Conflating Student and Professional Identities: fostering development of professional identity in first year architecture

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Students in creative disciplines undergo a dual transition when they commence tertiary study, taking on a student identity but also assuming their professional identity as a creative practitioner. The peculiarities of pedagogical frameworks in these disciplines require tailored support mechanisms to ensure student success. Students undertake a series of inquiry and practice based formative assessment tasks in the design studio, which build to the final summative assessment — the design jury and critique. As the predominant mode of studio assessment around the world, this is a daunting event for students. Facilitating students to successfully develop their professional identity from the commencement of first year, and building resilience into their learning experiences, can transform this event into a genuine learning experience. This paper outlines the interventions for transition students in the School of Architecture at University of Technology Sydney.

Retention of students is a problem in architecture and design disciplines, where high attrition rates are commonplace. The specific commonalities, which make transition difficult for architecture students, are particular to architecture, but share similarities with other design disciplines. Students undertake a series of inquiry and practice based formative assessment tasks in the design studio, which build to the final summative assessment – the design jury and critique. Students are typically high achievers, with no experience of what it is to engage in architectural design, committing to a five-year program of study. They experience the confrontational nature of formative feedback, entering a pre-existing culture that valorises over-work and all-night working sessions. Additionally they encounter an entirely new and diverse skill set which they are required to rapidly master.

Schön (1983, 1987) observed architecture design studios, nominating them as the exemplar of professional education activities, with particular reference to 'reflective learning' and the 'reflective practitioner'. Critical reflection, understood as a key element of project-based learning, is how studio learning occurs, requiring students to continually reflect on their work both alone and with others (Webster, 2004). Students undertaking creative design tasks that simulate the complexities of the real world demonstrate the importance of reflection as a condition of, and a stimulus for, creative action.

The importance of developing a positive emergent professional identity in first year law was established by Field et al (2013). The claim that students match their future professional identity to what they study in first year is no less relevant to creative disciplines. From the first day of architecture study students begin to adopt their professional identities. The tailoring of learning to real-world design processes, and understandings of practice-based performance, provides students with early induction into the discipline of architecture, and, because it is their chosen course of study, they are highly motivated to engage (Dall'Alba & Sandberg, 2006).

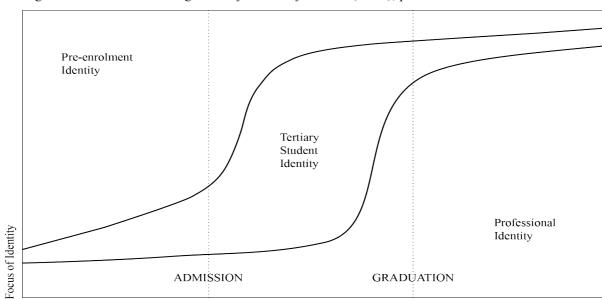


Fig. 1: A Student's Learning Journey from Taylor et al (2007), p2.

Taylor et al's (2007) model of a student's learning journey states that a student undergoes transition from a pre-enrolment identity into a tertiary student identity around or shortly after the time of admission to tertiary study. Similarly, a further transition to the professional identity occurs at approximately the time of graduation (Fig 1).

Identity Conflation in Architecture and Design Disciplines

Time

The transition that occurs from a pre-enrolment identity to the first year of architecture study is of a dual nature: a simultaneous transition to tertiary student identity and to a professional identity. The professional identity acquisition line is shifted to the left of the x-axis, until it is mapped on top of the tertiary student identity acquisition (see Fig 2). The Taylor et al (2007) model has been amended in a conscious remapping of the student learning journey in creative disciplines. There is a simple basis for this assertion.

