EXPANDING ILLUSTRATION DESIGN STUDIO PRACTICE THROUGH CRITICAL REFLECTION.

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ABSTRACT:

There is no standard model for teaching critical reflection within Illustration Design.

Evidence of critical reflection in Illustration Design practice is limited in undergraduate education and rarely occurs within professional practice. Illustration Design education should enable students to become effective and successful professional practitioners. It is a profession that requires high level conceptual and technical skills and is underpinned by innovative thinking and entrepreneurial abilities. A teaching approach that incorporates a formal critical reflection framework will provide students with lifelong skills to practice, critically reflect, analyse, describe and expand the impact of their work beyond obvious applications and industries.

This paper will describe and explain a critical reflection teaching and learning framework embedded within the University of South Australia, Visual Communication, Illustration design program that connects Illustration design professional practice with academic design research.

OVERVIEW

At the University of South Australia it was observed in recent years that Illustration Design students undertaking the Graduate Diploma in Visual Art and Design (Specialisation) program, within the Master of Visual Art and Design (Specialisation) experienced difficultly understanding and articulating the relationship between design practice, design processes and academic research. Subsequently students became unmotivated and disengaged from their learning when confronted by the formal academic research component of the program.

In response to this observation a critical reflection teaching and learning framework has been developed and embedding into Illustration Design studio practice in order to develop, test and enhance the understanding of critical reflection amongst Illustration Design undergraduate and postgraduate students. There are three key aims for this teaching approach, the first is to test and measure the impact a critical reflection teaching and learning framework will have on student learning in relation to academic research expectations. The second is to enable students, through design practice, to recognise the positive impact and benefits that theory and research methods can have on their professional design careers. The third is to show that a structured and applied critical reflection teaching and learning framework can enhance the effectiveness of design research education and inform the development of habitual research skills for design students and practitioners.

ILLUSTRATION DESIGN PRACTICE

Design is now regarded as a 'new discipline of practical reasoning and augmentation' (Buchanan 1992). Illustration Design has evolved into a modern multidisciplinary profession which produces visual artefacts that have far ranging commercial and cultural impact. Practitioners are now required to provide innovative solutions to complex problems; for example, cultural and corporate strategy, event/business structure and management, product design, social reflection and narrative, manufacture and communication. It is widely acknowledged that this requires the application of 'concepts and methods from other disciplines' and speculates on broader 'social, cultural and philosophic' issues and subjects to explore design (Buchanan & Margolin 1995). Critical reflection plays a key role in the ability of a design practitioner to identify, analyze and resolve complex issues for their clients and the societies they affect.

An Illustration Design practitioner facilitates communication with society through visual language, the use of typography and imagery. An Illustrator investigates a variety of possible communication solutions through creative and innovative problem solving methods, visualization techniques, a knowledge of typography, visual literacy and communication technologies as well as a variety of technical skills which are derived from individual interest and experiences. Illustration Design products are often initiated by personal or client briefs that define and describe the parameters surrounding a particular communication problem and indicate its final commercial application(s). Solutions for these problems are primarily resolved as visual artefacts that aid in the communication process.

As described by Swan (2002), design methods are 'solution focused strategies' that deliver a multitude of possible outcomes. This is opposed to scientific methods which gather and test data with the aim of proposing one absolute solution, 'problem focused strategies'. Design methods provide information and data throughout the design process which are considered for the final proposed solution. Design outcomes depend on the context or filter through which various stakeholders view the project. A comparison of these different approaches is shown below in Figure 1.

Science

Design

Ideas / Data
Possible Solutions

Absolute Solution

Absolute Solution

Problem focused strategies

Solution focused strategies

Figure 1: Problem and Solution focused strategies

Similar to other design disciplines, Illustration Design solutions are developed and discovered through an iterative process of investigation or research (Swan 2002). The design process periodically loops back on itself to reanalyse and question the original problem and proposed solutions, see Figure 2 below.

