ASCILITE
SHAPING THE FUTURE OF TERTIARY EDUCATION
Show Me The Learning
Adelaide, Nov 27-30, 2016

No More Lonely Learning: Applying Salmon's *Carpe Diem* process of subject re-design to three fully online postgraduate nursing subjects in a regional Australian university

Kristin Wicking
Nursing, Midwifery & Nutrition
James Cook University

Cecily Knight
Learning, Teaching & Student Engagement
James Cook University

Scott Bradey
Learning, Teaching & Student Engagement
James Cook University

David Lindsay
Nursing, Midwifery & Nutrition
James Cook University

Stephen Anderson
Library & Information Services
James Cook University

This study contributes to the literature on curriculum design for nursing education. Three fully online, postgraduate nursing subjects in a regional Australian university were re-designed using Salmon's Carpe Diem team-based, two-day intensive workshop process. An exploratory descriptive mixed methods design was used to evaluate both the process undertaken and the deliverables produced in this project. Workshop participants unanimously reported strongly positive experiences during the workshop itself, and both the teaching staff and the students enjoyed a positive, enthusiastic and engaged teaching and learning experience when the re-designed subjects were deployed. Student statistics regarding access to the subject website, and student performance in the subject, were both markedly improved when compared to prior offerings of the subjects. The Carpe Diem process was demonstrated to be fit for our purpose and context.

Keywords: online learning, Carpe Diem, nursing, active learning, curriculum design.

Background:

Registered nurses embrace the ethos of lifelong learning, which is a key requirement for maintaining their professional registration, and also necessary when seeking promotion. However, nurses experience barriers to on campus university attendance, due to a multiplicity of factors, including geographic location, family commitments, and work commitments, specifically those necessitated by the need to staff many of their health care facilities around the clock, 365 days per year. Distance learning neatly works around these time and space constraints, and has done so credibly for decades, originally using a text-based postal model for delivery of learning materials, with low tech support by telephone. As a regional university serving a large geographic footprint comprised of moderately sized regional centres interspersed with sparsely populated areas, James Cook University has continuously embraced distance learning as a means of providing educational opportunities, particularly for students who might not otherwise be able to participate in professional development via the tertiary education sector.

Distance learning can, however, present its own problems, particularly for shift workers, often resulting in a lonely learning experience, where students download, print and 'consume' their study materials while they are 'home alone' and with no/minimal contact with other learners or even with their teacher (Mulienburg & Berge, 2001). Computer technology and the increasing penetration of high-speed internet access, even in regional, rural and remote areas, offers the opportunity for learning that is both more active and more interactive, even in distance mode. However, such aspirations require more than mere 'horizontal to vertical' repositioning of didactic content, wherein text-based Study Guides were simply loaded into a Learning Management System (LMS) such as Blackboard and viewed vertically on screen, instead of horizontally as a printed booklet on the student's desk.

Practicing registered nurses, and the nurse educators teaching them, generally learned in face-to-face environments for their own undergraduate degrees. Both teacher and student may, therefore, struggle to embrace the many technological opportunities to enhance distance learning, particularly without an evidence-based pedagogical framework to guide both the curriculum design and the learning experiences. We aspired to the principle that the technology should be made to serve the pedagogy (McGee & Reis, 2012), and not the other way around.

With the above context and considerations in mind, internal learning and teaching development funding was sought and obtained to trial the use of the Salmon model of "Carpe Diem" to re-design two postgraduate subjects during a team-based, two-day intensive workshop. Our aim was to achieve more active and interactive learning for postgraduate registered nurses, by building the learner's online confidence and efficacy by scaffolding them through Salmon's Five Stage Model for online/blended learning (Salmon, 2011; Salmon, 2013; Salmon, Jones & Armellini, 2008; Salmon & Wright, 2014).

The success of this endeavour prompted an expansion of the project parameters to include a third "bonus" subject as well. The positive experience of using the Salmon framework for re-design will be briefly discussed, as well as the marked contrast in learner engagement with the Blackboard LMS, as gleaned from a cohort comparison of data from learning analytics for the subjects as 'delivered' in the pre-Salmon and post-Salmon pedagogy.

