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BEYOND THE WALLS OF ACADEMIA: ARCHITECTURAL INTERNSHIPS

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ABSTRACT

A full architectural education typically involves five years of formal education and two years of practice experience under the supervision of a registered architect. In many architecture courses some of this period of internship can be taken either as a 'year out' between years of study, or during enrolment as credited study; work place learning or work integrated learning. This period of learning can be characterised as an internship in which the student, as an adult learner, is supervised by their employer. This is a highly authentic learning environment, but one in which the learner is both student and employee, and the architect is both teacher and employer; at times conflicting roles. While the educational advantages of such authentic practice experience are well recognised, there are also concerns about the quality and variability of such experiences. This paper reviews the current state of practice, with respect to architectural internships, and analyses such practice using Laurillard's 'conversational framework' (2002). The framework highlights the interactions and affordances between teacher and student in the form of concepts, adaptations, reflections, actions and feedback. A review of common practice in architectural work place learning, internships in other fields of education, and focused research at the author's own university, are discussed, then analysed for 'affordances' of learning. Such analysis shows both the potential of work place learning to offer a unique environment for learning, and the need to organise and construct such experiences in ways that facilitates learning.

Keywords: Education, Internship, Architecture, Adult learning.

INTRODUCTION

In Australia, becoming an architect requires three formal steps (AACA, 2008):

1. A formal university education in an accredited (by the *Architects Accreditation Council of Australia*: AACA) and recognised (by the *Royal Australian Institute of Architects*) university program of five years full-time (normally structured as 3 or 4 years Undergraduate and 1 or 2 years Postgraduate study).
2. A two year period of workplace training (internship) equivalent to '3000 hours of logged architectural experience at the required levels of competence', (up to half of which may, and often does, occur before graduation from university study).
3. An architectural practice examination, 'to ensure that the persons applying... have an adequate knowledge and understanding of the practice of architecture in Australia and a capacity to exercise professional skills'.

This arrangement sees three significant stakeholders involved in, and influencing, architectural education (Webster, 1985):

- State Governments who establish *Boards of Architects* responsible for registering architects as fit for practice, and administering registration examinations. The Boards oversee the *Architects Accreditation Council of Australia* (AACA) who is responsible for accrediting formal courses/programs of architecture within universities.
- The professional industry body, the *Royal Australian Institute of Architects* (RAIA) [since 2008 using the trading name of the *Australian Institute of Architects* (AIA)], who have their own Education Committee and an 'Education Policy' (RAIA, 2002) that is used by the AACA in assessing university courses for accreditation.
- The universities themselves, responsible for curriculum development and delivery, within the guidelines and accreditation procedures of the RAIA and AACA.

This complex arrangement is fraught with all of the expected conflict between academia and industry and the ongoing differing visions of the role of architectural education (Crimson and Lubbock, 1994). The industry and professions have a vocational view and see the architecture course as 'training for operation in the profession' (Brine, 1991, p.36), while many academics still see their role as 'developing individual star architects as unique and gifted designers' (Nicol and Pilling, 2000, p.7). The same conflicts of values and beliefs are also present during the internship period. This is especially so in situations where one of the two years of internship occurs during the formal university program (structured as workplace learning) typically on the year-out between the first three year of undergraduate study and the last two.

INTERNSHIP AND COMPETENCY

The purpose of the two year (3000 hours) internship is to provide candidates for registration with a learning environment in which they can develop a range of competencies, not yet developed at university, as would be expected of a registered architect. During their internship, learners must record their activities in a logbook against a number of competency areas. The logbook lists 149 'performance criteria' against which the learner must achieve certain determined standards of experience, as recorded by the learner, and as certified by the learner's supervisor (the employing architect). The aim is for the learner to achieve competence in all areas of architectural practice, such that they would be 'competent in the design, documentation and management of an architectural project which could be undertaken by an independent practitioner' (AACA, 2008).

