For some time employers have identified that one of the most sought after graduate attributes is the ability to function as an effective member of a team. In the creative and performing arts disciplines, which are often individually oriented in nature, the development and implementation of curricula that enable students to attain high-level teamwork skills suitable for participation in multi-disciplinary collaboration is not only necessary but it can be challenging for both educators and students. Indeed the ability to evidence where and how students develop teamwork or collaborative skills will become increasingly critical, as a result of the impending standards framework that is soon to be implemented by the Tertiary Education Quality Standards Agency (TEQSA). This paper overviews the ways in which Creative Exchange, a multi-disciplinary teaching and learning capstone subject offered by the School of Creative Arts at James Cook University since 2009, provides direct evidence of the ways in which students develop strong teamwork skills and attributes. In addition to teamwork skills, students also continue to develop discipline-specific knowledge as well as insights into industry and community settings, given the work-integrated learning orientation of the projects themselves. Data obtained from creative and performing arts students and alumni who previously participated in Creative Exchange are analysed, in order to report on the extent to which they had achieved appropriate standards required for industry. In addition, ongoing benchmarking of the Creative Exchange model via consultations with national and international industry practitioners is presented to further contextualise the findings. The paper concludes by discussing future applications of the framework as well as a range of additional research directions and opportunities.

Introduction

Creative and performing arts students in higher education are typically dedicated and passionate practitioners, used to and reliant on hard work and discipline, these attributes an outcome of the fact that many have practiced their craft for several years in order to reach this level. While on occasions creative and performing arts students work in teams, it is more often the case that they have practiced as an individual, such as the musician learning an instrument for many hours in a practice room or the designer creating branding material for a client. At the same time, many creative and performing arts students do participate in groups, such as orchestras, productions and creative projects, although it is more often associated with activities within rather than
across the disciplines, and in particular when involving those beyond the creative and performing arts. That is, collaboration is often sporadic, usually within the discipline, and is quite rare in terms of formalised group work involving students beyond the creative and performing arts (McArthur 2007; Bennett 2009). These traditions and methods of practice have been commonplace for many decades in the Australian tertiary environment in terms of the creative and performing arts. The extent to which they remain relevant today however is worthy of consideration given the rapidly changing context in which students will be required to work and navigate a career. Furthermore, these issues exist amidst the backdrop of the impending introduction of the Tertiary Education Quality Standards Agency’s standards framework.

The impending introduction of a national ‘standard’

While outcomes are a typical feature of the creative and performing arts (e.g. the performance, a finished visual artefact, the screenplay), the extent to which there is a benchmark ‘standard’ for such creative outcomes at the completion of a program of undergraduate degree learning represents a new challenge for the Australian tertiary sector. Furthermore, given the diversity and individualistic nature of most areas of creative practice–indeed individuality is strongly encouraged in most cases–the impending Tertiary Education Quality Standards Agency’s framework is currently requiring curriculum developers to engage in significant reflection and consideration as to how to identify and evidence the achievement of standards (Coates 2010; Thompson-Whiteside 2011; Smith, Meijer and Kielly-Coleman 2010). It is certainly representative of a new phase within Australian tertiary education, a view endorsed recently by Coates (2010, 3) who refers to the fact that ‘relatively little scholarly research has been done on what this actually means’. There is no doubt that it will require educators in the creative and performing arts to grapple with complex issues, indeed Flood (2012, 805) even argues that the concept of learning performance indicators ‘can strike horror into the heart of teachers in creative learning fields’.

