2005 Pedagogical orientation program in the

School of Architecture and Built Environment – A case study

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Abstract

The University of Newcastle (UoN) offers various access and support programs for a range of students through the English Language and Foundation Studies Centre and a University orientation for students. At UoN, students are required to engage in a learning experience, meet program outcomes and demonstrate the core attributes of the University at each graduation point. For a University with a strong focus on access is there a missing facet to the access programs where students are required to study within a teaching delivery style which may be vastly different to their previous educational experience?

This paper will describe a pedagogical orientation program currently delivered at UoN School of Architecture and Built Environment in 2005 to assist in the transition of students from different cultural and pedagogical backgrounds into "Problem Based Learning" as delivered by this School. Furthermore the paper will analyse how this program has enabled students from diverse backgrounds to understand and successfully embrace the new learning opportunities.

Introduction

The University of Newcastle (UoN) offers access and support programs for a range of students through the English Language and Foundation Studies Centre and a University orientation program for enrolling students. At UoN, students are required to engage in a learning experience, meet program outcomes and demonstrate the core attributes of the University at each graduation point.

For a University with a strong focus on access it seems there may be a missing facet to the access programs when students are required to study within a teaching delivery style quite different to their previous educational experience.

This paper will describe a pedagogical orientation program delivered at UoN School of Architecture and Built Environment in 2005 to assist in the transition of students from different cultural and pedagogical backgrounds into "Problem Based Learning" as delivered by this School. Furthermore the paper will analyse how this program has enabled students from diverse backgrounds to understand and embrace the new learning opportunities.

Program Model: Bachelor of Science (Architecture) and Bachelor of Architecture

The case being studied in this paper is that of the Discipline of Architecture within the Faculty of Engineering and Built Environment, UoN. Students wanting to become eligible for registration as professional Architect are required to study for five years to satisfy the accrediting authority, the Royal Australian Institute of Architects (2005). This can be achieved by two routes through one undergraduate degree with five years of study or as UoN has optioned in two sections, Bachelor

of Science (Architecture) plus the Bachelor of Architecture, requiring three years and two years of study respectively (A&BE, 2004b, 2004a).

Students for Years 1 to 4 enrol in one course per semester comprising 40 units each and in Year 5 enrol in a full year of study. This is consolidated followed by two years of professional practice prior to application for registration by the Australian Board of Architects (2005).

Pedagogical Methodology

The School of Architecture and Built Environment has a strong tradition of delivering programs using Problem Based Learning (PBL) as the pedagogical methodology. Following the implementation of this model in 1984, all programs within this School apply PBL to their courses and the integration of teaching, problems to solve, timetables, skill and knowledge development is fundamental to the success of the programs and student outcomes (Maitland, 1991).

In particular, PBL requires students to be active participants in the learning process through the solution of current architectural problems brought to notice by the broader community. To strengthen the notion that all students are considered as "apprentice" Architects, the problems are deliberately messy, require consideration within a variety of constraints and are based around the needs of a real or virtual client. This in turn reflects the very practice of Architecture in our society today.

Within these programs the Studio is a strong component where students are able to develop their ideas and solve problems in the company of peers and tutors. Further, in keeping with

Architectural practices, the Studio Tutors are themselves practicing Architects and continue to bring currency to the program.

It is into this very stylised and intricately engineered environment that students enrol to study Architecture at UoN.

Student Base

Students arriving at UoN come from a variety of experiences, backgrounds and cultures. This is in itself nothing new to educators and is well documented through texts identify the "multicultural classroom" (Foster, 1988). Then again, at this point in history does the discussion of the cultural background of students enrolling at a University and consideration of English language acquisition or development really explore the diverse nature of our tertiary students today?

So who are the students currently enrolling in programs within the Discipline of Architecture?

Enrolling students can enter Year 1 Bachelor of Science (Architecture) from:

- Australian High Schools (public, private, independent)
- Access programs: Newstep (17-19 years) and Open Foundation (20+ years)
- Mature age entry
- Transfer from another accredited Architecture program

Articulation agreements are in place with several institutions and students can articulate into Years 2 and 3 Bachelor of Science (Architecture) from:

- Australian Technical and Further Education Institutions

- International Polytechnic Institutions

Enrolling students can enter Year 4 Bachelor of Architecture with a Bachelor of Science (Architecture) or three years of equivalent study from another accredited University.

