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**The industry studio in the creative arts: ten practitioner perspectives**

Abstract:

The studio is a core component of learning and teaching and the educational experience in the creative arts. Educators regard the studio as central to the support and development of creativity, as graduates prepare for employment in industry. However, in the literature to date on the studio mode of learning and teaching, there has been little focus on the industry studio. Based on interviews with a sample of ten industry studio practitioners, this article examines their perspectives on what the industry studio is, and whether the educational studio reflects this. The article highlights the dimensions and characteristics of industry studio practice identified by these practitioners, together with their broad perspectives on what studio should be within education. Reflection includes some of the implications and challenges for education, with recommended priorities for enhancing forward-thinking educational practice.

Biographical note:

Fiona Peterson's qualifications include MEd and PhD, which focused on interdisciplinary collaborative learning. She received an Australian Learning and Teaching Council (ALTC) Citation Award in 2008 for outstanding contributions to student learning, through innovative curriculum incorporating virtual teamwork and collaboration with industry worldwide. She has been involved in several projects and publications on learning and teaching leadership, work-integrated learning and studio teaching in the Creative Arts.

Louise McWhinnie's background is in Graphic Design/Visual Communication. Prior to entering employment in higher education, she worked as a senior designer in London design studios. Her PhD focused on international student design education and her research encompasses the typographic vernacular and its cultural particularity. Louise received an ALTC Citation Award in 2008 for educational excellence through a sustained commitment to undergraduate cultural and cross-cultural learning.

Jane Lawrence's background is in Interior Architecture. Jane has worked as the senior interior designer in a number of multi-disciplinary practices, and as the principal designer in her own practice specialising in health and aged care in regional hospitals. Jane has received numerous awards for studio teaching. Her research on design studio

pedagogies employing the tenets of memory and the everyday is widely published in books and journals.

Josie Arnold's background is in Creative and Educational Writing. She has published over 45 books in various genres and received several University and National awards for her teaching. She is the Inaugural Professor of Writing and established the MA (Writing) and the practitioner-based PhD by artefact and exegesis in writing.

Keywords:

Industry studio – Educational studio – Creative arts studio practice

## Introduction and background

The research presented in this article focuses on the studio model of learning and teaching in the creative arts disciplines, including art, architecture, design, performing arts (dance, music) and creative writing. In particular, industry studio practice and forward thinking are considered in relation to ‘studio’ in education. This builds on the work of the Australian Learning and Teaching Council (ALTC) Curriculum Development in Studio Teaching Project (STP), which investigated studio teaching in the broad disciplines of Art, Architecture and Design (Zehner et al. 2009). The STP included a focus on what constitutes effective studio practice in education, to inform curriculum development and future practice. That study included the comprehensive analysis of online surveys of both Heads of School and academics, case studies of educational practice, workshops and papers associated with three national forums (in 2007, 2008 and 2009) and a literature review.

In the STP, trends in curriculum design were identified, including an emphasis on the use of technology and industry-related content. The following benchmarks were developed for effective studio learning experiences: positive studio culture; quality staff; reasonable class size; student engagement; high levels of interaction; strong collaboration; quality projects; connection with industry and the profession; variety of outcomes; and appropriate studio space and facilities (Zehner et al. 2009). In terms of the benchmarks of ‘quality staff’ and ‘quality projects’, the STP outlined the importance of real-world projects, together with the ability of teachers to integrate their professional practice knowledge and skills in curriculum development and their teaching. The STP also identified four dimensions of the educational studio as: a culture/creative community; a mode of teaching and learning; a program of projects and activities; and a physical space or constructed environment. It was found that the successful integration of the four dimensions depends partly on the emulation of industry/professional practice.

What the STP study did not do, however, was to compare contemporary studio models in education with actual industry studio practice. Therefore, building upon the findings of the STP, input has been sought from industry as to what constitutes contemporary and predicted industry studio practice in the creative arts disciplines. This investigation of industry studio practice underpins a project focused on pedagogy, undertaken within the ALTC national leadership project titled ‘*createED*: strengthening learning and teaching leadership in the creative arts’ (2009-2012). This article reports specifically on the industry studio practice project within *createED*, which was undertaken by a team of five researchers comprising discipline specialists in art, architecture, creative writing, design and education. The Education specialist co-leading the team provided particular expertise in studio teaching (having been a member of the earlier STP). The other researchers in the industry studio practice project had a particular interest in their own disciplines, but also in the creative arts disciplines more broadly. Within this study, therefore, ‘industry’ is defined by the team as an artistic/design collective, incorporating professional practice and creative production. The conceptual framework of the industry studio practice project is shown in Figure 1 below:

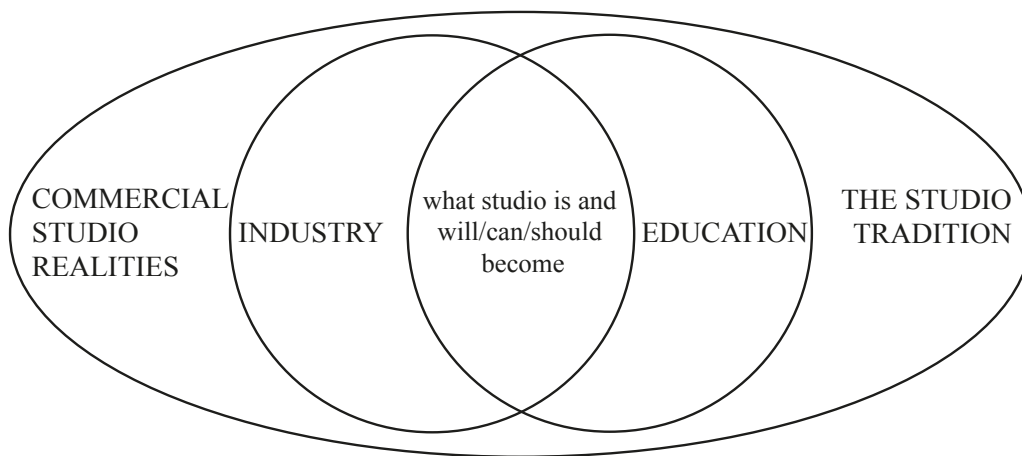


Fig. 1. Conceptual framework of parameters and outcomes of study.