As a response to this impending introduction of standards against which tertiary programs will be assessed, a set of threshold learning outcomes specific to the creative and performing arts have been developed as part of a major Australian Learning and Teaching Council funded project (Holmes and Fountain 2010). The
process of creating these standards was comprehensive, involving sector-wide consultation and collaboration, as well as benchmarking with international equivalents (Freiman 2011). While the set of six outcomes provides a broad expectation, there is significant freedom for institutions to create curricula that leads students to these relevant thresholds, although it is also the case that the general focus is about practice-led and learner-centred curricula (Freiman 2011). While ongoing work is required to refine and further develop mechanisms by which to evidence the achievement of these outcomes, it has certainly ‘promoted thinking and discussion about what teachers, directors and convenors expect students to be able to do … and focused the need for clear learning outcome statements in course curriculum planning, materials and information’ (Freiman 2011, 14). Work has certainly commenced within the sector. For example, the University of New South Wales has set out to anticipate these outcomes as part of a university-wide review of assessment practices (Flood 2012). In addition, a number of other projects funded through the Office for Learning and Teaching are in process in other Australian institutions (Assuring Learning 2012). Nevertheless, it is a very new phase for the Australian sector with few published studies relevant to the creative and performing arts available to curriculum developers and researchers.

**Working independently and collaboratively in the Creative and Performing Arts: navigating a changing world of work**

It is increasingly recognised that current creative and performing arts graduates will face complex and changing career patterns, with an emerging discourse relevant to the need for creative and performing arts graduates to develop career management capacities and a range of employability skills (e.g. Harbour 2005, Brown 2007, Bridgstock 2009, 2010, 2012). Bridgstock (2010) refers to the emerging discourse around the concepts of the ‘portfolio’, ‘boundaryless’ or ‘protean’ career types, these non-linear and self-managed paths seen as particularly relevant to creative and performing artists where the work is often contractual, short term and/or cyclical (Hartley 2005; Guile 2006; Markusen 2006; Bridgstock 2010). Furthermore, it has been recognised that the work environment of many creative and performing arts practitioners has changed in various areas of the creative industries’ sector, from working as a creative individual, to working as part of inter-, multi- or trans-
disciplinary teams (e.g. Friedman 2000; Kerlow 2001; Niederhelman 2001; Sommese 2007; Whyte and Bessant 2007; Icograda 2011; Friedman 2012). These changed work conditions are reflected in the standard attributes employers seek when employing new graduates. Writing soon after the turn of the twenty-first century, Harvey, Locke and Morey (2002) reflected on ongoing research relevant to a core set of attributes which employers had been looking for since the early 1990s, these including communication, interpersonal, teamwork skills, as well as capacity for lifelong learning, analytical and reflection. To a large extent these same skills and attributes are unchanged and are now also formalised as one of the six endorsed threshold learning outcomes, in terms of the ability for a student to ‘Work independently and collaboratively in the Creative and Performing Arts Discipline in response to project demands’ (Holmes and Fountain 2010, 12).

Tertiary institutions play a key role in ensuring that creative and performing arts graduates are sufficiently prepared for a long-term career in employment. Therefore, given institutions are preparing students for ‘a workforce that demands certain outcomes it is imperative that creative and performing arts educators are able to meet these requirements without losing the essence of the particular discipline learning needs of the individual’ (Flood 2012, 810). While it is arguably more straightforward to assess students as individual practitioners, the achievement of a suitable standard for working collaboratively is potentially more difficult to determine. Given employers continue to refer to teamwork skills as a key graduate attribute (Belt, Drake and Chapman 2010; Department of Education, Employment and Workplace Relations 2012), it will be imperative for tertiary institutions offering programs in the creative and performing arts to evidence that this key skill has been obtained.

Creative Exchange: a multi-disciplinary capstone experience

Creative Exchange, a multi-disciplinary capstone subject, was first introduced at the School of Creative Arts at James Cook University in 2009 as a response to a number of key imperatives and themes emerging in both the discourse and through research findings relevant to employers’ expectations and requirements in industry. The key principles of Creative Exchange are to:
• engage students in multi-disciplinary practice involving those from both within and beyond the creative arts disciplines;

• enable students to continue to develop discipline-specific expertise while simultaneously develop skills to participate and manage multi-disciplinary teamwork effectively;

• invite participation of the community and industry to facilitate dialogue between students and others from the university and the wider community—locally, nationally and internationally; and therefore

• connect students to multiple sources of expertise which requires that they critically assess the range of feedback provided;

• bring all of students’ learning together and based on the principles of good capstone design (e.g. Kift, Field and Wells 2008; Akili 2010; Keller, Chan and Parker 2010);

• enable students to resolve complex issues or respond to major tasks as a way of developing advanced problem-solving skills; and

• enable projects and outcomes to be benchmarked according to the requirements of industry and/or community.

