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Using Generic Templates to Promote the Use of High Quality Learning Designs in Higher Education

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ABSTRACT

Designing for learning in the higher education sector is a complex task, especially in light of the increasing diversity of the student body. With research pointing to an inverse relationship between student engagement and attrition rates, lecturers need to be mindful of a wide range of student ability levels, socio-economic backgrounds, learning styles, and specific curriculum requirements when designing for their students' learning. Learning design is a professional activity for which many of our academic staff are not trained. There are examples of learning designs which apply the most recent research into learning but a number of studies have shown that they are not widely utilised in all universities. This current study took a mixed methods approach to explore whether generic templates (a learning design pattern to which subject content can be added) could be used to share well-researched, high quality learning designs across a range of disciplines. The results revealed that generic learning design templates can provide a means for lecturers to access a broad range of learning designs but there are barriers to sharing these in the higher educational sector. At a time when providing students with a quality learning environment is considered highly desirable, it might be time these barriers were reviewed. By using generic templates, lecturers might be encouraged to explore new learning designs and reflect on how their existing teaching approaches affect their students' learning.

Keywords: Learning designs; disciplines; generic templates; disciplinary differences.

Background

The Course Experience Questionnaire (CEQ) researches elements of the higher education experience of Australian university graduates. It focuses on the graduates' perceptions of course quality, their self-rated skill levels, and their overall satisfaction with their course (for more information, see http://www.graduatecareers.com.au/research/surveys/Australiangraduatesurvey). In an analysis of the CEQ, Scott (2006) reported differences between the disciplines when graduates evaluated the quality of the teaching they experienced during their university studies. A review of the literature confirms this is not a 'one-off' occurrence nor is it limited to Australia (Cameron, 2013). A number of studies report that a link exists between approaches to teaching that inform learning design and student satisfaction (Braxton, 1995; Franklin & Theall, 1995; Scott, 2006) and between approaches to teaching and retention rates (Gilardi & Guglielmetti, 2011; Radloff, 2011; Schaeffer & Konetes, 2010). When used in this paper, 'approaches to teaching' refers to all the aspects of the teaching process that inform designing for learning, i.e. learning designs, teaching methods, teaching strategies, teaching activities and/or assessment tasks. When referring to 'learning designs', the following definition will be used (Donald, Blake, Girault, Datt, & Ramsay, 2009, p. 180):

> *A learning design documents and describes a learning activity in such a way that other teachers can understand it and use it in their own context. Typically, it includes descriptions of learning tasks, resources and supports.*

Courses with high student satisfaction ratings tend to be those in which their lecturers emphasise outcomes, other than a requirement to simply learn facts or concepts; employ teaching activities in addition to the lecture, and utilise assessment methods other than exams. In short, courses that use activities and assessment methods that engage students actively are generally associated with higher student ratings. Ratings of university students' satisfaction with teaching in the UK, the US and Australia have consistently shown that some disciplines score much better than others. Generally, the teaching experienced in the Humanities and Social Sciences is more highly regarded by students that that in the Sciences (Cashin & Downey, 1995; Franklin & Theall, 1995; Neumann, Parry & Becher, 2002; Scott, 2006). These findings have recently been confirmed to be consistent with the current Australian context (Cameron, 2017).

Scott's CEQ analysis (2006) and the literature reviewed also identified which approaches to teaching were most typically used in the disciplines that scored well for high student engagement, productive learning and optimised student retention. It was also noted that these approaches were not used regularly in the disciplines that scored poorly. The premise of this current study was to determine if the underlying pedagogies of these effective teaching approaches could be distilled into generic teaching strategies that could be successfully shared across all disciplines. These approaches to teaching might then facilitate more engaging teaching and learning throughout all disciplines in the higher education sector, which in turn would improve student retention rates overall.

This approach relies on the assumption that there are generic principles of teaching and learning that can be applied across disciplines (Barnett, 2005); a view that has been challenged by those who believe that what constitutes effective pedagogy in one discipline may not necessarily work in another (Donnelly & Crehan, 2011). In recent years there has been a shift away from generic educational development in Australian universities to discipline-based approaches which acknowledge the specific and contextualised needs of the disciplines (Young, 2010). Berthiaume (2009) reviewed a body of research that suggested that in order to be effective, higher education learning design may have to be discipline-specific. From this he produced the 'Model of Discipline-specific Pedagogical Knowledge (DPK) for university teaching' (Fry, Ketteridge, & Marshall, 2009, p. 219) which illustrated the integral role disciplines play in designing learning. While a detailed exploration of the model is outside the scope of this paper, the model highlights the significant influence of discipline on learning and teaching in higher education.

