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How Might Online Distance Learning Contribute to Coach Development?

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Abstract

The UK wide Future of Coaching Strategy (2016-2025) and the Coaching Plan for England (Sport England, 2016) identified the need to embrace technology and to foster an improvement culture which provides accessible digital learning to better support the development of coaches. This article reports data on 19,100 unique visitors to a free open access course targeted at active coaches over an eleven-month period in 2017/18. It examines their online behaviour and their responses to course surveys and other online feedback spaces. The research focuses on an analysis of: i) the demographic profile of those motivated to enrol on the course, ii) evidence of the topics and online functions that most engaged participants, and iii) how the participant's learning experience contributed to their development. The evidence from this study indicates how carefully structured digital forms of learning can benefit the continuous development of coaches, when blended with a wider range of learning opportunities.

Introduction

"The best coaches do not know it all. In fact…they never stop learning, never stop asking questions, and always are looking for ways to improve"
(O'Sullivan, 2013).

Traditional models and systems of coach education have focused almost entirely on formal coaching qualifications at different levels (eg Level 1, 2 or 3) and most ignore the value and importance

of the learning that takes place *between* levels of certification. Furthermore, in a survey of 322 UK coaches across 52 sports/activities, Thompson (2018) suggested that while the most popular learning environment is face-to-face interaction, such as workshops and tutorials (82% of respondents), surprisingly, online learning (66%) featured ahead of one-to-one coaching or mentoring (56%). When the main challenges and barriers to learning were explored the most common response was the cost of training, cited by 54% of respondents, followed by the inconvenience of the locations and timings. Consequently there does appear to be a role for technology-enhanced learning, since both cost and accessibility can be significantly offset through online delivery. Yet, as Cushion and Townsend (2018) report: "There is a pressing need for an evidence base concerning how technology is currently used in coach learning." That includes its impact and how it might be integrated with formal and informal learning opportunities in periods between qualification levels.

Recognising this opportunity there have been calls from UK Coaching (2017) and Sport England to embrace technology and to foster an improvement culture which provides, "high quality, 'on demand' digital learning and development solutions for coaches so that they can learn and improve more easily." There is also a growing recognition that it should be easier for people from a more diverse range of backgrounds to become coaches and develop their talent and potential to coach. Arguably online delivery may help achieve both more accessible forms of coach learning and open up opportunities to develop a wider coaching community that is more representative of society in general.

The aim of this article is therefore to discuss how a popular, free, online distance learning course, called Exploring Sports Coaching and Psychology, might contribute to the development of coaches when set in the context of what is known about their learning.

The aims of the study were to:

i) identify the demographic characteristics of participants attracted to this course,

ii) explore evidence of what topics and online functions engaged participants the most,

iii) discuss how participant's learning experience contributed to their development as a coach.

Drawing on this research, the paper discusses effective online learning design and the place that online distance learning might play in the wider landscape of coach learning.

What is known about technology-enhanced coach learning?

It is now widely recognised that informal learning experiences, including some provided online, contribute more to the development of coaching knowledge and practice than formal coach education courses. However, a challenge in reviewing what is known about technology-enhanced coach learning is the range of tools and modes it encompasses (eg podcasts, wikis, blogs, virtual learning environments, social media). The term 'blended learning' is often used to describe a mix of learning opportunities in which face-to-face interaction and online material are mixed. A common finding of those promoting blended learning are the reported increased accessibility of online course materials, enabling users to access resources multiple times and at their own pace or time. A further learning design observation in Kori et al's (2014) review is that the use of prompts, guiding questions, and comment gives structure and sets limits to learning, helping critical thinking and reinforcing new knowledge.

Despite the promise of technology-enhanced learning there has been minimal research that explores the impact this mode of delivery might have on a sport coaches' development and why it might usefully enhance their learning. Stodter and Cushion's (2016) research into face-to-face coach learning illuminates the potential mechanisms through which learning takes place in an online environment. Their framework describes the filtering processes coaches use whereby "individuals adopted, adapted and rejected elements of their experiences, leading to uneven learning in apparently similar situations." They describe that coaches "cherry pick" certain aspects of their learning to apply to their practice. Since coaches are different, the same coach development opportunity is likely to have a different impact on the individual coaches that experience it.

Their framework views coach learning as an individual as well as a social process in which relationships such as working with other coaches are an important influence. They suggest that coaches construct revised knowledge through two main filter mechanisms.