The purpose of the investigation of industry studio practice was to explore connections between a) the commercial realities of current and predicted industry practice and b) the traditions of ‘studio’ in the creative arts disciplines in the academy. The aim was to highlight any similarities and differences, or gaps, in order to inform thinking about what studio is, could or should become in education. The ultimate aim is to support graduates as they prepare for industry practice.

### Methodology

Ten sample interviews were conducted, focusing on the dimensions and characteristics of current and predicted industry studios in the creative arts disciplines. While the interviews yielded insights regarding industry practitioner views of what studios are and how they function, given the small sample, these views can only be interpreted as indicative rather than conclusive for each discipline, or for the Creative Arts disciplines more broadly. Nonetheless, the insights shared and the analysis undertaken provides a useful starting point for discussion and further research. The ten industry studios selected to supply personnel for the interviews are located in capital cities of three states in Australia (New South Wales, Victoria and South Australia). While not providing a truly national sample, selecting studios in the cities of Sydney, Melbourne and Adelaide reflects diverse locations and studio practices in the different practice areas of:

- graphic design;
- industrial, product design;
- motion graphics, animation, film production;
- video, media installation;

- dance;
- creative writing;
- music;
- architecture, exhibition design;
- interior architecture, graphic design, industrial design; and
- architecture, interior architecture, graphic design, urban design, landscape architecture.

Each of the studios was selected according to diversity criteria, to ensure that the sample of ten interviews undertaken represented as much breadth of practice as possible. The studios therefore represented diversity in terms of their locations, discipline mix, and the following five additional criteria: the size of the studio practice; scale/client base; type of studio practice; type of studio activity; and type of studio outcome. Table 1, below, indicates the range of industry studios selected for interviews, for comparison.

The ten sample interviews conducted aimed to identify the dimensions and characteristics of current and predicted industry studios. Each interview included structured and semi-structured questions, to develop points raised during the conversation of the interview. The relationship between industry and educational studio underpinned the interview questions, which focused on what industry studio is and may become, and what the implications are for future educational studio practice (see Endnote).

An analysis of the interview responses involved internal homogenous categorization by distinctive heterogeneous themes. In line with de la Harpe et al. (2009) and Merriam (1990), categories were constructed based on emergence rather than pre-determination. As initial categories were identified, they were expanded, then conflated and modified in response to the wealth of emergent data and the necessity for conceptual refinement. In order to negate the risk of interviewer bias towards the particular interviews each researcher conducted, the categorization of interview data was conducted initially by three individual researchers (two of whom conducted interviews and one who did not). With the final categorization formed through the analysis of three individuals, determination that all categories were distinct, whilst items within each category were similar, was assured, with concurrence (and non-concurrence) mapped through incidence (see Table 2).

The investigation also involved case study analysis of effective educational studio practice from the STP report, to reveal any possible gaps in educational practice. The case studies were reviewed in terms of the dimensions and characteristics of effective educational studio practice, identified in the STP. These dimensions and characteristics were then compared with those for current and predicted industry studio practice, identified in the industry interviews.

A literature review was also undertaken. The existing literature review in the STP included a wide range of publications regarding studio practice; however, the STP analysis focused on assessment within the educational studio, based on journal articles

for the previous decade. Therefore, the literature review for this study trawled existing literature on the industry relevance of educational studios and educational studio delivery. It was at this intersection that a gap in existing studio practice literature became apparent.

There is much academic discussion about the importance of studio in pedagogy. Indeed, studio experience in educational settings is a central theme in creative industry learning and teaching. For example, Nancy de Freitas sees arts practice as readily combinable with studio practicum so that the skills of creativity are enhanced, by ensuring that 'studio methods are defined and applied to reveal the intellectual and creative substance of the artwork or design' (2002: 1). Kathy Lynch et al. make the interesting observation that studio-based learning has contributed to the development of problem-based learning, as 'students practise skills and techniques and learn new concepts whilst working in an environment that encourages learning by doing, working together and seeking advice or assistance from mentors and tutors' (2001: 1). Studio teaching involving industry-aligned creativity underpins such effective studio practice, potentially contributing to what Erica McWilliam and Shane Dawson describe as 'creativity-enhancing' learning environments (2008: 633).

It is clear that studio-based learning prepares students for the real world of studio practice (Corkery et al. 2007, Lynch et al. 2001, Zehner et al. 2009), where the studio is regarded by practitioners as 'an experimental or a development space ... as essential to the artist as the laboratory is to the scientist' (Edmonds et al. 2005: 455). Some are diversifying studio-based learning experiences, given the rapid advances in technology, to ensure that new technology-based design processes and products are incorporated in the learning experience for students (Reffat 2007).

However, there is limited research into industry studio practice in the creative arts fields such as design (Sunley et al. 2011). Furthermore, the paucity of research examining the ways in which industry studio practice is perceived by practitioners themselves, including how this integrates with the educational studio context and delivery approaches, has highlighted the need for this type of research.

