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Positioning the Design Tutor's presence in the Design Studio for successful student design learning

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ABSTRACT

The small group learning and teaching environment of design studio settings in built environment undergraduate design degree programs is recognized as a complex and unique site of experiential learning. Impacting upon student design learning in this setting is student – teacher interaction. Influencing this interaction is the contradictory relationship between conceptions of design studio as an exemplar for student-centred university learning and the teacher-centred pedagogy of the culture of design studio.

In exploring this relationship, this paper introduces an action research project undertaken to identify and establish factors that impact upon student achievement of academic excellence in built environment student design education. It describes an aspect of the project that revealed that students place highest value on the personal qualities of the design tutor believing these are most important to their successful learning. This finding suggests that the design tutors' attentiveness to students has a powerful impact on student learning. On the basis of this research the paper concludes that the quality of 'presence' in a design tutor can be enhanced by adopting a reflexive approach that positions learning at the forefront of a community of practice in design education.

INTRODUCTION

Since the mid-1970s, much research has been undertaken to understand how best to make deep and meaningful university student learning possible (for example, Marton and Saijo 1976; Ramsden 1992; Biggs 1999; Prosser and Trigwell 1999). There has also been specific research on various academic, disciplinary, institutional, national and technological traditions (for example, Becher 1989; Barnett 2000; Boyer 1990, 1998; Laurillard 1993; Kreber 2002, 2005; Trigwell and Shale 2004). This research informs several generally agreed perspectives on student learning—that is, that students learn best, are motivated and achieve high grades at university when:

- the educational environment is student-centred
- they are empowered to construct their own understanding of disciplinary knowledge
- teachers demonstrate their own learning in their teaching practice

- department, curriculum, resources, teaching practices and assessment tasks are constructively aligned to specified learning outcomes (see Toohey 1999; Biggs 2003; Lea, Stephenson and Troy 2003).

Recently, significant attention has also been given to understanding the fine-grained interactions that occur between students and teachers in complex and fluid educational situations (Austerlitz, Aravot and Ben-Ze'ev 2002; Silen 2006; Webster 2004, 2007). As Haggis notes: *A. Conceptions of Design Studio*

Such perspectives suggest that it might be fruitful, for example, to try to understand something about the ways in which the specifics of context and history translate, in dynamic and unstable ways, into multiplicity and difference in the lives of situated individuals. Approaching teaching, learning and learners as embedded in a variety of particular and often unpredictable cultures and contexts, however, is far from easy (2004, p. 337).

Design studio is one such educational situation, for which the evidence suggests that fine-grained interactions between students and teachers appear to have a powerful impact on learning.

A. Conceptions of Design Studio

Although it has been heralded as an exemplar for university learning in general (Boyer and Mitang 1996) and specifically for educating professionals (Schön 1985), design studio can be an unpredictable educational setting involving complex interactions between students and teachers. This may be inherent to the creative, playful nature of design learning, where solutions are sought to sometimes vague, ambiguous, "wicked", tacit and authentic problems. Design requires its practitioners to make assumptions, take risks, work with "hunches" and intuition, tolerate ambiguity and uncertainty, all while engaging with a meta-cognitive, iterative process of reflecting on and questioning the problem, simultaneously making and representing a solution.

Although Shulman (2005) has described design studio as "signature pedagogy", characterised by the Socratic traditions of lively and robust questioning and discussion between students and teachers, there is very little scholarly discussion of the precise nature of the interactions between students and

tutors and how the presence of the design tutor impacts on student learning.

B. The Culture of Design Studio

The exemplary potential of design studio is at odds with aspects of design culture, specifically its antecedents in the master 'patron' ateliers of the French École des Beaux Arts system and the German Bauhaus movement. Proponents of these models carried them to the United States and the ideologies also became ensconced in the British and Australian design education systems. (see Cuff 1998, Larson 1977, Ahrentzen and Anthony 1993, Stevens 1998, Parnell 2003). This culture produces teacher-centred pedagogies typified by critique, which in turn engenders a 'star' system (Anthony 1991; Webster 2004, 2007).

This aspect of design studio education might account for the significant silence in the literature about student-teacher interaction in design education. Ochsner comments: 'This silence, itself, suggests a defensive response—the uncertainty and ambiguity that we all experienced as students in design studio, and the fear that went along with it are not something we want to remember or re-experience, let alone discuss' (2000, p.194).

