The place and importance that design has in your life, in business, industry, culture and the world is something for which design organisations and educators globally and over time have lobbied governments, business and society. From the establishment of professional organisations such as the Design Institute of Australia in 1958 (Design Institute of Australia, 2002) or the Australian Graphic Design Association in 1988 (Design Institute of Australia, 2002) to examples such as the American Institute of Graphic Arts (2012) writing publicly to the Obama administration in regards to their crowdsourcing for a jobs poster or the Australian Graphic Design Association in Western Australia running workshops with the Fremantle Chamber of Commerce (Campaign Brief, 2010) we see illustrated the work of the design profession to educate business and society as to the value of design. Michael Beirut (AIGA Philadelphia, 2009) believes that access to the technologies of production of some design professions, such as graphic design and desktop software, has increased awareness of design in people's lives and of their critique and engagement with it but that it still has a long way to go.

Terms such as 'Design Thinking' and 'Design Entrepreneurship' have become popularised as practitioners such as Paul Hughes (Flickr, 2010) espouse particular working models to not only design professionals but a much wider audience. Design thinking is defined by Hughes (Icograda, 2010) as deliberate and effective procedures for thinking that will enhance the creativity of your design solution. Design Entrepreneurship has been explored by people such as Ellen Lupton (AIMS, 2012; AIGA KC, 2012) and describes the entrepreneurial nature of design and designers as producers and instigators.

We have seen a growth in prominence in the last few years of these terms and of the valuing of design and designers in society. Design and its role in society and therefore the role of the designer in society is a contentious issue to some. The impact socially and economically of good or bad design is what drives these concerns. Michael Beirut discusses this idea in an interview with AIGA Philadelphia (2009), suggesting that good design will help a good product succeed faster and bad design will help a bad product fail faster. There are numerous examples that can be used to illustrate the economic advantage of good design. Companies such as Dyson with their bag-less vacuum cleaners revolutionised their industry and are now a 500 million dollar a year business (The Great Idea Finder, 2005) (Figure 1). Products such as 'The Hippo Roller' designed by Project H Design (2Modern Design Talk,

2009) take on social and economic concerns by improving the living conditions of those in third world conditions (Figure 2).

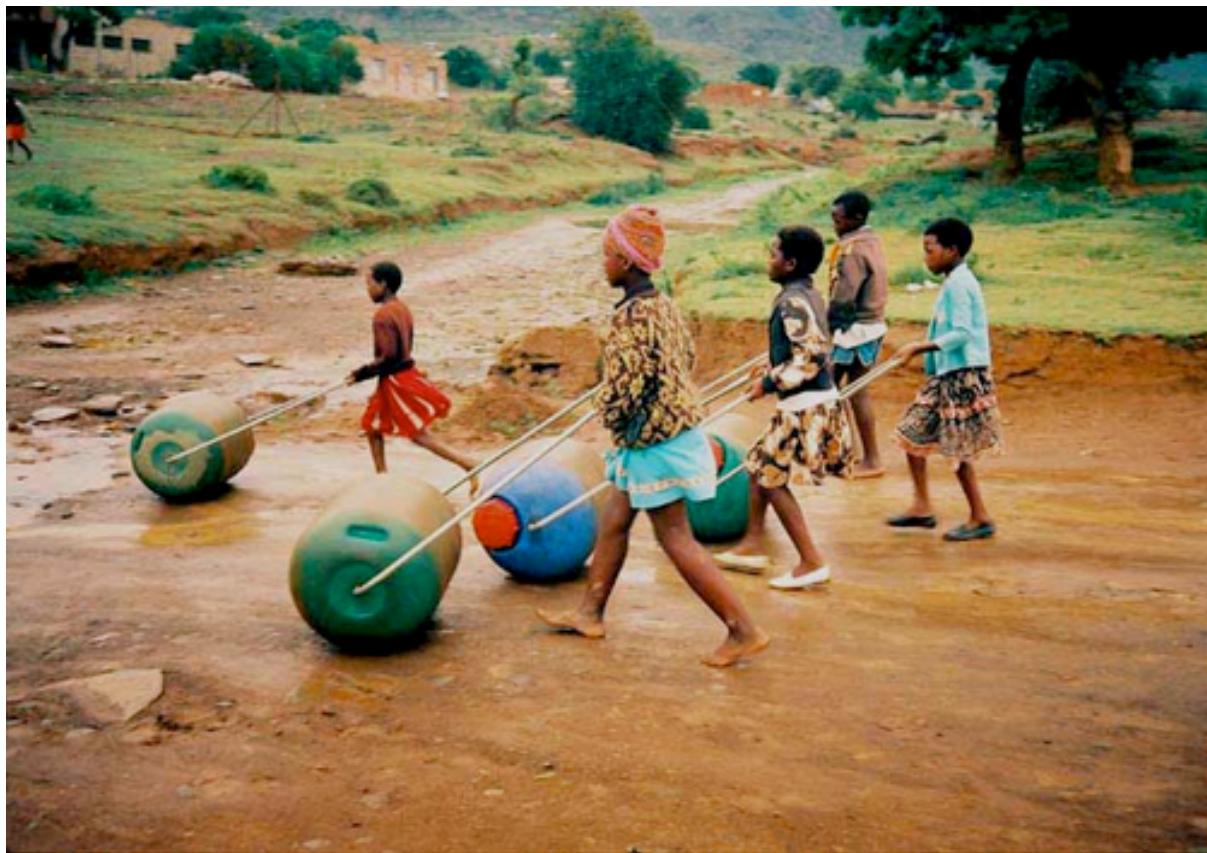Figure 1: *Dyson Vacuum Cleaner*, (Dyson Vacuum Cleaner, n.d.)