To date, the theoretical rationale for the framework has been presented and articulated in several fora (e.g. Fleischmann 2010; Fleischmann 2011), while the Creative Exchange subject design has also been reported in detail (Fleischmann and Hutchison 2012). To nevertheless provide a basic understanding of the subject design and how the development of collaborative skills are facilitated, an overview is provided in Figure 1 below, which represents the stakeholders involved in the 2010 iteration of the subject and including two example projects.
Figure 1. Creative Exchange participants and example projects (2010 academic year)
As can be seen from Figure 1 above, typical Creative Exchange projects involve students from at least three different disciplines as well as a range of staff and community/industry stakeholders who provide both formative and summative feedback.

**Strategies to assess whether creative or performing arts graduates have achieved the appropriate standard for working collaboratively**

Earlier research relevant to Creative Exchange demonstrates that engaging creative and performing arts students in multidisciplinary teamwork can create a range of beneficial outcomes, and which are in alignment with skills and attributes required by employers of the creative industries (e.g. Fleischmann 2011, Fleischmann 2012a, Fleischmann 2012b). These outcomes have been formulated based on the feedback from students on their expectations (before engaging in multidisciplinary teamwork) and on their experiences (after engaging in multidisciplinary teamwork), with the data analysed in terms of the extent to which it aligns with employer expectations. However, in order to further investigate the extent to which creative and performing arts students have achieved the appropriate standard for working collaboratively, the researchers deemed it important as a next stage to also evaluate graduates’ experiences of being employed in the creative industries, soon after their studies had concluded. Furthermore, to relate to and compare findings with current industry conditions and also to detect change in the industry, existing and future employers of creative and performing arts graduates were considered invaluable in providing feedback as part of this next stage. Figure 2 overviews the evaluation process applied in this next phase of ongoing research in this area.
This research study was conducted within a pragmatic framework and using a mixed-method research approach (Johnson & Christensen 2008; Punch 2009; Teddlie & Tashakkori 2009). The mixed methods research design was chosen in order to:

- ‘offer depth of qualitative understanding with reach of quantitative techniques’ (Fielding 2012, 124);
• use triangulation of different data sources that would ‘allow expression of different facets of knowledge or experience’ adding depth and/or breadth to the study (Bazeley 2004, 4); and
• apply triangulation of data obtained through different methods providing corroborating evidence for the conclusions drawn, i.e. validation technique (Bazeley 2004; Johnson and Christensen 2008; Teddlie and Tashakkori 2009).

From the research tools available, online questionnaires and interviews (face-to-face and focus groups) were considered the most appropriate to propose a high response rate and return a range of valid data. Quantitative data were analysed using the SurveyMonkey platform which automatically provides basic statistical data such as the tally of response totals, percentages, and response counts. Qualitative data obtained from responses to open-ended questions in questionnaires and interviews (duration between 20 to 60 minutes) were coded using the research analysis software NVivo.

As indicated in Figure 2 above, this paper reports on two specific strategies designed to respond to a process of ongoing benchmarking and refinement of Creative Exchange, including:

1a investigating creative and performing arts students’ perspectives after directly participating in Creative Exchange; as well as
1b alumni now working in industry, in order to ascertain the extent to which they believe Creative Exchange did enable them to transition easily into current industry practices and achieve the relevant standards; and
2 further consultations with and feedback from industry experts involved in the process and also including those who had not yet participated, in order to continue to stay abreast of industry attitudes and practices.