1. The biography filter: coaches approached and understood learning experiences through the lens of their existing beliefs, knowledge and coaching practice; in other words, their biography influenced their perspective on new ideas.

2. The context filter: sometimes coaches did not try something due to a perception that it might not fit the situation or coaching context in which they worked – they didn't see it as being relevant to their context.

Two further influences were identified. One way that knowledge was more likely to be trialled was if coaches could see, often with video or text, someone else using a coaching concept. They used the term, "seeing is believing". For example, one coach in their study recalled: "[if] I can see it working and it being relevant for the player and enjoyable, I can get my head round that and I think right well, let's give that a go." The second influence in the process was "experimentation". Here, coaches tried out ideas with athletes and if they felt comfortable using it and reflected positively on the outcome they were more likely to use or adapt the idea in some way. By drawing on this framework it may be possible to better understand how structured online learning can impact on coach development.

Research into coach learning is still evolving, but indicates that:

• a mix of experiences are valuable (eg Stodter and Cushion, 2016)

• appropriate mentoring and reflection can be influential (eg Knowles et al., 2001)

• the evidence base for technology-enhanced learning is limited and fragmented and partly reflects the range of tools and modes used (eg Cushion and Townsend, 2018)

• more emphasis on critical analysis, creativity, decision making and problem solving helps coaches make sense of complex coaching practice (eg Nelson et al., 2006)

• enhanced critical thinking is likely to contribute to the coach learning filtering process (eg Bailey et al., 2018).

Method
Participants on the course were asked to complete pre- and post-course online surveys. Each survey comprised a combination of Likert scale, multiple choice and open questions. Completion of pre- (n=321) and post-course (n=163) learner surveys were complemented by analysis of course reviews on OpenLearn and Facebook. Data on page visits and timings were provided by Google and Adobe analytics.

Description of the course
A brief outline of the characteristics of the Exploring Sports Coaching and Psychology course is required to better understand the nature of the learning experience. The course uses multi-sport examples, it is free and unsupported open learning. It is made up of 70 webpages organised into eight study sessions with an estimated study time of 9-15 hours in total. The course has been recommended by UK Coaching (UKC) and organisations such as the Professional Golfers Association (PGA) and British Canoeing (BC) have adopted it as part of their CPD offer to coaches. The course is continually available and was initially launched in June 2017. Learners who enrol on the course undertake a number of online quizzes. If they pass these assessments they receive a printable certificate and a digital badge which they can share online. Digital badges represent a coming together of games culture and traditional badges often issued by clubs and societies; a digital badge has, Ostashewski and Reid (2015) claimed, become "an online visual representation of an accomplishment or skill."

Key findings

Learner characteristics

The demographic profile of learners provides a picture of those who are more inclined to study this type of online course to gain reward and recognition (i.e. the digital badge). Most participants were in the 26-55 years age range (67%) with a male to female ratio of 2:1; 55% did not have a degree and were in full or part-time work [type of work not declared] (81%). Ten per cent of participants declared a disability. This represents a relatively diverse population attracted to this course which partly realises the aspiration to broaden the coaching workforce and ensure that this workforce is appropriately supported.

Respondents could select more than one answer to describe their reason for undertaking the course with: 'personal interest' (81%), 'professional development' (67%) and 'relevant to my work' (40%) dominating. This suggests coaches' motivations are closely associated with a desire to develop and improve their coaching practice.

A strong influence on why people take a course is how they are directed to it and Google Analytics can help determine this through tracking the URL via which they arrive at the course opening page. The majority arrive through three main routes:

- Recommendation via a range of other websites (46%).

- Through social networks (14%) (e.g. Facebook and Twitter).

- Through a search engine (31%).

Data confirmed three main organisations recommending the course (UKC, PGA and BC). Both canoeing and golf participants cited the motivation of CPD 'points' being awarded for completion of the course. Clearly for some this was a key factor in taking the course.

Learner engagement

There are two sets of data that signify different levels of learning engagement. Firstly, the unique visitors (19,100) to the course in 11 months since June 2017 indicates high levels of traffic visiting and browsing the resources and material (unique visitors refers to the number of distinct individuals requesting a page(s) from the website). Secondly, an accurate picture of detailed learner engagement is the number who have enrolled (n=3,100), thereby showing interest in completing and obtaining a digital badge.

