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Five stages of online course design: Taking the grief out of converting courses for online delivery

Karin Barac
Arts, Education and Law Group
Griffith University
Dr Lynda Davies
Arts, Education and Law Group
Griffith University
Sean Duffy
Arts, Education and Law Group
Griffith University
Neal Aitkin
Information Services, Learning and Teaching
Griffith University
Dr Jason Lodge
Griffith Institute for Educational Research
Griffith University

The burgeoning online delivery of higher education requires support and resourcing to be successfully implemented. In this paper, we report on the initial design and development of a professional learning module intended to guide academics when building quality online courses through a five-stage framework. The framework and resulting training module were developed in response to the growing demand on academics to convert their face-to-face courses to online offerings. This accelerating trend to move online often exceeds the capacity of allocated university course development resources (based locally or centrally as development units or specialised roles). It is for this reason a streamlined approach is needed to provide alternative support to academics that alleviates the pressure on these specialised support roles. The module developed also provides an example of how professional learning can be tailored to meet strategic university policies while delivering on quality products that align with everyday academic processes.

Keywords: Online Learning, Professional Development, Learning Design, Higher Education

Introduction

The design and development of online programs and courses in higher education is not a new phenomenon. With increased demand to attract and retain students through offering flexibility in study modes and with the advent of the Massively Open Online Course (MOOC) the imperative to move online is becoming more urgent. Building quality online courses requires not only technological expertise but for many new pedagogical expertise (Caplan & Graham, 2004) as these online learning models and frameworks have yet to be widely adopted by the academic community (Roby, Ashe, Singh, & Clark, 2012). In the last couple of decades universities have invested heavily in resourcing specialty units that were tasked with creating multimedia educational content in conjunction with the academics, usually on a limited project or fee-for-service basis. This model of resource development was possible when universities were concerned with boutique course development but is not financially viable to the large-scale course improvement model that many universities are experiencing now and into the future. Furthermore, as we move through the 21st century, one defined by

rapidly advancing and ubiquitous digital technologies, it is now assumed that academics (and students) should be able to naturally incorporate these technologies into their teaching and learning practices (Koehler & Mishra, 2005). As such, many universities are scaling back their funding of these specialist units focused on high-end resource development and instead concentrating their investment on providing enterprise level applications such as Learning Management Systems to allow academics to deliver online courses. Therefore the challenge facing many universities now, and in the future, is how to provide academics with the professional learning necessary to acquire these new pedagogies and effectively use the technological tools provided.

Developing quality online courses and programs often requires a complete reconceptualisation of an academic's teaching learning strategies (Bennett & Lockyer, 2004; Caplan & Graham, 2004; Garrison & Kanuka, 2004; Hanson, 2009; Macdonald & Poniatowska, 2011). It is for this reason it has become necessary for the development of a professional learning module that encompasses both the pedagogical and technological perspectives of the design process. This module will serve as a just-in-time resource to support the academics in the process of converting from a face-to-face delivery mode to an online one. It is intended that by giving the academics a strong pedagogical perspective on the curriculum design process that they will be able to make appropriate technological decisions when implementing the design. It is also envisioned that by completing this module that the conversations with the specialised development teams will be much more meaningful as many of the content and teaching activity decisions will have already been made. It is our experience that development projects conducted with specialty units often become costly or fail because academics are not given the time or the space to do the conceptual thinking required to make such radical shifts in their curriculum to make use of these specialist roles.

The challenge becomes: how does one breakdown and then reconceptualise this process of redesigning courses for an online environment and present it in a way that would be useful to an academic who has many other competing pressures and very little time to concentrate on the redesign process.

Designing the Online Course Design Framework

It has been acknowledged that academics generally do not take advantage of educational research (Price & Kirkwood, 2013) rather relying on personal experiences or their conversations with colleagues (Dondi, Mancinelli, & Moretti, 2006; Macdonald & Poniatowska, 2011; Price & Kirkwood, 2013; Spratt, Weaver, Maskill, & Kish, 2003) to improve their practices. As such the overall guiding principle in designing this professional learning module was to ground it in the theoretical frameworks that encompass quality online course design, while making it consumable for the average academic by providing practical examples from their colleagues to illustrate the theory in practice. The guiding pedagogical principles for the development of this module where underpinned by the three frameworks of Community of Inquiry (COI) (Garrison, Anderson, & Archer, 1999), Technological, Pedagogical, Content Knowledge (TPACK) (Mishra & Koehler, 2006) and the Goodyear (2005) pedagogical framework. The use of these three models is well documented in educational research on quality online course design (Anderson, 2008; Garrison & Kanuka, 2004; Koehler & Mishra, 2005; Rubin, Fernandes, & Avgerinou, 2012; Wiesenmayer, Kupczynski, & Ice, 2008).

Once the theoretical frameworks that would ground the modules were decided, the next task was to break down the process (and re-conceptualisation) that is required to build online courses into achievable steps. The main purpose of which was to direct academics away from the traditional concept of designing for the structured time periods of lectures and tutorials towards a more holistic design focusing on content and interactions. As such we defined five distinct, but ultimately interlinked, areas to stage the framework. These stages are Getting Started, Curriculum Design, Interaction Design, Assessment Design and Site Design.

