Abstract

This paper examines the process of an action research project to create a multi-campus inter-disciplinary collaborative culture across a number of creative arts faculties at Griffith University in Queensland, Australia. Since 2005, students and staff from the areas of Film Production and Animation at Griffith Film School (GFS), and Music Technology and Composition at Queensland Conservatorium Griffith University (QCGU), have been working to integrate creative practice and artistic outputs in order to foster new multi-platform exegetical artworks. A central goal is to reflect professional communities where the responsibility for knowledge creation is shared or socially constructed among the members rather than just 'delivered' to students by a lecturer. With a total cohort of around 120 students across two campuses, and a sophisticated network of cutting edge technologies and software, the human interactions and supporting technologies are investigated and analysed. This paper includes a brief description of process, project development, successes and shortcomings, discussing how some of these challenges have been met and how they may be taken forward in the future. Outlined within the paper are the inherent opportunities within such collaborations that enable students to develop a deeper understanding of relevant art practice, as well as the outcomes from a focus on the integration of professional traits into the practical aspects of the learning landscape.

Keywords: Learning and teaching, cross-disciplinary, inter-disciplinary, music, film, animation, moving image, collaboration.

INTRODUCTION: THE INTER DISCIPLINARY LEARNING CONTEXT

As with many other institutions the Griffith University cluster of creative arts campuses has offered the opportunity for cross departmental collaboration and the creation of new artistic practice outcomes that are beyond a single discipline. This paper responds to such a process, undertaken over the last decade between the Queensland College of Art (QCA), the Film Production department of Griffith Film School (GFS), and the Music Technology and Composition departments of Queensland Conservatorium Griffith University (QCGU). The project has been staff led and student centred, and has coincided with the amalgamation of previous stand alone institutions into the University environment. This paper also responds to a process of reflection instituted for the Apple University Consortium’s Create World 2010 conference, held in Brisbane Australia which brought QCGU and GFS academics together to reflect and document their shared experiences.

The project involves final year students in all programs. All three schools are faculties of Griffith University, located at the South Bank Parklands in Brisbane, Australia. QCGU and QCA were institutions in their own right until amalgamation with Griffith University in the late 1980s as part of the Australia-wide Dawkin's tertiary education reforms. GFS was created in 2005 as a specialist arm of QCA.

The three faculties occupy two locations on South Bank, with GFS as part of QCA at one end of South Bank, and QCGU located toward the middle of South Bank, a 15-20 minute walk from QCA / GFS. This is pertinent to this report because, despite the close proximity of the three Griffith University constituents, there has traditionally been minimal interaction between them. Reasons for this include the demanding nature of campus life and differences in the teaching timetables across faculties.
Although collaborative work has been undertaken for some time before the commencement of this project it has been informal and planned in addition to course content delivery and often student led. Such interactions though often impressive at the time are transient and afford little opportunity for long-term structural integration.

The larger context of tertiary education in Australia and other OECD countries is also pertinent. Professor Glyn Davis AC, Vice-Chancellor and Principal of the University of Melbourne, addressed this context in great detail in the 2010 ABC Radio National Boyer lectures, addressing the funding, workflow and efficiency changes that have taken place in recent years. Though acknowledging the difficulty that economics and changing workloads have placed on academics Davis points repeatedly to a hopeful model, one where flexible pedagogical models and methods of delivery can afford new learning and research outcomes well beyond the scope of the traditional lecture/tutorial model.

The challenge for academics within this project has been to stay connected to peer networks and academic associations beyond the scope of their general teaching and learning responsibilities. This is evident in the many creative arts faculties where academics have often moved into their position from project based careers that allow the formation of large and fluid networks, as well as the dissemination of cross discipline creative works. Ironically this connection with industry and creative networks can disappear very quickly within the confines of a full time position, as many academics are simply not able to stay abreast of maintaining professional network connections. Additionally, difficulties arise in trying to work across multiple campuses and disciplinary silos whilst managing the demands of each academic’s primary discipline area. Despite these pressures, the academics in this project have utilised their extensive industry experiences to establish a cross-disciplinary project with the aim to mirror industry within the classroom. This has exposed students to the intrinsically motivated interactions commonly found in professional communities (Hitchcock, 2009a).