<b>Industry Studio</b>	size: no. of employees	scale: client base	type of studio practice	type of studio activity	type of studio outcome
<b>GD</b>	2	local	new, urban	collaborative, discipline specific, focus on community projects	process, mass production
<b>Ind</b>	3	national	new, recent graduates, urban	inter-disciplinary collaboration, research embedded in practice, focus on ethical/sustainable practice	process, mass production to distribution/sale
<b>MG/Anim/FP</b>	10 (20 for specific projects)	national	established, urban	interdisciplinary collaboration, focus on technical expertise/advancement	process, production
<b>V/MI</b>	1 (use of actors/dancers)	national	established, suburban	interdisciplinary, local and virtual collaboration, focus on environmental issues, research embedded in practice	process, production, installation
<b>Da</b>	1	local	established, urban	interdisciplinary collaboration, focus on physical well-being	process, rehearsal, to performance
<b>CW</b>	1	national	established, urban	collaborative, discipline-specific, research embedded in practice, focus on personal projects	process, production, mass distribution
<b>Mu</b>	1	national	established, suburban	interdisciplinary, local and virtual collaboration and input, focus on youth/popular culture	process, rehearsal, to production/performance/distribution
<b>Arch/Ex</b>	12	local, regional	established, urban	interdisciplinary, local and virtual collaboration, research embedded in practice, focus on corporate projects	process, to production
<b>Int/GD/Ind</b>	6	local, regional	new, urban	cross-disciplinary, local and virtual collaboration, focus on community	process, to production/mass production, installation
<b>Arch/Int/GD/UD/LA</b>	50 (900 globally)	international	established, urban	cross-disciplinary, local and virtual collaboration, research embedded in practice, focus on corporate projects	process, to production/mass production, installation

**Key to the Industry Studios**

<b>GD</b>	Graphic Design
<b>Ind</b>	Industrial/Product Design
<b>MG/Anim/FP</b>	Motion Graphics/Animation/Film Production
<b>V/MI</b>	Video/Media Installation
<b>Da</b>	Dance
<b>CW</b>	Creative Writing
<b>Mu</b>	Music
<b>Arch/Ex</b>	Architecture/Exhibition Design
<b>Int/GD/Ind</b>	Interior Architecture/Graphic Design/Industrial Design
<b>Arch/Int/GD/UD/LA</b>	Architecture/Interior Architecture/Graphic Design/Urban Design/Landscape Architecture

Table 1: Range of industry studios examined

## What is industry studio?

The main focus of this article is on the industry practitioner perspectives revealed through our interviews. These are, therefore, now discussed, in terms of responses to the overarching questions: ‘What is the industry studio?’ and ‘What are the implications for educational studio practice?’ The interviewees’ responses highlight the dimensions and characteristics of industry studio practice, as well as some of the implications and challenges for education in the future. Where quotations are included for illustrative purposes, they are attributed to the code for the relevant studio (see key in Tables 1 and 2) and the line number of the interview transcript. For example, the attribution ‘[Da: 33]’ would represent the Dance interview transcript, line number 33.

Through an analysis of the interviews conducted with industry studio creative practitioners (comprising architects, designers, artists, performers and writers), three broad dimensions and nine characteristics of industry studio emerged. In the interviewees’ descriptions of ‘industry studio’, physical and philosophical aspects dominated with an intangible overlapping of both – the hybrid ‘space in between’. Figure 2 illustrates the aspects described, which have been classified into three dimensions of industry studio: physical, philosophical and hybrid.