Given the different pathways from which students can enter Architecture programs it is important to try to identify if the student profile is static or growing in numbers and range of diversity. The following definitions and statistics for the Architecture programs, are extracted from the UoN Statistics Handbook (2005).

Enrolment

An enrolment includes any student admitted to an award program, non-award program, enabling program or cross-institutional program at the University, and who is undertaking approved courses at the reference date. A student may be enrolled in more than one program.

Commencing Student

A commencing student is one who enrols in a program at the University for the first time. Students who transfer from one program to another, which is significantly different from the first program, are included in this category. The definition of a commencing student is consistent with the documentation provided in DEST's Higher Education Student Data Collection.
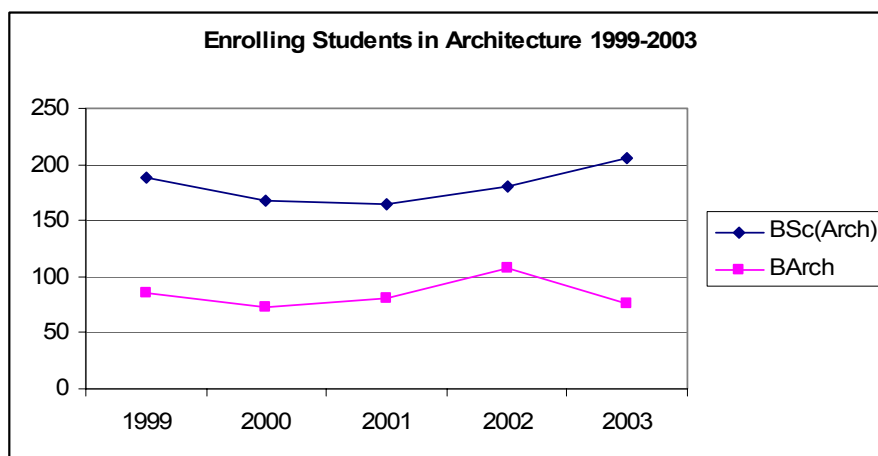
International Student

A student who is an Australian citizen; or a New Zealand citizen, or a diplomatic or

consular representative of New Zealand, a member of the staff of such a representative or the spouse or dependent relative of such a representative; or a person entitled to stay in Australia, or to enter and stay in Australia, without limitation as to time and resides in Australia during the semester.
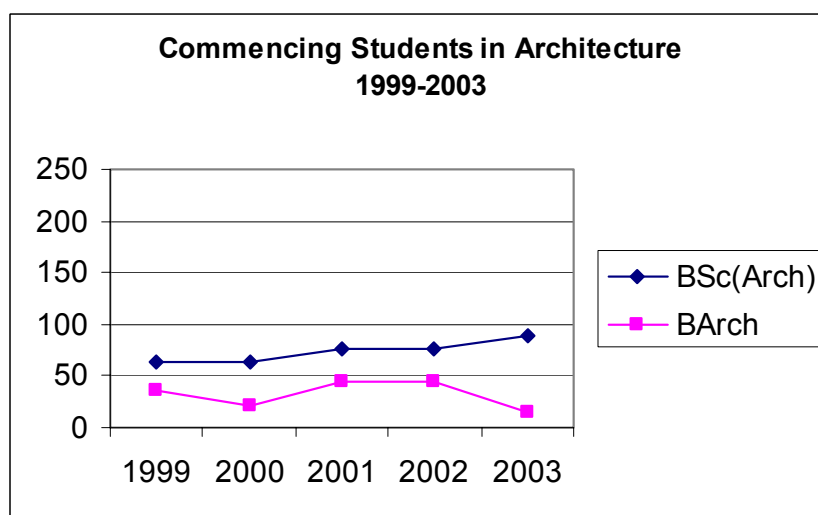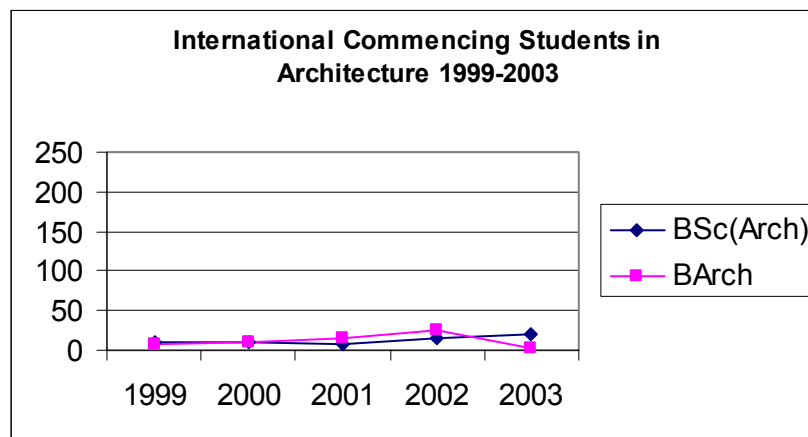
Architecture – enrolling students