However, recent discussions, symposiums and reports (AIAS 2002, CEBE 2003,2004,2005; Parnell 2004, Webster 2007) have contributed to a forthright and vocal questioning of teacher-centred pedagogies and their continued prevalence in educational settings despite of an espoused desire to better support student design learning. The research project outlined below makes a contribution to these discussions.

I. THE RESEARCH PROJECT

The Faculty-funded project described below commenced in 2003 as a collaborative enterprise involving staff from Architecture, Landscape Architecture, Interior Architecture and Planning.

The project aimed to:

- render transparent and explicit the values of the various design communities operating within the FBE
- enhance design learning, teaching and assessment practices as well as future curriculum redesign.

To pursue these aims, it focused on perceptions of:

- strengths and weaknesses of student design learning in general
- the characteristics of high distinction (HD) design studio projects—that is, design excellence
- the qualities of the ideal design teacher—that is, the sort of teacher who assists students to achieve their best work.

This paper reports on and discusses findings in relation to the last of these areas.

The project was informed by a phenomenological approach (Prosser and Trigwell 1999, Ashworth and Luca 2000) and undertaken within an action research framework. In addition

to a literature review and discourse analysis, the project's methodology involved:

1. a series of discussion groups with current students, graduates, full-time and part-time staff and the researchers themselves to elicit qualitative understandings about their experiences in design studio courses across the three programs
2. a survey of students in each of the programs to elicit information about their learning experiences in recently completed design studio courses.

A. Discussion Groups

Discussion groups were conducted with current students, recent graduates part-time practitioner staff and full time academic staff. The research team recruited all participants with the aim of including a mix of males and females and representatives from each of the represented programs: Architecture, Landscape Architecture and Interior Architecture. Teaching staff varied according to length of tenure at the FBE and levels of experience as a design teacher and/or practitioner. Current students and graduates also varied according to levels of typical grades received in studio courses, year of study, cultural perspective and type of employment. As per FBE human research ethical standards, all participation was voluntarily, no incentives were provided and participants could leave at any time during the workshops without prejudice.

The discussion groups were facilitated by the non-designer member of the research team. A sample of comments from the discussion groups is shown in Figure 1. All comments have been 'de-identified' to ensure anonymity of participant comments.

B. Survey

The survey took place at the commencement of the 2003 academic session (March), when 539 questionnaires were distributed to students in the second, third and final years of their design programs. Participation in the survey was voluntary and anonymous, with only program and year of study identifying the responses. The survey gained 341 written responses with the overall survey response rate of 63 percent.

The survey asked students to name three qualities that they thought a design tutor should have to assist successful learning. In response, 73 percent of the respondents (n=248) mentioned the personal qualities of the design tutor. Table 2 below summarises the responses and shows the specific words students used.

II. DISCUSSION

This section of the paper describes patterns of response from the surveys and results from the discussion groups. Figure 2 shows that, unequivocally, students in all programs and across all years believe the ideal design teachers should have, above other characteristics, certain personal qualities such as: being patient, compassionate, understanding, approachable, consistent, fair and enjoy teaching design studio.

Group	Sample Comments
Students	<ul style="list-style-type: none"> Enthusiasm. Staff have to 'want to be there'. They have to be there with the aim of "fostering new professionals" and "not just for the money". An equal amount of attention should be given to all students. Quite often, the students who have the same ideas as the tutor/lecturer get more attention. Drawing Skills. Creativity and open-mindedness. encourage balance through realistic ideas, and a knowledge of what is and isn't possible. Listening to what students say about the programs, and how they can be improved. Broad general knowledge. Good knowledge of 'materials' Sound environmental knowledge. Good verbal communication.
Recent Graduates	<ul style="list-style-type: none"> Plenty of demonstrated practical/industry experience. well-versed on history, concepts, ideas, constraints. An ability to cross disciplines Teaching skills – must be able to teach. A "task-master" – someone who encourages you to work and want to work, encourages you to learn for yourself, look outside your sphere, and "learn about all the pieces of the jigsaw". Someone who is energetic and interested in and passionate about what they do – that rubs off on the students, inspiring them, and giving them belief and confidence in their abilities. Someone who sets out clear criteria/objectives. A calmness about them. Organisational skills.
Part-time Staff	<ul style="list-style-type: none"> Someone who is strong enough in their views/principles so students know where they stand and where the teacher is coming from, but who is also not dogmatic, and has enough latitude and tolerance to be able to facilitate an idea/project which they don't necessarily agree with. Someone whose ability is recognisable. Someone who has practical experience. Lecturers/Tutors should be able to draw well. People management skills. Communication skills.
Full-time Staff	<ul style="list-style-type: none"> Understands all proposals and their complexities Giving all ideas equal time. Someone not just concerned with design. A person with a thorough knowledge of precedents, projects, ideas and theories. Has teaching experience. "Mental agility". Able to think on their feet. Communication – an ability to communicate one student's ideas to other students. Someone who acts a catalyst – inspires the students to learn for themselves and encourage their development. Stamina, dedication and compassion. Must have a sense of fun and humour.