When undertaking this study, the complex relationship between teaching practices, subject and content was recognised, however, like Shulman (2005), it is proposed that many different modes of teaching and learning can be found that are not unique to a particular discipline. This approach does not dismiss the importance of pedagogical content knowledge, which involves lecturers having an understanding of what effective teaching is in their own discipline (Shulman, 2005, 1986).

Although an academic must have pedagogical content knowledge in order to develop productive teaching activities in that discipline, it has been found that effective teachers in all disciplines had a tendency to use similar learning designs, teaching methods and/or teaching activities (Shulman, 1986). In fact, Gibbs (2000) states that many teaching methods described as discipline-specific are used widely across the disciplines and take much the same form regardless of the context. This suggests that generic pedagogic activities and methodologies can also be successfully employed when they are interpreted and used appropriately by discipline experts.

Context of the study

To test this premise, this study was undertaken following Learning Design workshops at which the concept of 'generic learning design templates' and the vocabulary of the Learning Design field were introduced. At the workshops a 'generic learning design template' was defined as:

> *A learning design pattern that is commonly derived by removing the subject content from a successful learning activity and distilling the activity down to its integral pedagogical parts. It represents the underlying structure so that content and resources can be added to customise the template* (Cameron & Campbell, 2010, p. 1915).

Specifically, workshop participants were introduced to the LAMS Activity Planner tool. The Planner tool is a visual authoring environment that allows design ideas to be presented in a way that demonstrates how learning designs, teaching methods and activities would be implemented with students. For a more detailed description of the LAMS Planner tool, see Cameron, 2010. Figures 1, 2 and 3 illustrate screenshots of the Planner tool illustrating the generic templates explored in the workshops.

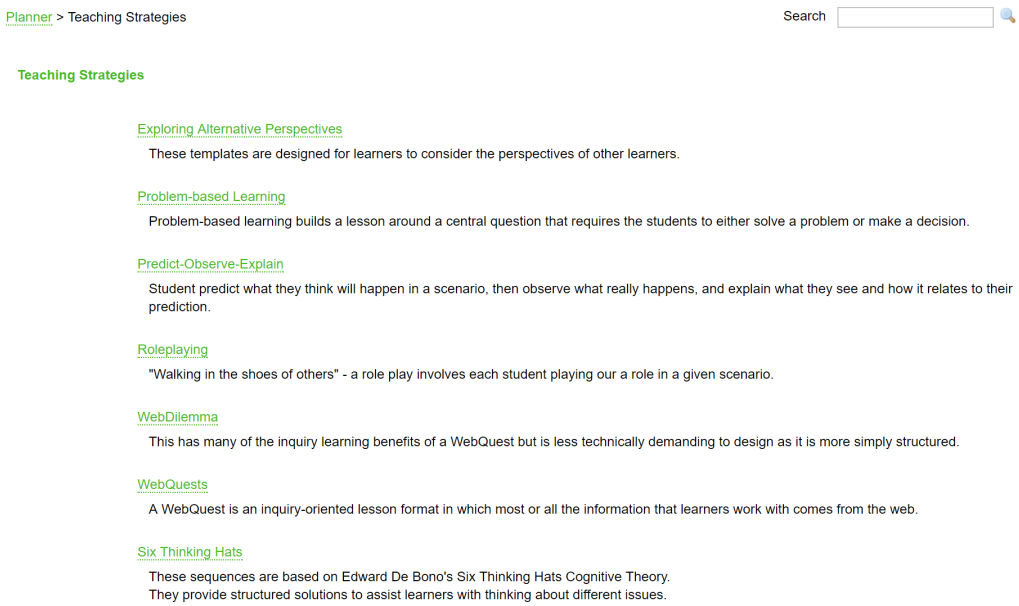

Figure 1: The teaching strategies available in the LAMS Activity Planner Tool during the workshops