It is important here to note that the purpose of the Board of Architects (and the AACA operating on their behalf) is primarily to protect the public against practitioners claiming to be an "architect" but who do not have the necessary skills to provide the service to a safe standard; 'ensuring the standards of competence required reflect consumer expectations' (AACA, 2008). As in all industrialised nations, this is achieved through a system of registration of practitioners who have completed formal education, an appropriate period of internship, and a final architectural practice examination. This sets one of the agendas of the internship program. It is there to provide learners with practical experience to become competent in design, documentation and management. This is in essence learning about *doing* architecture, as opposed to the formal period of education at university which can be characterised as learning *about* architecture; a distinction made by Schon (1984, p. 4). This distinction between different ways of learning and being was indeed made by Aristotle who differentiated between 'knowledge about things' and 'a state of capacity to make' as in the ability to perform 'an activity out of which is created a durable good... this might include an architect designing...' (Sides and Mrvica, 2007, p. 2). The period of internship provides the environment in which a student may develop this state of capacity to make.

This period of practical internship, following on from a period of formal education, is a model that Gonczi (in Foley 2004, p. 33) proposes as providing a good balance for the provision of professional education; for the provision of architectural education. Such workplace learning provides 'unique opportunities in which students explore their potential and integrate knowledge and skills acquired in higher education into a new set of employable skills and personal qualities' (Murakami, Murray, Sims and Chedzey, 2009, p. 14). As we will see, this 'integration' of knowledge from academia to the workplace is in many ways a missing link in the internship process.

INTERNSHIP AND OTHER AGENDAS

While there are obvious activities of learning in the workplace with pre-established knowledge structures (such as the AACA competency standards), there are also activities of informal learning with situational knowledge structures (Livingston in Sawchuk, 2008, p. 5-6); 'the workplace is suffused with informal and incidental learning' (Forrester and McTigue, 2004, p. 219). The full educational process then starts with formal education of a university course, then moves to informal learning, where interns 'consciously try to learn from their experience' (Foley, 2004, p. 4), but which also includes aspects of incidental learning. As well as the authority-directed learning there are aspects of mediated learning, self-directed learning, and unintended learning; each with varying degrees of learner control (Knowles, Holton, and Swanson, 2005, p. 176). All however are crucially operating within the context of the particular workplace in question, with all of its beliefs, values and cultural habits (Knowles, Holton, and Swanson, 2005, p. 4). These beliefs and values bring with them both good and bad habits, some even dangerous and unhealthy (Stevens 1998). In essence, interns are learning not only to become competent in design, documentation and management, but also learning the cultural norms of the profession as interpreted by their employer.

The profession has its own agenda and systems of control, which it exercises on a National level through its input to policy development (by lobbying the Board of Architects and the AACA), and on a local level through employing interns in architectural practices. Gary Stevens (1998) critiques the agenda of the architectural profession as being about maintaining its privileged position of controlling who gains access to architectural education and what form that education takes, where it occurs, and who is in control; in short who becomes an architect and who does not. Because of the need to 'assure competence, professions also claim exclusive jurisdiction over this knowledge and claim the right to restrict entry to the field' (Quinn, 2003, p. 42). The distinct advantages, to the profession, of an internship are that they can control the numbers of new practitioners, they define what is to be learned, and they control the context of learning, both cognitive and social, and thereby control the development of social capital and the social status of architects (Stevens, 1998, p. 168-179). [While Stevens' views of the profession may seem extreme, he provides compelling scholarly research and evidence to substantiate his claims]. Milliner (2000, p. 223) notes that the ability to control and 'reproduce its collective norms' is in fact a defining character of any self-regulating profession, and we see other regulated professions such as medicine and law using similar systems of internship to control and regulate entry to their ranks.