Figure 1. Sample Comments from Discussion Groups

In the discussion groups, recent graduates mentioned personal types of characteristics more than any other group, although full-time staff members also mentioned these characteristics, part-time staff did not.

Descriptor	Ranked Qualities of an Ideal Design Teacher	Total	Percent
Personal Qualities	patient, approachable, honest, compassionate, helpful, understanding, generous, interested in what students do, consistent, fair, they enjoy it, dedicated	248	73%
Enthusiasm	inspiring, energetic, positive, enthusiastic, passionate, motivating, encouraging, ambitious	101	30%
Open-minded	open to new ideas, great ideas, pushes creativity, doesn't push own ideas, open-minded, innovative, imaginative	100	29%
Constructive Criticism	constructive criticism (positive and negative), honest feedback, helps students problem solve, good at analysis, objective.	97	28%
Communication	Communication and presentation skills, good listener.	75	22%
Design Knowledge	knowledge of design, up-to-date, has general knowledge.	71	21%
Teaching ability	good teacher, wants to be there, gives appropriate guidance/direction.	70	21%
Industry Experience	Practical, Industry and professional experience	48	14%
Organisational	Professional approach, a good time manager, is available for students, understands the course objectives	25	7%
Other	Other, such as have, or turn students to resources, references, examples, samples; exposes students to new designers; are informative	24	7%
Drawing and Graphics	good drawing, rendering, graphic skills; a good designer	11	3%

Fig.2. Qualities of an Ideal Design Teacher: Student Responses.

Another key characteristic of the ideal design teacher, according to students, was that they should be open to new ideas, have good ideas to share but not push his or her own agenda, and be imaginative. Part-time staff, in the workshop, suggested the ideal design teacher should have their own strong ideas and but also be able to accept others ideas. The teacher being inspiring, passionate, energetic and encouraging with an ability to give constructive, open and honest criticism/feedback was important to all students and commented upon by full time staff who also noted the importance of having a sense of fun and humour. Comparatively, industry and practical experience was regarded as somewhat important for the students and mentioned by recent graduates and part-time staff.

The following characteristics were not listed very highly as key characteristics of an ideal design teacher: being good at graphics and drawing, being 'professional' with regards to time management and other duties and 'other' characteristics such as having reference materials, being well-briefed about the course or exposing the students to new designers. The part-timers did indicate these characteristics as being important, especially being able to draw well, having good management skills, and understanding the course and its students.

Our findings, which emphasise the overwhelming importance students and graduates attach to personal qualities, raise two important questions:

- How can we assist tutors to develop the personal qualities that students regard as important to their successful learning?
- Can these personal qualities be actualized within a studio culture that promotes hierarchical, teacher-centred relations?

A. Developing Tutors' Personal Qualities

Underpinning most, if not all, scholarly discussion of learning and teaching in higher education is the view that what students and teachers are is not important to learning; rather, what students do is the critical factor in whether they achieve a deep approach to learning (Biggs 2003). Our findings complicate this view because they place an emphasis on what teachers are, i.e. their personal qualities. It seems our students simply want their tutors to be attentive to their design learning. But how can we appropriately help tutors to develop attentiveness to students?

It is possible to reframe this issue. Based on a study of architecture students at Oxford Brookes University, Webster (2004) represents the ideal design tutor as a "liminal servant":

...The "liminal servant" adopts a student-centred approach to the role of tutor by assisting the student to manage and construct his or her own learning through critically reflective dialogue (2004, p. 109).

Complementing this perspective is Silen's (2006) reflection on the approach or 'way of being' of tutors in problem based group learning in health sciences. She proposes that when the tutor's wholeness as a person, or their presence, is concentrated on the group the tutor is attentive to the learning of the students. In contrast, she uses the concept of dys-appearing to describe what happens when the tutor becomes the focus of what is happening in the group rather than the students. These models open up ways of thinking about tutor development that extend beyond a focus on adjusting personal qualities towards identifying tangible behaviours that can be learned and fostered.