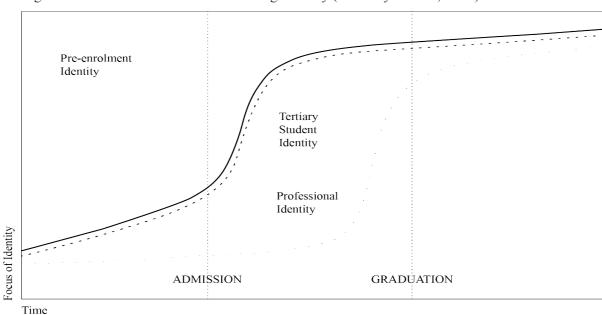


Fig. 2: An Architecture Student's Learning Journey (after Taylor et al, 2007)

Designing is a way of working. It is not content based, so students are not provided the typical student experience of learning foundational material and methods before attempting to master them themselves. The students are not studying the subject matter of their intended profession, then testing that knowledge in practical laboratory or clinical type settings. They are engaging the methods and ways of thinking of the discipline in real world, complex scenarios (McPeek, 2009). It is the difference between (1) giving electrical engineering students a circuit to assemble, which they can produce in a three hour tutorial and (2) showing them a range of equipment and a complex problem, and giving them a semester to research and to test their response, developing the sophistication and elegance in each iterative development of the solution (Aubrey, 2013). The former is student behaviour and maps to tertiary student identity: the latter requires disciplinary induction and engagement, mapping more to professional identity.

There is a conscious emphasis in studio on the students developing their own way of working and their own identity as an architect. "Design education at the college level is concerned with helping students open their eyes to the world, and about helping them find a way to define themselves in the face of the multiplicity they find there." (Crawford, 2013, emphasis added).

At architecture school students are required to assume the identity of architect & create architecture, which can only be learnt by doing (Salama, 1995). They are designing architecture on day one – not learning about it and not firstly learning the skills to do it. It is not student submissions, but the way of working as an architect, and the outputs of an architect, that they deliver. In a learning-by-doing framework they develop their identities as architects. Throughout their education and careers, students' design processes and outputs will develop in sophistication, but the role required of them *never* undergoes a shift from student to professional. They develop a conflation of both from the outset of university studies.

This conflation of transitioning identities confounds the experience of first year for architecture students, who have a particular set of challenges to negotiate in order to be successful in their studies. This argument also translates to many other creative disciplines (from any faculty), where design practice engages the student in the profession from the outset.

Pedagogical Approach: The Design Studio

At the core of architectural education is the design studio, with a typical undergraduate degree operating a studio in every semester of the course, which together operate as the site of all synthesis from the other curriculum areas. "Tacit rules and habits of the studio guide how meaning is made and how design is practiced in studio-based learning" (Brandt et al, 2013). The disciplinary and professional identity acquisition occurs primarily here within first year of an architectural education.

"The studio, as an academic entity must, by design, take into account the larger disciplinary community of practice and seek to provide a studio bridge, a sheltered practice community, where students can learn the norms, practices, and tools use of the larger professional community of practice. Yet, studio practice must also respect and take into account the academic community of which students and faculty are a part." Brandt et al, 2013 p346. (emphasis added)

In tutorial groups, the design problem is interrogated and the individual student responses discussed and developed against a set of criteria and a brief. The range of approaches, design

methods employed and theoretical bases for exploration are diverse, preparing students for the dynamic and changing nature of architectural practice (Cuff, 2000).

There is a tendency for this dynamic paradigm to degenerate into one-to-one interactions with the design tutor, if generating the group dynamic becomes arduous, or the tutor has little education training. This model has severe limitations: students develop the mentality of waiting turns, instead of listening to feedback and engaging in discussions; and the personality, dispositions and interests of the tutor have an effect on student motivation - motivating for some, de-motivating for others (Webster, 2004).

Feedback and Review: The 'Crit'

Within the design studio, as a core pedagogic device, and discipline specific ritual, the design review, design jury or 'Crit' (as it is variously known) is unique to creative fields, such as design, art, and architecture (Webster, 2007; Vowles 2000). This paper focuses on architectural education, where it is a globally ubiquitous model of feedback and assessment for students of architecture (Webster, 2006a). This discussion, however, translates to many other creative disciplines, where criticism is the mechanism for feedback on creative work. Fashion design students also undertake rigorous and public critiques, with other design disciplines (interior and spatial design, landscape design, industrial design, integrated product design, graphic design, visual communications, animation, creative writing and art practice) all sharing commonalities.