Additionally, and notwithstanding any silos that exist between the Music Technology, Composition Film, and Animation programs, there is a common emphasis on problem based learning (Sweller, 1988; Hmelo-Silver et al., 2007), scaffolding (Brown et al., 1989; Rogof et al., 1996). The reality for both staff and students is that the training provided has to prepare students to undertake jobs as well as build careers in an often-changing landscape. Herein it is important to understand the distinction between jobs and careers, as the distinction is philosophically central to the epistemological development of creative professionals. Hitchcock (2009b, p. 3) proposes that:

A career indicates a concerted and long-term series of endeavours undertaken over a significant period of a person’s life where there is opportunity for advancement and progress. In contrast, the term job is more suggestive of short-term employ, and an often pragmatic rather than passionate means of earning.

Regardless of any distinctions between the two however, the workplace opportunities that graduates can expect to move into are still largely project based, with intense pressures to be self-driven, proactive, confident and innovative in recognising and creating opportunity. Professional careers in many music, moving image and gaming related disciplines have long been mobile, transitory, project based and network driven with considerable advantages for those individuals who can cross disciplinary boundaries. Students cannot expect to walk into careers or career-related jobs with easily-framed responsibilities where employer direction is constantly provided and daily context decided within simpler long-term frames of reference. As Brown (2006, p.49) observes:

The workforce is increasingly consisting of individuals who are pursuing portfolio careers as self-employed, freelance, casual or part-time, not with a single employer or even industry.

Academics are also cognisant that the more successful graduates tended to be the ones that could apply themselves to multiple projects, often working in roles they did not anticipate on entry to study. Accordingly, the need was to create opportunities that would reflect the sorts of transformative knowledge sharing structures occurring in professional workplaces. These structures were intended to nurture sharing of cultural norms, vocabulary, and form and function as a “community of learners” (Short & Burke, 1991) where learning was explicitly an integral part of the practice (Wenger et al., 2002), and participants would be afforded the opportunity to create and decipher community patterns.

A key learning goal is therefore a form of situated cognition (Lave & Wenger, 1991) where the focus of literacy was transposed from one of individual expression to one of community involvement.

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1 A series of six themed lectures broadcast on Australian public radio each year.
Importantly, two central goals were (a) to foster engagement in intellectual and practical pursuits that may be unfamiliar to them, but which they are likely to encounter in their professional careers, and (b) to reflect aspects of professional communities where the responsibility for knowledge creation is shared or socially constructed among the students (Bandura, 1977; Lave and Wenger, 1991) rather than ‘delivered’ to students by a lecturer.

To this end, a project was initiated in 2005 by Matt Hitchcock (QCGU), Paul Draper (QCGU), Andi Spark (QCA) and Trish Fitzsimons (GFS), which has continued to expand and morph as an action research project over the last five years. What follows is a brief description of process, development, successes, shortcomings and insights leading to plans for the future development and continued expansion of the project. This project has had three distinct phases, experimentation, the development of learning systems and collaboration.

2006 – 2007: EXPERIMENTATION

Until the adoption of collaborative GFS / QCA / QCGU ventures, Film and Animation students were forced to either compose their own music or to call on the services of musically-inclined friends to create music for them. Consequently, rather than situating their practice in multiple specialist contexts, the Film and Animation students were often primarily focussing on high quality visual aspects with sound treated as peripheral or ancillary. This may have occurred through an impression in some students that this approach would result in a less challenging path to completion, but at the same time negated any requirement for students to have to learn, negotiate or indeed appropriate the ways of other special sub-disciplines. Consequently, the results often included poor image / sound balancing and a general lack of musical coherence.

While collaborations occasionally took place between music and film students, the nature of these projects were student driven with minimal faculty support. This therefore resulted in lost opportunities for academic mentorship with regard to the creation of coherent and efficient workflows and appropriate levels of interaction between the project participants. This placed stress on tight production schedules and endangered the efficacy of creative outputs.

In the 2010 Apple University Consortium Create World conference Matt Hitchcock reported on this first phase following a process of consultation with GFS academics. This phase started in 2005 with attempts to bring students and academics together into a combined four-hour workshop to facilitate collaborative project work. This workshop occurred at the start of the calendar year in the third week of teaching. Lecturers from Music Technology, Film and Animation introduced the workshop by briefly recounting some key experiences of crossing boundaries as a creative professional. This provided context for the workshop as well as a relevancy framework for the students.