INTERSHIPS, EMPLOYMENT AND REGULATION

The profession sees the internship as a period of control and socialisation. It also clearly sees its interns as employees; cheap employees (Stevens 1998). When the first school of

architecture in the United Kingdom, the *Architectural Association*, was established in 1847, it was founded by disgruntled architectural assistants seeking an alternative to the abusive system of pupillage (Stevens, 1998, p. 176). Interestingly 150 years later the same complaints of abuse are not uncommon among interns (Beach, 2002; Kroloff, 1999; Quinn, 2003). In the words of the profession when surveyed about their interns, 'they don't cost much, they don't mind lots of overtime, and they don't have family responsibilities' (Kroloff, 1999, p. 13). 'Firms expect a return on the money they invest in their employees' (Cascio, in Knowles, Holton, and Swanson, 2005, p. 166).

In stark contrast, the interns cite issues of poor mentoring, low pay, and lack or appropriate diverse experience. Indeed student groups have asked the question 'we'd just like to have a truly educational, professional experience - why isn't it simply expected that everyone will gather regularly to monitor and improve our training?' (Beach, 2002, p. 13). One of the major concerns of interns is the lack of appropriate experience across all of the competency areas, with many interns experiencing 'mainly menial, unchallenging work' (Quinn, 2003, p. 41). While the intent of the internship is for the intern to be exposed to the full range of architectural activities under the supervision of an experienced professional, it is fundamentally unstructured (Quinn, 2003, p. 43), resulting in diverse experience and diverse quality of mentoring/supervision. While the employer/mentor 'is there to help [the intern] get as many kinds of experiences possible' (Marjanovic, Ray, and Tankard, 2005, p. 62) the economic realities of architectural practice are such that many interns spend most of their time doing repetitive tasks and drafting; tasks that are most financially profitable to the employer.

In Australia, as in most industrialised nations, the internship is not regulated nor are the supervisors accredited; there is no system of program evaluation or appraisal (all features that should be expected of such an important educational program?). It is clear that some offices do not adhere to the recommendations of the various policy documents or the competency categories of the logbook (Marjanovic, Ray, and Tankard, 2005, p. 65). The process 'assumes rather than assures the competence of employers' to provide appropriate educational experiences and guidance (Quinn, 2003, p. 46). While there is no substantial research in Australia, research in the United States of America shows that such assumptions are dangerous: 41% of interns were forced to change jobs to gain more diverse experience, and one third felt they were not getting adequate mentoring.

With no external guidance or assistance in running an internship, the employer/supervisor will likely replicate practice she/he experienced as an intern, since the workplace 'serves as a primary site of socialization' into workplace cultures... [with] hidden and unintentional outcomes' (Sides and Mrvica, 2007, p. 12). 'Business practices, both good and bad, can become entrenched in the culture of the firm' (Kim, 2006, p. 88). These practices and activities are 'shaped by its rules and cultural norms, division of labour and power...' (Fenwick and Tennant, in Foley, 2004, p. 63), and are likely to include 'procedures that are unjust or dysfunctional' (p. 65). Research at the author's own university, where work place learning is linked to aspects of the academic program, supports the above discussion, as student feedback highlights issues of excessive work expectations, inconsistency of experience, irrelevance and disconnection from a culture of learning.

ANALYSIS

In critiquing the various activities and participants of the architectural internship we can use the conversational framework of Laurillard (2002) as a structural tool to understand the

potential learning opportunities and affordances. Laurillard (2008) has already proposed that the conversational framework can be used to both design and test learning environments and activities for optimal learning potential. The activities or interactions of a learning situation, such as an internship, can be mapped against the interactions of the framework. Ideally, all the interactions should be present to achieve a successful and ‘complete learning process’ (Laurillard, 2008, p. 142). This tool has previously been used to successfully critique aspects of the architectural design studio (Crowther, 2007; Crowther 2010).