Table 1

Enrolling Students in Architecture 1999-2003

Architecture – commencing students

Table 2

Commencing Students in Architecture 1999-2003

Architecture – international students

Table 3

In looking at the enrolling students in Architecture between the years 1999 and 2003 listed in

Table 1 above, it may be considered business as usual. In viewing statistics of enrolling students

there is not a great deal of change over the five year period. There is also evidence of a constant

difference between the completion rates of the first degree, Bachelor of Science (Architecture)

and those in the second degree, Bachelor of Architecture. Investigation of this is outside of the

parameters of this paper.

It can be concluded that over the five year pattern the student group enrolling into Architecture

programs is reasonably stable seeming to reflect adequate treatment, staffing resource allocation

and use of Library facilities and so on.

After spending some time with enrolling students in 2004 and 2005, the author believes that

viewing students through filters for enrolling, commencing and international enrolments, limits

the spectrum in which the identification of the rich diversity of background, employment experience and type of experience in education delivery is examined and identified.

Audience or Part of the Cast: the students

As indicated by the statistics above when viewing the enrolling students within the Bachelor of Science (Architecture) there is a pleasing increase in the number of students over the five year period from 1999 to 2003. Within the Bachelor of Architecture there remains stability in the number of enrolling students. This stability does not in turn mean that the disparate groups of students within this figure are in themselves fixed.

In providing data about the diversity found within the enrolling, commencing and international students it is not possible to identify the changing complexity and mix of students from year to year. In 2005 students will be surveyed to identify their diversity in:

- Educational background

- Type of institution

- Reason for attending this University

- Employment experience

- Other qualifications

(The results of the above survey will be available by delivery time of the conference.)

It is with this diversity in mind that the author would like to discuss the "audience" for Architecture programs. The enrolling students can be considered the "audience" for the delivery of Architecture through PBL. In considering this concept it is perhaps best to discuss what is an audience?

MacQuail in viewing audience in an historical concept described *"an audience is a set of spectators for public events of a secular kind"* (1997, 1-11). Although this description was institutionalised over 2000 years ago, it still holds as a description for present day "audience" being one of a physical gathering in a certain place. In present day there are a variety of forms of audience, some passive in front of a movie screen, some interactive at a live sporting event and others a combination of both. The different types of audience have evolved over time and reflect change in our environment.

"Problem Based Learning" is a student centered teaching methodology and requires the students to be actively involved at all times in the solving of the client's Architectural problem. If students come from an environment where a more traditional teaching method may delivery learning in discrete parcels, then "Problem Based Learning" will be alien to their historical learning environment.

Therefore, the audience, who is accustomed to receiving without necessarily interacting or contributing will need a period of adjustment to develop the skills of an involved audience which continuously interacts. And this is also true for students who move from one teaching methodology to another, as students, or audience, they will also need a period of adjustment to become "part of the cast". The Pedagogical Orientation Program described below is the first iteration delivered by this School to try and address this transitional period in a more supportive way.

Pedagogical Orientation Program

The program is designed to address the following issues identified by previous students through

Course Assessment Returns, Program Assessment Reviews and Student Forums (UoN, 2005)

Difficulties in understanding Problem Based Learning: introduce students to the program in a

holistic manner.

Poor computing facilities: ensure students move around the campus sufficient to explore the full

range of computing facilities by timetabling the program in various computing

laboratories across the campus.

Students have expressed difficulties in accessing support services: invite the various support

services to speak with the students

There were several concerns expressed by academic staff within the Architecture Discipline that

this program is also trying to address:

Poor student attendance: outline in detail to students the tight integration of all scheduled sessions

on the timetable and their relevance to the curriculum

Retention of information at orientation: even though students attend the one week orientation

program offered by UoN, retaining all of the new information at this time is

difficult and this program offers students a second opportunity

Lack of design skills: students articulating into Year 2 and 3 need additional design support to

accelerate their skills to meet the developed skills of students enrolling from first

year

Opportunity to speak with all enrolling students: the program offers academic and general staff

with opportunities to contact enrolling students over the six week period of the

program.