Methods

An exploratory descriptive mixed methods design was used to evaluate both the process undertaken and the deliverables produced in this project. Three postgraduate subjects were re-designed using the Salmon "Carpe Diem" two-day workshop structure, with an on-site team including nursing academics as 'knowledge owners' (Salmon & Wright, 2014), (e.g. content experts); a librarian assigned as the health liaison librarian; the manager of Blackboard LMS; and an educational designer from the Learning, Teaching and Student Engagement directorate. The Principal Investigator (PI) functioned as the Workshop Facilitator for all three workshops, given her training in the model, received in a MOOC about Carpe Diem undertaken in early 2014 with Professor Gilly Salmon and Professor Alejandro Armellini, and applied at that time to her own undergraduate fully online subject. The steps undertaken over the two days of a Carpe Diem are listed in Appendix A, and are further detailed in the Creative Commons licensed Facilitator Workbook that guided the process, and that is freely available online at:
http://www.gillysalmon.com/uploads/1/6/0/5/16055858/carpe_diem_planning_process_workbook_v17-january_2015.pdf

Data Collection/Data analysis

All design team members were interviewed by a research project officer who was not involved in either the design or delivery of any of the three subjects (JJ), and who has strong qualitative research experience in the healthcare field. She also interviewed five students upon their completion of one or more of the fully online subjects. All interviews were conducted either face-to-face or by phone, for the participant's convenience, at a mutually agreed upon time and location, after signing the consent form. Interviews were recorded and transcribed by a professional transcription service. A basic descriptive qualitative analysis of all interview data is underway by another research assistant (NB) with experience in qualitative analysis for nursing research, using Excel for sorting and categorising excerpts into themes as they arise.

Quantitative data was obtained from the existing university business intelligence system (Cognos) and from learning analytics available within the university's branded version of the Blackboard Learning Management system, called LearnJCU. Subject statistics on students' performance and their utilisation of the LearnJCU subject website were reviewed for the most recent delivery of the subject before the Carpe Diem re-design, as compared to the first delivery of the subject after Salmon re-design.

Results and Discussion:

Qualitative Data:

Staff feedback on Carpe Diem workshops
All staff interviewed were highly positive about their experience in the two-day workshop. They described the process as a high energy, enthusiastic one, that was enjoyable and immediately gratifying and reinforcing, due to seeing the LearnJCU subject site being built online before their eyes. They reported that the well-researched model provided a strong structure, which served to keep the process moving along at the brisk pace intended by the model. The pace and energy were also noted to be maintained by the skills, enthusiasm and lived experience of the facilitator, who had previously applied the model to re-design and deliver an undergraduate fully online subject. This finding concurs with Salmon's reported staff involvement (Salmon & Wright, 2014, p. 54).
They also reported that the unique contributions of each of the recommended roles were clearly evident as being necessary and crucial to the success of the process, and that it saved considerable time by having immediate access to experts to finish building an online component in the moment. Similarly, the interaction between the team members, even though some of the composition of the teams changed from one subject to the next, was also deemed to be valuable, productive and enjoyable.

The steps outlined in the Carpe Diem process were viewed as logical, linear, and correctly sequenced for optimal effect, with appropriate time frames for each stage. The original intention of the project was to use an evidence-based curriculum design approach, so the structure was followed carefully, and the rationale behind certain sequencing and approaches became evident as the process unfolded. While all stages were necessary and fruitful, the Storyboard stage and the use of this powerful tool throughout the rest of the workshop was a clear highlight for all participants, and proved to be a pivotal focal point and a versatile, colourful, engaging and practical method of ensuring that all components of the subject fit together well, and scaffolded the student to success across the semester. See Figure 1 for a photograph of the storyboard from the second subject.