Ultimately, the goal was to continue to enhance the validity of the curriculum as well as the research-led teaching approach that has underpinned the Creative Exchange concept since its first introduction.
Creative and performing arts students’ reflections on the learning of skills required for effective collaboration in multi-disciplinary teams

In this paper, feedback from sixty-nine undergraduate creative and performing arts students who participated in Creative Exchange during 2009 and 2010 is presented. Students from the following areas participated in an online questionnaire as well as focus group interviews: media design (34), photomedia (19), visual arts (9), music and sound (5) and performance (3). Table 1 presents students’ feedback via the questionnaire on their ability to understand the multi-disciplinary teamwork process.

Table 1. Creative and performing arts students’ reflections on developing an understanding of the multi-disciplinary teamwork process

<table>
<thead>
<tr>
<th>Do you think that you have developed a better understanding about how people from different disciplines could work together or are working together on projects?</th>
<th>Yes</th>
<th>No</th>
<th>Total number of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creative Exchange 2009</td>
<td>97%</td>
<td>3%</td>
<td>37</td>
</tr>
<tr>
<td>(36)</td>
<td>(1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creative Exchange 2010</td>
<td>94%</td>
<td>6%</td>
<td>32</td>
</tr>
<tr>
<td>(30)</td>
<td>(2)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As is presented in Table 1, over 90% of students stated that they developed an understanding how people from different disciplines work together, with only a small number arguing that it was not achieved. When analysing the additional feedback provided by creative and performing arts students in focus group interviews, the following key outcomes relevant to working collaboratively were identified, in that students learned to:

- understand their own role within the collaborative process;
- understand what other disciplines do including their contribution to the collaborative teamwork process;
- be able to work with others;
- develop and improve people skills such as communication especially by working with students from other disciplines outside the creative and performing arts; and
- understand how working collaboratively functions and how it needs to be organised in regards to communication and working effectively as a team.

Comments from the focus group interviews provide valuable insights and illustrate what creative and performing arts students gained in regards to organising and understanding the collaborative process. This in reality came as a result of working in multi-disciplinary project teams consisting of creative and/or performing arts students and, in some cases, students from information technology (IT), business and education:

I know what these guys do now. I can sit down with Florian [IT student] and say I understand what you are doing now. When before then I wouldn’t have had a damn clue.

I learned so much from working on a project where I depended on someone else’s work. Where what I had to get done, had to get done, before someone else could proceed with what they were doing. Or I couldn’t proceed until they had finished doing what they were working on. That dependency was a big learning curve.

Well, just in working together, I was able to ask anyone else any questions I had about the technology side of things like, … Amy Jo knows how do I go about doing that in a more efficient manner, “Oh, easy; do this,” and 20 minutes later I’m doing it ten times faster than beforehand.

The best thing was that I learned to work as a team because otherwise nothing will happen. It was the sort of subject where like, nothing was really pushing us along except for ourselves. We started from scratch and built ideas together, which was different.

These comments offered the teaching staff and researchers direct evidence of the specific ways in which students learn within collaborative settings and in particular the benefits of multiple disciplines working towards defined outcomes.

**Alumni reflections on achieving appropriate standards required for industry**

The same group of creative and performing arts students were surveyed one and two years after their graduation respectively. Twenty-six alumni participated voluntarily in the online questionnaire, of whom 91% (23) were working or had worked in the Creative Industries since their graduation and at the time of the survey. Table 2 presents alumni reflections on the extent to which the Creative Exchange experience
is reflective of industry standards. Furthermore, it overviews the extent to which students were able to identify and achieve the required industry standards expected of them when working collaboratively.

