

Using the self-determined learning principles of heutagogy to support academic staff who are learning to teach online

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Tailored professional development (PD) programmes assist university teaching staff to capitalise on the educational use of technology. To supplement on-campus PD support, staff at Avondale College of Higher Education developed a self-help online resource, *Moodle's Little Helper (MLH)*, that has since become an integral and accepted component of the institution's PD landscape. Since Avondale's overall PD program is built upon the theoretical underpinnings of heutagogy (Hase, 2009; Hase & Kenyon, 2003), a self-determined learning theory, the purpose and nature of the resource also reflects the key principles of this educational philosophy. Adopting a utilisation-focused research methodology (Patton, 2011) ensured staff needs were identified and met within *MLH's* customised content, homegrown style and iterative development. The outcomes from the first stages of the study provide commentary on how the theoretical principles of heutagogy can be employed to gain greater reach and efficiency when PD support is in high demand.

Keywords: heutagogy, online resource, professional development, institution-wide

Introduction

Online education has become a global phenomenon. As online learning and teaching technologies have developed to the extent where they are easily accessible and usable around the world, so too the demand for their use has influenced the nature of higher education courses (Hacifazlioglu, Sacli, & Yengin, 2007). This demand, in turn, puts pressure on those who deliver such courses - university administrators, course developers and lecturers (Rienties, Brouwer, & Lygo-Baker, 2013). Professional development (PD) programmes and resources are needed to assist academic staff in developing online course design and online teaching abilities. As staff become increasingly familiar with online contexts, the provision of self-help online resources can meet some of the unpredictable, chaotic and complex needs of university teaching staff.

This paper reports on the early stages of a research project in which the development and use of an online resource, *Moodle's Little Helper (MLH)*, was investigated. By drawing on the theoretical principles of heutagogy, the study of self-determined learning (Hase, 2009; Hase & Kenyon, 2003), the resource was designed to provide easily accessible instructional guidance to academic staff about online course design and online teaching. The strategies that comprise utilisation-focused research design (Patton, 2011) supplied an appropriate methodological direction to ensure the needs and feedback from resource users were incorporated into its design, development and ongoing evaluation. Together, these pedagogical and methodological principles formed the theoretical underpinnings of the study and continue to drive future stages of the research.

Background

Ongoing, innovative and customised PD programmes are essential to empower educators as they manage their changing roles and develop the necessary competencies for online course delivery (Baran, Correia, & Thompson, 2011). However, the PD requirements of university staff often outweigh their institution's ability to cater for their requests, a situation that has become more prevalent with the advent of new technologies. To resolve this imbalance, universities have increasingly capitalised on the affordances of capacity-building PD programmes (for example, Symes, 2005) which can enhance teachers' skills and somewhat reduce the demand on restricted professional learning support resources. This process can be promoted through using the online tools that will eventually become one's teaching resources and methods, the result of which can ultimately equip a tertiary teacher with confidence and competence in online teaching (Salmon, 2013; Ward & Kushner Benson, 2010). Academic staff are also known to benefit from the use of locally constructed, in-house, situated learning experiences (Guskey & Yoon, 2009). Nevertheless, while capacity-building PD strategies and homegrown resources may reduce the pressures placed on PD staff and resources, the unpredictable nature of the learning journeys experienced by academic staff, as they develop as online instructors, requires that PD support be highly flexible and accessible. Hase and Kenyon's (2003) concept of heutagogy was found to be particularly appropriate to inform the development of a flexible self-accessible support resource about online teaching as the

self-help nature of the theory “recognizes that people learn when they are ready and that this is most likely to occur quite randomly, chaotically and in the face of ambiguity and need” (pp. 3-4).

While adult learners within PD settings often report feeling insecure and out of their depth as they develop skills within the somewhat unfamiliar context of online education (Northcote, Reynaud, Beamish, Martin, & Gosselin, 2011), heutagogical principles propose that this premise may be an ideal context for learning, at the point “when there is a gap in understanding that creates curiosity, confusion or a gentle unease” (Hase, 2009, p. 44). In fact, the concept of heutagogy suggests that incorporating emotions into the learning process “may make learning more indelible” (p. 44). Furthermore, the educational theory of heutagogy lends itself to “spirals of reflection” (Canning & Callan, 2010, p. 71) which aligns closely to the cycles of iterative evaluation patterns recommended as part of Patton's (2011) utilisation-focused research methodology, used in this research.