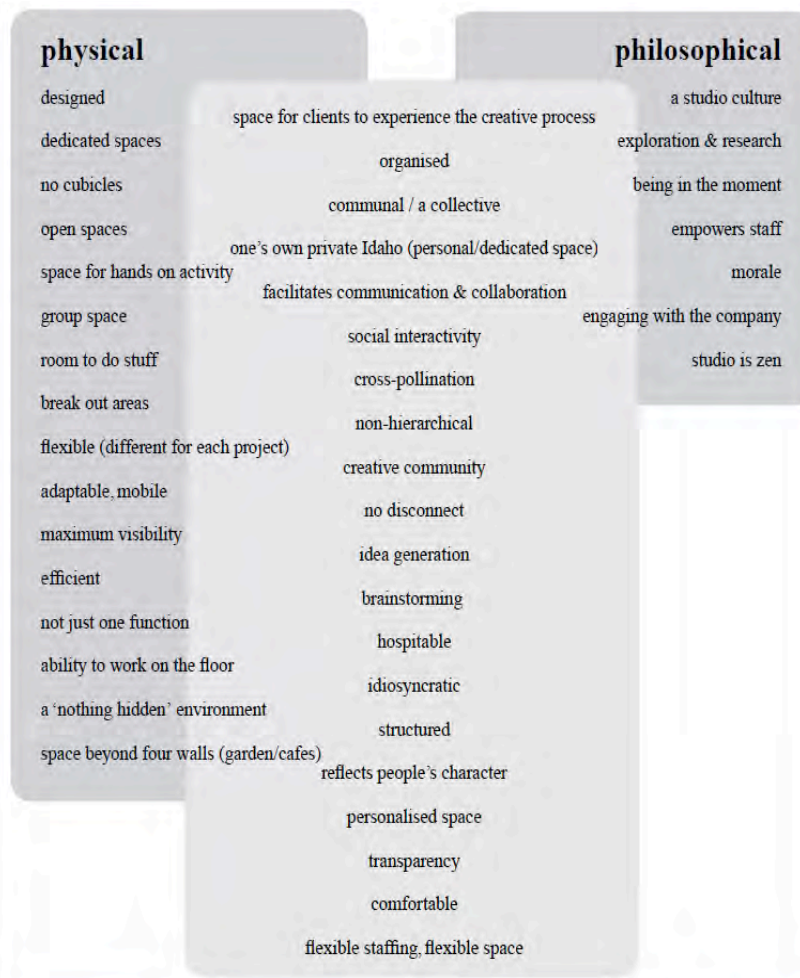


Fig. 2. Dimensions of industry studio



As Figure 2 illustrates, the industry interviewees perceive ‘studio’ in both physical and philosophical terms. Yet it is within the intangible hybrid ‘space in between’ that the pragmatic appears to bind with the ideological. The physical, philosophical and hybrid dimensions of industry studio are illustrated through the interviewees’ responses and, as shown, these dimensions are not mutually exclusive. All three dimensions (physical, philosophical and hybrid) can be both analogous and paradoxical taxonomies; that is, they can be mutually private and communal, open-spaced and dedicated, multi-functional and even ‘zen-like’. It is this complex overlapping that reflects the idiosyncratic nature of studio practice, where no generic model for industry studio can be claimed to exist, between or sometimes even within specific disciplines: ‘There is no blueprint for a design studio because it really depends on what sort of practice you are ... and what you do’ [GD: 244-245]. Physically, the studio is seen as a flexible space that can be adapted, in relation to the demands or requirements of each particular project, task or activity. Spaces need to ‘multi-function’ [V/MI: 90] and ‘multi-purpose’ [Da: 286] to enable the greatest flexibility. Many interviewees also suggest that versatile skills and the ability to be mobile and agile are requirements of a studio practitioner, in order to respond to deadlines and the opportunities that a studio project presents. This flexibility of both space and practitioners, and the ability to be responsive to opportunities, are seen as being central to the studio’s creative process, production and outcomes.

The studio is therefore regarded as an efficient and multi-functional physical space, composed of dedicated and non-dedicated areas that facilitate not only individual but also collaborative creative work. ‘We can tailor project delivery by tailoring the physical space’ [Arch/Int/GD/UD/LA: 43] and ‘a more formal structure doesn’t work for us, because the staff dynamic varies with people collaborating on different projects at different times’ [Arch/Ex: 12-13]. The physical possibility of having source material easily accessible to enhance creative output, as well as technical and material requirements, also ‘supports a dynamic work ethic’ [Int/GD/Ind: 82].

The physicality of the studio site is not perceived as defining the site of creativity, with a number of interviewees noting that creative interaction occurring within the defined space could also expand beyond the physical confines of the studio premises. ‘Your local environment is also very important in the studio’ [GD: 364]. Studio activities and hence the idea of the ‘studio’ itself are perceived to expand into local creative precincts and coffee shops, where collaborative creativity occurs. ‘The street is a place for creative stimulation ... we also use the garden as the workshop’ [Int/GD/Ind: 40, 31]. The studio ‘place’ may also exist through social media. ‘Some dance teachers work quite remotely with their students ... to create ... and submit ... solos via podcast’ [Da: 569-571]. ‘Studio’ here thus becomes descriptive of the creative activity and culture in which it occurs, rather than being defined simply by the physical space. At the same time, there appears to be a strong sense that ‘studio is home ... a place someone can go to and have a familiarity with ... an extension of the self’ [V/MI: 169, 205, 224], providing both space to be active and ‘room to do stuff’ [GD: 158].

In this way, the studio is regarded, philosophically, as more than simply a physical space. It is a culture, within which creative practice is facilitated and a creative ethos

is embedded: ‘where you can talk openly about your work and then go off and do the production and then be creative and messy and experimental’ [MG/Anim/FP: 358-359].

The creative culture of the physical studio and its surroundings is seen as a substantial factor in developing a positive creative practitioner/client interaction. The experience of the studio contrasts, for example, with the experience of the physical premises and work practices of corporate business. The studio philosophy or culture and the particular physicality of the space combine to form a location within which commercial clients can not only interact, but also experience, understand and contribute to the creative process. This is regarded as highly beneficial to industry studio practitioners, clients and the creative outcomes achieved. ‘It’s nice for clients to see that there’s a social feeling engaging their company ... they loosen up and it helps the process’ [MG/Anim/FP: 131-136].

The creative culture is also embedded in the collaborative aspect of the studio. In collaborative studios (that is, not sole practitioner studio practices), the physicality of the studio is perceived to enhance the philosophical nature of the studio through exchange, socialisation and sharing. Even within sole practitioner studios, the surrounding community of creativity is regarded as a necessity to ‘feed’ individual practice. ‘There are many collaborative advantages. It overcomes the isolation of being a writer, which is often lonely’ [CW: 15-16]. The desire for enhanced collaboration thus often actually drives the design of the group studio’s physical construction and use, because enhanced collaboration is perceived as being desirable and achieved through physical proximity to other creative practitioners and their creative work. Collaboration is also perceived to encourage ‘adaptability and exchange’ [Arch/Ex: 14]. In fact, the lack of such exchange of ideas risks the lack of creative growth in the creative process, because ‘if there’s no gelling, there’s no thriving’ [Int/GD/Ind: 16-17].