Following the staff presentations, students from Music Technology, Animation and Film were then asked to present, or pitch, a five minute exegesis of their current and proposed work in mind of selling the idea to the larger talent pool. This was designed to mirror industry pitches common in music, gaming and film, and academics facilitated the flow of information and contact details. In this phase students were expected to lead interactions with input and project management expertise provided by staff.

After two years some patterns were emerging despite the best efforts of academics, outlined by Hitchcock et al (2010, p. 2-3) in the collaborative QCGU / GFS Create World presentation:

• A core misalignment (which was easily addressed once discovered to be an impediment for students) between the Film and Animation programs and the Music Technology program in terms of assessment design. This is where Film and Animation students had a single year-long project with very late submission deadlines at the end of each year. Conversely, Music Technology students had faster turn-around projects with deadlines for multiple completed projects at the end of each semester.
• Film and Animation students leaving their collaborative approaches until the end of the academic year as a result of their work consisting of a single large-scale year-long project. Many Film and Animation students were therefore focussed on everything other than music for most of the year, often approaching Music Technology students in the last two weeks of the year for collaboration. This would include requests for a composer to compose a full score, a producer to organise and rehearse a full ensemble, the sourcing of studio time, recording of the ensemble, mixing the score and sound tracks, post-produce the overall result and finally combine the sound with the vision.
This meant that outcomes were often not being realized except for those students with already high levels of organisation and detailed project awareness.

- Music Technology students were also increasingly aware of the gap between the equipment held at the Conservatorium and the equipment at commercial studios and voiced concerns to staff members about being out of touch with industry standards.
- Due to negative word of mouth feedback, Music Technology students were becoming reticent to undertake film projects, consequently missing out on beneficial opportunities for learning and network development. This was therefore a “failure of potential” rather than a “failure to produce”, where failure of potential is more easily counteracted through intervention by academics.

2008 – 2009: DEVELOPMENT OF LEARNING SYSTEMS

Though not within the scope of this paper it is worth noting the delineation between process or competency based learning and critical thinking that is at the heart of creative practice education. Universities have a crucial role in creative practice education beyond simply showing students how to do things, or providing detailed procedural instruction, necessary as they may be in parts of the learning process. The provisioning of resources is also crucial. Students are judged by both the aesthetic qualities of their works and the production values within their artistic products. Universities have to match private colleges and commercial production houses in the provision of facilities in order to stay competitive in artistic disciplines. Accordingly while the delivery of course content continued to encourage critical thinking and artistic innovation the physical resources at the Conservatorium also required a review, detailed below:

The two studios at the Conservatorium, Studio A and B were both identified as needing serious attention. While suitable for pedagogy recent technological achievements had rendered them more in the ‘project studio’ class of facility, and it was clear that for this project to succeed physical equipment needed to be of the highest order. By mid 2009 the main studio, Studio A had been completely refurbished with a plan written for the refit of studio B (which was completed in mid 2010). The two studios were delineated in a manner similar to many production houses.

Studio A was designed to be a high class recording and mixing facility, equipped to deal with both critical acoustic and coloured sound sources. This has audio and video patched into critical Conservatorium concert spaces allowing the use of classical music recording techniques through to electronica, popular music genres and more esoteric genres that take advantage of multi-various acoustically treated spaces.

Studio B was designed for the writing and composing musician with an analogue console, 5.1 surround capability and a range of hardware and software tools designed for the creation of original compositions as well as supporting recording projects. Both spaces have audio and video capture and synchronisation facilities as well as capabilities for audio to moving image post-production.

Both studios now have an enhanced focus on supporting music for moving image. In addition to significant hardware purchases that are outside the scope of this study, a substantial investment was made in regards to sample based software, often described as ‘virtual instruments’. These can be triggered or programmed on a number of computers at the Conservatorium, and students have been encouraged to pre-compose instrumental parts at home before rendering a much higher quality product using the advanced instruments at the Conservatorium. Instrument collections include full orchestral libraries, ethnic instruments, percussion, keyboards and soundscape generators, making it possible for students to realize compositions within industry standards. The result of this has been students writing works at home before rendering them in the QCGU studios, and laying them to image at the GFS edit suite.

In addition to the provisioning of resources, learning and teaching systems also required formalisation and development. One of the overarching findings from the experimentation phase was the need to develop a formal learning system that allowed students to work throughout the calendar year on joint projects. In GFS timelines were tuned to allow better integration of music and sound and film students were encouraged by guest conservatorium lecturers to allow adequate time and resources for music, sound and foley.