**Table 2.** Alumni reflections and feedback on industry practices and expectations for collaborative skills

<table>
<thead>
<tr>
<th>Alumni who participated in Creative Exchange in 2009 or 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>While at university you participated in teamwork projects (Creative Exchange). Do you think that this experience has better prepared you for working in the industry?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>I am not sure</th>
<th>Total number of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>58%</td>
<td>15%</td>
<td>27%</td>
<td>26</td>
</tr>
<tr>
<td>(15)</td>
<td>(4)</td>
<td>(7)</td>
<td></td>
</tr>
</tbody>
</table>

Do you think that your experience in working in multi-disciplinary teams while at university has helped you to gain employment/get a job/be considered for a job?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>I am not sure</th>
<th>Total number of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>50%</td>
<td>27%</td>
<td>23%</td>
<td>26</td>
</tr>
<tr>
<td>(13)</td>
<td>(7)</td>
<td>(6)</td>
<td></td>
</tr>
</tbody>
</table>

While only representative of a small number of students who had so far participated in the Creative Exchange experience, a range of perceptions are presented in Table 2 which offer the researchers key findings. From this particular group, half reflected positively on their Creative Exchange experience as relevant and helpful in their current work environment and/or in gaining employment. These alumni identified the following key learning outcomes from their participation in Creative Exchange:

- greater capacity to deal with deadlines/time management;
- enhanced people skills; for example
  - how to work with difficult team members, and how to come up with a win-win solution;
  - understanding different points of view and priorities people have on projects;
- the ability to communicate with people from different backgrounds;

and

• a greater understanding of other disciplines.

A particularly valuable insight is provided by one alumnus who describes how the Creative Exchange experience helped in the transition from the classroom to the workplace:

It gave me insight as to how people from different disciplines work and more importantly what they need to be able to work effectively. This helped when working in my employment as I knew what they would need to be able to get to work immediately and not have to hassle me for more/different material.

Another alumnus reflects on some of the key benefits in the following comment:

I think it helped me be able to understand the different ways that people work. And also to be able to share ideas and develop ideas in a team. It definitely improved my communication skills.

The group of alumni who were unsure or did not see an immediate relevance of the Creative Exchange experience at the time of the survey provided insights into why they chose this view. Some had not or did not work in a team environment, therefore they felt the experience had not yet proven relevant. The following comment illustrates this point:

At present I can't decide whether or not those projects are having a direct influence. I don't feel that I've really been put in a similar situation in which I've relied upon the skills learnt.

Another important issue several alumni mentioned is a remaining gap between simulating a real world work situation in an academic environment and the industry itself. One aspect described by alumni is the difference in accountability, this issue highlighted in the following two comments:

Although every effort was made to try and make the experiences as much like the real world as possible, it didn't work. People in the work place have to answer to someone if they don't pull their weight. Targets in the work place are more realistic.

The main difference I've found is there was always at least one weak link and someone who didn't want to be there, or couldn't perform to a high enough standard, or refused to participate at all (at university), while in the workplace everyone has the same goal and is passionate about the final outcome.
Another point of difference to industry employment relates to some students who found it challenging to negotiate and compromise with others from the same discipline in the multi-disciplinary team while being at university:

It often felt like too many cooks in the kitchen. Sometimes, for example, having three designers arguing over one design trying to push it in the way they wanted it to look and in addition sometimes programmers trying to help in the art direction which just complicated things even more. Real world has people with set tasks that do only that and stick to their area of expertise.

It is notable that within this group some alumni felt that the Creative Exchange experience had not necessarily prepared them for industry standards but given them life skills in general:

I think the teamwork has prepared me for life in general. You always have to work with people and the skills you learn from so much teamwork can be used in any aspect of your life.

Overall this feedback provides not only valuable insights into what impact the Creative Exchange experience had for graduates now in industry, but also the opportunity to benchmark these experiences against the requirements of employers of creative and performing graduates. In order to be able to evaluate more specifically what teamwork attributes and skills alumni felt they had developed, they were asked to choose from a list ranked as very important by employers (Fleischmann 2010; benchmarking interviews conducted from 2008-2011, see also for example AIGA 2008; 60Sox 2010; Institute for the Future 2011; Design Commission 2011). Figure 3 summarises the results from the twenty-six alumni that responded.
To what extent did participation in multi-disciplinary teamwork such as Creative Exchange enable you to: (choose all that apply)