Laurillard proposes a model with twelve interactions between students, teachers, environments and activities, wherein each of these interactions offers an opportunity or affordance for learning, and together form a comprehensive framework for a holistic learning environment (Figure 1). Comparison of the typical interactions of an architectural internship with these twelve interactions in the model shows that many are not explicit or not present at all. Not unsurprisingly, the interactions of an internship are essentially those of a workplace, reflecting the employment relationship (interactions 6, 7, 8, and 9, highlighted in the lower half of Figure 1). As previously discussed, the commercial pressures of employment and the limited skills of the intern result in most, if not exclusive, focus being on student actions (work) within the constructed environment (the workplace).

While there is undoubtedly also an exchange of concepts in the workplace, evidence suggest that this is certainly not at the cognitive or conceptual level experienced in more traditional learning environments. The exchange of concepts, as a structured part of a learning experience, still occurs primarily within academia (interactions 1, 2, 3, and 4, highlighted in the upper half of Figure 1). It is also evident from the literature and from student feedback at the author’s own university that students are not experiencing appropriate levels of reflection and adaptation (interactions 5, 10, 11, and 12) in the workplace.

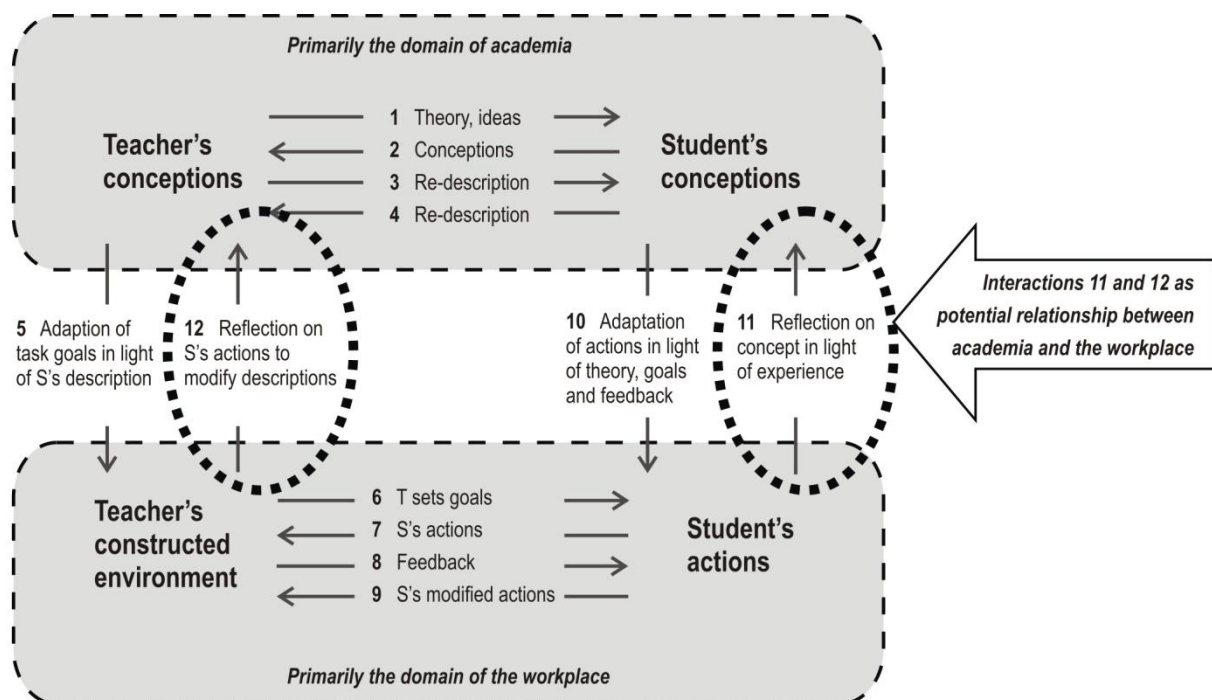


Figure 1: ‘Conversational Framework’ (Laurillard, 2002, p. 87) modified to highlight potential model of the architectural internship

PROPOSED MODEL

At the author's own university a modified relationship has been trialled between academia and the workplace. Students may take time off from academic studies to work under the supervision of a registered architect, ideally as a paid employee, such that this time may count towards the requirements of registration. The experience in the workplace has also been structured as a series of units (subjects) that are given academic credit. In these units, students are required, through a series of assessable assignments, to provide reflections on their experiences in the workplace. This is not simply academic credit for working, but credit for a structured and thoughtful exposition of the experience of the workplace and the relationship between concept and action; between theory and practice (interactions 11 and 12 in Figure 1).