Of considerable significance in this phase was an alteration in the structure of assessments at GFS / QCA. In addition to the year-long projects, which constituted the major assessment three minute fast turn-around projects were introduced in order to capitalise on the benefits of action research approaches to learning. These had a significant impact on the nature of collaborations
between the students because they provided very tangible and short-term deadlines where students could form, develop and negotiate multiple ways of accomplishing tasks and mutual interaction. This could then form the basis for ongoing deeper professional relationships in year-long projects where students were learning to “be” and “become”.

To complement this a decision was made in Music Technology to create an assessment environment that explicitly set up the idea of multi-staged long-term projects. Assessments were designed to recognise and separate whatever stages were appropriate to student involvement in large-scale moving image projects. This resulted in Music Technology issuing learning contracts to participating students at the start of the year. These learning contracts allowed Music Technology students to take a more pro-active stance in the project stages because not only were they required to plan out how their year long assessments would look at the end of each stage, they also had to communicate with their film and animation collaborators on an much deeper level in order to ensure that (a) there was an appropriate breakdown of stages, (b) the timelines were realistic and achievable, (c) all parties understood associated timelines and responsibilities, and (d) the overall plan would be approved by their academics.

An example of a Music Technology learning contract included four assessment submissions that could cover stages such as:

[1] mid-semester 1: story-board with musical genres / style examples;
[2] end-semester 1: animatic\(^2\) with mocked-up original musical score using virtual instruments;
[3] mid-semester 2: recorded dialogue, sound effects, developed score with rough visual edits; and

The contract was year-long and allowed a single project to be tracked across multiple courses and multiple assessment items in order to align with GFS’ single course / single project structure.

Despite these efforts there still existed a considerable gap between the collaborations being undertaken by undergraduate students and the demands of higher-end professional practice as understood by the academics. The gaps, however, were not only in the “know-what” or “know-how”, but also in relation to “being” someone, where “mastering a field of knowledge involves not only “learning about” the subject matter but also “learning to be” a full participant in the field” (Brown & Adler, 2008, p. 4). In this context, learning to “be” is about knowing how to learn, negotiate and appropriate the “ways” of different professions (Wenger et al., 2002), where the establishment of a healthy collaborative culture plays an important role in relation to students “being” or “becoming” someone (Brown, 2006). This was apparent in communication, artistic practice and in the final artistic product.

2009-2010: COLLABORATION

Artistic practice is always at the heart of a conservatorium. Though research is often the core business of academics most musicians and composers define themselves by the music they make and its effect on the wider community. Similar approaches to artistic practice are seen in many other creative arts faculties where academics place primary importance on their craft, thereby imparting a sense of lineage to their work and their students.

This is most obvious in cases of instrumental and composition technique where teachers can trace their own teacher back to one of the greats of Western art music, the playing of students will reflect this, a Russian teacher’s student will have been exposed to a myriad of different playing styles to a student of a German teacher, and a modernist composer will impart a particular slant on their students completely different to a jazz composer.

Such lineages are pertinent to this discussion as collaboration has the potential to morph them, and to create new hybrid lineages and communities. Technology based collaborations such as with this project offer the young musician or filmmaker the chance to experience a wholly new tradition. At

\(^2\) An animatic is a rough cut of a film, pieced together from panels taken from the creator's storyboards using editing software such as Final Cut Pro. The animatic provides a quick and effective means of determining camera angles, action, shot length and overall pacing. This often takes weeks to prepare and extremely valuable for a composer and sound designer to work to. For animators, the animatic is something that is under continual revision for much of the pre-production and production phases of the film-making process.
GFS senior academics still make feature, animation and documentary film, and at QCGU the lineages of music technology and composition come together in the craft of soundtrack writing and recording.

In 2009, a number of developments changed the context and nature of this project. Both GFS and QCGU hired new permanent lecturers with a view to expanding project and interdisciplinary capabilities. In 2009 QCGU appointed Kim Cunio as lecturer in Music Sound and the Moving Image, a response to developments in film music pedagogy in other territories. The brief of this position included a deepening of the links between composition and music technology in moving image work. Cunio discussed inter-disciplinary collaboration in a 2010 QCGU lecture.