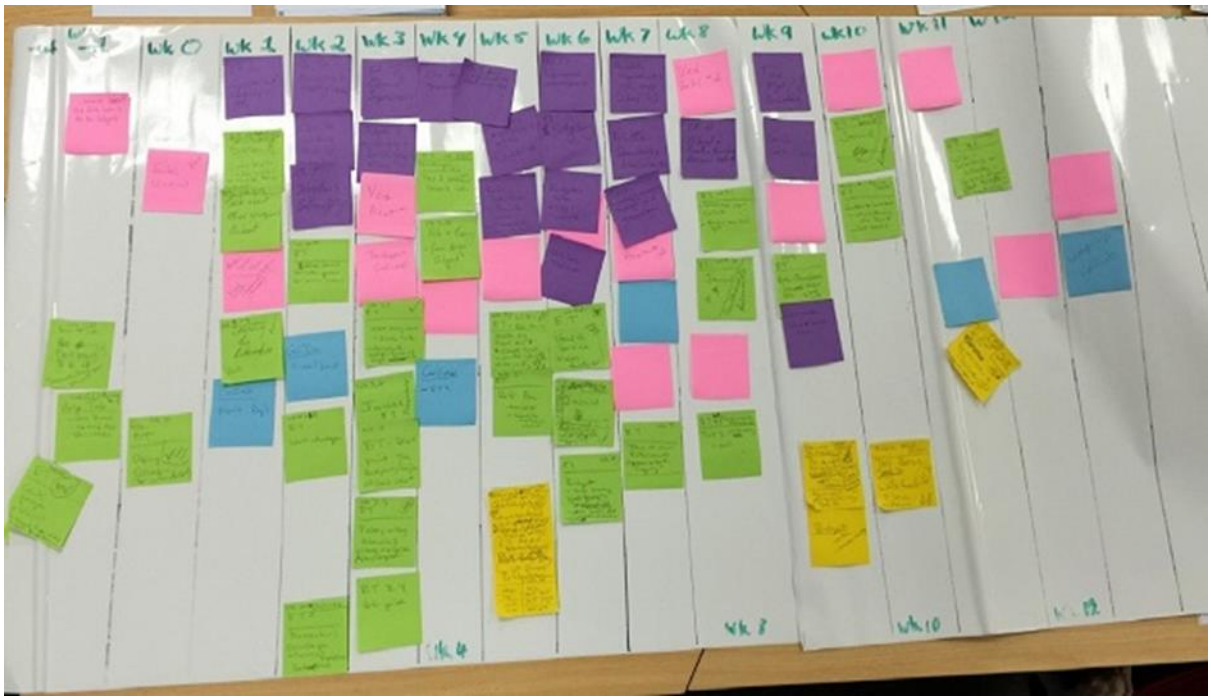

Figure 1: Photo of storyboard in progress for the second re-designed subject, Nursing Management

The prioritizing of time was an interesting element of the process. While all participants were convinced the return on investment was worthwhile in the end, this was a potential stumbling block: finding a time when all team members could be present for the full two-day workshop; and the consequences of setting aside other tasks during the two six hour days that then had to be addressed upon completion of the workshop. Participants encouraged scheduling well in advance as one workaround, and noted that the time taken was less than what would have been consumed if the process had been done alone and/or in rushed fragments of leftover time around the edges of other duties. The momentum of the fast paced process and the 'permission' to set aside other duties during this dedicated time, seemed to serve to create a retreat-like culture during the workshop, and to focus and energise the group. These findings reflect similar observations made by Salmon and Wright (2014, p. 58).

Staff feedback on teaching in the re-designed subjects
Subject Coordinators perform all the online teaching for their own subjects, and noted a qualitatively different experience from previous online teaching. There was a greater sense of connection to the students, a more energetic 'buzz' to the feel of the subject, and far greater student-to-student interaction, as well as student-to-teacher interaction. Student comments within the LMS reflected a sense of conquest over the technology, pleasure in learning, and appreciation for the palpable support of their colleagues and teachers, reflecting a successful ability to project an online social presence.

Student feedback on learning in the re-designed subjects
Data analysis for the student interviews is still underway, with some students having only just completed their re-designed subject within the last month. Preliminary data analysis indicates that students found the cohesive subject structure to be helpful, and recognised the multiple benefits of the E-tivities in helping them to be more active, to learn the technology, and to build up to their summative assessments. Students particularly appreciated the built in high levels of 'how to' support that helped them to master the technology requirements of online learning, an aspect emphasised heavily in *Stage One: Access and Motivation* of Salmon's five stage model of online learning (Salmon, 2013). Stages Two through Five are: Online Socialisation, Information Exchange, Knowledge Construction, and Development (Salmon, 2013).

Quantitative measures of student engagement and student learning

When comparing student behaviour in the re-designed subjects to that of their predecessors in the previous offering, we found that students were entering the subject website about twice as often, (see Table 1), and spending more than twice as many minutes within the subject site (see Table 2). In addition, they were using the LMS in more interactive ways, versus prior patterns of only logging in to passively download content and upload assessments (see Table 3). The higher levels of engagement online also translated to better performance, with three to five times as many fails in the prior offerings, as compared to the re-designed offering. The results were far less marked in the subject Contemporary Issues in Acute Care Nursing, but with only 6 students involved, those statistics are less robust. The other two subjects each had better numbers, with 25-30 students, as is usually seen in our typical postgraduate nursing subjects.

Student access and engagement with the Blackboard LMS (LearnJCU)

Table 1: Average number of times a student accessed the subject website in LearnJCU, per student:

Subject Title	PRE	POST
Nursing Management	34	69
Clinical Governance	45	71
Contemporary Issues in Acute Care Nursing	46	56

Table 2: Average Minutes spent on the subject website in LearnJCU, per student:

	PRE	POST
Nursing Management	518	1368
Clinical Governance	878	1854
Contemporary Issues in Acute Care Nursing	666	1044

Table 3: Average number of interactions on the subject website in LearnJCU, per student

	PRE	POST
Nursing Management	277	780
Clinical Governance	327	867
Contemporary Issues in Acute Care Nursing	415	466

A limitation of the study was the relatively small sample size, both of the design team and of the student participants. A strength of the study was the triangulation of data sources, including qualitative staff data, qualitative student data, and quantitative student data.