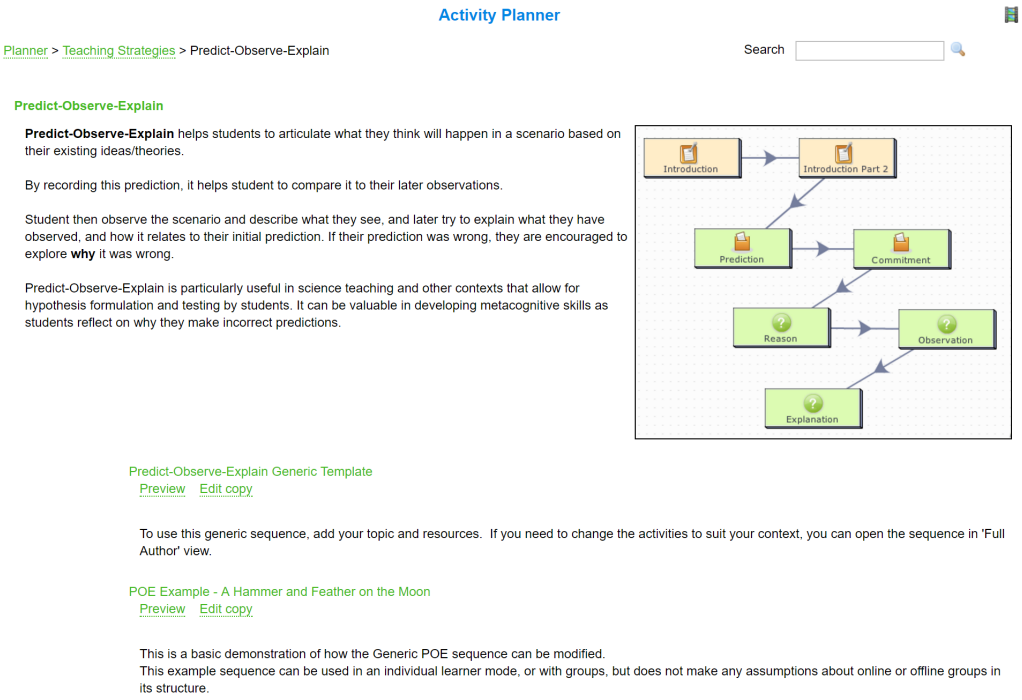

Figure 2: The Predict-Observe-Explain (P-O-E) teaching strategy Introductory page

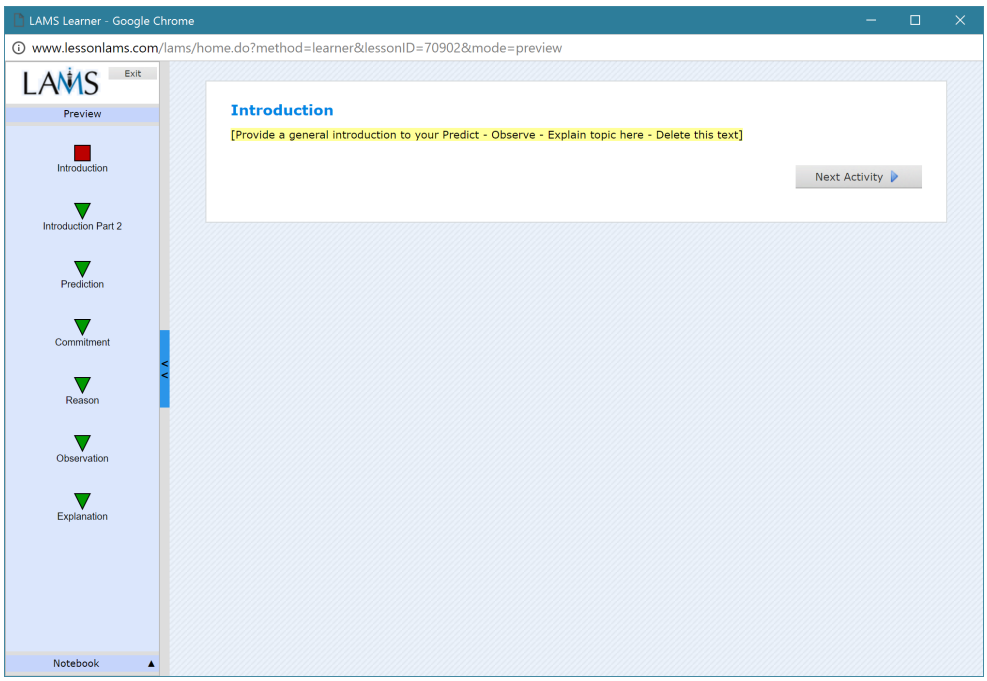

Figure 3: A example of how specific subject content is added to the generic template for P-O-E

