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Creators	Mccarthy, Liam, Allanson, Ashley and Stoszkowski, John Robert

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1   Abstract

2   As sports coaching continues to professionalise, the demand for and importance placed upon

3   high-quality education and development programmes for sports coaches is increasing. As a

4   result, the landscape of provision is changing and there is now a recognition of the key role that

5   Higher Education Institutes (HEIs) play in the education, development and assessment of sports

6   coaches. In this insights paper, we argue that since there is a scarcity of research focused solely

7   on assessment as a feature of coach education programmes, there is something to be gained from

8   examining how HEIs assess sports coaches. This represents an important contribution to the

9   research literature, given that assessment is a feature of nearly all coach education programmes

10   and the attainment of a specific award communicates to stakeholders (e.g., employers, athletes,

11   parents) that a precise standard of practice has been met. As such, we identify how some HEIs

12   are addressing the issue of assessment with sports coaches and highlight a series of assessment

13   principles, alongside practical examples from the literature, which intend to stimulate

14   conversation in what we argue is an important area of study.

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16   Keywords: assessment strategies, coach assessment, coach learning, higher education, social-

17   constructivism

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The Research Context

26   While sports coaching is societally important, concerns about the quality of coaching

27 practice have grown in recent years (North, 2017). Quality of practice, it is suggested, is

28 connected to the development of sports coaching as a profession (Lyle, 2002; Lyle & Cushion,

29 2016) and coach education undoubtedly plays a role. Increasingly, this has been recognised by

30 the sports coaching community and coach education is receiving a significant amount of

31 attention (Hay, Dickens, Crudgington, & Engstrom, 2012). As a result, the demand for and

32 importance placed upon coach education has increased. Indeed, Hay et al. (2012) suggest that

33 "acceptance of this reality has been reflected in the investment by sports and sporting

34 organisations in formal and non-formal coach education programs such as coaching workshops,

35 coaching accreditation schemes and tertiary/university-based courses" (p. 188). It is argued,

36 therefore, that coach education programmes are a key feature of a coach's professional

37 development (Gilbert & Trudel, 1999; Nelson, Cushion, & Potrac, 2012). In fact, in many

38 instances, the ability to undertake their role as a coach depends upon it (i.e., coach licensing).

39   Against this backdrop, there has been notable growth in the number of Higher Education

40 Institutions (HEIs) around the world designing and delivering sport coaching bachelor degree

41 programmes (Kjær, 2019; Lara-Bercial et al., 2016; Trudel, Milestetd, & Culver, 2020).

42 Typically, these programmes involve three to four years of study and prepare students for

43 employment as a sports coach. It could even be argued that the HEI sector is now the largest

44 formal coach education provider, facilitating diverse routes into paid coaching roles (Milistetd,

45 Trudel, Rynne, Mesquita, & do Nascimento, 2018). Indeed, Gano-Overway and Diffenbach

46 (2019) recently identified 308 HEIs in the USA that offer courses with sports coaching in the

47   title, while 67,000 students in the UK were enrolled in sport related programs in 2016/17 (HESA,

48   2020). This has not always been the case, however, as traditionally coach education has been the

49   exclusive domain of specific sporting NGBs and federations. As one of the many diverse

50   functions of an NGB (Piggott, 2012), coach education serves as a way to train and certify

51   coaches in a specific sport, with the intended outcome of growing a coaching workforce able to

52   meet participant demand. Although these sport-specific and NGB-led coach education

53   programmes still play a dominant role in a coach's professional development, supplementary

54   qualifications and accreditation are becoming more widely accepted and play a role in a sports

55   coach's increasingly blended learning and development journey.

56   The purpose of the present article is to highlight HEIs as a significant contributor to

57   coach education, while exploring what can be learned from the ways in which they carry out this

58   work. In the following sections, we "zoom in" on the ways in which NGBs and HEIs undertake

59   assessment with sports coaches and identify some potential issues and opportunities. Then, we

60   outline three assessment principles that we believe could enhance the assessment experience and

61   outcomes for sports coaches, followed by examples of the practical application of each principle

62   in a HEI context. We recognise that other best practice principles exist (cf. Abraham, Muir, &

63   Morgan, 2010) and the three we present are by no means the only ones, yet it is beyond the scope

64   of this paper to consider them all and as such, we have made choices based upon those which we

65   believe might be most readily adopted and could provide the greatest initial return.