Figure 1: Homepage image of the module site
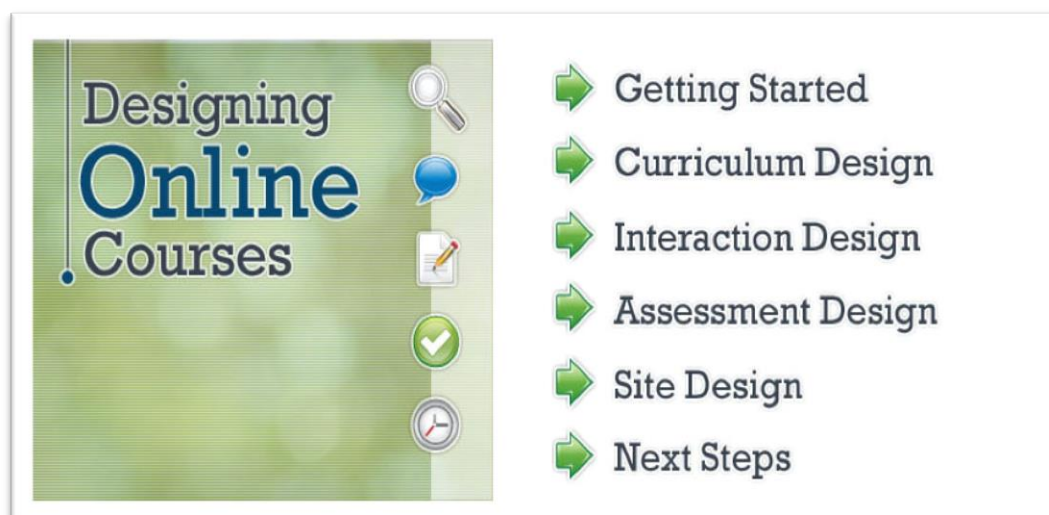
The intention of each section of the framework is briefly outlined below:-

Getting Started

This area frames the process in the larger context of the university outlining relevant expectations, structures or processes that are to be adhered to during course development. By positioning the process in existing processes and workflows it creates a positive perception with the academics that this module and the design of their course is not an extra workload. It also serves to position the process within the support structures that are available to the academics; one of the greatest challenges for support roles (i.e. educational designers, multimedia developers) is that academics know that they exist to help.

Curriculum Design

Activities throughout this section help academics to design and review their course learning outcomes, consider content sequencing, articulate the purpose of the assessment plan, appraise what learning activities will be most appropriate and plan for a cycle of evaluation. This section touches briefly on theory, highlights good practice, and through the activities provides completed design plans that can be transferred directly into required university documentation such as course profiles.

Interaction Design

This is seen as one of the most crucial parts of the process to produce quality online courses (Finch & Jacobs, 2012). This area outlines the process of using the Community of Inquiry framework to reconceptualise courses as a series of content and student interactions to create the learning environment.

Assessment Design

This section briefly discusses the philosophy underlying the concept of assessment *for* learning, exploring the purpose and outcomes of formative and summative tasks that were initially discussed in the Interaction Design section. In the current higher education context, universities are looking to maximise outcomes through the potential of high enrolments in online courses so the size of the cohort and its affect on marking effort (and hence the sustainability of the task) should be explicitly considered in the course design.

Site Design

This is seen as one of the other crucial areas in the framework as this is often what is missing from online courses. This teaches the academics the importance of creating a teacher presence through elements of site design and the importance of instructional text in an online environment.

Early in the design process for this framework it was decided to make a clear distinction between the design of an online course and the teaching of an online course. However, during the creation of content for each stage it was found that this distinction can often blur so a sixth but separate stage, *Next Steps*, was added. This area briefly highlights where design factors of a course can affect how a course is eventually taught and serves as a lead in to the next professional learning module (to be developed), "Teaching Online Courses".

Each section has been framed with simple question statements to help frame the work that is required to design online courses. The intention of which is to speak to the academics in a conversational tone, which allows the academics to see the process in their own terms and not as something external. While this module is pedagogical in nature the main ideas are illustrated through practical examples of the technologies in use provided from the academic's context. Allowing the academics to internalise the theory and start seeing how the technologies can be used in practice, based on the learning activity ideas that they design. For this reason these modules are highly adaptable for any discipline or environment as the main content is provided through examples.

Each section also contains practical activities that scaffold the design process. These activities were designed to fit and explicitly link to the development of the course or unit outline, the documentation requirements of most universities. The purpose of which was to reduce the perception that designing an online course or more importantly, participating in this development module would be extra workload on the academics' part. All activities are based on these requirements so that academics are not spending any extra time or energy in completing this module. It is this defining design factor that makes this module highly adaptable for any discipline or university to adapt to their own context.

Conclusion

The module was initially trialed, in a workshop format, with a small team of academics that have been tasked

with developing a new online teacher-training program to begin delivery in 2014. Anecdotal feedback from this initial trial suggested that the team found the information very useful and that they would be returning to the content as they move further through the development of their individual courses. A pilot will be conducted with a larger group of academics that will undertake the module as a part of their regular professional development activities for the semester as a four-week online course. Evaluation of the trial cohort and the pilot cohort will be conducted through two methods. Firstly, participants will be surveyed on their experience with the module. Secondly, an analysis will be conducted of the course outlines and course design documents that the participants are expected to complete throughout the module to assess whether the key concepts are being applied effectively. The results from the initial trial and the formal pilot will be used to revaluate and adjust the content of the framework before it is opened to the larger academic community within the University.

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Author contact details:
Karin Barac, k.barac@griffith.edu.au