The community practice aspect, enabled physically by the studio and philosophically by the culture, supports the cross-pollination of ideas not only to enhance outcomes, but also to inform new inter- and cross-disciplinary practices. As ‘designer makers ... we work as a team and rely on that expertise and embrace and encourage collaboration. In fact we feed off it’ [Arch/Ex: 90-91]. Indeed, for some, ‘true studio’ exists when it includes ‘a genuine cross-disciplinary collaborative practice’ [Arch/Ex: 50].

Typically, the studio is client-oriented, communal, collective and non-hierarchical. Physically, this is able to occur because of the adaptability of both space and people. ‘The reception and meeting spaces are open to clients and visitors and staff are on display, so nothing is hidden in our work environment. This transparency is important to our philosophy’ [GD: 43-46]. This visibility and a lack of hierarchy (achieved through the design of the space) results in a sense of the creative process being open, where traditionally it was not. This openness, in terms of client interaction, supports clients’ understanding of, and involvement in, the creative process, as well as a sharing and generation of ideas between staff. ‘It’s a non-hierarchical office, that is,

we don't have private offices so all the brainstorming is done in compacted space and in compacted time' [Int/GD/Ind: 6].

The studio is thus regarded as the physical site within which creativity is formalised, while the studio culture formalises activities: 'I feel much more professional when I'm in here' [Ind/PD: 399]. The embodied knowledge also exists, however, within the studio placement of resources and hence inspiration for creativity. 'Embodied knowledge is at hand' [Arch/Ex: 64] where books and models, sketches and prints line the studio and meeting room walls, and existing work acts as both reference and inspiration. 'We tend to have the products out ... to see the reward of doing the work ... looking at the work and trying to replicate the success of having something made' [Ind: 402].

### ***Nine characteristics of industry studio***

In analysing the interviews through the lens of the three dimensions of industry studio discussed above, characteristics of industry studio emerged. These characteristics were then compared with those of educational studio as identified in the STP. Several themes were revealed as characteristics of industry studios, including: culture (creative community); technology; flexibility (space); flexibility (personal attribute); collaborative practice; intensive projects; cross-studio collaboration; client participation; and integration of research. The prevalence of each theme/characteristic, according to the industry studio interviewee responses, is shown in Table 2.

While the creative *community culture*, *collaborative practice* and *flexibility of space* featured strongly within the industry studios, interpretations varied in relation to collaborative practice. All ten interviewees responded that *collaborative practice* is important. The Graphic Design and Creative Writing practitioners described the importance of a collaborative environment for their studio involving peers within their discipline (intra-disciplinary). On the other hand, the Interior Architecture/Graphic Design/Industrial Design studio and the Architecture/Interior Architecture/Graphic Design/Urban Design/Landscape Architecture studio already embodied broader cross-disciplinary collaboration (transcending disciplines). The other eight studios involved inter-disciplinary collaboration (integrated disciplines). Collaborative work practices include *intensive projects*, where *space flexibility*, *personal flexibility* and adaptability are also essential, according to all the interviewees. 'My studio looks like a storeroom ... it's important that I have that gear available and I can then move to a larger multi-functional space where ... it allows a different type of thinking to occur' [V/MI: 13, 88-89, 96-98].

Significantly, *cross-studio collaboration* appears to be emerging as a trend, and is regarded by some as imperative to achieve a commercial and competitive advantage. Half of the interviewees described the importance of collaborating with fellow specialists (or even other specialists) to facilitate studio projects and achieve the resultant outputs that would not be possible otherwise. The five studios involved in cross-studio collaboration are the: 1) Industrial/Product Design; 2) Motion Graphics/Animation/Film Production; 3) Video/Media Installation; 4) Music; and 5) Interior

Architecture/Graphic/Industrial Design studios. These cross-studio collaborations occur at both a local and international level in face-to-face or digital environments. ‘What I think is important is collaboration with other studios ... we are designer makers and we work as a team and rely on that expertise and embrace and encourage collaboration. In fact we feed off it’ [Int/GD/Ind: 85, 89-91].

Industry studio	Culture: creative community	Technology	Flexibility: space	Flexibility: personal attribute	Collaborative practice	Intensive, relevant projects	Cross-studio collaboration	Integration of research	Client participation
GD	X	X	X	X	X*				X
Ind/PD	X	X	X	X	X**	X	X	X	X
MG/Anim/FP	X	X	X	X	X**	X	X		X
V/MI	X	X	X	X	X**	X	X	X	
Da	X	X	X	X	X**	X			
CW	X	X	X	X	X*	X		X	
Mu	X	X	X	X	X**	X	X		X
Arch/Ex	X	X	X	X	X**	X		X	
Int/GD/Ind	X	X	X	X	X***	X	X		
Arch/Int/GD/UD/LA	X	X	X	X	X***			X	
<b>TOTAL</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>8</b>	<b>5</b>	<b>5</b>	<b>4</b>

\*Intra-disciplinary collaboration \*\* Inter-disciplinary collaboration \*\*\* Cross-disciplinary collaboration

**Key to the Industry Studios**

<b>GD</b>	Graphic Design
<b>Ind/PD</b>	Industrial/Product Design
<b>MG/Anim/FP</b>	Motion Graphics/Animation/Film Production
<b>V/MI</b>	Video/Media Installation
<b>Da</b>	Dance
<b>CW</b>	Creative Writing
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Table 2: Common themes/characteristics of industry studios

*Technology developments*, in terms of discipline-specific tools and applications, were also mentioned by all of the interviewees. Technology was seen by most as ‘vital’ [V/MI: 298] to studio function and efficiencies: ‘It’s an economical situation where there are shared and active files on line and share-point’ [Arch/Int/GD/UD/LA: 58-59]. These technological developments are also relevant to collaboration and distributed work practices. ‘Studio locally is an evolving physical space but for international projects it’s a virtual space’ [Arch/Int/GD/UD/LA: 57-58]. ‘You can have studios that become virtual like a meeting space or place...I’ve got a network...a producer in Melbourne ... someone in Los Angeles .... within 48 hours you’ve got this international ... collaboration’ [Mu: 77-78, 200-201, 208].