66   **Coach Education, Higher Education and Assessment: Issues and Opportunities**

67   Although the field of research concerned with coach education is a maturing one, the

68   literature to date has predominantly focussed on NGB-led provision. Indeed, a recent review by

69   Trudel et al. (2020) discovered that just 38 peer-reviewed articles exploring sport coach

70   education programmes in higher education (HE) have been published since 2000, with 61% of

71   these articles published much more recently (i.e., between 2015 and 2018). With regard to NGB-

72   led provision, the research literature has typically taken a disparaging view and is largely

73   pessimistic about the impact of coach education on coaching practice and the contribution it can

74   make to coach learning (Abraham & Collins, 1998; Piggott, 2012). The research often highlights

75   how coaches can find coach education to be far removed from the realities of coaching practice

76   (Chesterfield, Potrac, & Jones, 2010; Cushion, Armour, & Jones, 2003) suggesting that there

77   exists only a loose fit between coaching practice and coach education. As such, general

78   criticisms of coach education have led contemporary scholars to suggest a range of different

79   pedagogical approaches that may remedy some of the concerns expressed within the research;

80   for example, experiential learning (Cronin & Lowes, 2016) and heutagogical approaches

81   (Stoszkowski & Collins, 2017). Yet, with such a heavy focus on teaching and learning strategies,

82   very little attention has been paid to how coaches are assessed, how assessment contributes to

83   coach learning and the extent to which teaching, learning and assessment strategies are

84   congruent. To our knowledge, only the work of Hay et al. (2012) considers the matter in any

85   detail, and they suggest that:

86   Contemporary discussions of learning and pedagogy in formal coach education settings

87   have underestimated the potential contribution of assessment to the field. We believe that

88   this is a significant oversight that both fails to recognise key aspects of pedagogy and

89   learning, and overlooks opportunities for optimising coach and athlete development (p.

90   189).

91   At the time of writing, coaches enrolled on NGB-led coach education programmes are

92   most often (with some exceptions) assessed against a set of predetermined observable

93   competencies (Collins, Burke, Martindale, & Cruickshank, 2015) in endpoint, performative,

94   'high stakes' scenarios (Harrison, Könings, Schuwirth, Wass, & van der Vleuten, 2017). Indeed,

95   NGBs (specifically their administrative function) typically seek to ensure that coaches meet or

96   exceed a specific standard and that those standards are recognised across the wider sector.

97   Situating assessment within this paradigm suggests a certain a level of confidence that there is

98   objectivity and rigour in the process, and a strong belief (by both coach, coach educator and

99   awarding organisation) in the validity of the 'grade' awarded, with the feedback provided

100   helping the student to pass future, similar, assessments (Harrison et al., 2017). However, research

101   focused specifically on assessment as a feature of coach education is (at the time of writing)

102   relatively scarce. As a result, little work has been done to move the field beyond the assessment

103   approach described above. For example, exploring how alternative approaches to assessment

104   might place greater emphasis on coach learning alongside certification. One of the few pieces of

105   academic literature which does shine a light on assessment, suggests that "learning-oriented,

106   authentic, valid and socially just assessment practices have much to offer both coach

107   accreditation and continuing professional development." (Hay et al., 2012, p. 196). Nevertheless,

108   it would seem that conversations about coach education programmes typically overlook issues of

109   assessment, and instead focus attention on how coaches learn (Mallett, Trudel, Lyle & Rynne,

110   2009; Stodter & Cushion, 2017) and experience coach education (Piggott, 2012). Of course, this

111   gap in the scholarly literature may be attributable to the fact that NGBs don't often study their

112   assessment practices on coach education programmes; however, the apparent absence of much

113   critical thought given to assessment practices does suggest that the recent growth in (and focus

114   on) HEI-led provision represents an opportunity to stimulate greater discussion and collaboration

115   between the two contexts.

116   In the following section, we briefly outline a number of assessment principles that we

117 believe could enhance the assessment experience and outcomes for sports coaches. We present

118 these from a social-constructivist perspective, since it would appear that many NGBs in

119 particular are increasingly drawing from this theory of learning to inform their programme

120 design and delivery (Callary, Culver, Werthner, & Bales, 2014; Chapman, Richardson, Cope, &

121 Cronin, 2019; Paquette, Hussain, Trudel, & Camiré, 2014; Paquette & Trudel, 2018). Yet, we

122 must be clear that it is not our intention to advocate any one singular approach, indeed we do

123 recognise that limited evaluation work has been undertaken to understand the efficacy of not just

124 coach education underpinned by social-constructivism, but coach education more broadly

125 (Dohme, Rankin-Wright & Lara-Bercial, 2019; Gilbert & Trudel, 1999 and Cassidy, Potrac &

126 McKenzie, 2006). Finally, we provide examples of the practical application of each principle in a

127 HEI context. Consequently, we hope to encourage more carefully considered approaches to the

128 assessment of sports coaches on coach education programmes broadly, while encouraging debate

129 within an important but sparse area of coach education research.

130   **Assessment as a Feature of Coach Education Programmes: Principles and Examples**

131   Assessment is commonly considered as the practice of making a singular observable

132 judgment against a piece of work (e.g., a practical performance) at the end of a programme of

133 study, in a simulated set of circumstances and against well-rehearsed problems (Gervais, 2016).