The final summative assessment of the design jury and critique, as the predominant mode of studio assessment around the world, is a daunting event for students. Design Review or 'Crit' refers to the presentation of a student's design proposal to a jury of invited architecture practitioners and academics, for the purpose of providing feedback on the progress of the project. Each candidate exhibits a series of printed panels containing drawings, diagrams and images pinned to the wall, physical models of the design and digital projections of progress work or animations of the final design. The student typically has a short time to deliver an oral account of the work, the theoretical or conceptual basis for it, and a description of the designed outcome. The jury then provides feedback to the student for the development of the project. The student's is invariably one of a large number presentations being held in a prolonged review session. It is usual for a 'crit' to be held part way (often half way) through the course or semester and then again at the conclusion thereof. While the event is conceived of as a feedback mechanism, it is often conducted on the occasion of an assessment deadline.

While the focus of discussion in the design review is the work as presented, students can experience the critique as a judgement about their value as designers (Webster, 2006b). This internalisation of the critique is amplified by the fact that students typically work very long hours in the build up to their reviews, and come to the review exhausted, and emotionally invested in the work they are presenting. A number of studies point to the importance of comprehending the connection between assessment and identity in this context (Melles, 2007 Orr, 2007).

"the architecture crit is about identity work and being recognized as in the academic discourse of architecture, a discourse where emotion is generally marginalized. Identity work is not limited to the student currently occupying the presenter position; peer critique by fellow students is also an opportunity for students to 'display' their identity as knowledgeable architects." Melles, 2007, p162.

The event of the 'crit' is not merely intertwined with students' sense of identity as a student, but also with their emerging identity within the profession concerned. "...the presentation is socially and ideologically constitutive, 'in using a discourse we are also tacitly teaching a version of reality and the student's place and mode of operation in it' " (Melles, 2007).

"... the crit is a sophisticated social event that is traditionally an assessment of representation (the individual student's presentation of his or her project) and a reproduction of the social relations of the architectural profession." Vowles (2000), p259.

The student-centred nature of the reflection is critical in the construction of the individual architectural identity under this reading of the design studio/'crit.' Most educators would concur that the event of the 'crit' is designed to facilitate development of the professional identity of the student, and their induction into the discipline. Webster (2006b) noted that many students develop crit mastery behaviour, at times adopting tactics more aligned with surface, shallow learning, to ensure a favourable jury review and/or mark. Tactics "required for reflective learning (creativity, risk taking, openness and self-criticism) [can be] therefore effectively undermined" as compared with the stated aims of the design jury (Webster, 2006b, p19).

There are also, disturbingly, commentators who have observed that design juries can degenerate into "a critic-centered ritual that coerces students into conforming to hegemonic notions of professional identity" (Webster, 2006b; Anthony, 1991; Cuff, 1998; and Doidge et al, 2000).

Assessment

"...assessment is a socially situated practice that is informed by, and mediated through, the socio-political context within which it occurs." Orr, 2007, p648.

Understanding the relationship between assessment and identity, for both the students and for the educators, is necessary in creative disciplines (Orr, 2006). It is common for a community of practice model of assessment to occur around creative work, with academic staff engaging as a group in dialogue about the work and the assessment criteria, actively co-creating collective beliefs about the assessment (Orr, 2006, 2007). This is critical to prevent disjuncture between the written documents for the assessment (assessment criteria, task descriptions) and the practice of assessment (Orr, 2007), in a subject that, by its nature, calls for originality, innovation and therefore rule-breaking or unexpected outcomes. Gordon (2004) argues that 'wow' factor is an essential, if elusive, factor in creative works, and therefore has a legitimate place in assessment. Assessment criteria should refer to risk-taking or creative approaches; assessment should be conducted by a group of educators and practitioners for a broad base of knowledge; and the design process itself should be logged as part of the assessment according to Gordon (2004), in subtle assessment procedures that allow for 'wow' factor to be acknowledged and rewarded.