Figure 2: *The Hippo Roller* designed by Project H Design (2Modern Design Talk, 2009)

The power and decision making roles lie with different parties in each alternative model of the design process. Students, Designers and Design Educators may have an idea of where and how they interact in the process of designing something, however it can often be a surprise to them to come across large tracts of society that work to different models that prioritise design and designers differently. An example of this is Masters student Oyn's City Branding project (Wahyurini, 2012) where she has one model that involves the designer throughout the branding process and another where the designer is relegated to a discrete part of the branding process. Her discussion of both approaches to a branding project in the textbook she is developing led to the developer of one of the models taking umbrage with her discussion of the relative merits of the models and her preference for the model that prioritised the role of the designer. All of the models are legitimate and work, however modern design mantras dictate the designers and their ideas are involved throughout the design process (Howard & Melles, 2011) whereas some of the alternative models may see design as a discrete component in the process. As with all models the reality is more often a mix of many varied models and as such educators like Oyn endeavour to expose their students to a variety of thoughts, methods and approaches. One interesting thing is that the

differing models mirror the traditional distinction between the 'suits and the creatives' in the creative industries (Hughes, 2006).

The position an educator or institution takes in prioritising particular technical or theoretical approaches has a massive impact on what students take away from their education and how they approach employment. Design viewed as a form of 'decoration' or 'self-expression' or 'artistic expression' fulfils a cultural role in society (Kawamura, 2004). An example of design having a high art cultural context and an everyday social communication function is that of fashion (Davis, 1992). Designers determine largely what is available to consumers and therefore influence the purchase decisions and choices people have when it comes to buying products that are utilised to construct one's identity. There is a need to encourage design students to look at their projects and to contextualise them in regards to their place in time or society as well as to recognise the needs and desires of society. To look outwards and see how others have dealt with and faced designing and then take this on board within their own practice. Design as a form of persuasion or a tool that can improve situations or circumstances is the positioning of the graphic design and creative advertising major at Curtin University (Curtin University, 2012). Sunley *et al.* (2008, p.677) talk about Lash and Urry's description of the increased aestheticisation of products and consumption and the impact this has had on the rise of the importance placed on design economically and socially. This has had the effect of increasing enrolments in communication design courses (Australia Education, n.d.), leading to the need for more qualified educators.

In a University environment there is a variety of core skill sets that need to be addressed. These are things such as academic skills, industry skills and interpersonal skills. Academic skills are those particular to a University environment, however they can be transferrable to the professional setting if contextualised correctly by the educator. An example of that would be referencing of research and its correlation with intellectual property laws (Curtin, 2012; Wrays, n.d.).

Design is a broad and varied discipline housing many sub-disciplines within it. When you look at the variety of design courses offered across the higher education sector you find course descriptors such as '3D Design, Creative Advertising and Graphic Design,

Communication Design, Design, Fashion and Photography' (Curtin & RMIT, 2012). These courses do not necessarily align skill wise exactly with professions, although they are attempting to do so in order to mirror particular skill sets specific to particular industries. The shared basis of these professions is the theory that sits behind them; visualisation skills; interpersonal skills; and basic technological skills that help practitioners to express their ideas. Industry skills, computer programs, technological skill sets and an understanding of technology in their industry, as de Raadt, Watson and Toleman (2003, p.5) state can be easily judged and compared by both potential employers and students. Students should have access to staff with these skill sets. However as in industry not everyone involved in a design job will have exactly the same skill sets. It is through an understanding, as Ambrose and Harris (2009) put forward, that designers can play a multitude of roles in a variety of 'environments and company structures' that students can comprehend how fully realised designs are achieved through team work. It is important to realise however that although the mastery and understanding of technological skills is invaluable (McCade, n.d.), these will date and the ability to be a lifelong learner is, in this regard, more important.