134 More recently, however, attitudes toward assessment practices have shifted in some cases and

135 examples of different approaches to assessment in coach education are beginning to emerge.

136 Although the assessment of observable competencies still dominates, in some instances this is

137 supplemented by, and value is now placed upon, coaches' capacity to solve context-specific

138 problems, develop metacognitive skills such as self-monitoring (Blumenfeld et al., 1991),

139   collaborate with peers (Adams, 2006; Shepard, 2000), and ultimately value and work toward

140   expertise (Collins, Burke, Martindale, & Cruickshank, 2015). The 'drama' of 'high stakes'

141   endpoint assessment (Harrison, et al., 2017) has, on occasion, made way for an approach to

142   assessment that is divergent in nature, ongoing and often embedded or at least smoothed out

143   (Gibbs & Simpson, 2005). Many of these examples are located in a HEI context and as a result,

144   we will focus on three principles which we believe have been largely overlooked elsewhere but

145   could have wider application. It is important to note here that we accept the unique context that

146   HEIs, NGBs and other organisations responsible for coach education exist within and the range

147   of affordances they each have. For example, constraining features of these contexts are often

148   resource-based (i.e., cost and time) (Maclean & Lorimer, 2016). For this reason, we have been

149   careful to offer practical strategies that we believe can help mitigate these issues.

150   **Principle 1: Assessment that is ongoing and embedded**

151   While assessment most typically takes place at the end of coach education programmes,

152   we argue that a series of ongoing no or low risk assessments embedded within the programme

153   may bring about desirable outcomes. This principle of assessment practice is not new (cf. Sadler,

154   1989) but has come to prominence more recently as a rebalancing of the educational debate from

155   performance to learning has taken place (Adams, 2006). According to Carless (2007),

156   assessment tasks should "aim to spread attention across a period of study, not lead to short-term

157   bursts of sustained study" (p. 59). By smoothing out the journey in this way and promoting the

158   even distribution of effort, there is the potential for a greater connection between the learner and

159   that which is being learned (Carless, 2007). Adams (2006) argues that not only does this require

160   a reorientation of the relationship between teaching, learning and assessment, but indeed the

161   latter should be embedded deeply within the former.

162   On a Physical Education bachelor's degree programme at a Brazilian University,

163   Milistetd et al. (2019) worked with 32 student-coaches over a course of 18 weeks with the goal

164   of preparing "students to plan and conduct training sessions in team sports" (p. 296). A wide

165   variety of tools were used to assess the student-coaches, including individual reflective

166   portfolios, group activities, presentations, the planning and delivery of coaching practice,

167   reflections (based on video review of one's own practice) and the observation of others. Student-

168   coaches reported positive experiences of engaging with the assessment, noting that the 'ongoing'

169   nature provided an opportunity to continually assimilate new knowledge and understanding each

170   week. The authors of the study also noted how ongoing and embedded assessment afforded

171   student-coaches the opportunity to appreciate the evolution of their own ideas. As such, we

172   would encourage those tasked with designing and delivering coach education programmes to

173   consider how, for example, project-based assessment (Bell, 2010; English & Kitsantas, 2013)

174   might be used to afford coaches the opportunity to curate evidence of learning across the

175   duration of an entire programme of study. Indeed, this offers coaches the opportunity to seek

176   regular feedback from a coach educator, self-assess and share their work with others for further

177   guidance – all prior to the awarding of any 'grade'.

178   **Principle 2: Assessment that is collaborative in nature**

179   If assessment is ongoing and embedded throughout a programme of study, it then

180   becomes possible to invite others in as part of the process. Social-constructivism, as a theory of

181   learning, regards stakeholders beyond the traditional teacher-learner dyad as integral to the

182   learning process. While Black and Wiliam (2009) suggest that peers are a useful instructional

183   resource, Lave and Wenger (1991) draw attention to the rich and diverse field of actors that play

184   roles within the learning process. We argue that as teaching, learning and assessment become

185   integrated this can be true of assessment too. This is consistent with the work of Adams (2006),

186   who suggests that there is a need to "involve pupils in self and peer assessment through the use

187   of discursive and collaborative learning and teaching strategies" (p. 253). Further, Woodburn

188   (2017) suggests that a wide set of stakeholders can play an important role in drawing learners'

189   attention to feedback they otherwise may have missed, which may be even more relevant for

190   novice coaches, yet we can all find self-insight a significant challenge (Dunning, 2005).