Interventions

The School of Architecture at University of Technology Sydney has actively sought to celebrate the strengths of studio education and the crit, whilst confronting the short-comings for first year transition to both the tertiary student and professional identities with a series of interventions.

The Design Studio

All of the four core subjects in first year architecture have become integrated for both semesters, creating cohesive learning communities that lie between cluster courses and coordinated studies (Tinto, 2003). A student may be studying a precedent building for its construction techniques and structural system in one subject (Construction and Structural Synthesis); for its socio-political context in another (History: Modernity and Modernism); learning to make an accurate digital model and architectural drawings of it in a third subject (Architectural Communications); and in the design studio then synthesising these other learning experiences to develop a creative work initiated and informed by the precedent building. This ensures that students reflect on the relevance of their learning (in a range of subjects) to the act of designing in the studio. The artificial compartmentalisation of knowledge that usually occurs in an institution seldom occurs in the profession. Students experience the accumulation of diverse knowledge sets for the purpose of creative synthesis, as they will in future practice, as an element of their induction into the discipline.

To prevent the degeneration to one-on-one tutorial discussions all tutors for the first year design studio underwent a training session that focussed on transition pedagogies (Kift, 2009; Kift et al, 2010), classroom management and lesson plan development. They were surprised at the diversity of students in the class, and none were aware of the wide range of pathways into the course. Several reported that they were grateful to be aware of the range of experience of the students, and that it helped them look for alternative approaches rather than writing a student off as lazy or incapable. The tutors were also enthusiastic about the ability to generate lesson plans together and voluntarily met several times during the semester to continue the practice together. Most conceded they would have ended up doing far more one-to-one feedback if they had not planned the sessions as a group. They had notably more active classroom sessions than had been observed by the subject coordinator in previous years. This active engagement in classroom activities and discussions facilitates the positive acquisition of a professional identity, whilst concurrently engaging and motivating students to be active in their learning.

Immersion in Professional Identity

Students need to match their future professional identity to what they study in first year (Field et al 2013). In the first week of the first semester, the architecture school institutes a one week program which brings together first, second and third year students from the design stream of the Bachelor of Design in Architecture program for a collaborative design workshop. With such a steep learning curve at the beginning of a student's university career, the workshop provides a framework to learn essential discipline specific skills and techniques as well as important strategies in critical and analytical thinking. First year students meet and work with students from the other year groups, promoting active and collaborative learning with those who have successfully negotiated first year before. The workshop ensures students are supported to produce design outputs (which is the core of the design studio pedagogy), an experience which provides confidence, gratification and an understanding of how to approach the semester. By DOING, rather than learning about doing, students experience success, rather than just knowing about it.

This collaborative workshop additionally sets up a framework for supported engagement inside and, more importantly, outside the classroom from the outset. Through this workshop, transition students will have an opportunity to engage with students, peer mentors, subject coordinators and faculty across the department, introducing them to the vast and diverse resources and services available; fostering a sense of belonging and providing a more seamless orientation and introduction to the architecture school.

In 2013, the week long program ended with an exhibition in the entry to the architecture school, showcasing the work. Five percent of marks for the subject were allocated for this task. Interestingly, the typical attrition occurs over the entire semester, but with this program the students knew in week one if architecture was not for them & withdrew immediately – allowing to them to make alternative study choices and removing them from the attrition statistics.

Feedback

Because the tertiary student identity is largely shaped by the feedback students receive (Field et al, 2013), any intervention that subscribes to positive professional identity must also subscribe to positive feedback mechanisms. With the 'Crit' looming on the horizon for students, they therefore need to be prepared so that it can be reframed as a positive learning experience.