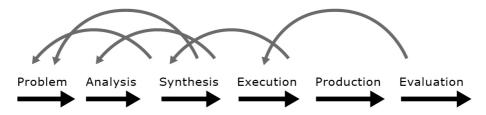


Figure 2: Iterative Design process (Swan 2002)

ACADEMIC DESIGN RESEARCH

Leedy (1997) defines research as how we 'address the holes in our knowledge and those unresolved problems by asking relevant questions and seeking answers to them. The role of research is to provide a method for obtaining those answers by inquiringly studying the evidence within the parameters of the scientific method' (Leedy 1997)

Such research statements are often perceived by Illustration Design students as having only academic relevance with no relationship or attributed value for professional practice. In the initial stages of Illustration Design coursework students have a natural preference for skills that will obviously enhance immediate employment opportunities in professional practice. Students often do not perceive the relevance or importance that research outcomes or research skills can have to their

ongoing professional development and practice. They disengage from learning and disregard the positive influence that formal research will have on their careers.

Design processes, typically implemented to complete Visual Communication design projects, closely reflect two research methods in particular. Leedy's Research Cyclical model, (practice based research) Figure 3, (Leedy 1997) and Lewin's cyclic model of Action Research, (practice led research) (Burns 1996), shown in Figure 4. Describing and discussing these research methods in relation to Visual Communication Illustration Design practice enables students to develop their understanding of the direct connection between their practice and academic research.

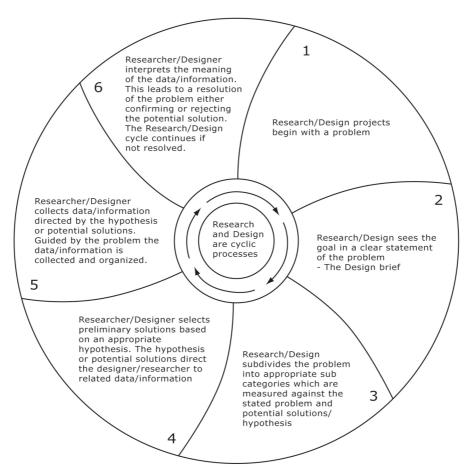


Figure 3: Leedy's Research Cyclical model, modified to compare the Design Process. (Leedy 1997)

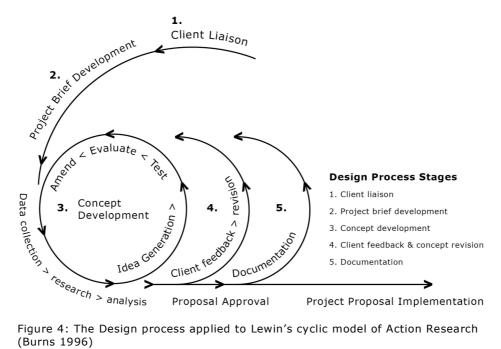


Figure 4: The Design process applied to Lewin's cyclic model of Action Research (Burns 1996)

REFLECTION

These cyclic and iterative processes require the practitioner and researcher to loop or circle back, to reflect and assess the action taken in order to determine if it is the most suitable. While reflection 'in action' and 'on action' as described by Schon (1983) is clearly practiced throughout a typical design process, it is rarely documented or discussed in Illustration Design.

Illustration Design education and professional practice is underpinned by reflective practice, a process through which experiences are analyzed as learning opportunities, enabling personal and professional transformation. Reflection enables design practitioners to think through and review their experiences, perceptions and ideas, providing insights into possible future action that may improve both professional practice and design outcomes. However critical reflection is limited in undergraduate education and rarely occurs explicitly within professional practice. Most practitioners achieve three of the four levels of reflection described by (Lynch 2005). Three of these levels, technical reflection, descriptive reflection and dialogic reflection' are practiced, often unconsciously, by visual communication students and practitioners 'to construct personal knowledge and theory out of their experiences' (Rolfe, Freshwater & Jasper 2001)

TECHNICAL REFLECTION

The ability to technically reflect enables a practitioner to assess themselves in relation to specific criteria and make the changes necessary for success. To successfully practice Illustration Design requires a high level of technical reflection in order to continually build the required skills and competencies associated with design and manufacture. For example, core technical abilities are required of Illustration designers in the areas of idea generation, drawing, medium rendering, knowledge of software used in concept visualization, rendering, layout and pre-press production. Maintaining and advancing career within the Visual Communication disciplines requires ongoing technical reflection for practitioners to develop and maintain up to date skills.