The *integration of research* was referred to explicitly by half of the interviewees, those in: 1) Industrial/Product Design; 2) Video/Media Installation; 3) Creative

Writing; 4) Architecture/Exhibition Design; and 5) Architecture/Interior Design/Graphic Design/Urban Design/Landscape Architecture. Commonly, libraries are an essential element in industry studios and augment the embodied knowledge inherent in the studios examined. ‘Studio is a place for physical things like materials, literature library and models. It’s quicker to find in the physical rather than the virtual and better for our clients’ [Arch/Ex: 41-43].

Finally, *client participation* appears to be another emerging trend in industry studio, with the client not simply a consumer but integral to the creative process. Four of the ten interviewees identified this specifically: 1) Graphic Design; 2) Industrial/Product Design; 3) Motion Graphics/Animation/Film Production; and 4) Music. The clients ‘really like to be here ... they buy the creativity when they come here ... but they feel they’re part of the creativity’ [GD: 274-275].

### **What are the implications for educational studio?**

In order to answer the question regarding the implications for educational studio from these findings, the characteristics identified for industry studio are first summarised and compared briefly with those identified by the ALTC Studio Teaching Project (STP) for studio in education, including three key points of difference. This provides an indication as to whether or not studio in education *does* reflect industry studio practice.

#### ***Culture (creative community)***

The industry interviewees highlighted first and foremost the significance of the culture of ‘studio’ as being integral to creative practice. ‘Studio’ is commonly perceived as a culture – a creative community, incorporating both individual and collective creative practice endeavours, although for at least some of the time studio practice may be a solitary activity. This cultural aspect of studio practice was equally significant for educators in the STP, and understood as underpinning education in the creative arts.

#### ***Technology***

Many of the industry practitioners highlighted technology as the key change within the creative arts industries. Some described the emergence of new ways of working and collaborating in virtual studios, and the sense of community that can be created through the use of social media. Some also emphasised the phenomenon of new creative practices that can be created through the use of technology, enhanced by connections with others not previously possible. For example, not only can new forms of music be created using new technology, but also different ways of co-producing music with the audience are now possible. Similarly, educators in the STP described the impact of technology as a key change experienced over time in the educational studio, including *some* take-up of virtual studio; while in many of the industry studios

examined, the use of technology to support virtual studio practice is becoming widespread.

### ***Flexibility (space) and flexibility (personal attribute)***

Industry practitioners and educators, alike, highlighted the importance of adaptability and flexibility, in terms of both studio space and the personal attributes of studio practitioners. For example, in terms of space, the Design and Video/Media Installation studio practitioners conceptualised multi-functional spaces without too much structure and with different 'set-ups' possible for different approaches. In addition to the importance of flexibility as a personal attribute, collegiality and social interaction skills were also mentioned by many industry interviewees (such as Creative Writing and Dance), in creating the sense of belonging within a studio community and shared space. In terms of personal attributes, the educators in the STP also highlighted the need for graduates to develop professional confidence as part of professional practice, together with professional literacy including the ability to talk about practice in commercial terms.

### ***Collaborative practice and intensive projects***

Again, both industry practitioners and educators highlighted the importance of collaborative and inter- or cross-disciplinary practice and intensive projects, in the repertoire of activities within the real-world studio environment. Half of the interviewees, including one from a large global studio, also described ways in which they collaborate with other studios (locally and beyond) on commercial projects that would not be possible otherwise. This networking of collaborating studios facilitates creating a competitive edge within a competitive market place. In the development of inter-disciplinary, intensive and community projects, educators in the STP also mentioned the importance of the application of ethical and sustainable principles as a key change in educational studio over time.

### ***Integration of research***

Half of the industry practitioners interviewed mentioned the development and integration of research into the industry studio. In terms of the future, research was seen to support innovation such as in the cross-disciplinary, large-scale studio encompassing Architecture, Interior Architecture, Graphic Design, Urban Design and Landscape Architecture. Developments in technology were also seen as central to the future studio, although indirectly, in their support of studio practice. For example, important research and development includes new prototyping technologies in Industrial Design, or the new technology of Dance floors (in light of health and safety concerns that are central to Dance practice). Educators in the STP also highlighted research as one of the notable changes that has occurred in educational studios over time. In this sense, it could be said that the educational studio is closely aligned to the

forward thinking that some industry studio practitioners regard as the future of studio practice.

There are three key points of difference in emphasis between what was identified about ‘studio’ by some of the industry practitioners interviewed, and by educators in the STP. These can be summarised as follows:

1. Half of the ten industry practitioners who were interviewed (Industrial/Product Design; Motion Graphics/Animation/Film Production; Video/Media Installation; Music; and Interior Architecture/Graphic Design/Industrial Design) stressed the importance of new forms of collaboration including *cross-studio collaboration* (such as with competitors/particular specialists) as a trend that is becoming an emerging commercial reality. However, while there was some mention of cross-institutional collaboration in the STP, this commercial aspect was not highlighted by those educators in the STP.
2. Four of the ten industry practitioner interviewees described the value of *client participation* in the studio environment and especially the actual creative process (Graphic Design; Industrial/Product Design; Motion Graphics/Animation/Film Production; and Music). The interviewees saw this as a way to empower their clients, as well as strengthen the studio/client relationship and the creative outcomes produced. However, such client participation in the creative process per se was not a focus highlighted in the STP, as part of industry engagement and real-world/work integrated learning projects.
3. The STP identified the development and integration of research as one of the notable and key changes that has occurred in educational studios over time, however, this was not highlighted as a change in industry studios by half of the industry practitioners interviewed.