Methodology

The choice of research approach was driven by the study’s aim: to develop an efficient online resource that directly met the needs of both novice and experienced online educators in a higher education institution. To achieve this, the needs of academic staff were identified and incorporated into the design and ongoing development of the *MLH* resource. These research processes were guided by the following research questions:

- What are the needs of academic staff as they develop online course design and teaching skills?
- How can varied needs of academic staff be incorporated into an online self-help support resource?
- How is the self-help resource used by academic staff to develop online course design and teaching skills?

The methodology of this study adopted a utilisation-focused design (Patton, 2011) to guide the development and evaluation of the content and structure of resource. This research approach also suited the long-term nature of the study by ensuring that future iterations of the resource continue to incorporate the contextual and dynamic needs of staff at the institution. This participatory research methodology was enacted by inviting resource users to contribute to its initial design and its successive modifications through journals and online surveys. Further data were gathered through LMS analytics and interviews with HelpDesk staff. The completed stages of the study to date, outlined in Table 1, are progressively interdependent and informative, in that each stage further directs the subsequent stages while simultaneously contributing to the ongoing development of the resource.

Table 1: Progressive stages of the study, including data gathering and analysis processes

Stage 1	2011-2012	Problem defined in consultation with practitioners (online educators)
Stage 2	2012	Prototype 1 of the resource was created and made available for use and evaluation
Stage 3	2012-2013	Evaluation processes identified and administered to gather feedback data (evaluation surveys; learner analytics in LMS; and Help Desk data) which were analysed using research questions as interrogation tools to determine future resource modifications
Stage 4	2013-2014	Outcomes of data analysed from Stage 3 were incorporated into Prototype 2

By incorporating a range of face-to-face and online data gathering processes and tools, both the users and the developers of *MLH* were provided with multiple opportunities to refine the resource collaboratively. To determine the main areas of need for academic teaching staff, the data gathered from reflection journals kept by the researchers and online survey responses from staff users of the resource were open-coded using qualitative analysis software (NVivo). Themes and areas of need identified through this process consequently inform future iterations of the resource. Data continues to be gathered about the needs of academic teaching staff through a range of sources including email, Help Desk requests, individual consultations, LMS learning analytics, survey responses from resource users and observations of PD officers. Other research at the institution that is tracking the development of foundational online teaching skills has found that online teaching abilities are developing across academic staff in all faculties (Gosselin & Northcote, 2013; Northcote et al., 2011).

Findings and discussion

Data gathered during the first stage of this study provided information about the needs of academic staff as they develop online teaching skills. These data were used to develop the initial prototype of *MLH*. Secondly, participants provided evaluative data about how they used the self-help resource to develop their online course

design and teaching skills. Based on an analysis of these data, twelve areas of need were identified which have since been used to inform the structure of the *MLH* resource, including: instructions about setting up and structuring courses; uploading resources; learner interactivity; media enhancements; and quality control. A hyperlinked menu enables quick access, not necessarily in any predetermined order, to text-based instructional resources, video tutorials, course exemplars, showcases of best practice and workshop materials (see Figure 1) to suit the dynamic and non-linear nature of adult learning (Hase, 2009). The use of Patton's (2011) utilisation-focused methodology facilitated this development process by regularly engaging a wide range of academic staff, at various stages of development as online educators, in the process of developing and evaluating the resource.