DESCRIPTIVE REFLECTION

Lynch (2005) defines descriptive reflection as 'describing the process' taken to determine the final action. Illustration Design practitioners are required within the various stages of a project to utilize descriptive reflection. This often takes place when describing the context and parameters of the project or conveying recommendations for a particular communication solution over others to both peers and clients. These recommendations are commonly based on a practitioner's knowledge, such as design principles or project specific data and validate decisions that can be construed as aesthetic or subjective judgments.

DIALOGIC REFLECTION

Dialogic reflection is the retrospective examination of a situation or action that has been taken. Within Visual Communication, Illustration Design dialogic reflection is a form of discussion that questions aspects of a design project and results in the development of critiques and rationales used to justify or debunk a communication solution. Illustrators use dialogic reflection most often in the final stages or at the completion of a project. It is a form of reflection that looks back and compares choices and decisions with possible alternatives. Design actions and their effects are considered from different perspectives with the aim of assessing the success or failings of a completed project.

CRITICAL REFLECTION

Critical reflection is characterized by a high level of self-awareness which accounts for personal and situational events (micro level of reflection) and questions associated with aspects of culture, society and the political state of events (macro level of reflection). Critical reflection can also question values and morals inherent in a project and can aid practitioners and clients to act ethically within a situation (Thompson & Thompson 2008; Rolfe, Freshwater & Jasper 2001; Hatton & Smith cited in Lynch 2005).

An important factor of critical reflection and 'reflexive practice' (Thompson & Thompson 2008) is a multi-perspective approach in questioning assumptions that occur throughout the design process, at any stage within the action of a design project. Critical reflection should question assumptions not simply make judgments about the project outcome, design processes, visual techniques and production processes. It 'is a process of making evaluations' about the broader impact of design practice, for example, the wider social, political and cultural

implications that occur throughout a design project or from the impact of a design artifact. (Lynch 2005).

Illustration Designers can and do engage in these aspects of critical reflection however it is rarely recorded in any way other than being present in project development verbal discussions, notation throughout a project or communication from the design artefact itself, for example an illustration that communicates social and political messages.

TEACHING APPROACH

There is no standard model for teaching critical reflection however a 'deep teaching approach' (Ramsden 2003) that is varied, utilizes diverse methods and materials, is flexible and allows for personal preferences should be employed to guide and enhance student development. For example, mind mapping and brainstorming techniques, group analysis and discussion, visual diaries, voice recording and video recording are ways to develop an understanding of reflection and its value for practice and research. Students must also be able to determine their own topic for reflection and be given the opportunity to pursue this focus within their study (Lynch 2005).

At the core of the undergraduate and coursework postgraduate Visual Communication programs, is studio practice. Experiential learning and independent learning are key learning outcomes of studio based education, this learning approach is problem based and is one in which 'the student learns through doing and through reflection.' (Schon cited in Pearson & Brew 2002). Through studio based education, most students are able to achieve an excellent understanding of practice and are able to contribute immediately as practicing professionals.

Reflection teaching approaches in studio practice should be introduced in such a way as to gradually build student interest and ability in critical reflection, critical analysis and research investigation. Satisfaction is not the sole aim of critical reflection, risk taking is important to emphasize. This is both dangerous and difficult within assessment based teaching and learning frameworks as learners, in their attempts to achieve premium grades, find it difficult to remove themselves from the critical reflection process. In making research connections with design practice through critical reflection an educator should be aware the process may confront a student due to the personal and cultural issues it may raise.

Key academic skills, such as high level literacy and writing, should also be a priority when developing reflection skills. Unfortunately these are not highly valued or necessary for success in professional design practice and have been largely ignored in Illustration Design undergraduate education. The lack of skills to connect practice to research and a disregard for academic writing is prevalent throughout the Visual Communication profession (Swann 2002, p. 57-58). If students are to reach a high level of studio practice, academic literacy, writing, critical reflection and knowledge construction, the teaching approach and learning frameworks must be 'structured and cohesive' (Garrison & Cleveland-Innes 2005).

IMPLEMENTING A REFLECTION FRAMEWORK

Cognizant of the issues that are inhibiting the research/practice nexus of Illustration Design students the following outlines how a more robust and sustainable approach to introducing critical reflection abilities within undergraduate and postgraduate courses would benefit Illustration Design students and their future in the profession.

