

Learning design@CSU

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Educational Designers at Charles Sturt University have recently completed a professional development program in course design. An outcome of this professional development activity has been the development of online modules which cover various learning and teaching strategies and as a by-product; learning design templates. The online modules are designed to provide an overview of how to use evidence based learning and teaching strategies, with the aim of changing teaching practice to positively influence student learning. After developing these modules, it was recognised that they could be adapted into templates that teaching staff could use directly in their subjects. This paper will discuss the progress of this multi-faceted project that focuses on professional development of Educational Designers and academic staff, development of online modules and learning design templates.

Keywords: Learning design, course design, professional development, learning design templates, learning and teaching strategies.

Introduction

Learning and teaching in higher education is becoming increasingly complex with leaders having to deal with environments that are volatile, uncertain, complex and ambiguous (Shapland, 2013; Johansen, 2009). Increased participation and the lessening of entry requirements has resulted in students less academically prepared entering higher education (Norton, 2014). There is also continued uncertainty about government funding, deregulated fees and the quality regulator (Norton, 2014). Academic staff face competing demands juggling research, teaching and curriculum development coupled with the increased use of technology in teaching including learning management systems, Web 2 technologies and mobile technology (Bennett, Thomas, Agostinho, Lockyer, Jones & Harper, 2011; Bexley, James & Arkoudis, 2011; Dalziel, Conole, Wills, Walker, Bennett, Dobozy, Cameron, Badilescu-Buga & Bower, 2016). They are required to understand and incorporate pedagogical sound approaches in their teaching, focus on 'student centered' approaches and embed Graduate Learning Outcomes in courses. To meet regulatory requirements (Higher Education Standards, Australian Qualifications Framework), threshold standards and specific Institutional standards, a holistic approach to course design is advocated. Many projects and fellowships funded by the Office for Learning and Teaching advocate a holistic approach to course design (Lawson, 2015; Rodger, 2011). Also as a number of authors indicate curriculum design and the development of courses is no longer an individual activity;

The focus has shifted in recent years from the individual teacher designing a module or session to include teams designing whole courses (Laurillard, 2013, p.26)

teaching is being conducted by teams in which the quality of the student experience and student learning is highly dependent on the seamless integration of the different individuals – both academic and professional staff – who contribute specialised roles, from curriculum designers and 'discipline experts', to small-group facilitators, assessors, eLearning experts, academic skills specialists and library skills support staff, to name a few (James, Baik, Millar, Naylor, Bexley, Kennedy, Krause, Hughes-Warrington, Sadler, Booth, & Booth, 2015, p.11)

This is the case at Charles Sturt University (CSU) where a holistic approach to course design has been adopted. It is a collaborative process with Course Directors leading an academic course team supported by experts in course design, graduate learning outcomes, online learning, and assessment. Educational Designers work closely with Course Directors co-leading the process and are an integral part of the team. Whilst course design is a collaborative team process, individual teachers have considerable autonomy in the way subjects are delivered; provided they teach within the designed curriculum, the intended learning outcomes for the subject and assess the stated learning outcomes (Bennett et al, 2011). Therefore, teachers would benefit from a professional development program in how to adopt learning and teaching strategies in their subjects (Bennett, et al, 2011). As Bennett et al states;

Team planning often occurred at a course level, with individuals often left to design their own units within an agreed overall structure and approach (Bennett, et al, 2011, p. 165)

Terminology

The definitions of learning design and teaching strategies outlined by the Larnaca Declaration are appropriate for the context outlined in this paper (Dalziel, et al 2016). A learning design (uncapitalised) is a 'sequence of teaching and learning activities' and these have been developed based on various teaching strategies (active lecture, problem based learning, cooperative learning, scenario based learning, portfolios and reflection). The learning design templates developed are aligned to particular pedagogical approaches but may also be adapted to suit discipline contexts. As Dalziel et al suggests the templates may be used 'as is' or adapted to suit the needs of the learner and/or differences in disciplines.

Reference to 'course' in this paper is used to describe a degree program with 'subject' used to describe individual units of study.