Next, in answering the question ‘What are the implications for educational studio?’, we highlight the industry studio practitioners’ views on this, and provide a snapshot of the relevant literature. This provides an indication as to whether or not studio in education *should* reflect industry studio practice. The interviewees indicated that they understood educational studios could not, and need not necessarily, replicate industry studios. However, high student numbers, space restrictions, shared teaching spaces, facilities and budget were seen by the interviewees as dramatically impacting on the conditions, scale and quality of educational studios. Most importantly, they recognised that the very nature and operation of learning and teaching studio spaces are in dramatic contrast to the dynamic, income generating practice-based studios; for example, one respondent said: ‘I understand why it has to be like it is but white space is so isolating and empty’ [Int/GD/Ind: 56-57].

Interviewees once again distinguished desirable attributes between the physical constructed space of studio and the philosophical ideals of studio practices. Principally, studio culture, ‘where working space becomes a more fluid extension of the self ... that kind of hot house environment ... testing stuff out together’ [V/MI: 224-240], was nominated by some as the most important aspect lacking in educational studios. The imperatives of integrating leading technologies, time management and research with intensive, multi- or inter-disciplinary, collaborative, community-based

projects, were also deemed by interviewees as professionally relevant and essential to educational studio facilities and practices. It was suggested, for example, that ‘there has to be more multi-disciplinary practices introduced ... a compression of project time [to] get the students to shift their thinking quickly’ [Int/GD/Ind: 104-106].

Turning to the literature, studio-based learning and industry studio practices are of central significance in the development of creative practices and, importantly, ‘creativity requires circumstances that enhance development possibilities’ (Edmonds et al. 2005: 455). Traditionally, creative practices outside of the academy have relied upon the idiosyncratic, self-reflexive individual often working in a solitary mode. However, the contemporary studio model relies in part on a community culture and on creative teams, comprising individuals who can contribute to creative outcomes in complex and non-linear projects (McWilliam 2007).

The practicum studio may be physical or virtual, or a combination. Edmonds et al. (2005: 452) point out that studio in the creative arts needs to be an experimental space or one in which ideas and work are developed, with technology providing opportunities to experience and ‘understand the multi-dimensional characteristics of the creative process’. In his discussion about design studio and pedagogy, Dutton also reinforces the view that ‘studios are active sites where students are engaged intellectually and socially, shifting between analytic, synthetic and evaluative modes of thinking in different sets of activities (drawing, conversing, model-making)’ (1987: 16).

Beyond descriptions of the educational studio, its ethos and activities, the literature highlights the industry relevance of educational studio delivery and the growing emphasis on employability as a graduate attribute. Increasingly, any student experience within a university setting is seen as having strong implications for employability within relevant industries or professions. This is important to the economy, and revealed in such documents as the Department of State and Regional Development’s report, *NSW Creative Industry: Economic Fundamentals*, which for example, states that:

The creative industry is a significant component of NSW’s economy, employing over 5 per cent of the workforce [of 150,000]. Further, over the ten years to 2006, employment in the creative industry increased by 28 per cent, against 13.5 per cent for all industries (2009: 8).

This report also quotes the OECD estimates of cultural/creative contributions in Australia as 3.1% of GDP, comparable with Canada at 3.5%, France at 2.8% and the USA at 3.3%, but outflanked by the UK at 5.8% (2009: 8).

There are economic as well as cultural reasons, then, that many Australian universities are becoming open to creative studio-based practice and the resultant ‘design-thinking’, understanding these as making important contributions to student employment as well as knowledge (Oakley 2004). Taking this further, through situating practice within scholarship (Makela 2007) and hence showing practice as research in itself, the academy is able to look at practice as a way that generates significant new contributions to knowledge (Nelson 2004).



Links have also been made between creativity and generating economic activity, with the creative industries acknowledged as contributing to economic development (Florida 2002, Gibson & Klocker 2004, Landry 2000). Given that ‘research and practice are interdependent activities that have mutual benefits as well as discrete activities’ (Edmonds et al. 2005: 453), the opportunities presented by the creativity and research nexus are potentially transformative, in terms of graduates being able to look at the world in new ways. In turn, graduates skilled in integrating creative processes and practice as research are able to contribute to enhanced creative outcomes in industry studio. Thus, a significant issue for both education and industry is the creativity/research nexus and the development of graduates who can contribute to a creative knowledge economy.

### **Priorities and Recommendations for adapting educational studios**

The analysis undertaken in this project suggests that educators should consider the following priorities and recommendations when developing and supporting studio learning experiences for students in the creative arts. These priorities and recommendations have been provided in order for the educational studio to be able to best assist graduates in preparing to contribute in the industry studio setting and more broadly to the creative knowledge economy, to reflect current and emerging trends in industry studio practice, and to help lead industry practice.