While undertaking studio projects in undergraduate and postgraduate courses students are exposed to and engage in a range of reflection exercises, discussions and approaches to analysing and contextualizing their work. These are strategically integrated into the studio courses to awaken and transform student understanding of relationships and potential benefits between practice and research. The reflection exercises focus on the ability to critically reflect on and through Illustration design practice and academic literacy. Students are supported throughout the studio projects by tutors who discuss reflection results and give feedback on academic writing. Formal tutorials are conducted to convey reflection principles, demonstrate techniques and discuss academic writing expectations. (Rolfe, Freshwater & Jasper 2001, p 22)

UNDERGRADUATE SELF-DIRECTED (INDIVIDUALIZED) PROJECTS

For undergraduate students, the reflection framework is present as a component of self-directed (individualized) projects that are studio course requirements. It is a flexible curriculum within which students move to and from bridging and self-directed projects throughout the duration of the program. (A description of bridging projects and self-directed projects is discussed below). This structure maintains the delivery of design principles, introduces relevant industry and research topics while encouraging students to engage in self-directed (individualized) and experiential learning.

Each Illustration undergraduate course at UniSA has two, 4 hour Illustration studio contact times per week. Working within this structure there are bridging and self-directed projects running in tandem. Bridging projects are prescriptive only in learning objective and professional format, for example students produce an editorial illustration in response to a written magazine article. Students determine the theme, illustrative medium and rendering technique for each project. This opportunity is important in the education of an Illustrator to develop technical expertise, visual style and visual language which become essential aspects of their professional lives.

Within Self-directed (individualised) projects students are required to identify/discuss a design problem and develop project documentation which allows an in-depth investigation and experience of the specific Illustration design fields they wish to pursue professionally. Students then apply design theory, research and professional practice to complete their investigations, producing studio based artefacts. This approach maintains continuity between the core design principles introduced in the first year foundation course and following years.

Student expectations of the requirements for project documentation is formed and nurtured through the support of formal templates, examples of academic writing including preferred reference systems. A formal project template explains and describes the type of discussion and information that is expected, listing these in order from a broad project

overview (critical reflection) through to project specific details (technical reflection). For example, project context, project focus, learning objectives, project methods, technical skills, professional focus, project schedule, project specifications and references. While all reflection types are present through the process of completing the documentation these are not consciously identified for the student by the tutor at this stage. Reflection information, discussions and techniques are conducted in the studio lecture and feedback sessions which gradually connect studio practice with the benefits of reflective practice.

This subtle separation of reflection in practice and theory enables students to learn through experimentation and illustrative technique practice. They are supported through a process of negotiation and consultation with their tutors who discuss and connect reflection based issues with the project, emphasize professional time management and demonstrate the application of creative processes to 'real world' scenarios. Ramsden's "Principle Number 5: Independence, control and engagement", (Ramsden 2003) reflects the teaching approach in this aspect of the Illustration Design program. A learning structure determined by the student engages them personally, resulting in a deeper learning outcome and more fulfilling educational experience for the student.

POSTGRADUATE CRITICAL REFLECTION FRAMEWORK

The reflection framework is aligned with the stages of the design process as shown in Figure 5 to facilitate the understanding of critical reflection amongst postgraduate Visual Communication, Illustration Design students undertaking the Graduate Diploma and Honours programs at the University of South Australia. Students are required to reflect and articulate their perceptions, thoughts and ideas during ('in action') and after key stages ('on action') in a typical design process (Schon 1983). The reflection framework requires students to formally reflect through visual and written journals and a portfolio of short essays that discuss the contents of the journals throughout and at the completion of the design project.

REFLECTION IN ACTION

Throughout the postgraduate program students are required to produce a series of reflections based on their current design project. These reflections may be documented in any way that suits the individual student. For example visual journals are common practice throughout the design disciplines and help to develop core skills such as drawing but most importantly they enable practitioners to reflect on; document and advance ideas (Brereton 2009).

As per Borton's model for reflexive practice (Rolfe, Freshwater & Jasper 2001, p 35), shown below in Figure 5, students are required to reflect sequentially through the following three levels of reflection, Descriptive, Dialogic (theory and knowledge building) and Critical (questioning assumptions, methods and beliefs). A discussion paper is required towards the end of the program, which examines and discusses reflection and insights on studio projects, process and experience including potential academic research topics that have been identified.