Professional development

Educational Designers at CSU have traditionally been involved in supporting a wide array of learning and teaching activities. These include the use of technology in teaching, advising on assessment design in subjects, induction of academic teaching staff, and facilitating professional development activities. Educational Designers are also seen as change agents and are often involved in the rollout of University wide policies (Assessment and Moderation policy in 2014), implementation of Learning Management Systems (Blackboard, 2015) and other technologies (PebblePad, 2016). Educational Designers are increasingly involved in the process of course design and work collaboratively with Course Directors and course teams through a systematic course design process supported by bespoke software.

In order to ensure Educational Designers are able to fulfil this expanding role in course design, a six month professional development program was undertaken in the first half of 2016. Educational Designers attended weekly workshops where they were introduced to the Course Design process. Outside of these workshops, the participants were divided into teams and used the course design process to develop programs in learning and teaching strategies. The following professional development programs were developed; Active lectures, Problem Based Learning, Cooperative learning, Scenario based role play, Portfolios and Reflection. The programs will be delivered online using Blackboard (Interact 2) and are designed to upskill academic teaching staff as an individual development activity. The resources developed will also be used by Educational Designers in facilitated workshops for course teams and sessional teaching staff. The use of the professional development programs could also be considered further and incorporated into Graduate Certificate programs in learning and teaching or as series of badges that provide evidence of professional competency (Gibson, Ostashewski, Flintoff, Grant & Knight, 2015). Discussions about their use is currently underway.

The professional development modules are currently being peer reviewed by academic staff who have used the strategies successfully within their own teaching both online and face to face and/or by those who have conducted research in these areas. Feedback will be considered and changes incorporated into the online modules.

Academic staff at CSU are often recruited from professional roles in industry and are valued for skills and knowledge in their particular discipline area (Bennett et al, 2011). Because of their professional backgrounds, most academic teachers usually start teaching by reproducing the way they were taught and model a specific way of teaching for their discipline (Salmon & Wright, 2014; García, Arias, Murri, & Serna, 2010). Whilst new teaching staff may complete introductory courses in learning and teaching in higher education, teaching staff may not be exposed to a variety of teaching strategies. Whilst it is recognised that different strategies may be more appropriate for different subjects, disciplines or at certain stages of learning (Dalziel et al, 2016) the use of different learning and teaching strategies should not be excluded from consideration. Providing a number of design templates enables teachers to consider new learning and teaching strategies and be guided in a supportive manner which would ultimately improve student learning. As Laurillard et al, 2011 states;

Teachers do not have the time to learn through books, papers, course and workshops, therefore the environment has to embed within its operations information, advice, and guidance on the current knowledge about teaching and learning (p.13)

Hence, learning design templates that could teachers could easily be re-used in their subjects will also be developed.

Learning design templates

The process of learning design is second nature to Educational Designers but the product or outcome of the design process has not been articulated for reuse at CSU (Corrin, Kennedy, de Barba, Lockyer, Gaševic, Williams, Dawson, Mulder, Copeland, & Bakharia, 2016). The product or outcome of a design process is a description of the pedagogical intent of the teacher represented as text and/or illustrations and are often referred to as design patterns (Corrin, 2016; Goodyear, 2005). The process of conceptualizing, planning, and orchestrating learning designs is a key component of the work undertaken by Educational Designers. The learning design of each online program was based on the underlying principles of a teaching strategy and identification of appropriate online tools that would support students engaging in the activities. Once the professional development programs were developed, work began on 'thinking through' how the teaching strategy could be adapted to become a 'template' or a design pattern that could be created within Interact2. Teaching staff could then export/import the templates into their Interact2 sites for use and customised to suit their students.

The learning design templates could be used to underpin the design of a whole course or subject or as the basis for a learning activity or experience within a subject. It was also recognised that not all teaching staff would have the time or inclination to work through the professional development modules. Various professional development workshops and online resources are available but attendance and use of the resources is variable. Whether professional development activities transform teaching practice is also not clear (Salmon & Wright, 2014). The development of both online modules and a template provides the 'either-or' or both option. The templates are a set of example designs providing guidance to teaching staff about how to use the teaching strategy whilst incorporating practical considerations such as online tool selection, processes with a learning management system, and learning activities.