Brookfield is also helpful here. He suggests that the teacher characteristics most preferred by students cluster around ideas of credibility and authenticity:

Students define *credibility* as the perception that the teacher has something important to offer and that whatever this "something" is (skills, knowledge, insight, wisdom, information) learning it will benefit the student considerably. *Authenticity*, on the other hand, is defined as the perception that the teacher is being open and honest in her attempts to help students learn (2006, p. 56).

The majority of design tutors in the FBE design programs are part-time academics and full-time practitioners, therefore, their credibility is generally very high and much appreciated by students and their academic colleagues. Their credibility as professional practice experts who also aspire to be professional in their university teaching would be enhanced

by staff development and education in learning and teaching scholarship and practices.

Indeed, tutors' academic professionalism might well be enhanced by a development focus on the personal qualities that contribute to attentiveness, to the tutor's presence and qualities that indicate "authenticity" to students. Brookfield identifies these as:

- demonstrating congruence between words and actions
- providing a full disclosure of criteria, expectations, agendas and assumptions that guide practice
- being responsive and/or student-centred in their behaviour
- revealing their 'personhood', that is, having lives and identities outside the classroom and disclosing these appropriately in the classroom (2006, pp. 67-72).

In reflecting upon congruence in particular, Webster (2007) calls to our attention examples of words and actions that demonstrate these qualities that students are seeking. For example, in her observation of design juries she explicitly illustrates how words and actions impact on the quality of student learning that arises out of the relationship a student has with a design tutor over time.

B. Overcoming a Teacher-Centred Design Culture

In acknowledging that teaching is closely aligned to disciplinary content, its habitual discourse and practices researchers note that many staff, both academic and casual 'teach as they were taught, perpetuating an adherence to traditional methods and strategies without reflecting upon the appropriateness of such methods in bringing about high quality student learning' (Wentzel in Ballantyne, Bain and Packer 1999, p. 237). This explains, in part why the teacher-centered 'master' model of interaction continues to remain the so-called 'theorized' model of design studio.

In perpetuating these habitual methods teachers rely upon tacit knowledge (Polanyi 1998). For Schön, this is knowledge-in-action, 'spontaneously delivered without conscious deliberation; and it works, yielding intended outcomes so long as the situation falls within the boundaries of what we have learnt to treat as normal' (1987, p.28).

For design learning, Dutton (1991) and Webster (2004) comment that despite the very obvious disjunction of the master model with qualitative student learning, there is a continuing reluctance to not only embrace learning and teaching scholarship but also in light of this, to question the perceived 'normality' of teacher's knowledge and expertise being at the centre of design studio education. They suggest that it is only when these inner life practices, assumptions and beliefs of design studio are willingly made explicit that reflection, awareness, discussion and the need for change can possibly be embraced.

The findings of the research study outlined in this paper make very explicit that students in our design community unequivocally believe that positive interpersonal relations are essential to their successful design learning and their achievement of academic excellence. One way to overcome a

teacher-centred culture in design studio and the noted reluctance of design teachers to embrace reflection and change, is to empower students to act on their belief. As the Tyler axiom reminds us: 'Learning takes place through the active behaviour of the student; it is what he [she] does that he[she] learns, not what the teacher does' (Tyler 1949 in Biggs 2003, preface.).

Just as tutors need to be aware of their presence in design studio, so to do students as they are the ones constructing a personal understanding of design in their quest to become creative, independent design practitioners. To achieve this, students could themselves develop a dialogical learning environment that 'instills a critical spirit in students' (Barnett in Curzon-Hobson, 2002, p. 183). In reference to the research findings, they might achieve this by considering the following:

- modelling their expectation of personal interaction and constructive feedback for their design tutors
- participating as a peer reviewer on design jury panels, and
- initiating regular meetings with course conveners and student representatives.

In these ways, students could initiate tutors into the preferred student-centred world of learning with the expectation that tutors would then become more aware of their interactions with students and reflexive of their teacher-centred pedagogy.

III. CONCLUSION

The findings of our research study reveal to our design education community student expectations of the qualities of design tutors for their successful design learning. As such it anticipates further research into the contradictions that design studio poses between its conception and its embedded culture, which is so apparent to students in their interactions with their tutors and disjunction to qualitative student learning. This research provides insight into our design teaching approaches, challenges us to be reflexive and aware of our presence in design studio. It encourages our student and staff design community to engage in conversations amongst ourselves as participants in a learning community of practice so as to engender alignment between student centred conceptions of design studio and our students' lived experiences of design education.

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