Students are encouraged to take a multidisciplinary approach in extending and questioning their experiences of the design work flow and events that occurred throughout the Illustration design process. Expected to be seen at this point will be the development of student's self-awareness and a high level of comprehension of critical reflection. Also expected is the emergence of personal research topics from this critical reflection and analysis.

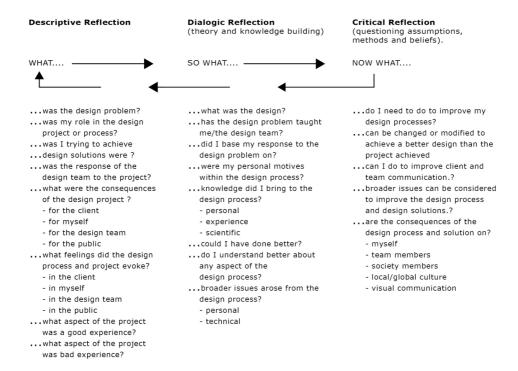


Figure 5: Modified from Borton's model for reflexive practice (Rolfe, Freshwater & Jasper 2001)

EVIDENCE OF REFLECTION

Evidence of student reflection within the visual and written journals and portfolio of essays is assessed and measured using guidelines discussed by Thompson and Thompson (2008, p 123-130). These guidelines are as follows, has 'an awareness of interactive processes' (Thompson & Thompson 2008, p 124) taken place? Has the student perceived, considered or discussed the interaction, relationship and interpersonal communication between themselves, their client, design team members and society. As Thompson and Thompson (2008) state, does the student acknowledge 'what happens in the space between people'?

Has 'learning and development' (Thompson & Thompson 2008) taken place, specifically has reflection clearly influenced the design practice and design project outcomes at any stage. Is a student's 'knowledge base up-to-date' (Thompson & Thompson 2008) in relation to current professional design practice? For example has a student's reflection considered recent technical or theoretical developments outside of their

discipline of Illustration Design, other observations could be in the following areas, Illustration Design production processes, an awareness of recent technological developments that affect Illustration design or related industries, developments in visualization techniques, social and business trends.

Is a student conscious of their own 'value base' (Thompson & Thompson 2008), have explicit statements of value surfaced in their reflections, do they identify or question these values within their reflections? For example, have personal values in relation to the design project and the client been considered? Have professional values such as, collaboration, punctuality, reliability, personal respect and responsibility been examined and noted? Does a student show a high level of 'motivation' (Thompson & Thompson 2008) and engagement with their design practice and process? Does the reflection and analysis show thoughts or initiatives that required independent thinking to learn or solve problems, for example sourcing and utilizing related literature or practice outside of design fields?

Within the Visual journal 'creativity' (Thompson & Thompson 2008) is expected due to the nature of the design discipline. In determining if imagery and mark making show a level of reflection, the work should display 'uniqueness' in the examination of the idea or relevant problem. Has the visual response extended the idea or problem and is it appropriate? A consideration of design practice, how it is, how it was or how it might be, is clear evidence that reflection in practice has occurred. This is what Thompson and Thompson refer to as 'awareness of comparative practice' (Thompson & Thompson 2008). Similar evidence of reflection is an acknowledgement of 'competing perspectives' (Thompson & Thompson 2008) which shows an examination of a situation from a variety of perspectives and approaches, for example considering other opinions and potential solutions to a design problem.

Evidence of critical reflection within student's design practice will be shown through sustained questioning of assumptions and solutions relating to the practitioner (student), client, design problem and process. For example, reflections on the influences or implications of design project outcomes for the wider community, society or political situation. Or reflections which consider the ethics and values that have been portrayed or conveyed within the project process and its outcomes. This critical reflection evidence will be underpinned by an acknowledgement of 'competing perspectives' (Thompson & Thompson 2008) as discussed above and a high level of self-awareness that has allowed the student consider their role within the complexity of the design project.

CONCLUSION

It is important to note that this reflection framework has been implemented and is currently being tested and refined within both undergraduate and postgraduate Illustration design programs at the University of South Australia. The framework tests the assumption that undergraduate students understand and are able to articulate reflection in Illustration Design studio practice will easily determine the relationships and links between critical reflection, their studio practice and academic research. It is expected this will facilitate a smoother

transition to a greater uptake of postgraduate research, in turn expanding the perception and impact of Illustration Design professional practice.

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