The three-hour workshops undertaken were regularly sponsored by the central Learning & Teaching Centre of a Sydney University and they were open to anyone in the sector interested in exploring Learning Design. Typically, 20 lecturers from a wide range of Australian universities, disciplines and teaching experience attended. During a workshop participants explored a number of existing learning designs, teaching methods and activity templates. Initially, participants were introduced to a learning design with which none of them were familiar (in this instance, the Predict-Observe-Explain design. For a more detailed explanation of this learning design, see Kearney, Treagust, Yeo, & Zadnik, 2001). This was a demonstration of how readily the participants could become familiar with a new learning design and how these might be shared throughout the sector. The concept of how content and pedagogy can be

separated in a learning design was also introduced to demonstrate how a 'generic learning design' could be used to share the pedagogy.

An integral part of the workshops was that participants contributed to a number of whole group discussions where the implications of the use of generic learning design templates were discussed in detail. The facilitator ensured this analysis was well-balanced, involved all participants' own personal experiences, and covered a wide-range of authentic and practical considerations around designing learning in the higher education sector.

Methodology

Research Question

The central research question explored in this study was:

> *Can generic learning design templates be used to introduce new learning designs, teaching methods and/or teaching activities across disciplines in higher education?*

To answer this question, it was determined that the most efficient way to collect data was by means of a broad survey across the sector. However, after reviewing the survey results, it was clear that to fully explore the themes that emerged, additional interviews would be necessary. Therefore, mixed methods were used which allowed for a more comprehensive analysis by taking advantage of the strengths of both quantitative and qualitative methods (Creswell, 2005; Tashakkori & Teddlie, 2003). The study was undertaken with the approval of the Faculty of Human Sciences Human Research Ethics Sub-Committee, Macquarie University, Australia.

The research design consisted of two distinct data collection stages: Phase 1 - An online survey, designed to draw out how open the participants were to adopting new learning designs using generic learning design templates; and what barriers they saw to sharing learning designs across the disciplines. This was followed by Phase 2 - Interviews to explore survey themes further and to determine how feasible it was that generic learning designs could be adopted or adapted into their own teaching context. Data from both phases were used in the final analysis.

Phase 1: Online Survey Participants

Of the 20 workshop participants approached, 16 agreed to participate in the survey. This sample included representatives from each of the four disciplines, i.e. Humanities (3), Social Sciences (2), Science (3) and the Professional Fields (8), however upon analysis of the data collected, participants' responses did not vary by their discipline. Disciplines' were defined as four subject groupings. Humanities, Social Sciences, Science and the Professional Fields. For a more comprehensive discussion about how these disciplines groupings and teaching models are derived, see Cameron (2013). All information obtained by the survey was anonymously reported. To differentiate between respondents, each respondent was given an identifier: Respondent1 through to Respondent16.

Participants in the survey represented six Australian universities from four states. Five universities were from large capital cities, the other was located in regional NSW. All participants taught undergraduate students at a recognised university, 10 of whom also taught postgraduate courses. They most commonly taught face-to-face classes (14) but also frequently taught in the blended mode (12). Every participant taught groups of 15-30 students, whilst 5 also lectured large groups (90+). The teaching experience of the participants ranged from 1 year to 28 years. The survey data was analysed for frequency of responses and recurring themes that would benefit from additional exploration.

Phase 2: Interviewees

The five major themes that emerged from the online survey were investigated further in interviews (n=6). The semi-structured interview questions were designed to explore these themes and confirm the learning designs the interviewees typically used; the interviewees' knowledge of the designing for learning process; their understanding of learning design representations; and how feasible it was that they be adopted in their own discipline.

The interviewees came from two large Sydney universities and their teaching experience ranged from 6 months to 30+ years. Interviewees were distributed among the disciplines as follows: Humanities (2), Social Sciences (2), Science (0) and the Professional Fields (2). Numerous attempts were made to procure an interviewee from the Sciences but an interview about teaching did not appeal to anyone of the many approached.

