Evaluating First Year Experiences in Design Education using "First Year Attributes"

Dr Lizzie Muller & Dr Mukti Bawa, Faculty of Design, Architecture & Building, University of Technology Sydney

Abstract

This paper reports on an exercise that evaluated the experience of first year design students. The exercise explored the use of "First Year Attributes" as a means for structuring experiential evaluation. The exercise revealed useful information about the gaps and connections between staff and student expectations. It also raised questions about the potential of First Year Attributes as a strategy for engaging realistically with first year experiences.

Introduction

The evaluation exercise reported in this paper had three main aims: First to give the students a chance to talk about their first semester in groups with their tutors; Second to give teaching staff qualitative feedback about the students' experiences to inform teaching and learning strategies; Third to help shape the development of a set of First Year Attributes, which could be used in the future to evaluate the first year programme.

In order to conduct this evaluation a group of staff involved in first-year teaching developed a set of First Year Attributes that describe the skills, knowledge and attitudes that students should have by the end of their first year in the Design School. These First Year Attributes lay the foundations for achieving the Design School's Graduate Attributes, ensuring that students are on the right path from the start of their education at university S:

Design Literacy

At the end of the first year students should have an introductory understanding of the broad field of design. They should have an understanding and interest in each other's disciplines (i.e. Industrial Design, Fashion and Textiles, Visual Communications and Interior Design). Students should be familiar with some of the professional vocabulary of design (including ideas and words such as "tacit knowledge" and "reflective practice", and skills such as scale drawing).

Openness to experimentation and new influences

First year students should be inspired by examples of design and creative practice they should be curious and eager to try new things. By the end of the first year they should have increased their engagement and participation in the wider world of culture and design (online, in galleries and museums, in the library, attending talks and lectures etc).

Understanding the learning context of the Design School

The student should have a clear idea of the format and structure of undergraduate learning (e.g. self-directed, mixture of practical and theoretical etc) and to plan their studies

confidently. Students should be aware that research is a major part of university life and have some knowledge of their lecturers' research interests.

Attitudes and Values

Students should have a self confident but critical awareness of their own skills. They should enjoy the challenges that are set for them, feel enthusiastic about what they have achieved in the first year and excited about what is to come in subsequent years. By the end of the first year students should have developed the ability to work well with others.

Method

The exercise was based on a technique called the "Experience Workshop", which provides a structure for group discussion and evaluation of individual and collective experiences. It was facilitated by tutors in tutorial groups of up to 20 students. Students were asked to write down, on different coloured post-its three "best things", three "worst things" and three "new things learned" within the first semester of their course. The tutors then explained the four First Year Attributes. Each attribute was written on one of five large sheets of paper (including one blank sheet), which were stuck on the wall around the room. The students were asked to attach each of their post-its to the sheet of paper with the attribute that most related to each separate point they jotted down. They could use the blank sheet for any points that seem unrelated to the attributes. The aim of this data-sorting process was to create connections between the students' real experiences and the ideal experiences represented by the four attributes. The tutors then led a discussion in which students reflected on these connections.

The material was analysed in three ways. First, a quantitative record of the number of "best things", "worst things" and "new things learned" that students associated with each attribute. Second the identification of major themes within the post-its, which reveal aspects of the experience of the first semester that were common to many students. Third, a de-brief with tutors where we discussed the main points of their discussions with the students – these informed the identification and description of the major themes.

Evaluation of students' experiences against the four First Year Attributes

Design Literacy

Learning the professional vocabulary of design clearly had a big impact on students during their first semester. They identified significant developments in their professional and technical skills, their understanding of design concepts and ideas, and their understanding of the design process.

The students also had a significant interest in engaging with students and faculty from different courses within the design school, and they valued opportunities to work in interdisciplinary ways.

The responses to this attribute had a very different pattern to the other three attributes. There were a much larger number of comments under the category of "new things learned" here

¹ Muller, L., Robertson, T. and Edmonds, E. (2006) "Experience Workshops". Proceedings of *OZCHI Workshop on The Object of Interaction*, Sydney, November 20-24th 2006. Queensland: Australasian CRC for Interaction In Design (ACID).

than anywhere else. This showed that the students linked the majority of new information and experiences of their first semester with their introduction to the professional and specialised world of design. The attribute attracted few positive or negative comments, suggesting that students did not yet feel confident enough about these kinds of new experiences to express evaluative opinions.

The responses in this area expressed a new understanding of the design process as a whole, and the thinking and methods that underpin it. Many students described a change in their perception of design as a discipline, including comments such as "there is so much more to design than I thought." Students understanding about the design discipline evolved and changed during the course of the first semester. One student stated "design isn't necessarily a linear practice or systematic or straightforward." Many students felt that they could now "look at situations from different view points" and had developed an "ability to look at a problem in a new way, leading to a better solution."

Open to experimentation and new influences

This attribute was associated overwhelmingly with new and positive experiences. By the end of the first semester the students are clearly curious and eager to try new things. The comments here expressed the students' excitement about a wide spectrum of experiences from practical skills to theoretical ideas and concepts. An interesting, unexpected response was the importance of students meeting new people who share their passion for design. This was clearly one of the most significant aspects of their experience of the first semester. In particular they identified here the inspirational potential of meeting students from other design disciplines.