The fact that most students of design courses are transitioning from high school into the workforce means that they are at a time in their life where they are still developing their interpersonal skills (The Good Universities Guide, 2012). Andrew Norton (2012) suggests that Australian employers value interpersonal and communication skills and this is closely aligned with what is desirable in a design graduate. Ellen Lupton (2010) talks about the importance of interpersonal skills and of strong communication skills particularly with regard to reading and writing and verbal communication, as well as general self-confidence, in order to be an effective and successful designer.

Study units, even entire courses, have been designed to address the historical, cultural and social issues surrounding the design profession in order to ensure that particular skill sets, knowledge bases or opportunities are imparted to students. Units such as Design in Context 192 (Curtin, 2010) in the pre c.2010 curriculum at Curtin encompassed social and environmental issues surrounding design, addressing it in a written form. There are other units such as Image Design Culture (Curtin, 2012) that explore identity and subcultural issues, contextualising them in the students' practice through visual research and image

production. Some units allow for more technical interactions with the profession, for example, Image Design 272 (Curtin, 2012a) allows for an interaction with the print Industry.

Joseph McCade (n.d.) discusses design education and the fact that the gap between aesthetic production of a design and the translation of this into real world production is a production gap that requires knowledge beyond the classroom or academia. It requires staff that not only have industry experience but also the ability to communicate that the real world production aspect of design requires proactive problem solving as the technology and the methods of design production are constantly changing and updating. This means they have to proactively engage industry and students in order to enrich their experiences in this aspect of their education. Programs such as Work Integrated Learning (WIL) (QUT, 2008) have been instigated, researched and explored in order to cater to this need.

Embedding theory and practice into units and curriculum goes some way to improving the teaching mix, however it isn't the only piece of the puzzle. Having a teaching staff that is made up of people with a mixture of both academic and professional skills is another crucial piece of the puzzle (Manchester, n.d.). With either academic or industry experience, or ideally both, all you need to add into the mix is an education skill set. Design tutors and staff are often Honours or Postgraduate students, often lacking professional experience or teaching qualifications and therefore possess no experience beyond their own educational experiences. Educators such as these have a responsibility, as do those who employ them, to ensure that they 'skill-up' in the areas where they are lacking. The opportunity for educators to undertake meaningful professional development needs to be embraced by all stakeholders and is widely supported in literature across education systems (Association for Middle Level Education, 2004). Taking on board feedback from peers, educators and experts is essential in maintaining quality delivery of information to students and the competency of tutors to manage a class and help students to learn effectively.

Proactively utilising student projects as they bring them in to class for feedback allows both the educator and the student to explore economic, production, social, historical, environmental and a raft of other issues. Utilising 'practical work' as a teaching methodology in the classroom is an invaluable skill to develop. Practical work is defined by Millar (2004)

as 'any teaching and learning activity which involves at some point the students in observing or manipulating real objects and materials'. The educator needs to have some skill or mastery of 'active learning' (Meyers & Jones, 1993) classroom techniques. This will help ensure the students have an interactive, student-centred environment rather than a teacher-centred one. Techniques that engender student participation, such as questioning of students in the feedback session, and an ability to draw knowledge from the group are things that need to be learnt and practised in order to deliver the best possible experience for students. An educator needs to have a multitude of skills and a repertoire of teaching techniques. For example, if an educator needs to deal with overly dominant students, they may utilise methods such as the paper clip technique where every class member gets 5-6 paperclips, or other tokens that represent units of participation, indicating both the maximum and minimum levels of contribution required of them. (USciences, 2011).

The competing demands of the different schools of thought on the role of the designer and the impact this has on the education of designers and the design educators themselves will continue. Those with an interest in being engaged in design and design education need to actively engage and drive how they would like to see the design education landscape evolve. The need for design educators to actively demonstrate all the elements discussed in this paper is a challenge, however it is achievable with appropriate support from the institutions that rely on the reputation of the quality of their courses.

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