191   In recent years, examples of this type of collaborative assessment practice have begun to

192   emerge in HEIs. For example, in a study involving student-coaches from two UK HEIs,

193   Stoszkowski, McCarthy and Fonseca (2017) used online collaborative group blogs

194   (www.wordpress.com) to capture and assesses learning during a year-long applied sports

195   coaching module. Over the course of their study, the student-coaches shared their practical

196   coaching experiences with peers and discussed coaching issues that they faced in the field,

197   helping each other to resolve the issues as they arose. Alongside this, student-coaches had access

198   to an online video platform (www.coach-logic.com), whereby they could upload video content

199   from their practice for others to view and comment on in a dialogic review process. The student-

200   coaches were then graded against a clear and transparent set of success criteria, which

201   encouraged them to contribute regularly to both platforms in a sufficiently critical manner. In a

202   follow up study, McCarthy and Stoszkowski (2018) concluded that this type of approach to

203   assessment is particularly efficacious for coaches who are motivated and have prior experience

204   of being self-determined in their learning. For these reasons, we contend that collaborative online

205   opportunities using existing Web 2.0 technologies, which often involve no upfront cost to coach

206   or organisation, would be particularly relevant, especially for experienced coaches (i.e., those

207   with applied experiences to draw upon) on NGB coach education programmes.

208   **Principle 3: Assessment that meets the needs of a wide variety of motivations and goals**

209   As formal coach education is most commonly criticised for failing to recognise and meet

210   the needs of individual coaches (Abraham & Collins, 1998; Callary, Rathwell, & Young, 2018;

211   Erickson, Bruner, MacDonald, & Côté, 2008; Piggott, 2012), undertaking assessment using a

212   wider variety of assessment tools might be beneficial. According to Shepard (2000), a "broader

213   range of assessment tools is needed to capture important learning goals," and it is recommended

214   that those tasked with assessment design "devise more open-ended performance tasks to ensure

215   that students are able to reason critically, to solve complex problems, and to apply their

216   knowledge in real-world contexts" (p. 8). For example, projects and e-portfolios (Bright, 2016)

217   are suggested as just two of many tools which can be used to assess learners in a way which is

218   consistent with this guidance.

219   Within HEIs, a wide range of contemporary tools are being used to assess sports coaches

220   which consider the variance in motivations and goals of student-coaches, some of which have

221   begun to appear in the academic literature. Most recently, Stoszkowski, Hodgkinson and Collins

222   (2020) explored the use of Flipgrid, a video-based online communication tool that enables face

223   to face, short verbal interactions, as a means to improve collaborative online learning and critical

224   reflection. A cohort of final year undergraduate student-coaches in the UK used the smartphone-

225   based app over the course of a 15-week semester to debate coaching topics in relation to their

226   own coaching contexts and professional practice. Results showed good support for the approach,

227   with participants exhibiting more frequent and more critical interactions compared to written

228   response and interaction formats. Stoszkowski, Hodgkinson and Collins (2020) posit that the

229   short, sharp and electronically enabled communication that mobile based apps such as Flipgrid

230   offer are more in line with Generation Z individual's daily experience, therefore providing

231   familiarity and a more natural (or at least student-palatable) means of engaging in reflective

232   thinking with their peers.

233   **Conclusion: What is There to Learn by Exploring these Strategies?**

234   In this insights article we suggest that despite assessment being a feature of nearly all

235   coach education programmes, approaches to assessment have been largely overlooked and/or

236   given insufficient consideration (Hay et al., 2012). Secondly, we recognise that there has been a

237   significant recent growth in HEI-led coach education provision and argue that by directing our

238   attention towards how assessment is being designed and delivered in this setting, it becomes

239   possible to move the field forward. Driven by the three principles of assessment that we shine a

240   light on within this article, we provide practical examples of what we believe to be authentic,

241   learning-oriented assessment, which might be useful for organisations responsible for coach

242   education to consider when designing and delivering assessment as part of their programmes.

243   More specifically, we believe it may be fruitful for the coach education community (by

244   the broadest possible definition) to explore the use of a wider variety of assessment tools and, in

245   doing so, it may be possible to better meet coaches' diverse range of learning goals and

246   motivations through more open-ended activities (Shepard, 2000). Furthermore, with a wider

247   variety of more open-ended assessment methods and activities, it becomes possible to embed

248   assessment into a coach education programme over a longer period of time, which we argue

249   might replace the high stakes, endpoint, summative assessments that typify coach education

250   courses. We believe assessment can be intertwined with and not simply adjunct to, teaching and

251   learning activities (Adams, 2006). While this not only provides coaches with the opportunity to

252   assimilate and apply new knowledge on an ongoing basis (Milistetd et al., 2019), it also ensures

253   that learning and performance insight is generated frequently and, as a result, feedback can be

254 provided more often to the coach. Finally, if a wider variety of assessment modes are used in an

255 ongoing and embedded basis, we invite programme designers and deliverers to consider how

256 assessment could be collaborative in nature. That is to say, assessment where learners achieve

257 goals through interacting, collaboration and sharing with others (Kokotsaki et al., 2016).

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