

Addresses three priority areas:

- Quality of learning and teaching
- Quality of research
- Knowledge transfer and engagement

- Strengthening research in the undergraduate curriculum has the capacity to increase student perseverance, improve retention and success (Janke, 2006) and re-connect disengaged students with the University learning community (McInnes, 2003).
- This is an important priority in light of the findings of Kift (2004), McInnes (2001) and Cleary & Skaines (2005) which draw attention to growing evidence of disengagement among first year students.

- McInnis (2001) reported that the greatest rate of attrition occurs in a student's first year at university
- Strahm & Danaher reported in 2005 that a third of students who enrol in a university program do not graduate
- ▶ Feelings of isolation and disconnection from the university contribute to student attrition (Peel, 2000; Tinto, 2000)

- Krause (2005) recommended that universities need to create a sense of belonging within learning communities
- ▶ Students entering universities from 2005 onwards represent a new generation of technoliterate 'Y-ers' (Krause, 2005)
- ▶ This generation, also referred to as 'Generation Y' 'Net Generation' (Tapscott, 1998); 'Millenials' (Oblinger and Oblinger, 2005a); 'Digital Natives' (Prensky, 2001) are said to display similar characteristics:

- ▶ ability to multi-task
- desire for immediacy
- ▶ a preference for multi-modal learning (learning from pictures, sound and video rather than text)
- the desire for interactive and networked activities
- ▶ a desire for entertainment and excitement
- preference for experiential activities
- peer to peer communication
- ▶ interested in 'things that matter' (Oblinger and Oblinger, 2005b)

Despite the reported benefits of incorporating research into the curriculum (Boyer, 1990; Brew, 1999; 2001; Brew and Boud, 1995; Elton, 2001; Griffiths, 2004, Healey, 2005; Jenkins, 2004), there are difficulties in instigating a research-based approach within the undergraduate media arts curriculum in a discipline which is not well defined (Wood, 2009).

Thornham and O'Sullivan (2004) noted these tensions in their study of the employability of media studies graduates in the UK, commenting on the perception of employers that media studies is neither a 'real discipline' nor 'real training', and the shifting discourses, which they characterise as the 'critical' and the 'vocational'.

- The divisions between theory and practice, training and education, vocationalism and the academic, must be regarded at one and the same time as vast, but also as ultimately bridgeable (Bromley et al., 2001).
- Adam and Skinner (cited in Bromley et al., 2001) argue for a sustainable journalism epistemology which begins with a determination of what constitutes an education in journalism (as a field) and about journalism (as practice).

- Communication students majoring in Com Media and Culture or Professional Writing more likely to progress to Honours
- Journalism lack of student interest in Honours and research degree pathways
- Media Arts students enrol in Honours but attrition is high due to research focus
- Both Journalism and Media Arts students more interested in coursework (applied)
 Masters than graduate research degrees

- •These issues are not specific to the creative arts disciplines. Participation in research has not previously been a priority in many of the allied health professions either.
- •For example, Sim and Radloff (2009) report that the attitudes of students and practitioners of radiography to research have been demonstrably negative, and to date there has not been any evidence that undergraduate degree study addresses these perceptions.

- •To the contrary, role modelling experienced by students on clinical placements has probably reinforced the perception that participation in research is not a primary role of these professions.
- •Yet with the move towards models of advanced practice for these professions, there is an increasing need to define their knowledge basis and take responsibility for evidence supporting their practice population (Yielder and Davis, 2009).

Typology of teaching and research links

Typology of teaching and research links (Griffiths 2004):

- Teaching can be research-led
- Teaching can be research-oriented
- Teaching can be research-based
- Teaching can be research-informed

Teaching and Research Dimensions

Healey (2005) suggested that curricula can also be designed along three additional dimensions, according to whether:

- •The emphasis is on research content or research processes
- •Students are treated as the audience or participants or
- Teaching is teacher or student focused.

University of South Australia T&L Framework

- One of the key elements of the University of South Australia's teaching and learning framework is a commitment to student engagement.
- In 2007 the University embarked on a project, STEP 2010, which aims to promote activities that:

University of South Australia T&L Framework

- engage first year students beginning with active student orientation programs that integrate the academic, institutional and social aspects of university life
- provide opportunities for students to engage in experiential learning
- implement empirically derived teaching strategies that build on our existing commitment to the scholarship of teaching

University of South Australia T&L Framework

There are three identified mechanisms for achieving such student engagement:

- Teaching-research nexus the linking of teaching and research
- Practice-based learning authentic and active learning in workplaces and in the classroom
- •Service learning volunteer work as a community service with opportunities to reflect and develop key Graduate Qualities.

