The ‘model for’ of FAIRS\(^2\), Figure 4, does stress the cyclical process nature of coaching, but in reality it is a simple input–output model, nominally of what is regarded as a coaching process, with an episodic focus that ignores the long-term aspect of planning.

The work of SHERMAN et al\(^{16}\) in attempting to reconceptualise sports coaching as sport instruction is, again, an example of focusing on a small part of the coaching process, namely the receiving of skills from an expert during a coaching session. However it does conceptually skill acquisition as a coach-directed process. It is most likely situated in a participation process and this model, like the two previous examples, betrays a very narrow appreciation of what is involved in the coaching process.

Starting with his 1993 comparative study where he modelled a combination of training and competition factors mathematically to compare the relative coaching intensities of Belgian and Scottish volleyball coaches, Lyle has written extensively on modelling\(^{17}\). From conceptualising the coaching process as a continuous cyclical pathway his ideas developed\(^4\), and a series of twelve concepts as essential elements of the coaching process was introduced. In a number of works he has attempted to produce the most complete ‘model for’ of the coaching process as an ‘ideal type’\(^{1, 5, 18}\). The version in Figure 5 shows not only how complex that process is but also how difficult it is to portray it in its entirety\(^1\). Almost inevitably, the complexity will limit how useful his model will be for the practising coach but it does emphasise the factors of planning and progression as part of the process. Prior assumptions are stated and in the latest study (2002) there are now fourteen concepts or building blocks\(^1\). The usefulness of Lyle’s model may lie in its ability to generate research questions, or by adopting a partial focus on specific areas rather than being of direct benefit to coaches. Thus it is possible that the researcher rather than the practising coach will find it more useful.

‘Models of’

Compared to ‘models for’, the number of ‘models of’ the coaching process is relatively limited. One factor that could explain this is the difficulties that coaches have in articulating what exactly their practice consists of, and researchers have in grasping the full complexity of what it is that coaches do.

The ‘model of’ coaching by COTE et al\(^7\), shown in Figure 6, is a ‘mental model’ derived from empirical data. In contrast to the works described in the previous section, the focus is on knowledge not behaviour. Developed from an examination of 17 expert gymnastic coaches, a series of studies by COTE et al\(^{19, 20, 21}\) fo-
Figure 5: The coaching process (LYLE')

The Cote model’s goal of developing athletes reveals the long-term process, the factors involved and their relative importance, and at the same time that these factors are monitored and subsequently adjusted by the coach due to the complexity of the process. However, the model does not show how the process operates and thus it is limited in fully describing and analysing practice. Its usefulness lies in its abil-
ity to generate a number of questions about knowledge (how to acquire it, how to develop it, and how to use it), which together are likely to prove a more useful investigative route in the development of expert coaches. The similarity between the four aspects of Cote’s model, namely the coach, athlete, knowledge and context as the basis of the coach’s mental model and the discussion of pedagogy in the next section below is striking.

The growing emphasis on the teaching model as a basis for coaching has been very evident in recent literature in two ways. Initial attempts to examine the similarities between coaching and teaching showed a very limited appreciation of coaching. For RUPERT & BUSCHNER22 the focus was on a practice session; DREWE30 explored the same area with a similar approach although with a recognition of different value frameworks, and, as already noted, SHERMAN et al16 adopted a simplified skills model of coaching. The behavioural episodic approach in teaching is evident in the use of the Coach Behavioural Assessment System for the observation of the direct interventional skills of teachers5. Again the narrow focus adopted ignores the much wider aspects of the performance coach’s practice.

**Figure 6: The coaching model (COTE, J. et al)***

**Sociological / Pedagogical Models**

The emphasis on knowledge mentioned above has also been seen in the work of a number of writers who examine coaching from a sociological / pedagogical viewpoint. Where-
Second, in works that adopt a sociological/pedagogical viewpoint there may be an unsatisfactory appreciation of performance sport. Whilst LYLE\(^5\), \(^1\), \(^5\), \(^18\) stresses that the ultimate aim of a performance coach is improved competition performance, JONES et al\(^24\) view ‘athlete learning as the basis of coaching practice’. Although most would agree that athlete learning is a desired aim of coaching, is it the measure against which a performance coach will be judged? An athlete may know what to do to improve performance in hurdles or pole vault, and produce a more aesthetic or polished outcome, but if it does not result in an improved performance then a negative judgement will surely and quickly follow. Learning may not automatically result in improved performance.