Each template will be structured in a similar format and be designed to provide step by step instructions for the teacher to populate as required. The template will include the core elements of the learning and teaching strategy but also have a similar structure. All templates will include; an introduction to the activity, how it aligns with the subject learning outcomes, specific tasks that students will need to engage with, resources that support learning, the relationship to assessment tasks, the amount of time allocated for the activity and student feedback on the design of the task. The elements in the template reflect the planning stages of a learning activity outlined by Conole, Dyke, Oliver & Seale (2004). Since the templates are designed for use in the online environment recommendations to which tools to use will also be included. Employing a particular teaching strategy provides an underlying rationale for structuring the learning activities in a particular way. This will see variations in the design of each template. For example, active lecture may not necessarily include a group or peer learning experience whereas group activities underpin problem based learning and cooperative learning. The selection of online tools will also reflect the learning strategy employed.

Embedding the learning design templates into Interact2, enables the design to be easily exported into any Interact2 subject site and enables immediate use. So whilst the teacher may not complete the professional development modules for a particular strategy (even though this would be the ideal), using the template would ensure that evidence based teaching strategies are used. It is also possible that a variety of templates could be used in a subject. The use of templates in Interact2 enables a number of templates to be imported into subject sites and hence various learning and teaching strategies could be used; as long as the learning activities align to the learning outcomes for the subject and scaffolds students towards completion of assessment tasks. For example, a teacher may choose to use the active lecture template as well as cooperative learning template for students in the same subject. The learning experience could focus on a single activity or across an entire subject (Masterman & Craft, 2013).

Future directions

Work continues on refining the content and design of each professional development program based on peer feedback and as a consequence, to the learning design templates. Additional programs are being developed to add to the existing suite. Discussions about the use of the programs in our Graduate Certificate in Learning and Teaching in Higher Education are also ongoing. Further consideration will need to be given to how the online learning modules and templates will be promoted and supported. Technical aspects of ensuring that the template can be easily exported and used in subject sites will need to be investigated further as well as the development of help documentation. It is recognised that is unlikely that teaching staff will use the template without support from Educational Designers (McAlpine & Allen, 2007). Educational Designers are working on course reviews and it is possible that the professional learning programs and templates will be used by course teams to develop their skills and knowledge of learning and teaching strategies. The project offers a number of opportunities for further research including the how the online programs are used to support course teams and teaching staff, whether completion of a particular program changes teaching practice, and if/how the generic learning design template are used by teaching staff (too name a few!).

Conclusion

Participation in a professional learning program has not only improved the skills of Educational Designers in course design but also created an online learning program that will enhance the knowledge and skills of individual teaching staff. Ready to use online design templates combined with professional development and supported by Educational Designers would ensure that subjects use appropriate teaching strategies as well maintain the integrity of the course design. This multi-faced project offers the opportunity to support cultural change given the opportunity.