Case study – Introduction to Digital Media

A case study based on the redesign of the curriculum of a first year undergraduate multimedia course in which students undertake research-based assignments and participate in self review and assessment, and peer review of each other's research publications is presented.

Aims

The overall aim of the course is to introduce students to the fundamental creative design principles, processes, skills and media production techniques required for use within and across a variety of digital media artefacts and interactive digital media forms, including graphics, photography, film, video and sound.

Objectives

The specific objectives are:

- Develop effective strategies for embedding inquiry-based learning in the undergraduate curriculum.
- Develop undergraduate students' understandings of the role of research and their capacity to undertake research within their disciplines

Original structure

- The topics covered in the course over the 13
 week period of the course include
 introduction to the theory of design, basic
 fundamentals in digital camera techniques
 and sound production, the use of image
 editing applications and Web design.
- The assignments prior to the changes in the assessment requirements involved: (1) a theory based visual critique paper; (2) a practical camera task and (3) the design of a website.

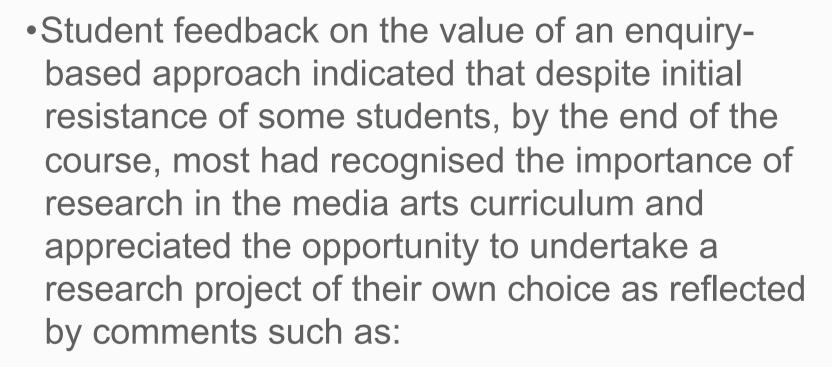
First revision

- In the first offering of the revised course (2007) the modules covered in the course remained unchanged, but the assignments were reframed to provide students with the opportunity to demonstrate the same competencies through an enquiry-based approach.
- In the revised version students chose a research topic and were then required to review the relevant literature, and present their findings in the format of a journal paper and online publication at the conclusion of the course.

- Even though these students were encouraged to choose a research topic focusing on animation, design or film and television many of the students expressed concern to their tutors that the course had very little to do with media arts.
- It was clear from these students' comments and feedback in the course evaluation, that some students had enrolled in the program with the expectation that all courses would be practically oriented with only a minimal component of theory within those courses.

This finding is consistent with Quinn's (2006) observation that media studies programs offered by universities have tended to attract students who regard training in media production as 'entrée to the media industries' and that attempts to integrate such training with education in media theory and criticism have produced 'apparent contradictions and misalignments that are obvious to teachers and students alike'.

- Despite the resistances of the film and television cohort of students in the course, tutors reported a high standard of student work; with significant improvements in students' ability to think creatively, undertake critical analysis and present a compelling argument from being noted.
- The diversity of topics chosen by students reflects both the breadth of a field of study that is not clearly defined, as well as the creativity in approach that is possible within an enquiry-based curriculum, even at the first-year undergraduate level.



'I thoroughly enjoyed undertaking my own project in DMT, as it enabled me to explore an area of personal interest, which resulted in a project that I am proud of'.

While the majority of students agreed to Likertscale questions relating to the importance of research in the undergraduate curriculum ("I have a better understanding of the role of research as a result of completing this course"; "I enjoyed the challenge of undertaking my own research project" and "I think that research is a good thing to include in the undergraduate curriculum") by the end of the course not all students were convinced, as this student's comments reflect:

- 'This subject was not clear at all, it is not a subject that will in any way whatsoever contribute towards my studies. Perhaps it should really just be a minor elective rather than a compulsory subject'.
- •Comments such as these reflect the tensions of the field and the challenges facing academics trying to find a balance between the 'academic' and the 'vocational' in an applied institutional context.

Revisions 2009

- Course redeveloped so that students research the basic communicative and creative possibilities of graphics, still images, film and video and the Web through an introduction to some of the key conceptual, technical and craft issues related to digital media production.
- All three assignments are based on the one major project, which involves researching a social issue for the first assignment, producing a compelling and engaging digital story based on the chosen social issue for assignment two, and presenting a digital story through an online medium in the final assignment.