Insight into when participants accessed and engaged with the course was analysed by comparing course website visit data across two randomly selected weeks, from the 11-month period since June 2017. Visit numbers per hour were aggregated for each day across the two weeks and then an average number of visitors per hour was calculated for each day. This analysis revealed a regular rhythm of peak visitor numbers midweek with comparatively little traffic at weekends. Equally, early to mid-morning through to mid-afternoon was the most popular time of the day for participants to access the course followed by a smaller peak in the evenings. Figure 1 shows the pattern of visitor numbers for two representative Wednesdays and Sundays of the weeks analysed.
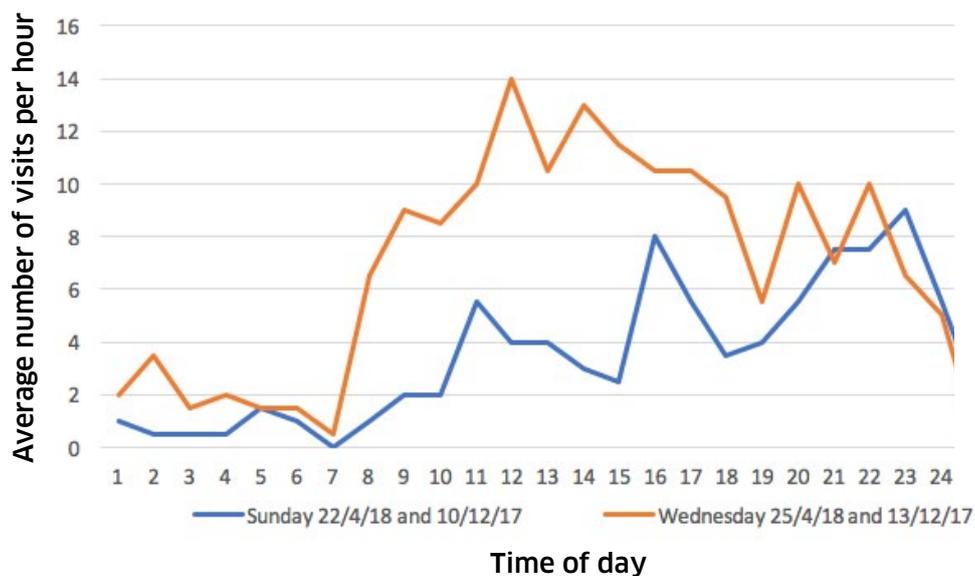
Figure 1 Average course website visitor numbers by hour across weekday (Wednesday) and weekend (Sunday) in mid-December (2017) and late-April (2018).

This pattern of activity suggests that participants clearly had a preference for accessing the course during the traditional working day and avoided weekends and to a lesser extent the evenings. This is contrary to when most traditional coach education courses take place, which is during the weekends and evenings. These findings suggest that online learning can provide a more flexible and convenient mode of delivery that allows individuals the opportunity to learn at a time which suits them and accommodates their wider commitments and responsibilities.

To explore which parts of the course were most popular, unique visitor number data were analysed. Specifically, the number of visitors to each of the 70 pages was used as an indication of the level of interest in each section (page) of the course. Box 1 shows the top seven page titles using this approach.

Box 1: Seven section page titles showing higher than average visitor numbers relative to other pages

- What conversations do coaches and psychologists have?

- What does fun mean in children's sport?

- Why being born in May has its advantages

- What drives international athletes?

- Sport Psychologists explain their work

- How much can we trust what journalists say?

- A fresh look; coaching commandments

A wide range of factors contribute to the popularity of different pages (eg study order, text content, video elements, and links to assessment). Page titles that were framed as questions appeared to be popular. Using a question to frame a section also provided a clear structure for the section – a distinct narrative focus and purpose. A further learning design consideration is the amount of time participants spend on the course pages per visit: 80% spend less than two hours, while 37% spend less than one hour. The content therefore needs to be structured in small manageable chunks (less than one hour of study time) to accommodate this dipping in and out of the course.

Engaging learners is a central and acute issue in much distance learning, since often there is no tutor to guide learners through material. The content has to be accessible, clear and has to capture attention to sustain learners' interest. Learners were asked what their preferred types of learning activities were, with the most commonly cited being:

- watching videos (95%) and

- getting feedback via quizzes/tests (90%).