Third, there is a dearth of works where there is an explicit definition of coaching practice and the coaching process, rather a belief in the value of ‘sociological knowledge to coaches’\(^9\). It would seem that these authors are approaching coaching from a different perspective. Their focus is on ‘graduates from the system’\(^9\), and on the academic study of coaching that will lead to a career as a coach or a coach educator and thus similarities between the careers and the training needed for teaching/lecturing and coaching can be drawn. There is a stress on the need for a profession’s content knowledge\(^24\) and continuous professional development and thus the ability to critically reflect\(^9\).

The fact is that for the vast majority of coaches in individual sports, like athletics, around the world coaching is part time, voluntary and unpaid. These coaches may study on a limited number of short-term courses their formal education is nothing like that of graduate coaches who undergo degree courses of three or four years. Even with a professional outlook, will they be able to reach the standards that academic writers see as the norm? Whilst the findings on role and interaction are interesting, they leave the question of ‘so what?’ and fail to move the analysis of coaching forward.

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as for LYLE\(^5\) it was important not to focus on the coach but rather on the coaching process, these writers focus on what are regarded as the four factors of a pedagogy of coaching, namely coach, athlete, knowledge and context\(^12\).

The work of JONES\(^23\), CASSIDY et al\(^12\), and JONES et al\(^24\) regard the coaching process as problematic in their focus on the coach, the sportsperson, the interaction between them, and also on the examination of the transmission of knowledge and therefore learning, within the coaching context. In part this is due to the realisation that the academic study of coaching has ‘largely developed along bio-scientific fragmentary lines’\(^23\). Their work has attempted to show the value of a pedagogical approach to the skills and knowledge base of teachers in general and of Physical Education in particular, and how its use in coaching would bring similar benefits to coaches as it had to teachers. They have urged the transfer of the teaching model and a focus on pedagogical skills and analysis to coaching and especially coach education. However, JONES et al\(^25\) stress the need for ‘undertaking a social analysis of coaching’, with a focus on the three interrelated concepts of role, interaction and power.

There are a number of problems with this approach. First, the authors seem to have a problem with findings that do not fit their agenda. Although JONES et al\(^24\) found that one successful athletics coach, unlike the team coaches studied, did not maintain a social distance from the athletes he coached and this was put down to the part time nature of his coaching practice. His behaviour was dismissed as digressive! That this is typical of some, all or nearly all those who coach individual athletes was not deemed worthy of examination. There seemed to be an over-emphasis on generalising from the coaching of team games and a lack of appreciation that the relationship between coach and athlete in an individual, non-professional sport may not involve the same power relationships as in team and/or professional sport\(^26\). The concept of power can prove useful, although how it impacts coaches in individual sports is generally ignored in favour of team games.
Assessing Coaching Models for Application to Practice

In considering a coach’s practice against the range of coaching models examined, the ‘models for’ offer limited insights due either to their generality (FAIRS)² or their focus on the episodic session¹⁰, ¹⁶. The three approaches that are likely to prove the most value are the works of Lyle, the ‘model of’ approach of COTE et al supported by SAURY & DURAND’s¹¹ findings from expert sailing coaches and, to a lesser extent, the recent development of sociological / pedagogical insights into coaching.

With an approach similar to peeling an onion to reveal all the layers not visible under a smooth surface, LYLE¹, ⁵ showed not only how complex and problematic are many of the components and outcomes of the coaching process, but also that his attempt to model the entire process should be seen as an ideal. Coaches have to make the best of their circumstances, recognise the constraints involved and strive to improve. It is much better to realise how far short of the ideal one’s own practice is, rather than being unaware of how partial it actually is whilst still claiming to be a performance coach.