Revisions 2009

- Web 2.0 environment http://unisa.moodlesites.com/
- Incorporating profile pages, visual diary blog, wiki, discussion forums, live chat, messaging and YouTube like functionality
- Process of self and peer review, and self assessment
- Opportunity to work on 'real projects' in company of teachers, community and peers from other levels
- Visiting speakers from industry
- Flexible learning options
- Industry awards and 'Viewers' Choice' Awards

Peer Review

Formative peer review involving both students and teacher as peers provides students with timely feedback in a non-threatening manner and enables them to act on the feedback prior to marking.

Research based approach

When used in conjunction with teaching methods that employ a research-based approach in which students undertake their own research, formative peer review supports students in their enquiry-based tasks.

Formative peer review

- Requiring assignments to be self-assessed (without any marks being involved);
- Providing feedback but no marks, so that students have to read the feedback to get any idea how they are progressing;
- Providing a grade only after self assessment and tutor feedback has been completed;
- Using two-stage assignments with feedback on the first stage, to enable student to improve the quality of work for final submission, which is graded.

Student comments about peer review

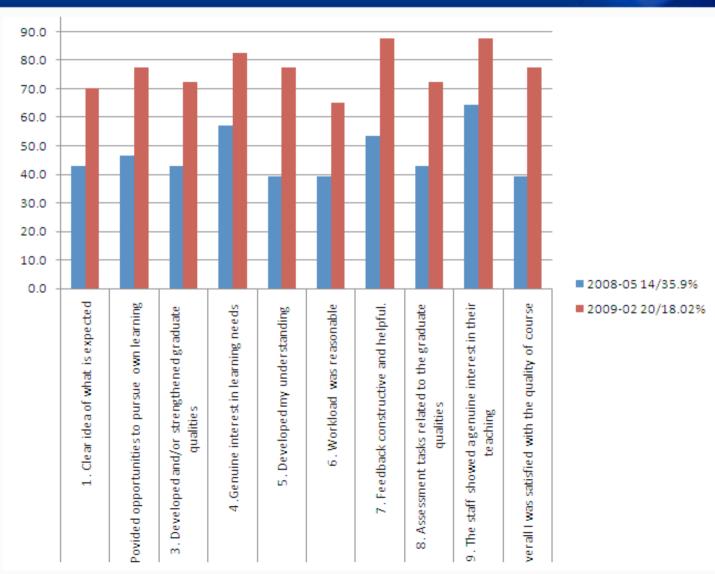
- the benefits of being able to review their peers' assignments and to reflect on their own work;
- the value in comparing their work against the assignments of other students and to improve on their work prior to final marking; and
- the communication process which facilitated collaboration among peers;
- only one student commented on the lack of feedback he/she received from peers.

CEI means IDM

	В	Е	F	G	Н	1	J	K	L
1	Criteria	2005-05	2006-02	2006-05	2007-02	2007-05	2008-02	2008-05	2009-02
3	1 . Clear idea of what is expected	31.25	61.21	54.55	58.7	39.47	15.28	42.9	70.00
4	2 . Povided opportunities to pursue own learning	56.25	57.76	63.64	57.78	47.37	38.89	46.4	77.50
5	3 . Developed and/or strengthened graduate qualities	62.5	59.48	45.45	52.17	42.11	33.33	42.9	72.50
6	4 .Genuine interest in learning needs	87.5	62.93	54.55	47.83	52.63	44.44	57.1	82.50
7	5 . Developed my understanding	56.25	67.24	54.55	63.04	52.63	41.67	39.3	77.50
8	6 . Workload was reasonable	25	53.45	50	45.65	2.63	27.78	39.3	65.00
9	7 . Feedback constructive and helpful.	75	72.41	54.55	52.17	57.89	59.72	53.6	87.50
10	8 . Assessment tasks related to the graduate qualities	56.25	62.07	54.55	53.33	47.37	52.78	42.9	72.50
11	9 . The staff showed a genuine interest in their teaching	87.5	76.72	68.18	71.74	76.32	63.89	64.3	87.50
12	10 . Overall I was satisfied with the quality of course	31.25	66.38	54.55	51.09	39.47	34.72	39.3	77.50