The full timetable and identified sessions for the Pedagogical Orientation Program is found at the end of this paper.

Delivery in Action

At the time of writing this paper the Program is in the middle of its first delivery. Attendance at the program fluctuates and at this time the author believes this can be attributed to the level of comfort the students feel about the topics offered. For example more students attend a session on "critical decision making" than one on "computer literacy". At the delivery of this paper, the author will be able to provide a reflective viewpoint on the delivery and can outline the successes or drawbacks experienced in 2005.

This is reinforced by the high standard of computer literacy demonstrated by students currently enrolled in an access program called Newstep. As the lecturer involved in delivery of the six hour computer literacy introduction, the author observed that the majority of students ably demonstrated competence across a range of software programs and internet activities. This standard is higher than that demonstrated by students enrolled in 2004. Although this is early days in projecting the competence of future cohorts, this may reflect across to enrolling Architecture students in 2005.

Orientation Funding at Risk

At the time of delivery of this extended Pedagogical Orientation Program there is some question over the funding of University orientation programs across Australia (White, 2005). As outlined in a letter to the editor, White of the Australasian Campus Union Managers Association detailed *"it is government policy to legislate that services and facilities provided by student campus service organisations not be funded."*

This movement away from orientation support is in direct contrast to the extended six week program described within this paper and it is outside of the parameters of this paper to comment on the effect this will have on enrolling students. The fact that UoN is hosting an "Enhancing Student Success" conference highlights the importance this University and the attendees of this conference, place on the initial experiences of the students enrolling in the programs offered at the respective Universities.

This issue of ongoing orientation will need to be monitored over the next few years.

Conclusion

As a recent graduate and now PhD candidate of University of New South Wales so aptly writes (Donaldson, 2005, 26-27):

> *"The universities need to acknowledge that any attribute they are not screening for at intake but are expecting by the end of the process is their responsibility to impart."*

It is with this very sound and reasonable viewpoint in mind that the author designed the Pedagogical Orientation Program for the students enrolling in the Bachelor of Science (Architecture) and the Bachelor of Architecture. As the University does not screen for students with a sound background in "Problem Based Learning" teaching methodology, it is our responsibility to provide our students with a transitional process that will ensure that their entry into our programs is seamless with a supportive orientation that bridges the gap from their enrolling point to the successful completion of their first semester.

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Orientation Program for Articulating Students
      in Years 1, 2, and 3
3 hours/week x 6 weeks   **75 students**

Week	Times	Content	Room	Teaching Unit
1 **22/2**	Session 1: 2.00 pm Session 2: 3.30 pm	Welcome to School of A&BE and overview of Design in Architecture OH&S Orientation to Studio Resources and Site Visits	BSC126 Studio Tour	A&BE OH&S
2 **1/3**	Session 1: 3.00 pm Session 2: 4.00 pm	Computer Literacy: Blackboard, Studentmail and referencing websites Computer Literacy: Blackboard, Studentmail and referencing websites	ES105	A&BE
3 **8/3**	Session 1: 2.00 pm Session 2: 3.30pm	Introduction to Critical Decision Making Standard of Academic Writing at UoN and support services	BSC126	A&BE Learning Support
4 **15/3**	Session 1: 2.00 pm Session 2: 3.00 pm Session 3: 4.00 pm	Academic Integrity and software Academic Integrity and software Academic Integrity and software	CT306	Library Library Library
5 **22/3**	Session 1: 2.00 pm Session 2: 3,00 pm Session 3: 4.00 pm	International Liaison Officer Counselling Services NUSport	ES305	A&BE Couns. NUSport
7 **5/4**	Session 1: 2.00pm Session 2: 3.30pm	UoN Rights, Responsibilities and Learner Expectations in Higher Education Student Evaluation of Orientation Program	BSC126	A&BE Statistics

Additional Design Support

Year 2: Design studies for classes scheduled for Year 1 and Year 2 will be compulsory
Year 2: articulating students will have an additional 1 hour/week x 3 weeks Design support and
      then as required

Year 3: Design studies for classes scheduled for Year 1, 2 and 3 will be compulsory
Year 3: articulating students will have an additional 1 hour/week x 3 weeks Design support and
      then as required