Teaching Context

**Interior Visualisation** is a first year undergraduate unit in the Bachelor of Design at Queensland University of Technology. Unlike other design units that focus on physical skills (e.g., drawing), this subject focuses on the development of metacognitive skills necessary for design practice.

**Students**: Approximately 180 – 190 students from various Schools/Faculties undertake this subject. Most students are enrolled in architecture, engineering, fashion design, or interior design programs.

**The Teaching Team**: Dr Marisha McAuliffe is the unit coordinator and is supported by a team of tutors who are design practitioners.

**Mode**: 12-week semester of face to face lectures and weekly tutorials, supported by the unit’s learning management system.

Issue: Impetus for change

Over a number of years the teaching team observed a high number of overwhelmed students in mid-semester. They recognised that first year students need better support in making the transition into university and academic life, and in developing an understanding of their skills and abilities. In design education, this includes metacognitive skills that are crucial for becoming design professionals.

**Aim**

To design curriculum that helps first year students develop the metacognitive skills essential for design practice, and help them with their transition into academic life.

**Subject design strategies**

The teaching staff adopt numerous strategies that can be identified as supporting student wellbeing:

**Organising topics and structuring lectures around key skills**

Lectures are planned to introduce thinking styles alongside the core design theories, and to help students see the relevance of the skills and theories to professional design practice. Each lecture outlines how one thinking style might be applied to design drawings and visualisation in professional design.

This helps students contextualise what they are learning as it is applied to real world design practice.

**Embedding an activities-based tutorial program**

The tutorials are designed to provide opportunities to practice each thinking style, and reflect on how each thinking style can be applied to ‘real life’ design projects. The activities help students build the skills and knowledge required to complete their two assessment pieces so they can see how each tutorial contributes to the learning outcomes and assessment of the subject (See below). Each tutorial includes a 6-minute visualisation activity, in which students practice visualising the thinking style. These activities are designed to maximise students’ experience of ‘flow’, which describes the experience of being completely immersed in an activity. (Csikszentmihalyi, 2008). The activities aim to reduce self-consciousness, remove concerns about failure, and promote self awareness.

**Fostering meaningful interactions through classroom activities**

Many of the tutorial activities are designed to enable students to practice articulating their experience, receive constructive feedback from tutors and identify areas for improvement. The activities promote active discussion among peers as well as with tutors.
**Interior Visualisation**

**CASE STUDY**

**Designing assessment to develop students’ metacognitive and self-assessment skills**

Assessment tasks involve written exercises in which students consider how the thinking styles apply to their goals within the course. This assessment aims to provide a meaningful opportunity for them to consolidate the different thinking styles and practice metacognition through articulating their processes of using each approach. Students build on tutors’ feedback from earlier assessment to become critics of their own work.

The assessments are designed to develop students’ ability to reflect upon and evaluate their own skills and cognitive processes in meaningful ways. The experiences also encourage intuition and metacognition, which not only promote engagement and motivation in design, but also contribute to a greater sense of agency during panellist critiques in subsequent subjects.

**Evaluating outcomes**

Marisha evaluates her unit using a *Unit Improvement Plan*. The Unit Improvement Plan is completed during the semester by each teacher, and documents activities that are going well and activities that need improvement. Evidence from the UIP, Student Engagement Survey, and teachers’ perceptions during class, indicates improvements in the following areas:

- Most students demonstrate improvement in their awareness of their own processes between the first assessment and the second assessment. Their improved skills reflect an increased confidence in using conceptual approaches to analyse their own work.
- Students are more deeply engaged in their learning, particularly in completing the activities and assessment tasks.

**REFERENCES**

