

Some notes on the assessment of sports performance

Introduction

This paper does not attempt to analyse all of the literature on assessment in sports coaching. It does, however, attempt to give a brief overview of assessment, particularly its relationship with learning, in a sport coaching environment.

Coaching theory

Jones (2006) argued that sport coaching has been too disparate a field, and too fragmented in content, for a conceptual framework to deal with it.

‘Despite a recent upsurge in scholarly interest, coaching remains an ill-defined and under-theorised field’ (Jones, 2006:3).

However, he acknowledged that coaching is based on pedagogy as a social process. The assumptions underlying this approach are that: coaching is inherently non-routine; problematic and complex; that there is tacit knowledge in a coach as well as the athlete; and that coaching is grounded in social interaction and power bases. This argument that coaching and teaching are interlinked is supported by both Fleming et al., (2005); and Martens, (2004).

‘Good coaching is good teaching, and good teaching involves ... the right philosophy, good communications skills, understanding athletes’ motivation, and skilful management of their behaviour’ (Martens, 2004:165).

Models of learning

There have been various models of learning in coaching: from classical and operant conditioning (Skinner, 1953 in Cox, 2002) and cybernetic feedback theory, to social learning theory (Hull, 1943; Bandura, 1986 in Cox, 2002), and goal setting (Schmidt and Wrisberg, 2004). Wikely and Bullock, (2006) claimed that there was no universally accepted learning model.

‘The quest for a universally accepted theory of learning has engaged educational researchers, psychologists and practitioners, but most models remain inadequate’ (ibid:14).

Notwithstanding this, it is generally agreed that most coaches accept that learning in sport performance requires both the acquisition of skills or knowledge and their internalisation, to produce an individual’s motor performance. Fleming et al. (2005) supported this from a constructivist viewpoint.

‘Athletes are not empty vessels waiting for new ideas that they have never heard about. They have constructed their own ideas and realities beforehand and they bring those to the coaching sessions too’ (Fleming, et al., 2005: 8).

Wikely and Bullock, (2006) argued that Kolb’s (1984) theory of experiential learning was the most documented and adapted model of learning: a cycle of experience, reflection, conceptualisation and testing those concepts in new situations.

‘Kolb believed that few people have equal skill in all four areas and, hence, individuals develop an orientation towards one of the poles in each dimension. This he called this their preferred learning style’ (ibid:15).

However, they went on to cite Duffy and Duffy, (2002); Garner, (2000); Henson and Hwang, (2002); and Swales and Senior, (1999), as critics of the learning styles theory. Their argument was that all learning styles concern central processes such as reasoning and memory, and that learners use

different quantities of each: depending on the problem or task. Swailes and Senior (1999) termed this 'Action - Reflection – Planning'. But having acknowledged this argument, Wikely and Bullock (2006) then went back to Kolb's model and adapted it for coaching: 'Practice – Experience – Evaluation – Plan for change'.

Formative and summative assessment of sports performance

The purpose of formative and summative assessment is different. Formative assessment is feedback designed to aid an athlete's learning. It is based on a constructivist approach to learning: an inductive approach to the gathering of evidence and the drawing of probable conclusions. Athletes have to construct their own understanding and meanings of their sport's skills, which Martens (2004) classified as 'technical' and 'tactical'. Summative assessment, on the other hand, is much more high stakes and designed to get a valid measurement: typically the result of a match or the time ran, or length thrown. It tends to be positivist in nature: a deductive approach to gathering evidence scientifically and drawing absolute conclusions.

Assessment as objective measurement

As Biggs (2003) explained, assessment as objective measurement is designed to measure an underlying trait or ability, and express that measurement along a graduated scale. In this way athletes could be compared with each other and ranked. The 'Traditional' approach to coaching shares many characteristics with this approach to assessment. The 'Traditional' coach has most of the power in the coach-athlete relationship, and by using lots of controlled skill drills, can easily build up a series of measurements to grade the athletes (Martens, 2004).

By using a 'goal setting' approach to a learning experience, Schmidt and Wrisberg (2004) advocated the use of objective measurement in both 'outcome goals' and 'performance goals'. The former may entail the use of statistics, and results, or controlled tasks in the laboratory or as a field test. The latter is often measured using 'notational analysis'.

Assessment as subjective judgement

This approach is designed for assessing learning in a coaching/teaching situation. It is based on a qualitative view of learning. It most often occurs when coaches use their judgment to compare a learner against some chosen criterion of performance. Drawing on Martens (2004) again, this would closely align with his 'Games' approach to coaching. In many ways the opposite of the 'Traditional' approach to coaching. In this situation, power is more evenly distributed between the coach and athlete(s); more open skills are practiced and there is more active involvement in the learning process, especially in developing the thinking, understanding and decision making skills: the tactical skills. For example, according to Schmidt and Wrisberg (2004), a coach would focus on an athlete's 'process goals' to improve the quality of movement production.

The validity and reliability of assessment of sport performance

The assessment literature in education insists that both measurement and judgment should be valid. In education it is seldom possible to measure exactly what learning has taken place. Assessors are forced to measure a 'surrogate' for what they are really interested in (Jarvis, et al., 2005). However in sports coaching, this is less of an issue for individual sports, as the measurement approach can be used to assess performance. However, it may be more of a problem in team sports, where others may mask an individual's performance. Here coaches may need to use their judgement, based on their own experiences and perhaps biomechanical knowledge and the use of video replays (Martens, 2004).

Conclusion

This paper has attempted to briefly explain the issues surrounding assessment in a sports coaching context. It is a contested concept. There are issues concerning the lack of a coaching theory, exemplified by the lack of agreement on the models of learning, though Kolb's experiential learning model is often cited. The need for valid and reliable assessment is accepted in the literature. However the means of obtaining it are also contested, between those who advocate an objective approach and those who argue for a subjective judgement: the positivist versus constructivist debate. Often this may be resolved by considering the context: whether it is an individual or a team performance that is being assessed.

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