This is reinforced from course review comments such as: "The use of different educational means - quizzes, articles, videos, journal articles - was very useful in facilitating learning" (L1). It appears variety in appropriate tasks and activities helps sustain engagement.

The durations of activities are also important. Internal Open University research has demonstrated that participant retention on short courses is partly related to use of video clips that are less than three minutes. However, the use of clips alone has modest value for learners. Learner comments suggested one aspect of the design of video use was particularly important: "Videos and discussion follow up was a really useful facility" (L2). Before watching a video the online text tells the participants what to focus on – active watching – and afterwards there is a commentary about what 'experts' (the course team) thought as they watched the video (ie the discussion follow-up referred to by participant L2). This design feature helps to reinforce and shape participant's understanding and aligns with Kori et al.'s (2014) findings.

Discussion: the impact on coaching practice
It is recognised that expressions of attitudes to a course cannot straightforwardly be equated with learner development and impact, but attitudes to learning is used here to stimulate discussion in the context of the filtering process described by Stodter and Cushion (2016).

The overwhelming majority of those completing the post-course survey had a positive learning experience with "interesting" (94%), "thought provoking" (81%) and "stimulating" (70%) being the three most commonly agreed terms used to describe their learning. A further sign of overall satisfaction was the 96% who agreed that "I would recommend

the course to others". The only negative comments related to part of the quiz functionality when using mobile devices and the limitations of some of the quiz questions. For example: "Sometimes the quiz answers you had to type in were a little too specific" (L3).

There is a need to consider some of the other statements that learners made about their learning experiences. For example, the following three statements directly frame the learning in terms of their new knowledge beyond formal Level 2 courses and positive change.

"The course covers topics that never came up in my Level 1 or 2 coaching courses for cricket, nor in any post-Level 2 CPD, so very valuable." (L4)

"Really interesting and engaging course. Lots of bite size information for the busy amateur to manage their time. I learnt so much, it reaffirmed lots and I've made some positive changes!" (L5)

"I'm a Level 2 gymnastics coach and have begun to realise how little we are taught on the other courses. This is opening my eyes to a world of things I ought to know." (L6)

This 'change' theme suggests that in relation to the Stodter and Cushion (2016) filtering framework, the course, especially via video clips, is able to model effective practice exemplars through a 'seeing is believing' approach. Case studies can demonstrate effective planning and interpersonal skills, while video scenarios can enhance decision making and problem solving skills. These are likely to stimulate the possibility of later experimentation in practice in the coach's own context. Most effective coach learning is described as taking place in situ alongside or within coaching practice. Online distance learning such as this is unlikely to be in situ, nor is it studied in a remote classroom. As demonstrated earlier it occupies, typically, a midweek learning episode before most coaches continue their practice in the evening or weekend.

A feature of this 9-15 hours of learning, studied midweek, is the possibility that if consistent concepts and critical analysis of coaching practice are reinforced by opportunities for personal reflection, some slight adjustments to a coach's beliefs and their 'biography filter' may occur. For example, comments such as this: "The course has been fascinating, and has helped me to think about my own coaching beyond a plan for the next session with the under-6s on Saturday morning!" (L7). This suggests introspection and thinking about practice more broadly beyond the next coaching episode.

