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Factors associated with user engagement in online professional development courses: a systematic review

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Background

The Internet has significantly impacted the world's capability to store, collect and disseminate information (Kumar & Gulla, 2011). This medium of information exchange allows for "learning on demand"; that is, being able to acquire information on a specific topic regardless of time or location (Tozman, 2012). With promises of flexibility, ease of access, lowered costs and overall sustainability that learning delivered through the Internet might offer (Kumar & Gulla, 2011), online learning has permeated its way into many industries and at all education levels.

Despite the potential benefits of online learning, recent studies have found that fewer than 10% of individuals who enrol in online education platforms complete all course activities (Fidalgo-Blanco, Sein-Echaluce, & García-Peñalvo, 2016; Jordan, 2015; Onah, Sinclair, & Boyatt, 2014; Pursel, Zhang, Jablokow, Choi, & Velegoi, 2016). Such low completion rates emphasise that expanded delivery and reach of educational content is not enough to achieve better learning (McGowan, 2015).

While low completion rates may undermine the idea of learning at scale, studies have shown that learner completion of online courses can be just as effective as traditional face-to-face classes for learning content (Fishman et al., 2013). In order to maximise the potential of the Internet as a teaching and learning medium, it is necessary to understand what drives students to engage with online courses.

Previous research on engagement in online learning has mainly focused on learners from primary, secondary and tertiary education (Meyer, 2014; Pellas, 2014; Sun & Rueda, 2012). Few studies have considered the engagement of individuals who participate in online learning for work related reasons – online professional development. Although many industries understand the need for professional development, the literature on online professional development has mostly focused on its feasibility, rather than how online professional development may be optimised.

As online professional development becomes more prevalent, there is a trend towards personalizing the online learning experience to fit the individual's learning preferences and needs. By doing so, individuals may become more engaged in learning, thereby maximising the potential of online learning. This review focuses on individual and contextual factors associated with user engagement in online professional development courses.

Objectives

The objective of this review is to identify factors associated with user engagement in online professional development courses.

Existing reviews

Registered on PROSPERO, a review by Bailie and Delgaty (2016) aims to identify factors which influence online and distance education in medical education (Bailie & Delgaty, 2016). http://www.crd.york.ac.uk/PROSPERO/display_record.asp?ID=CRD42016046329

Similar to the review by Bailie and Delgaty (2016), this review will examine online learning. The aims are to identify factors associated with user engagement in online professional development courses. However, our review will examine professional development from all professions, not just focusing on medical education.

Intervention

In this review, we define online professional development as education delivered via the Internet (Bakia, 2010; Clark & Mayer, 2011; Sinclair, Kable, Levett-Jones, & Booth, 2016) with the objective of helping an individual grow in their profession (Biddoe, 2015; Marriss, 2011). As a profession is characterised by its requirement of specialised knowledge and training with the use of an individual's independent judgement (Buhai, 2012; Cruess, Johnston, & Cruess, 2004), individuals should remain well-informed of developments in their profession to maintain competency. While professional development may exist in many forms, this review will specifically look at online professional development that is structured as a course – i.e., a series of learning activities (Kim, 2015).

Studies will be included if professional development courses were either fully or partially delivered through the Internet. Studies which examine professional development courses designed for orientation or induction purposes will be excluded.

Population

This review focuses on user engagement in online professional development courses, so studies in all professions will be included. Participants will be working individuals who have been enrolled in online professional development courses within their profession (c.f. courses an individual may sign up for out of self-interest). Studies will be excluded if they examine pre-service individuals who are undergoing professional development during practicum and have not officially entered the workforce.

Outcomes

Engagement is defined as the behavioural, emotional and cognitive involvement between a user and a resource (Attfield, Kazai, Lalmas, & Piwowarski, 2011). For the purpose of this review, we will examine user engagement in working individuals by the breadth and depth of use in online learning platforms. We will identify how user engagement measures (e.g. sustained participation, learning flow, and course completion) relate to individual or contextual factors (e.g. motivation, job characteristics, and online learning platform characteristics) of working individuals.

Extracted data will include: 1) Descriptive study information; 2) Online professional development course information; 3) Measures of factors associated with engagement; 4) Measures of engagement; and 5) the relationship between 3 and 4.

Study designs

All study designs will be included. Qualitative studies will be set aside for a separate review.

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Roles and responsibilities

Jane Lee will lead the work on the review, with input and guidance from Dr. Taren Sanders, A/Prof. Philip Parker and A/Prof. Chris Lonsdale. Mr. Devan Antczak will assist as a second reviewer.

- Content: Jane Lee
- Systematic Review Methods: Jane Lee, Devan Antczak, Dr. Taren Sanders, A/Prof. Chris Lonsdale
- Statistical Analysis: Jane Lee, A/Prof. Philip Parker,
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Potential conflicts of interest

None known

Preliminary timeframe

- Date you plan to submit a draft protocol: May 31
- Date you plan to submit a draft review: October 31

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By completing this form, you accept responsibility for preparing, maintaining, and updating the review in accordance with Campbell Collaboration policy. The Coordinating Group will provide as much support as possible to assist with the preparation of the review.

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Form completed by: Jane Lee **Date: 10 May 2017**