The attractiveness of the ‘model of’ coaching as seen in the studies by COTE et al and SAURY & DURAND¹¹ is that it matches my personal perception that the accumulation of knowledge and its application via critical reflection in an ongoing commitment to personal development is the way towards expertise. The emphasis on knowledge - the view that content knowledge is one of the three basic requirements - if coaching is to be regarded as deserving of professional status (JONES et al)²⁴, the recognition that expertise is grounded in knowledge, supported by SAURY & DURAND’s¹¹ focus on practical knowledge, all point to the critical role that knowledge has in the coaching process.

As recognised by SALMELA²⁷ this coaching knowledge is tacit, however it is expressed in the operationalisation of the coaching process. With this expertise comes the ability to ‘see’ a talented athlete, to ‘read’ an athlete, even a motivated athlete and know when an increase in training will be counter productive⁹. The coach must also be able to take that potential, recognised as visible or as a result of a test or a scheme, and by using a mental model of the stages necessary to turn potential into reality, make evident their expertise. The coach’s mental model for each of the athletes coached is likely to vary from athlete to athlete and from general to specific, always with the long-term outlook of how their current status compares to the demands necessary of a senior athlete to compete successfully in those events.

The coach-athlete relationship in individual sports is one that JONES et al find difficult to appreciate. The ‘model of’ approach of COTE et al has proved very helpful as it recognises the interplay between the athletes’ training and personal level of development and the change in the coach’s mental model of potential (as it must to accommodate these changes in a dynamic setting), whilst still striving towards the goal of developing athletes. As the athletes approach this position more closely, then original opinions can be confirmed or modified and decisions made about ultimate potential at agreed distances.

Cote’s emphasis on knowledge is matched by those authors supporting the teaching approach. How to turn that knowledge into expertise via reflective practice is one of the concerns of the pedagogical approach to coaching. As the pedagogy of coaching is an area that has developed recently, there is an unresolved debate between two approaches. Is the study of coaching as learning and teaching a new and separate avenue, or alternatively as LYLE¹ has put forward should this still be situated in an improved coach education section?

In support of Lyle, CAMPBELL²⁸ noted that one of the six sections of a fully rounded coach education programme is that of teaching / coaching methodology. CASSIDY²⁹ takes the view ‘that coaching is essentially a social endeavour’, and therefore the emphasis should be on the sociological and educational aspects of coaching rather than on the psycho-
logical and bio-scientific aspects of coaching. Although there are numerous insights in a pedagogical approach in the areas of feedback and of trying to understand more about each athlete to improve the coach athlete relationship, there is the need to question the analysis of writers supporting a pedagogical approach in a number of areas, such as their bias towards team sports and the need for distance between coach and sportspeople in individual sports. They offer insights into particular forms and typologies of coaching, but their approach is often too particular to offer assistance in trying to generalise about coaching per se rather than about one or some particular examples of coaching.

Although for JONES et al\textsuperscript{25} the coach could be seen as occupying a position of legitimate and expert power, in reality it is the athletes who have power. They have power over the coach’s power. In contrast to team players, individual athletes have to be empowered for their own performance from the start of their involvement in the sport as they compete alone with only the possibility of verbal encouragement by their coach. By athlete and coach working together, athletes use their coach to achieve their goals; it is not the coach’s role to get them to do something they do not want to do in a ‘power over performer’ relationship.

This area will need to be studied in line with future changes as a full exploration of the impact of sociological findings as part of a comprehensive coach education programme is required. The athletes take part in competitions, and as noted by DREWE\textsuperscript{30}, competitions involve a striving together or a social act that allows the athletes to grow and realise their potential.

Even though there are many models of coaching, there is a broad degree of agreement amongst these approaches. CASSIDY et al\textsuperscript{12} recognises ‘coaching as intellectual as opposed to technical work, requiring higher order thinking skills’ whilst for LYLE\textsuperscript{18} the ‘coaches’ practice is a largely cognitive enterprise’. SALMELA\textsuperscript{27} reached the conclusion that sport coaches use a ‘metacognitive’ form of knowledge. It is a conclusion that is very difficult to disagree with.

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REFERENCES