*When I was a student my teacher encouraged a cross disciplinary model. He would actually suggest that I should be able to teach myself most of the nuts and bolts of writing music, as he had done. In addition to music tuition he exposed me to great art, primarily the visual arts, and what followed was a process of exploration that saw me write many installation works and completely change what I thought a composer could do.* (K. Cunio, personal communication, August 16, 2010)

By 2010 links were forged with student and staff composers and ‘film composition’ was positioned as a serious part of composition practice. As part of this process composition students began to experiment and join the culture of moving image collaboration alongside music technology students.

A number of students underwent a paradigm shift in their understanding of creative potential and workflows, where individual student work was often significantly informed by newly found contexts. For example, Composition and Music Technology students began to swap skill-sets through passion-based and intrinsically motivated interactions. This took the form of Composition students assisting Music Technology students with scoring and arrangement approaches, while Music Technology students assisted composition students with digital audio workflows and approaches. This extended into all participants of the collaborations, with Film and Animation students similarly affecting and being affected by the Composition and Music Technology students. This can be seen as an example of students learning to “be” in cross-disciplinary contexts.

This has encouraged a number of students to enrol in independent composition projects whereby they compose music for film and write an exegetical work describing the outcomes of the music. This learning model, based on artistic practice as research, offers the opportunity for project based work and critical reflection.

In addition to this a number of guests at QCGU have significant moving image experience. This has included improvising musicians, traditional musicians from other cultures and film composers. All these guests have iterated that collaboration is one of the essential skills of project-based arts, and a core business of the creative artist.

By mid 2010 it became apparent that film and music students were starting to co-own projects, as opposed to the former GFS model where the composer was brought in to work to a set music brief at the end of a film. This has been reflected in a growing number of GFS films with QCGU soundtracks. QCGU students began to meet GFS film-makers before their final year of study and in some cases had written a number of soundtracks before the commencement of their formal project. Recent project outcomes have included fully notated and recorded works, live recordings, sample based and acoustic studio based soundtracks, as well as live interactive visuals in QCGU concerts and installations.

As GFS students have been able to hear the difference and level of possibility contained in QCGU soundtracks they have built more flexibility into their production plans and generally allowed a more creative role for the composer. This is a pertinent area of discussion to both industry and education. One of the greatest difficulties in managing moving image collaboration is in finding a common set of expectations for a project. Film makers often have set ideas about the music they like and even supply composers with ‘sound alike’ cues that they have already chosen for musical treatment. Conversely composers often have strong ideas on the merits of their music and struggle to see the functional aspects of this relationship, in which their music is by its very nature the junior partner in the artistic work.

As such this project has also encouraged a wider view of possible modes of collaboration. These have included:

- The presentation of a music theatre work realized with a combination of live performance and sampling. This work was composed by a Film School student who presented traditional scores to Conservatorium vocal students and instrumentalists.
Real time VJ-ing within newly composed multi-channel surround sound installation works. These works involved the real time manipulation of animation as an essential part of the live performance.

• Improvised soundtracks to newly created animation works. This “comprovisational” process has since been identified as an area of future collaboration between the Film School and Conservatorium by the Directors of both GFS and QCGU.

• The formation of a new ensemble within the Conservatorium, led by Kim Cunio and Paul Draper to respond to potentialities in sound, music composition and comprovisation.  

Staff and student led Conservatorium ensembles have also responded to this changing landscape.

An example of this is seen where Conservatorium students sought out recent film school graduates for the Sounding Out Composers Collective 2010 concert series, incorporating live image generation into performances. In the lead up to Encounters 2010 (a multi platform festival highlighting the artistic ties between Australia and China), GFS graduates manipulated a newly edited film screened in the Conservatorium foyer with a live improvised student and staff soundtrack.

QCGU also presented two live soundtracks as part of its 2010 concert series. Both involved the real time performance of comprovised soundtracks to silent films. These included the Rome-based guitarist and electronic musician Mike Cooper improvising a score for the 1924 underwater fantasia film Venus of the South Seas, and the world music ensemble DVA (Linsey Pollak and Tunji Beier) improvising the soundtrack to Frank Osten’s 1928 classic Shiraz.

Both films soundtracks included interviews for the Conservatorium’s acclaimed ‘Behind the Music’ Series and have embedded publication outcomes which will be realized in 2011.

FUTURE DIRECTIONS

As the number of GFS scripts with animation and compositing content increases every year, and as the standard of artistic output is raised through greater inter-faculty collaboration, the role of workflow management will be increasingly crucial. The timetabling of film projects offers an ongoing challenge as most student edits are completed with a timeframe of three weeks for music and sound design.