Conclusions and Future Directions

The search for workable pedagogical frameworks to guide curriculum design for nursing education is ongoing. This study offers one approach that has been received positively by both academic staff and students, with high levels of satisfaction reported by the design team, and improved student parameters of engagement, performance and satisfaction being noted. The study also shows that the Carpe Diem model of online subject design is suitable for use in the context of an Australian regional university. Salmon and Wright (2014) note that more research into the experience and use of the Carpe Diem process in various disciplines is needed, and this study has provided an exploration of its successful application in the discipline of nursing. Further in depth analysis of the remaining qualitative student data from this study will result in additional publications that will further contribute to the nursing education literature.

References

McGee,P. & Reis, A. (2012). Blended course Design: A synthesis of best practices. *Journal of Asynchronous Learning Networks,16*(4),7-22.

Muilenburg, L. & Berge, Z.L. (2001). Barriers to distance education: A factor-analytic study. American Journal of Distance Education,15@, 7-22, DOI: 10.1080/08923640109527081

Salmon, G. (2011). E-moderating: The key to teaching and learning online, 3rd ed. New York: Routledge--Taylor & Francis Group.

Salmon, G. (2013). E-tivities: The key to active online learning, 2nd ed. New York: Routledge--Taylor & Francis Group.

Salmon, G., Jones, S., & Armellini, A. (2008). Building institutional capability in e-learning design. *ALT-J, Research in Learning Technology, 16*(2), 95-109.

Salmon, G. & Wright, P. (2014). Transforming future teaching through 'Carpe Diem' learning design. *Education Sciences, 4,* 52-63. DOI: 10.3390/edusci4010052.

Salmon, G. (2015) Carpe *Diem Planning Process—Handbook.* Retrieved: http://www.gillysalmon.com/uploads/1/6/0/5/16055858/carpe_diem_planning_process_workbook_v17-january_2015.pdf

Appendix A

Carpe Diem Two Day Subject Re-design Workshop		
Day	**Session**	**Component Tasks**
Day One:	Write a blueprint-envision the future	Our mission is….
		The 'look and feel' of our unit
		Start at the end (learning outcomes)
		Explore how you will assess these outcomes
	Make a storyboard	Create a table with a column for each week of the study period, and add in coloured post-its with components of the subject placed in the weeks they seem to fit together best.
		Begin with summative assessments as yellow post-its, then build backwards, adding in green post-its for the e-tivities; blue for campus or virtual class meetings; and lastly, content resources like textbook chapters (pink) and video lectures (purple), etc.
		Move post-its freely as creativity flows, and to ensure students will progress through The Five Stage Model over the semester.
	E-tivities on paper	Break in to pairs and use the E-tivity template to create and build E-tivities; can do so on paper for now.
Day Two:	Build your prototype on line	Move your E-tivities to your LMS online environment, complete with sparks and links, and using the LMS tools (e.g. Discussion Boards, Journals, Wikis, etc.) as suits the E-tivity's purpose.
	Check Reality	Students or other academics external to the team, road test your E-tivities within your LMS, using the Reality Checker feedback form.
	Review and adjust	Incorporate feedback from your Reality Checkers to revise E-tivities; check storyboard for cohesion across semester and reasonable student time commitments in hours per week/semester (carpe horam).
	Planning your next steps	Complete your action plan, stipulate the remaining tasks to be completed by when and by whom; schedule a short (1.5 hour) follow-up session in a few weeks, or sooner if subject will be commencing shortly.

Adapted from: Salmon, G. (2015) Carpe *Diem Planning Process—Handbook.* Retrieved 4 August 2016 from: http://www.gillysalmon.com/uploads/1/6/0/5/16055858/carpe_diem_planning_process_workbook_v17-january_2015.pdf

Please cite as: Wicking, K., Bradey, S., Anderson, S., Knight, C. & Lindsay, D. (2016). No More Lonely Learning: Applying Salmon's Carpe Diem process of subject re-design to three fully online postgraduate nursing subjects in a regional Australian university. In S. Barker, S. Dawson, A. Pardo, & C. Colvin (Eds.), *Show Me The Learning*. *Proceedings ASCILITE 2016 Adelaide* (pp. 642-647).

Note: All published papers are refereed, having undergone a double-blind peer-review process.