Additional access to the survey participants was not possible so the interviewees were not the same individuals as responded to the survey. However, to maintain consistency, the interviewees were required to have similar characteristics to the original survey participant: they were to have recently participated in the Learning Design workshop, and be lecturers who designed learning in the higher education sector. Eleven lecturers were invited to be interviewed as part in the project – six agreed. The intention at this point in the study was not to be wholly representative of the entire higher education sector but simply to provide a variety of views.

All interview documentation was coded at the time of interview so information obtained was anonymously recorded. The coding pattern adopted reflected the discipline of the interviewee, e.g. Hum1 – indicates Humanities interviewee 1, Social Sciences (SS), Humanities (Hum), Professional Fields (PF).)

To maximise reliability and provide depth, two initial pilot interviews were conducted to test the interview questions. The interview process utilised a wide range of learning designs presented in generic template form. In the pilot interviews, 6 semi-structured questions were asked and 13 generic learning design templates were demonstrated with each interviewee. In the subsequent four interviews, the number of templates demonstrated was reduced to 4 possibilities to reduce interviewee fatigue. The analysis that followed the interviews further explored the themes that emerged from the survey analysis.

Findings

Phase 1: Online Survey

Question 1 of the survey established the discipline for which each participant mainly designed learning. These ranged broadly across the disciplines: Humanities (3), Social Sciences (2), Science (3) and the Professional Fields (8). Question 2 was used to confirm all participants understood, and could use, the generic learning designs templates that had been introduced in the workshop they had just attended. All 16 participants successfully completed this question.

When asked in Question 3, "Might using templates to share good teaching practice work in your teaching area?", 11 of the 16 participants agreed (69%) and 4 other participants indicated they "might be used". Their comments included:

> *I may consider using some of these templates with staff to broaden their understanding.* Respondent1
>
> *Possibly – saves time from designing from 'scratch'.* Respondent5
>
> *To some extent. Must try out and be convinced first.* Respondent10

Only one participant responded in the negative:

> *Not necessary. It's more appropriate to just share your learning activity because the sequences are designed based on specific case studies which we use for teaching.* Respondent8

Question 4 asked participants, "Were there things you didn't like about using the templates?". Five replied there was nothing they didn't like, three made comments that they would like to trial it in their workplace before commenting and two participants offered no response. Other comments included:

> *Depends on capability of the author and usefulness of learning.* Respondent2
>
> *There is not enough faculty that is sharing their materials for higher education.* Respondent12
>
> *A bit too constrictive, but good as a starting point.* Respondent14

The final two questions of the survey aimed to build upon existing work about enablers and barriers to sharing learning designs (Philip & Cameron, 2008). Participants were asked initially about enablers (Q5), "Can you suggest ways of scaffolding and supporting the sharing of learning designs, teaching methods and teaching activities?" Multiple responses were permitted so more than 16 answers were recorded. Seven participants chose not to answer this question (44%).

a) *Establishing Community (n=7)* – Developing a Community of Practice – The majority of participants saw benefits in establishing a 'community of practice' where learning designs could be shared and discussed.

> *Getting Faculty members who have been successful in using teaching activities to share their experiences as short F2F sessions or as a video, as that will help each other learn.*
>
> *I think that through collaboration we can all benefit.*
>
> *Communication is always the barrier and letting people know when there was something new. It would be good if you could.*

b) *Training (n=2)* – Further formal training in the area of Learning Design:

> *Offering further formal training.*
>
> *I'd love some more workshops on this.*

c) *Repository (n=2)* – Providing a centralised location for the sharing of learning designs:

> *establishing a local learning design repository.*
>
> *There seems to be already quite a lot of models out there. It'd be nice if teachers could be updated on such sites.*

d) *Champions (n=1)* – Having support from senior university in the area of improving teaching and learning:

Endorsing a senior academic as a 'champion'

The final question of the survey addressed the issue of barriers to sharing learning designs. Participants were asked, "What do you think are the barriers to sharing learning designs, teaching methods and teaching activities?" Once again, participants could make multiple responses (the same seven participants chose not to answer this question). Comments could be grouped into five major themes:

a) *Time (n=8)* – A lack of time to work on new learning designs (including documentation to make them accessible to others):

Time, time and time. No experience or no knowledge.