Students are assigned a feedback sheet on the day of the Crit, and asked to reflect on the feedback they receive and to fill it out. A significant amount of detail is required, so that students team up with others for the purpose of reciprocal note-taking during the crits. Reporting on the content of the feedback is required first, but then they are asked what they disagree with, what is instrumental for improving their work in the future and how will they improve the project. A (condensed) sample of one of these handouts is provided in Fig 3.

The amount of critique and feedback provided to students on their creative works on a weekly basis during semester has effectively been doubled in the classroom with the inclusion of peer support. Peer-tutoring has consistently demonstrated that it mutually improves the learning experience for the peer tutors and the peer-tutees and that it has a positive impact on perceptions of institutional belonging for both groups (for example, Topping, 1996a&b). The term "peer-tutor" is used here, consistent with the nomenclature in the literature, for the role carried out in the design studio, but it could be equally exchanged for the term "design leader" without impacting the role or the outcome.

For five hours every week supplementary peer-tutoring, using exemplary senior students in the junior design studios, supports transition by helping the students to understand the expectations of the course, and by ensuring they know how to meet those expectations. Actively facilitating a culture of critique, in which students are immersed with peer-tutors every week, develops students' ability to engage with critique, to provide it for others and to learn from it for themselves. Whilst this has been touched on previously (Paterson Kinniburgh, 2013; Egea et al 2013), there are aspects that need to be reframed in this context, so they are included briefly.

UTS Official Student Feedback Survey for First Year First Semester Design Studio.

1=disagree, 5=strongly agree. 2012: 52% cohort response rate. 2013: 68% cohort reponse rate (n=105) 2012, Q9. Peer-tutoring had a positive effect on my ability to adapt to the course. **4.20** (0.88) 2013, Q9. Peer-tutoring had a positive effect on my ability to adapt to the course. **4.22** (0.93)

Focus group findings over several years found that the emphssis on negotiating the culture of critique in tutorials with the peer-tutors allowed students to perform better, to feel more confident in final summative design jury, learning from critique rather than feeling judged by it. For the students, the critique and summative feedback becomes more meaningful and more clearly related to the work. "I really appreciate the weekly task that lead up to the assignment. I think this resulted in great work from the students. All those that work hard had good feed back." SFS, 11221 2012.1



11209

ARCHITECTURAL DESIGN: MAKING

ASSESSMENT 01 FORMAL REVIEWS:	Student Feedback Form
STUDENT NAME:	
STUDENT NUMBER:	
WHAT WAS YOUR FEEDBACK TODAY? Outline the comments made by the jury	
WHAT WAS HELPFUL?	
WHAT DID YOU DISAGREE WITH?	
The first half of the semester focused on the iterative development of a mu	utant. Accommon 02 is a continuation of your
work with the mutant. You will incorporate spatial strategies that have bee mutant continues to be mutated and reappropriated to respond to a specif site for this next design phase is to be the selected twentieth century build	en identified in your research to date, as the fied site and a given set of rules/parameters. The
WHAT WILL YOU DO TO IMPROVE YOUR MUTANT FOR THE SECON Based on the comments and feedback from the jury.	D PROJECT?
DID YOU HAVE WAYS OF WORKING THAT LIMITED YOUR THINKING ASSESSMENT 01?	3 OR YOUR DESIGN OUTCOME IN
HOW DO YOU INTEND TO CHALLENGE THESE WAYS OF WORKING	G IN ASSESSMENT 02?

Concluding Remarks

Students in creative disciplines undergo a dual transition when they commence tertiary study, taking on a student identity but also assuming their professional identity as a creative practitioner. The peculiarities of pedagogical frameworks in these disciplines require tailored support mechanisms to ensure student success.

It should be noted that while this paper does not set out to discuss the institution-wide strategies that support this work, they have been outlined elsewhere (Egea & McKenzie, 2012; Egea et al, 2013; Paterson Kinniburgh, 2013). Plugging in to the First Year Experience Project within the university is what allows work like this to be supported and to thrive.

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