References

- Bennett, S., Thomas, L., Agostinho, S., Lockyer, L., Jones, J. & Harper, B. (2011). Understanding the design context for Australian university teacher: implications for the future of learning design. *Learning, Media & Technology*, 36(2), 151-167. https://doi.org/10.1080/17439884.2011.553622
- Bexley, E., James, R. & Arkoudis, S. (Sept, 2011). The Australian academic profession in transition: Addressing the challenge of reconceptualising academic work and regenerating the academic workforce. Centre for the Study of Higher Education. Retrieved from; <u>http://www.cshe.unimelb.edu.au/people/bexley_docs/The_Academic_Profession_in_Transition_Sept2011.p</u>
- df Carala C. Duka M. Olivar M. & Saala J. (2004). Manning nodeposity and tools for effective learning design
- Conole, G., Dyke, M., Oliver, M., & Seale, J. (2004). Mapping pedagogy and tools for effective learning design. *Computers & Education*, 43, 17-33. https://doi.org/10.1016/j.compedu.2003.12.018
- Corrin, L., Kennedy, G., de Barba, P.G., Lockyer, L., Gaševic, D., Williams, D., Dawson, S., Mulder, R., Copeland, S., & Bakharia, A. (2016). Completing the Loop: Returning Meaningful Learning Analytic Data to Teachers. Sydney: Office for Learning and Teaching.
- Dalziel, J., Conole, G., Wills, S., Walker, S., Bennett, S, Dobozy, E., Cameron, L., Badilescu-Buga, E. & Bower, M. (2016). The Larnaca Declaration on Learning Design. *Journal of Interactive Media in Education*, 7(1), 1-24. https://doi.org/10.5334/jime.407
- Garcia, E., Arias, M. B., Murri, N. J. H., & Serna, C. (2010). Developing responsive teachers: A challenge for a demographic reality. *Journal of Teacher Education*, 61, 132-142. https://doi.org/10.1177/0022487109347878
- Gibson, D., Ostashewski, N., Flintoff, K., Grant, S., & Knight, E. (2015). *Digital badges in education. Education and Information Technologies, 20*(2), 403-410. https://doi.org/10.1007/s10639-013-9291-7
- Goodyear, P. (2005). Educational design and networked learning: Patterns, pattern languages and design practice. Australasian Journal of Educational Technology, 21(1), 82-101. https://doi.org/10.14742/ajet.1344

- James, R., Baik, C., Millar, V., Naylor, R., Bexley, E., Kennedy, G., Krause, K., Hughes-Warrington, M., Sadler, D., Booth, S., & Booth, C. (2015). Advancing the Quality and Status of Teaching in Australian Higher Education. Lead Institution: The University of Melbourne. Retrieved from; <u>http://www.olt.gov.au/resource-academic-workforce-2025</u>
- Johansen, B. (2009). *Leaders make the future: Ten leadership skills for an uncertain world*. San Francisco, CA: Berrett-Koehler.
- Lanillard, D. (2013). "Forward" in Beetham, H. & Sharpe, R. (eds). *Rethinking Pedagogy for a Digital Age*. 2nd Edition, 26-30, Oxford: Routledge Falmer.
- Lawson, R. (2015). Curriculum design for assuring learning leading the way Final report, May 2015. 2013 National Teaching Fellowship. Retrieved from; <u>http://www.olt.gov.au/resource-curriculum-design-assuring-learning-leading-way-2015</u>
- Masterman, E., & Craft, B. (2013). Designing and evaluating representations to model pedagogy. *Research in Learning Technology*, 21, 1-14. https://doi.org/10.3402/rlt.v21i0.20205
- McAlpine, I., & Allen, B. (2007). Designing for active learning online with learning design templates. Proceedings ASCILITE conference Singapore 2007. Retrieved from; http://www.ascilite.org/conferences/singapore07/procs/mcalpine.pdf
- Norton, A. (2014). *Mapping Australian Higher Education, 2014-15*. Grattan Institute Retrieved from; http://grattan.edu.au/wp-content/uploads/2014/10/816-mapping-higher-education-20142.pdf
- Rodger, S. (2011). Building capacity among emerging occupational therapy academic leaders in curriculum renewal and evaluation at UQ and nationally. Final Report. The University of Queensland. Retrieved from; <u>http://www.olt.gov.au/resource-building-capacity-among-emerging-occupational-therapy-academic-leaders-curriculum-renewal-a</u>
- Salmon, G., & Wright, P. (2014). Transforming fututeaching through 'Carpe Diem' Learning Design. Education Sciences, 4, 52-63. https://doi.org/10.3390/educsci4010052
- Shapland, N. (2013). Academics are students too: Rethinking our approach. Proceedings of INTED2013 Conference, 4-6th March, 2013. Valencia, Spain. Retrieved from; <u>http://library.iated.org/view/SHAPLAND2013ACA</u>

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