People are busy in their own world; research, winning grants etc. The rewards to putting time on teaching is generally less than the rewards one gets through investing in research.

b) *Change (n=6)* – Faculty do not want to try something new:

People not willing to learn new things, being set in their own ways.

Entrenched practices.

Mindset of individuals, and perceptions of certain learning design models of individuals.

c) *Culture (n=4)* – There is no established culture of sharing in their community ('competitiveness' was mentioned three times):

Competitiveness. Especially in academia, the need to be 'the teacher of the year', as a means to receive both financial and merit bonuses, prevent teachers form sharing materials.

More collaborative spirit would ensure better learning for more students, but that seems to be an ideal contradictory to yearly KPIs academic teachers have to fulfil.

Not the culture.

Need open mind & not afraid to fail when implementing new teaching method.

d) *Author rights (n=2)* – Some respondents listed concerns about intellectual property and copyright:

Intellectual property.

It needs to consider copyright of designer.

Copyright issues.

e) *Lack of experience with learning design (n=2)* – There was some concern about a lack of skill in the area of learning design:

Concern that they are difficult to implement.

Lack of experience makes it harder.

I'm not sure others on the staff have the background to adapt these learning designs.

Phase 2: Interviews

Questions 1, 2 and 4 of the two pilot interviews and Questions 1-4 of the four following interviews asked interviewees to describe their teaching. Lectures and tutorials were the most commonly described mode of delivery, with 1 or 2 hours of lectures and 2-3 hours of smaller group tutorial per week the typical model. Whilst three of the lecturers spoke of often conducting 'traditional tutorials' whereby the students pre-read material that was discussed as a group, there was a wide range of other learning designs, teaching methods and teaching activities being employed, such as role play, problem-based learning, brainstorming activities and inquiry-based learning.

Interviewees were asked in Question 3: "Do you use any of these learning designs? Would you consider using them? Why?/Why not?". To determine interviewees' level of understanding of the learning designs gained from the generic templates they were shown four generic learning designs: Problem-based Learning; Exploring Alternative Perspectives; Web Dilemma and Predict-Observe-Explain. From the list, lecturers were asked to identify a learning design they had not previously seen. For each interviewee, the learning design selected was the 'Predict-Observe-Explain' (P-O-E) model which was then used in each of the interviews to answer Questions 5-9. For more information about the P-O-E learning design, see Kearney, Treagust, Yeo & Zadnik (2001).

All six interviewees said they could understand how the new learning design worked from seeing the generic learning design template demonstrated (Q13). Additionally, each agreed they could reproduce this approach to teaching in their classroom, if required, despite not ever been exposed to this particular learning design before. Four interviewees agreed they might try P-O-E in their own classes now they had been introduced to it:

> *I really like the idea of this. I might try it.* (PF1)
>
> *But we do ask students to predict what happened in the cases we present so this more formalised approach is really appealing. I might try this one.* (PF2)

Two interviewees were less enthusiastic about ever using this particular learning design (P-O-E) in their own teaching:

> *I've never seen this before but I can see it could be quite effective in the right instance – can't think of a circumstance I could use it.* (Hum2)
>
> *Too difficult to set up. We don't really have anything to use it with anyway.* (SS1)

However, despite not considering that this particular learning design would be useful in their own teaching, these interviewees were able to understand how the design worked from the generic template demonstration.

All interviewees could articulate barriers to sharing learning designs when asked: "Discuss any barriers to sharing learning designs in your institution. Are there ways to remove these barriers?" (Q10 & 11). Their responses fell into four main categories:

a) *Student resistance* – Students' adverse reactions to innovative learning designs, such as problem-based learning, was mentioned commonly as being a barrier (5/6 interviewees). Meeting student expectations was spoken about regularly during these interviews.

> *Student attitudes. They want to be spoon fed, as opposed to them being responsible for their own learning. We like to try to develop their independence and critical thinking but they don't like to be asked to think.* (SS1)
>
> *There is an expectation (by the students) that appears to come from their schooling that the content will be provided for them and they will simply have to answer a few comprehension questions to get through.* (PF2)

b) *A lack of time to get together to share* – All interviewees mentioned having time to develop new learning designs and then finding the time to meet colleagues to share them was a barrier.