Because such clear and ongoing communication needs to be in place between film makers and music students, the basics of aesthetics, cues, and styles need to be agreed upon much earlier in the project development and both parties need to maintain flexibility. For filmmakers, this collaboration has the potential to clarify communication and language – how the visual, musical and spoken languages combine in film. For young composers, film projects offer a litmus test of how they may function in the music marketplace, where one common role of the composer is to interpret a brief, something different from the creative licence of the concert hall.

There are a number of potential future developments pertinent to this article. A key area in fostering cross discipline creativity already discussed in this article is the provision of appropriate physical resources. This has been responded to by both GFS and QCGU with the planning of new multi art-form moving image spaces in both institutions. Both GFS and QCGU have applied for funding to develop and enhance existing facilities to foster large-scale interaction between the disciplines. For QCGU, this involves the redevelopment of one of the rehearsal and performance spaces, the Basil Jones Auditorium, into a fully operational scoring stage, comparable to scoring stages in other capital cities within Australia. This would have the facility to record a full orchestra to moving image, work in multiple sound formats, and present public performances of live film soundtracks. For GFS, this involves developing the screening theatre into a purpose built space that allows live music to image, live manipulation of image to music and traditional music performance.

It is also pertinent that such developments be supported through the provision of staff resources. Possible future directions include the embedding of relevant academics within co-located faculties, having a composer in residence at GFS and a filmmaker in residence at QCGU. Such medium term collaborations will allow a greater contest of ideas, practices and exegetical outputs, foster co-located research projects and facilitate project based interfaculty public works.

This is relevant to the careers of both academics and students. Students will not only benefit from

3 “Comprovisation” is the fusion of composition and improvisation.

4 See http://www29.griffith.edu.au/soundspace/
mentoring by staff, but staff will also benefit from maintaining and establishing their own networks and opportunities for potential. As already mentioned in this paper, comprovisation is an area of future interaction. This can take place in dual contexts, improvised soundtracks to set films, VJ-ing to set music works or hybrid real time works.

Possibly the most apparent future direction is the formation of a cross institutional ensemble, a semi permanent group that contains staff and students from both GFS and QCGU with a brief to make a number of creative works a year. Additionally, it is hoped that staff will be able to collaborate professionally as artists, providing a model of leadership for students, a process that relates not only to the making of art, but the mechanics of positions and job descriptions within creative faculties.

CONCLUSIONS

Artistic practice by its very nature a collaborative endeavour requiring complex and multiple forms of communication and feedback (Hitchcock, 2009a). Similarly, sharing through social interaction, social construction of knowledge and collaboration are integral to the creative arts professions. Exposure to complexity, multiple ways of accomplishing tasks, problem solving, and interaction with experts and peers therefore helps learners to understand that there is no one embodiment of expertise and encourages them to view learning as a continuing and reflective process, thereby offering students insights into what it means to “be” a professional practitioner.

John Seely-Brown (2006, p. 11), in discussing this transformation from student to someone who has insight into being a practitioner, proposes that:

We need to find ways that our students can learn more about learning-to-be much earlier in their education. Today’s students want to create and learn at the same time. They want to pull content into use immediately. They want it situated and actionable—all aspects of learning-to-be, which is also an identity-forming activity. This path bridges the gap between knowledge and knowing.

The process of building student interactions within co-located faculties is hardly new, and this project owes a great deal to a number of dedicated academics and students. The practice based reflective learning model identified in this paper offers great potential for artistic practice, skills based education, exegetical output and creative confidence. It is hoped that it will lead to student and staff cohorts that learn to be full participants in their fields.

It is therefore important that arts institutions facilitate this process whilst providing clear structures and expectations for students on how to manage interdisciplinary media projects. Further, while this project has demonstrated some very positive outcomes for students and staff to date, providing these opportunities at an earlier stage in their degree programs should create a more sophisticated level of interaction by the time they reach their final year of study.

This then extends the framework for collaborative endeavours through the early creation of intellectual and social communities of like-minded participants with a focus around practice, philosophy and the underlying epistemologies. The benefits of multiple literacies being transposed from individual expression to community involvement are then manifest throughout the students’ degree rather than just at the end, consequently providing a much richer experience by their final year. The hope is that this will further prepare students with awareness and skills to seek both jobs and careers in related disciplines in order to improve their ability to achieve long-term and successful careers in changing market places.

REFERENCES


School.