CEI means IDM

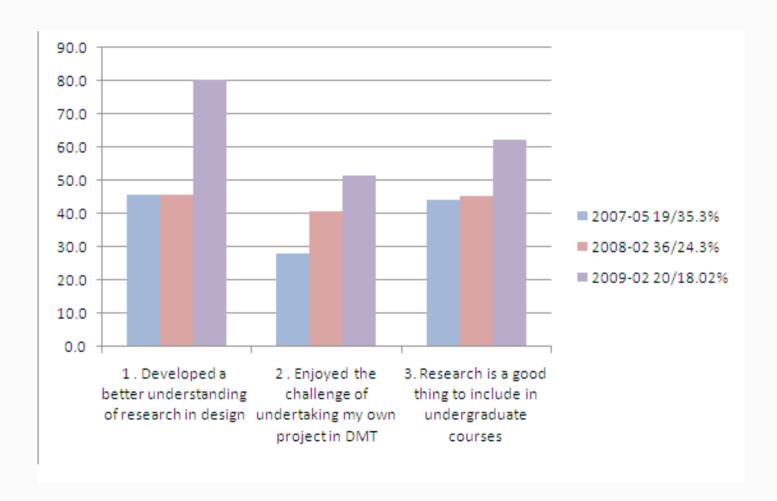




Research means IDM	

	В	1	J	L
1	Criteria	2007-05	2008-02	2009-02
13	1. Developed a better understanding of research in design	45.8	45.8	80.47
14	2 . Enjoyed the challenge of undertaking my own project in DMT	28.1	40.6	51.31
15	3. Research is a good thing to include in undergraduate courses	44.2	45.3	62.14
16	4 . Peer review process helped me to better reflect on my own work	32.5	61.0	
17	5 . Developed better skill in the ability to critique the work of others	28.1	44.7	
18	6 . Able to improve quality of my assignments through peer review	29.4	61.4	
23	4b. Gained a greater insight into my value positions and assumptions			56.43
24	5b. Better understanding of social and ethical responsibility			76.43
25	6b. The idea generation process helped to conceputalise social issue			74.05
26	7b. The mind mapping exercise helped with different perspectives			60.36
27	8b. The course allowed me to relate to my own experiences			55.00
28	9b. Eencouraged students to take responsibility for own learning			77.50
29	10b. Accommodated the differences in student backgrounds			81.79

Research means IDM



Student comments

- 'I thoroughly enjoyed this topic as it was highly creative and were given a high degree of creative freedom despite having to work with in the limitations set down. All the teaching staff were passionate and extremely helpful and willing to go that extra mile'.
- 'The creativity component challenged my technical ability. For example, having new and more creative ideas forced me to learn new video editing techniques'.

Student comments

- 'Creative idea generation methods enabled me to think outside of the ordinary and therefore I was able to creatively produce an exciting finished product which one would not normally come across. It also helped me to think very deeply and come up with alternative and sophisticated solutions to creative problems'.
- 'It was more research based and required a lot of creative thinking'.

Client (community) comments

'Second Life is a great laboratory for your students. When your students enter the virtual world, they are then able to connect to people whom they would likely never meet in their real lives. People from all over the physical globe, people who would be physically incapable of interacting with them face-to-face. Your students learn a great deal about how we live our lives. Many myths are addressed and misconceptions cleared up. Yet at the same time, your students learn about the commonalities, that beyond our disabilities we are very much like them. I've seen those light bulbs go on for the students I've worked with. This subtle advocacy is important in both the able bodied and disabled communities' (Alice Krueger, Virtual Ability Inc)

Industry comments

'It is a much repeated maxim within industry that "content is king". Those practitioners most able find interesting, arresting new ideas from within the existing body of human knowledge will always be in demand. Research is the key to unlocking new ideas. Yet solid research is often de-emphasised in the teaching of creative of content production, in favour of a focus on expression and technical proficiency' (Mike Carroll, Planet Earth Films)

- The case study reported in this paper serves to illustrate the complexities and challenges involved in attempting to enhance the teaching and research nexus in the undergraduate curriculum in a field of study that is not well defined and lacks the strong disciplinary foundations of the more established disciplines.
- These challenges are particularly evident in the newer universities that have derived from more vocationally focused institutions.

Despite these challenges, the findings from initial trials of a revised curriculum designed to strengthen the teaching and research nexus suggest that an enquiry-based approach in which teacher and learner are engaged in a process of reflective practice can be an effective strategy in introducing students to research.

The findings also suggest that such an approach can strengthen the scholarship of teaching and learning by engaging teachers in a process of reflection on their own teaching, the quality of the feedback they provide students, and the alignment of assessment and feedback with student learning objectives.

Through the process of self, peer and collaborative assessment and by employing a combination of formative and summative approaches, both teacher and student are required to discuss, critique, and reflect on student work, the appropriateness of the assessment approach, and the feedback provided.

By engaging students in active learning and research 'in the company of mature scholars and practitioners' (Ramaley (2005, p. 33) students are able to define real world problems, then cooperate in the process of addressing those problems (Colbeck & Michael, 2006).

Teaching and Research Nexus

- Linking teaching and research has the capacity to engage teachers in the scholarship of discovery by providing opportunities for them to undertake quality discipline-based research while also undertaking research that informs their teaching.
- In this way, it has the capacity to demonstrate the integration of all four scholarships of learning and teaching (Boyer, 1996).

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