> *Lack of time, is the reason we seem to do what we did last Semester again this Semester without discussing it with anyone.* (Hum1)
>
> *The mutual benefits are not articulated or appreciated by the Management. If they gave us the time to get together to talk about our teaching – I would do it in a flash. Why wouldn't we want to be better teachers, but quality teaching doesn't seem to be a priority at the moment.* (SS2)

c) *Communicating new learning and teaching ideas* – Interviewees were not exposed to new innovative teaching practices regularly. One interviewee spoke of an 'Office of Teaching and Learning' discussion group they attended previously at another university but he had not heard of anything like this at his current university. No-one spoke of communities of practice being organised to formally discuss teaching and learning practice unless it involved the introduction of a new technology.

> *Communication is always the barrier and letting people know when there is something new.* (Hum1)
>
> *We heard in an IT workshop about an American model where lecture content was online and the students worked in small groups in the lecture time.* (SS2)

The responses from respondents to the question of sharing personal learning designs indicated they were concerned that their work would be judged harshly and were unlikely to put up "work in progress".

d) *There is no sharing culture* – Four of the interviewees mentioned that there was no collaborative or co-operative culture at their university.

> *Sharing? It's not the culture around here.* (SS1)
>
> *I took over unit after a staff member had moved on. Even in that instance there was a rolling of the eyes when I asked other staff for suggested learning activities. It was as if they thought I wanted to use their hard work to take a short cut for my own. I was told, 'We do our own work here.'* (PF2)

Interviewees were then asked, "From where do your teaching ideas come?" (Pilot interview Question 5, Interview question 12). All six responded that they had learnt about new learning designs from other lecturers but mainly from teaching with these lecturers on a course. Two of the interviewees said they had had a discussion with a peer that prompted a change in teaching approach and one lecturer mentioned attending an IT workshop. Simple trial and error and student feedback was how they all reported they evaluated their teaching success.

> *Sharing classes with fellow teachers is usually when I tried some new methods or technologies.*
>
> *Feedback from students are always the important input to improve my learning design.*

All interviewees provided a number of ideas when asked, "How might learning designs be shared?" (Pilot Interview Question 6, Interview Question 13). Their responses can be categorised into three main areas:

- Encouraging informal conversations with peers and colleagues (n=6).
- A community of practice, workshops or short videos where lecturers who have been successful in using new learning designs could share their experiences (n=5).
- A centralised university site that was frequently updated, that provided new learning designs and teaching ideas (n=2).

Finally, all interviewees said they could see how generic learning design templates demonstrated for them could be used to share new learning designs:

> *This is what we should do more of. We could introduce an example to others.* (PF2)
>
> *I could use this to try some new type of designs in tutorials.* (PF1)
>
> *I don't know why we don't use this, and why others don't use it.* (SS2)

Discussion

From the combined data three major themes emerged: The source of participants' design ideas; the usefulness of generic templates; and the barriers to sharing.

The source of participants' design ideas

This study's respondents relied heavily on student evaluations to suggest learning and teaching improvements and they did not regularly consult the learning and teaching research. Additionally, the findings support what the literature suggests: That lecturers seeking guidance about teaching tend to give most credibility to peers from their discipline (Cameron, 2017; Gibbs, 2000). Similarly, our results can confirm lecturers are often sceptical of what they may see as banal generic education advice delivered by centralised learning and teaching centres (Kreber, 2009). Nor do they avail themselves of expert assistance when planning courses, even if it is readily available and they rarely read educational literature (Knight, 2004; Stark & Lattuca, 2009). Instead, these lecturers attempt the complex and challenging task of effective teaching with no training, and do not often go on to formally develop their teaching skills. This highlights a need to establish a means of transmitting accurate and current teaching and learning information to all lecturers across all universities. This study suggests that allowing lecturers to explore well-researched learning designs delivered by generic templates might be one way to address this issue.

The usefulness of generic templates

As a means of illustrating a new learning design, our interviewees unanimously agreed that the generic learning design template allowed them to see how the new design worked. Most importantly, they confirmed they would be able to reproduce it in their classroom if required, despite not ever been exposed to this particular learning design before. This would indicate that this tool could be very valuable in sharing new learning designs.