This may be one small trial step towards some form of regulation, accreditation and quality control. It is however only a one way interaction, academia providing direction to the student and then re-describing conceptions (interaction 3) to assist the student's learning. At this point there is no formal relationship with the employer, and no requirement or formal procedure for the workplace to respond through adaptation of the environment or adaptation of the workplace tasks (interactions 5 and 10).

An ideal internship may see a fully developed model in which the intern has a more significant aspect of control over the learning environment and in which academia and the workplace are integrated to better facilitate the full range of interactions in the conversational framework. An ideal internship may see all twelve of the interactions being not only present, but being explicit and identifiable to the intern. There is no doubt about the tremendous educational potential of learning in the workplace and the advantages of such experiential learning are many (Sweitzer and King, 2009, p. 10-13). David Kolb however notes the 'need for experience to be organized and processed in some way to facilitate learning' (in Sweitzer and King, 2009, p. 10). The above analysis starts to suggest a model for such organisation and processing which can all too often be missing from an architecture internship.

ADULT LEARNING

LaCost and Pounder (1987) propose an alternative model for internship, one with a conceptual foundation based on adult learning theory. Crucially in contrast to current architecture internship practice, they promote learner involvement in designing a program to integrate formal education with field experience or internship. Such learner involvement, and even control, has been widely championed by many writers and researchers, such as Knowles, Holton, and Swanson in their model of andragogy (2005). Issues of control in the workplace are always likely to cause conflict. The workplace, as a context of employment, is hierarchical with the employer in control. In contrast, the workplace, as an adult learning context, would benefit from the learner having control (Knowles, Holton, and Swanson, 2005). When the learning activity is also the employment activity it can be expected that there may be conflict around issues of power and control (Altman, 2008).

Yoshimoto, Inenaga and Yamada (2007, p. 94) highlight that good practice in workplace learning can be understood using aspects of both theories/models of pedagogy and andragogy. If we analyse the practice of architectural internship with Knowles' model of Andragogy (Knowles, Holton, and Swanson, 2005, p. 64-69), we see that there are problems of control and motivation. In particular, motivation may be severely undermined by employer-employee

relationships and the lack of access to a diversity of learning opportunities; 'high levels of interest are necessary to trigger and maintain a strong intrinsic motivation for learning' (Bye, Pushkar and Conway, 2007, p. 145). Such intrinsic motivation is vital to adult learning as 'engagement with an intrinsic goal, such as learning for the sake of self-development, actually promotes subjective well-being' (Deci and Ryan, in Bye, Pushkar and Conway, 2007, p. 146).

Ideally, 'best adult education practices allow maximum individual control' (Knowles, Holton, and Swanson, 2005, p. 172); a climate conducive to learning (p. 118-122). Ideally, mentoring must be based on 'encouragement, constructive comments, openness, mutual trust, respect and willingness to learn and share' (Misko, 2008, p. 25). Ideally, the educational practice of architectural internship needs to be regulated and accredited (by an external organisation); perhaps establishing 'teaching firms' like teaching hospitals (Quinn, 2003, p. 48).

CONCLUSION

It seems that while in principle an internship should provide an excellent adult learning environment, in the field of architecture there are problems of control, motivation, access to experience, mentoring, program evaluation, and general lack of quality control or academic integration. In a field controlled by a professional body of employers, who have significant impact on educational practices in the university, let alone in their own offices, there are a lot of cultural norms to overcome. A more successful internship would see all stakeholders participating in the design of the program, the development of cognitive and cultural goals, and the monitoring, or even licensing, of the learning environment.

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