#### ***Priority 1: Real world projects***

*Recommendation 1. Graduates need to be able to participate in and/or lead intensive projects and develop capacity in effective client relations.*

Real-world studio projects are defined by the research team as those projects which include a creative response to an industry brief, or involve initiating a creative work, for industry feedback and critique. Real-world studio projects could enhance support for students in preparing for intensive and longer-term project experiences post-graduation, with client interaction integral to a collaborative creative process and embedded in students’ reflective practice requirements. Community and industry engagement, with ‘real-world’ deadlines, client interaction in the studio and with clients participating in the creative process would provide a closer replication of industry-based projects and deliverables. The integration of non-linear projects, with research-driven creative outcomes and a more intensive teaching approach, would better prepare students for the vicissitudes of professional practice.

#### ***Priority 2: Skills and attributes***

*Recommendation 2. Graduates need to be able to integrate research and practice to help lead practice.*

This provides students with a ‘competitive edge’ and gives them a real advantage in an industry studio environment, as well as enhancing their creative practice. The goal is to develop innovative creative outcomes that are achieved through research and

reflective practice, integral to professional practice. Indeed, new forms of creative practice may emerge, associated with technology and/or other professional practice developments in the relevant field/s.

*Recommendation 3. Graduates need to be flexible and able to work with others in different ways.*

Creative practices and their support industries are not always based within urban centres. Graduates need to be able to work in urban, suburban, regional and/or international or other remote locations as required, so technology may be integral to this practice and help to enable a creative community or network to develop. Graduates need to be able to work individually, as well as collaborate with fellow specialists and different specialists in teams. They also need to prepare for practice that may include developing working relationships with ‘competitor’ studios to support sustainable professional practice – that is, cross-studio collaboration.

### ***Priority 3: Use of space***

*Recommendation 4. Space and place need to be reconceptualised for creative practice/research.*

Studio spaces need to be adaptable, evolving learning spaces in order to facilitate various types of creative projects and activities, changing technologies, research endeavours, collaboration and community building. This includes the ability to host combinations of face-to-face/virtual events, to facilitate the use of social networking, and the exploration of the creativity/research nexus.

### **Further research**

Given the small sample of interviews undertaken for this study, the findings are indicative rather than conclusive but they do provide a starting point for further research. We suggest three broad areas for further investigation: the influence of space/place on learning, working and work undertaken in studio; the opportunities, challenges and ways of working in cross-studio practice; and the impact of the creativity/research nexus on transforming practice in industry studio.

In terms of whether or not educational studio reflects industry studio practice, a key distinction between the industry studio and the educational studio clearly exists in the minds of the industry practitioners interviewed. Some suggested that educational studios are left wanting in terms of opportunities for students to personalise and take ownership of their space. This is a tension, as educational institutions and programs encounter space restrictions, and often can only provide limited time for students to use the space allocated. Further research is, therefore, required to re-evaluate the influence of space and place on learning, and especially in relation to the creative work practices, processes and outcomes in studio (which may or may not be a dedicated physical space). If ‘studio’ may be experienced partly in a local coffee shop, a student open access area or elsewhere, we may be able to reconceptualise ‘space’

and ‘place’ requirements in line with contemporary industry and learner preferences. This research could be guided by asking the question: ‘Is studio a state of mind?’

Creative teams in industry studios may incorporate inter- and cross-disciplinary practice (physically, remotely and increasingly virtually, depending upon specific projects and practices) or, at the very least, are built around creative precincts and/or supportive creative communities. The long-held perception of studios as guardians of specialist disciplines has also changed, with intra-, inter- and cross-disciplinary projects regarded as creatively and commercially advantageous. Such collaborative practices occur in a variety of ways in studios in education, according to the STP. On the other hand, the growing trend for cross-studio collaboration in industry is not yet widespread in the studio in educational settings. Similarly, while client involvement in studio projects occurs in the education studio, the extent to which clients actively participate in, and contribute to, the creative process may not be as extensive as it appears to be in industry. Further analysis of ‘cross-studio’ projects and their potential development as cross-institutional learning experiences would thus be important in order to inform a forward-thinking educational studio configuration, which also incorporates active participation by clients in the creative process.

The integration of research and its application to creative projects and activities, regarded as fundamental to educational practice, is starting to be recognised as critical in industry studio practice across disciplines. The opportunities afforded by the creativity/research nexus also enable educators to show how studio-based teaching prepares students for their real-world practicum employment. The discussion above begins to address this, including ways in which studio practice in education can be enhanced. However, further research is needed to determine what impact the creativity/research nexus may continue to have on practice in the creative arts, and what role education can play in contributing to this industry studio development.

### **Concluding remarks**

While this article starts to address ways in which studio practice in education can be enhanced, it is now timely to seek educators’ responses to the studio developments outlined. Furthermore, while replicating every aspect of industry studio in education may not be possible, expected or desired, continual dialogue between both industry and education is a professional necessity, to support students as they prepare for professional practice and employment into the future. If forward-thinking educational models are to emerge, a clear understanding of the changing nature and practices of industry studios is vital.

### **Endnote**

#### **1. Industry interview questions**

Four researchers undertook the interviews for this study, each exploring the following questions:

- 1) What is an industry studio and what does an industry ‘studio’ look like?
- 2) In contemporary industry practice, what does ‘the studio’ contribute to enhancing creative and commercial outcomes?

- 3) Dimensions of an educational studio are understood as including: studio culture/creative community of people; physical space or constructed environment; and, projects and activities.
  - 3a) Do you think these are common to your industry studios? If so, can you describe them as they relate to your field?
  - 3b) Are there other descriptors that you feel should be added to the list to reflect studio practice in your industry?
- 4) How might industry studio change in the future?
- 5) What do you see as the priorities for the future of studios in universities?

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