Scott's CEQ survey data analysis (2006) identified the learning designs and teaching approaches that optimise student engagement: The students rated interactive, practice-oriented, problem-based learning methods and resources more highly than the more traditional 'sage on the stage', knowledge-transmission methods associated with traditional lectures. (For a more detailed report of these findings, see Scott, 2006).

If much of the student engagement is built into the learning design as some suggest (Scott, 2006; Toohey, 1999), then generic learning design templates may help lecturers improve student engagement and the effectiveness of their teaching. By documenting high quality learning activities and the means by which student achievement can be accurately assessed, engaging learning designs and teaching can be shared. This study clearly indicates that sharing learning designs using generic learning design templates across disciplines is possible.

There are documented examples of learning designs which apply the most recent research into learning but they are not always well-known outside their discipline (Cameron, 2013). This study confirms that generic learning design templates provide lecturers with a means of accessing a wide range of learning designs. It is hoped that they might encourage lecturers to explore new learning designs, and use this experience to re-evaluate their teaching, question their existing teaching methods and search out reasons for the effects of their teaching on their students' learning (Cameron, 2010).

A number of well-resourced projects have been developing a means of efficiently bringing learning designs to the educational community with limited success to date (DDI [Seeto & Vlachopoulos, 2015]; The Learning Designer [Bower, Craft, Laurillard & Masterman, 2011]; LAMS Pedagogical Planner [Cameron, 2008]; QUT's Design Templates [Dawson & Winslett, 2006]). While the technology being employed to deliver these is becoming increasingly streamlined, these project have not gained widespread uptake throughout the sector to date. Reasons for this may include the barriers to sharing learning designs that have been identified in this study.

The barriers to sharing

If improved student engagement is one of the benefits of sharing innovative and creative learning designs and teaching approaches across the disciplines, it seems reasonable, therefore, to expect that the sharing and reuse of good teaching methods and exemplary learning designs would be a frequent occurrence. It was confirmed in this study that sharing is a common practice by our participants within the discipline, but not as common across disciplines. Barriers to sharing existed and participants indicated that many of their peers did not participate in this practice. The barriers were identified on a number of levels: lecturers being unaware and/or averse to change, university administration not allowing enough time for course development and students being uncomfortable with some innovative methods. The literature also cites a concern with standards, licensing and the tension between academic culture and the desire to share and reuse resources (Campbell, 2003; McNaught, 2003; Pennell, 2007). McGill, Currier, Duncan, & Douglas (2008) quote from a DR Report that states that the culture of higher education institutions may be a significate barrier to sharing (p. 4):

> *There is little tradition or articulated desire for sharing learning materials in the sector… current practice is not characterised by the sharing of learning materials or team work.*

The participants themselves proposed solutions to these issues. They identified many could be addressed by creating an active and positive community of practice within their university where lecturers could share learning design innovation. This would require a shift in the culture at some institutions to one that fosters collaboration and cooperative learning design. The time needed for this approach would require an endorsement by the university administration of the value of such endeavours. Until this has been provided, the opportunity to share learning designs using generic templates on a wide scale may be somewhat limited.

Conclusion

At a time when student engagement is considered highly desirable, there is a need for productive learning designs to be employed throughout the sector. This study has found that generic templates can be valuable in facilitating the introduction of new learning designs. If lecturers are encouraged to share and reuse high quality learning designs, they might look at their teaching differently and apply what they find in different assessment and instructional methods (Cameron & Campbell, 2010). For some lecturers this process may be affirmation of their current practice but Scott's CEQ analysis (2006) clearly outlines there is room for improvement in the higher education sector when it comes to student engagement and opportunities for improved student retention.

Engaging and effective teaching requires lecturers to have a knowledge of a variety of teaching techniques, be mindful of different student ability levels, socio-economic backgrounds, the range of learning styles and specific curriculum requirements when designing for their students' learning. Therefore, to be effective, they need to draw upon the latest learning and teaching literature - not just traditional teaching approaches. Sharing learning designs and teaching approaches that have already been demonstrated to engage students would seem to be a desirable way forward. This study has determined that one means of doing this could be by using generic learning design templates.

Biography

Leanne Cameron is Lecturer in Design, Digital and Technology Education at Southern Cross University, Coffs Harbour, Australia. Her research explores the possibilities of technology use in education with pre-service teachers. Prior to working at the university, Leanne spent a number of years working as a teacher in both primary and secondary schools.

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