The theme of freedom and creative expression appeared repeatedly in the students responses. The word "freedom" appeared on its own in many cases, and it was also associated with thinking, creativity and individuality, with comments including: "freedom of ideas", "freedom to design as an individual", "freedom of creativity" and "ability to express a personal style and interest." This theme shows that students value the looser structure of university teaching.

At the same time students were aware of the connection between creativity and more structured learning of disciplinary skills. They perceived that they had learned new tools and techniques to help them refine and express their creativity – including new techniques and technologies and new skills such as research. For example, one student suggested that "the best thing in this semester is to create new ideas from lots of research", another valued "being given the tools to show our creative potential", a third enjoyed "being able to develop ideas conceptually in new ways."

Students clearly value the freedom that they are given within the curriculum of the first semester. Interestingly, they also value the way that their new skills allow them to express themselves in new ways. There is a positive correlation in their experiences between skill-development and creativity.

There were a small number of positive comments about inspiration from real-world examples. But there were few responses that showed an increased engagement with the wider cultural resources of the city, and this is certainly an area that can be developed much more in the future.

Understanding the learning context of the Design School

This attribute attracted high numbers of both "worst things" and "best things" about the first semester. This critical and evaluative response suggests that the students' first encounter with undergraduate modes of teaching and learning presents intense challenges and opportunities. Self-regulation, motivation and management are the key problem areas and there is clearly scope for increased support in this first semester in helping students develop these skills.

There were very few comments that suggested that students understood the broader research context of the university. There is clearly a need and an opportunity to develop their awareness of and engagement with the research life of the Design School.

A major aspect of the "new things learned" during the first semester was the necessity for self-regulated learning, and the change in attitude that is required. Many students explained that they struggled with the concept of "learning how to teach yourself." One student commented, "I learnt to take more responsibility for my own work", and this sentiment was reflected in many other responses, for example, "I learnt how to actually do my work – it won't get done by itself", "I've learnt to put effort into things", "I've learned not to procrastinate." A large proportion of comments related to time management and "learning not to leave everything to the last minute." Many students felt their time management skills had needed to rapidly improve.

Attitudes and Values

There was a great deal of overlap in the responses to this and the previous attribute around the challenges presented by undergraduate learning. This suggests that the difference between the two attributes is not currently articulated clearly enough. Despite the difficulty in articulating this attribute several of the major themes across the evaluation are clearly relevant, such as the students' development of a reflective and critical approach to their own learning. One strongly positive theme that emerged within this attribute was the development of group work skills. There were many positive comments related to group work experiences, such as "learning how to work in a group situation and why it is important to do so" and "The importance of working in groups and its advantages to the design process." Many comments showed that whilst students felt they were learning new group-skills, the interpersonal aspects of group work were still challenging, e.g. "I got the handle of how to work in groups, although some people need to be a little more patient before judging others."

Students clearly feel a good deal of excitement about their experience of the first semester but also some anxieties and feelings of stress. The first semester presents a steep learning curve, and whilst students value their new capabilities, they are not yet confident in them. It is possible that exercises such as the one being reported here, where students get a chance to discuss their experience in groups with their tutors, may help them to deal with these anxieties and develop a more confident and reflective attitude to their own experience.

Meeting other students was a significantly positive theme across many parts of the evaluation. Many students found their encounters with new people inspiring; as one student put it "the best thing is being involved with so many inspiring people and other types of students". Students expressed that "meeting new people with similar interests" was a great aspect of their course. Students appreciated both the similarities and differences they encountered in the new people they met. Many students described their experience of meeting new people with comments such as "developing social network with peers and people who

share common goals and aspirations" whilst other identified "contact with a diverse and cohort from different socio economic backgrounds."

Many comments here related to the social aspects of the students' experience such as "making new friends who are interesting unique and diverse." Students particularly identified their eagerness to meet people from other design disciplines and backgrounds, and identified the interdisciplinary subject Researching Design Processes (RDP) as a positive part of this experience: "RDP gives us a chance to mingle with people from other courses" and "[RDP] helped me to meet new people from different courses and work together as a group."

Conclusions and Questions

Evaluating against First Year Attributes was found to offer a valuable way of framing a discussion around student and staff expectations. The development of the attributes provided staff with a way to articulate their expectations of students at first year level, and to link these to the longer term goals articulated by the graduate attributes. This clarifies the contribution that first year learning makes to these longer term goals, and offers a measure of attainment that is more applicable and meaningful to students at first year level. The First Year Attributes provided a framework for students to organise and direct their feedback in line with the aims of the staff and the institution. This exercise created meaningful links and comparisons between student experiences and staff expectations, which allowed for rich discussions to take place.

This early work raises questions to be discussed in the conference session:

- 1. Are "First Year Attributes" a tool being used by other universities, and if so, how?
- 2. Is it useful to distinguish between first year and graduate attributes?
- 3. How can First Year Attributes be used in guiding first year curriculum?
- 4. Can First Year Attributes be used to bring together student and staff expectations in the first year at university?
- 5. How much of this work is specific to Design education and how might it cross disciplinary boundaries?

Session Outline

- 1. 10 minutes: Presentation of the local initiative and results.
- 2. 15 minutes: Guided whole group discussion based upon the 5 concluding questions (above), particularly focusing on similar initiatives and experiences in the fields of evaluation and attributes.
- 3. 5 minutes: Concluding remarks and identification of possibilities for development, refinement, evaluation, partnerships, exchange and further implementation.