A final theme to emerge was the accessibility of credible research insights into coaching. As Bailey et al. (2018) suggest, there is a great deal of online content available; navigating and
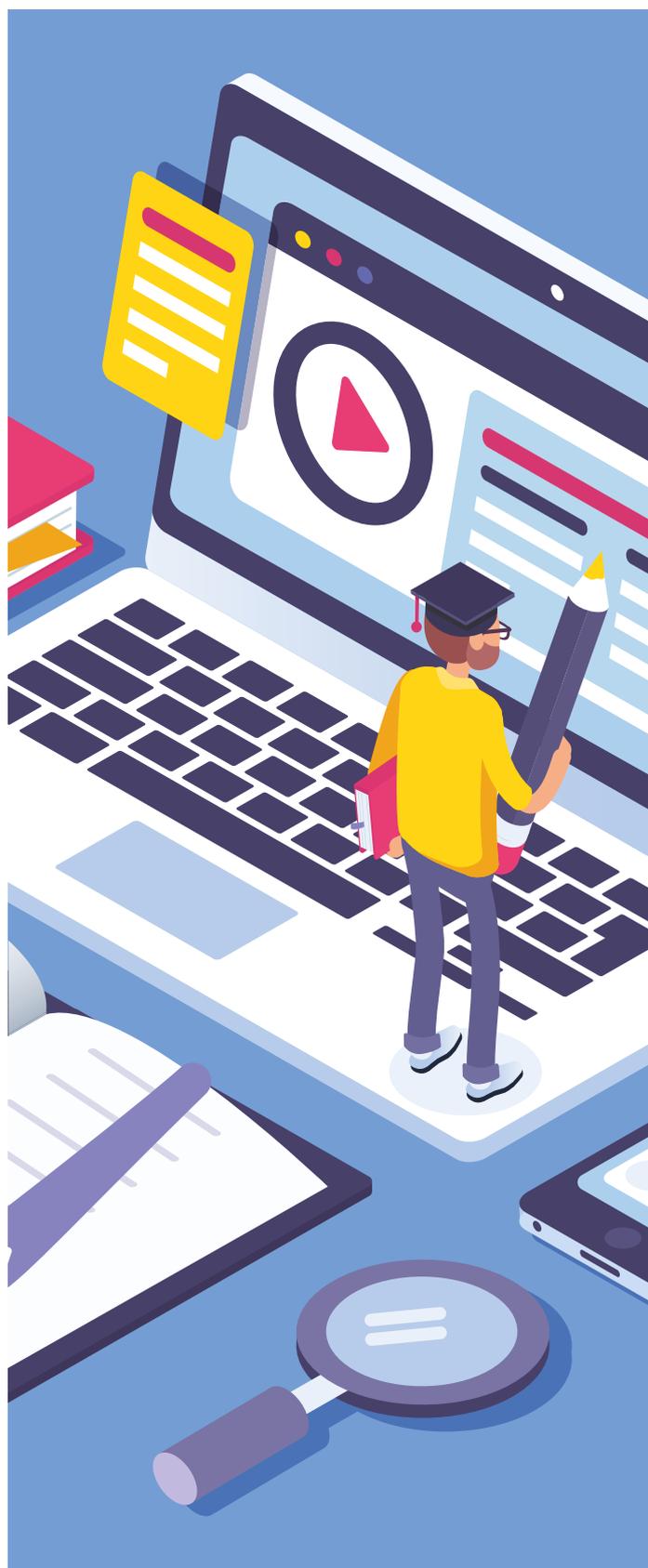
critically evaluating the surfeit of information can be difficult for those with time constraints or a limited knowledge of what might be valuable. Online distance learning with high quality control mechanisms has the potential to act as a curating function, in assembling appropriate evidence-based material in an accessible manner, particularly if reinforced by a range of learning activities with a critical lens. For example, these comments address this theme:

> *"I am a secondary school PE teacher and coach some elite young athletes in my spare time. It is great to find current and relevant research/ information." (L8)*

> *"A lot of the material was new to me and very applicable to my coaching. The way that it is set up means that you can dip into the sections that you are most interested in even if you do not complete the whole course." (L9)*

There is some evidence of modest impact on practice through some of these participant comments. To aide experimentation of some the coaching ideas in practice and passing through Stodter and Cushion's (2016) 'context filter', it is likely that this course would be most effectively used in conjunction with other learning and, in particular, mentoring relationships. In this way, the strength of the course –its engagement and stimulating of new ideas – could be discussed with others, allowing deeper reflection as part of any participant filtering process.

Conclusion

Insights from this analysis mainly relate to the learning design, namely:

- A variety of tasks and the use of prompts, guiding questions, and comments gives structure, helps critical thinking and reinforces new knowledge.

- The short time duration (ie <2 hours) of peoples' online learning episodes, suggests information should be structured in short bite-sized chunks, with consideration given to engaging headings possibly framed as questions.

- Activities that stimulate reflection are more likely to be effective. Learners' preferences were for viewing short videos (ie <3 minutes), with a clear task focus and an ability to compare their thinking with that of the course team. This can support 'seeing is believing' in helping to influence coaching practice. In addition, quizzes encourage participants to think about what they know, with feedback on whether their interpretation is appropriate.

In conclusion, a variety of learning opportunities, with online distance learning as a component part, has the potential to impact coaching practice. Courses such as the one evaluated here could be integrated into a formal qualification programme or could contribute to ongoing development and help to fill the space between qualifications. The scale and reach of online distance learning, and its accessibility to diverse populations, may also allow organisations to free up their resources and time to develop other learning opportunities.

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