<table>
<thead>
<tr>
<th>Skill/Attribute</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicate with people from other creative arts disciplines</td>
<td>85% (22)</td>
</tr>
<tr>
<td>Better understand my role in a team process</td>
<td>81% (21)</td>
</tr>
<tr>
<td>Be willing to share ideas</td>
<td>81% (21)</td>
</tr>
<tr>
<td>Be a good team member</td>
<td>77% (20)</td>
</tr>
<tr>
<td>Communicate with people from other disciplines</td>
<td>69% (18)</td>
</tr>
<tr>
<td>Understand what others are talking about</td>
<td>69% (18)</td>
</tr>
<tr>
<td>Communicate with people from the same discipline</td>
<td>65% (17)</td>
</tr>
<tr>
<td>Connect more easily with others</td>
<td>62% (16)</td>
</tr>
<tr>
<td>Better understand other disciplines</td>
<td>54% (14)</td>
</tr>
<tr>
<td>Make myself better understood</td>
<td>54% (14)</td>
</tr>
<tr>
<td>Not worry in team situations</td>
<td>42% (11)</td>
</tr>
<tr>
<td>I learned nothing from it</td>
<td>4% (1)</td>
</tr>
</tbody>
</table>

Number of participants: 26

**Figure 3.** Skills and attributes alumni developed as a result of participation in multi-disciplinary collaboration.

It is evident that a variety of benefits relevant to working collaboratively could be identified by a number of alumni, in many cases the majority of those who participated in this survey. It is also positive that these are congruent with current market demands and indeed include a range of more specific skills and attributes usually broadly presented under the category of ‘teamwork skills’.

When asked to reflect on whether multi-disciplinary teamwork should remain part of the degree, 97% (25 alumni) thought that it should be included. In addition, 96% (24 alumni) felt that collaboration with students from outside the creative and performing arts (e.g. IT, business) should also remain a part of the curriculum. This is strong feedback in support of the value of collaborative learning and also of the importance of involving disciplines beyond the creative and performing arts.
Industry practitioner reflections on the suitability of the framework

The creative industries sector typically involves dynamic change. In order to keep the list of attributes and skills expected of graduates relevant and up to date, industry practitioners in Australia and Europe who were involved directly in Creative Exchange were interviewed, in addition to others who employ creative and performing arts graduates. A sample of twenty-six took part in interviews during the period 2008-2011. Views from both groups of creative and performing arts industry practitioners can be broadly summarised as follows:

1. integrating multi-disciplinary collaboration into degree programs of creative and performing arts students should not be seen as an option but an imperative for a contemporary higher education provider;
2. wherever relevant and projects demand, collaborations with disciplines outside the creative and performing arts should be pursued; and
3. graduates who had experience with multi-disciplinary collaboration within and/or beyond the creative arts would be more employable.

To illustrate these points the following exemplar comments were provided by creative industries’ employers involved in external scrutiny of the Creative Exchange subject:

I think that’s really excellent for the development of students, because that’s almost like imitating a real life scenario. As we were saying before, most projects have collaborations between multiple disciplines. (CEO of Multimedia Design Company, Australia)

I think it’s imperative that they go through some form of team building exercises and how to operate within a multi-disciplinary team before being sent out into the big bad world. (Creative Director, Australia)

It is important that students do not only learn about multi-disciplinary teamwork in theory but also apply what they have learned already at university. They need to be able to talk with others and importantly with people in other departments (Design Director, Germany).

It is important that students understand the processes in collaborations, how these projects come together, who has what part to fulfil, etc. before they go out in the industry. It is not only about people skills anymore; that means graduates must not only be able to talk to other people from various areas but what they say and what they do needs to make sense to all participating members of the team. (Creative marketing and events specialist, Germany)
Creative industries practitioners who were directly involved in Creative Exchange also participated in the evaluation of the model in terms of facilitating the development of industry standards. The following two comments provide excellent examples of why the Creative Exchange model was initially developed and introduced:

As much as we all like it, we can’t be one hundred percent fantastic at everything we do. Some people are really good at design, but maybe they are not good at programming, or they are not good at presenting or something like that. I think it is good to give people a chance to just focus on the thing that they are good at doing, and work with other people. Because that is what it is like in the industry, you are specialising in one area but you do need to understand how to work with other people. (Web designer and developer, Australia)

In my industry as a graphic designer I have to work with lots of different people that are outside the creative industry. So I think it gets them used to it and because they definitely have got different mindsets. And you need to be able to converse and convey your ideas to people in different disciplines. So that is a really realistic way of approaching it. It is the reality of the workplace. (Graphic designer, Australia)

**Summary and conclusions**

While still in the early stages of delivering, benchmarking and evaluating the model itself, the evidence to date reveals the potential successes that Creative Exchange provides, ranging from students being able to develop a range of understandings of the complexities and realities of multi-disciplinary work as well as learning about the processes of working with others towards a defined outcome. While there are some issues in terms of some students not necessarily recognising the value of the experience, be this at the time of their direct involvement in the program or afterwards as alumni, the evidence obtained to date has been largely positive. Indeed, further recognition of the success of this model is the fact that it has recently been chosen as the template for a Faculty-wide multi-disciplinary capstone where students from the Schools of Law, Business (including the discipline of Information Technology) and Creative Arts will work in formalised project teams, with this extended form of collaboration due to be implemented from 2013\[ii\].

At the same time, it is clear that there are particular challenges for tertiary educators when attempting to align the curriculum for collaborative practice to the realities of
contemporary practice in the creative industries sector. Firstly, from a curriculum design point of view the Creative Exchange subject requires significant resources, not only in terms of staff time and commitment, but also in terms of the time and costs associated with directly involving industry practitioners as advisors or providers of feedback on projects. Secondly, some alumni identified a relative disconnect between the collaborative experience during their studies and the realities of practice and standards of working within industry. These insights and findings reveal the fact that continued refinements to the curriculum are required in order to attempt to increasingly align the educational experience with the direct realities of the sector. For tertiary educators, this is an issue further exacerbated by the fact that creative and performing arts degrees are yet to be formally accredited by any representative industry organisations and/or authorities, thereby arguably placing the onus on curriculum designers and key stakeholders in industry to achieve a meaningful response and solution to this issue.

There are clearly significant opportunities for further research relevant to this particular curriculum initiative and how it fosters the achievement of threshold learning outcomes. For example, further data gathering strategies (e.g. interviews) from additional cohorts of alumni would extend the findings to date and offer further insights. Follow-up studies with graduates further years from the completion of their studies would also offer a longer-term analysis of the relevance and value of the curriculum, as well as greater opportunity to have experienced and reflected on different models of working collaboratively. Finally, exploring additional ways in which to benchmark that students have in fact developed teamwork and/or collaborative skills could occur, be this through such mechanisms as end of degree interviews and/or testing, or via the direct involvement of industry in assessing such skills at the point of exit from undergraduate studies. Given the newness of this benchmarking and standards process to the Australian tertiary sector, there are numerous opportunities for further research. Ultimately, for the majority of stakeholders involved in the institution where this research-led teaching is taking place, the Creative Exchange model has proved to be one way of providing support and evidence of undergraduates in the creative and performing arts being able to at least gain insights into or the foundation skills relevant to industry standards in terms of teamwork skills. It is clearly not the only way, however the curriculum and
associated research completed to date presents a framework and basis by which to continue to refine and improve existing practice, in order to develop an even more comprehensive and benchmarked set of experiences for students and their prospective employers.
References


http://ahh.sagepub.com/content/early/2012/11/20/1474022212465725.full.pdf+
html


University of Technology, Perth, WA, 409-419.


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1 While the term ‘creative industries’ to some extent remains a contested one within the discourse (see, for example O’Connor 2009; Flew and Cunningham 2010), for the purposes of this paper it is adopted in order to refer to what is generally accepted as broad sector of creative employment areas where the majority of creative and performing arts graduates will seek a career.

2 See Daniel and Shircore (2012).