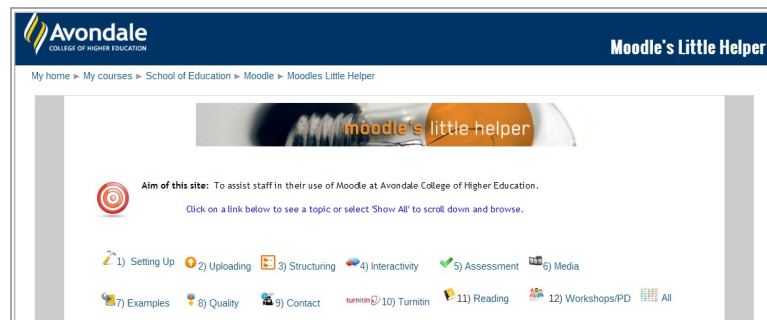


Figure 1: Navigation panel of the Moodle's Little Helper (MLH) resource

Since the resource has been made available for access, it has provided a mixture of what Bell and Morris (2009) refer to as a “conceptions-based approach” and a “practice-based approach” (pp. 702-703) to professional learning in that staff have reported its impact on their development of understanding about online teaching as well as their practical skills. In discussions about heutagogy, these understandings and skills have been referred to as “competencies and capabilities” (Blaschke, 2012, p. 59). They are developed within a learner-driven context, which is one of the central tenets of Hase and Kenyon's concept of heutagogy (2003). This appears to have had a capacity-building impact on academic staff who, before the resource became available, often expressed feelings of self-consciousness about their regular access to on-campus support services. Now, however, staff regularly and independently access the online resource, *MLH*, for guidance about online education. According to LMS analytics, the resource recorded almost 1500 hits between February and March 2014. Analysis of these hits with associated evaluation data has revealed that both inexperienced and experienced online educators who use the resource reported on how its flexibility helped them to find the assistance they sought: “I tend to graze: going to whatever meets my immediate need. That tends to be more the top-end kind of skills in various sections” and “At this stage I have concentrated on the ‘setting up’ of the basics, and now need to take some time to look at some more of the ‘examples’ and to work on different ways of facilitating online interactivity”. The diversity of responses from academic staff suggests that it caters to some extent for the complexity of their online teaching abilities and the non-linearity of their learning (Hase, 2009).

The resource was housed within the familiar confines of the institution’s LMS. Because the academic teachers at the institution who use the resource were given control of their learning within a familiar, authentic and situated context (Bell & Morris, 2009), they appeared to be motivated to learn about online teaching by using *MLH*. Just as Ashton and Newman (2006) found that “heutagogy prepares students for self-determined lifelong learning” (p. 825), this study has shown how a resource embedded with heutagogical principles can also support ongoing teacher learning by providing adult learners with greater autonomy (Blaschke, 2012). The homegrown nature of *MLH* provided an online space from which teachers could privately gain access to information they were ready to incorporate into their teaching: “learning occurs when the learner is ready rather than when the teacher expects or intends for it to occur” (Hase, 2009, p. 44). Similarly, the heutagogical approach to designing learning resources has the capacity to meet the demands of adult learners by preparing them to engage in complexity in the workplace (Blaschke, 2012).

The problem associated with providing efficient and accessible instructional guidance on how to design effective online courses to staff at a tertiary education institution has been partially solved through the provision of this online resource. While the *MLH* provides some solutions to many of the queries about online teaching and course design raised by academic teaching staff, the researchers are still aware of the need for some targeted face-to-face, on-campus PD activities such as workshops, showcases and colloquia, on the topics of online teaching, online course design and online learning. Although some staff still require on-campus support, the *MLH* resource has provided an efficient way to meet many of the needs of Avondale's academic teaching staff who are developing skills and understanding of online course design and teaching. One limitation of the

resource that has emerged to date is the lack of engagement by academic staff in the collaborative tools embedded in the *MLH* resource. As such, an interactive online collaborative learning community, as described by Bell and Morris (2009) as an effective PD space, has yet to be established within the resource as staff tend to make use of *MLH* on an individual basis. Instead, the collaboration instigated by use of the resource tends to occur during informal on-campus conversations or via email. The future use of collaborative tools will be the focus of future iterations of the resource.

Conclusion

Because PD programmes can be costly, the efficiency of staff development strategies are frequently under scrutiny. The outcomes of this project demonstrate how a set of theoretically informed strategies, primarily focused on self-determined learning, can produce a time and resource efficient solution to dealing with the high demands made on university PD resources. *Moodle's Little Helper* is an example of institution-wide technology integration which provides staff with *just-in-time* best practice teaching guidelines, instructions, practical and pedagogical tips, and exemplars for online education contexts. Findings from the early stages of the study have illustrated how the methodological principles of utilisation-focused research combined effectively with the theoretical underpinnings of heutagogy, especially the self-determined, learner-driven principles of the theory that recognise the role of emotions and the non-linearity of adult learning. Together, these educational and methodological approaches guided the design, development and implementation of a PD resource to support online teaching within a higher education institution. Learning about teaching online was situated within the online context. Both the development and use of the resource has revitalised online education at Avondale where enhanced online course development is encouraged and innovation is a fostered priority. The resource has, subsequently, become integral to the support of online educators. Findings from this continuing study are offered for interpretation and possible application by academic development staff, course designers and teachers engaged in developing their institution's online education capacity.

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