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# *Service Design 101: The joy and challenge of introducing service design into an undergraduate design curriculum*

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## Abstract

This paper describes the introduction of service design into a university design course that previously promoted itself as industry-based and practice-driven—but which had not necessarily kept pace with the contemporary meanings of these terms. The followings discuss the need to teach service design in Western Australia. These are being highlighted through the latest development in business community, government and NGOs that seek innovation and sustainability. Edith Cowan University Design Department therefore is committed to teach socially-focused projects (such as wayfinding; civic identity; designing out crime) connect students with the public and real clients through collaborative practice and social design workshops. These changes are showing positive feedbacks from students and the community. Expected outcomes in the next 6 to 12 months are to establish clear point of difference to other design education providers in the state, and to see more design students working in and with other areas of the university.

**KEYWORDS:** service design, design education

## Introduction

This paper describes the introduction of service design into Edith Cowan University's (ECU) Design course that previously promoted itself as industry-based and practice-driven—but which had not necessarily kept pace with the contemporary meanings of these terms. The current shift is focusing on applying design methods as the means to innovate organisations and to enhance people's experiences. While this focus is already a norm in many countries, the current design direction in Western Australia is still very much focusing on aesthetic, retail and object outcomes. While service design is slowly taking shape and getting recognition in Western Australia, it is important to educate design students so that they will be able to practice and research in this field. To practice in the service design field, designers are required to consistently apply user-centred design methods, able to work trans-disciplinarily, and be literate in fields apart from just aesthetic design. Seeing the need of expanding design education that aligns with the changes in global design profession, ECU Design is committed to provide study content that will generate graduates who can adapt to the new challenges. ECU Design therefore aims to expand in directions that are sustainable for the long-term good of both Western Australian design education and the design profession.

## Challenges and Opportunities

The design industry in Western Australia currently focuses on producing retail and aesthetic artifacts that generate profit for their clients. This limited focus is causing two main challenges:

- This industry is over-saturated due mainly to the high supply of design graduates, and self-taught 'designers'. This situation is misrepresenting the true value of design, and at the same time keeping designers from exploring the tacit practices that are valuable to social growth;
- The nature of this industry is fast paced and relies heavily on quantity of productions. Designers are left with little room to explore, reflect and innovate on their practices to provide broader services and create new values. This has therefore kept the role of design stagnant.

While the retail product economy is still crucial to the growth of a society, and this paper is not suggesting designers stop developing this industry, the roles of design are definitely in need of expansion and broader recognition.

With the growing demand of innovative services, Western Australia is providing new opportunities for the design profession to change. The shift of economic focus is altering the landscape of funding. Social

Innovation is an emerging sector that gains rapid momentum. It aims at developing new ideas and sustainable services that contribute benefits to social needs. The Western Australian Government is offering \$4 million a year, from 2012 onwards, as grants to assist the development of social enterprises (Government of Western Australia 2012). There are therefore growing numbers of social businesses that require innovative approaches. Design, as a thinking tool, has been identified as a driving force in this development. For example, Social Innovation In Western Australia (SiWA) is focusing on Design Thinking as the means to innovation. This commitment is evidenced in their sub-project, SpaceCubed, a co-working space that nurtures innovative start-ups, where a design lab is being set up to provide Service Design consultancies. Corporations are also starting to care for society with many projects being initiated to engage with and benefit communities. For example, the National Australia Bank (NAB) Schools First project links education with local businesses and therefore creates closer-knit communities. This new and vibrant direction requires designers to focus on innovating social services and human experiences.

With new challenges in the economies and the way the society functions, there are imminent changes taking place in the Western Australian design profession:

- The field is expanding from aesthetic, branding and communication design to innovating organisational change. The focus is therefore shifting from a retail product economy to a service economy;
- Designers' roles are changing from 'production' to planning, facilitating and strategising innovation;
- Designers do not have to work only within (traditional) design realms. This means designers will be contributing creative solutions in social innovation, business consultancies, and government sectors.

Strategising and designing effective services are therefore ways forward to expand the Western Australian design profession. Service design as a research field is also gaining attention. Seeing the transformation of the global design profession while contrasting with the lack of expansion of design in Western Australia, ECU Design is taking the step in broadening design education through venturing into the service economy.

## Service Design: Definition and application

Service Design has recently gained attention through helping organisations to innovate new experiences for their customers. According to Moritz (2005, p.7), service design is 'a new holistic, multi-disciplinary,

integrative field. It helps to either innovate or improve services to make them more useful, usable, desirable for clients, as well as more efficient and effective for organisations'. This definition shows the wide application of Service Design, and its value in meeting the complex demands of various demographics today.

Throughout the world, Service Design covers projects as diverse as improving patients' experiences in emergency rooms, to the enhancement of family experiences in airports. For example, Engine Service Design has developed user-centred service strategies for the Portuguese Airport Group. The project involves co-creation processes to gain insight into passengers' experiences in the airport. The Service Design guidelines developed from this project covered the overall passenger experiences and the creation of new experiences (see Nisbett 2011, pp. 28-29). This project demonstrates that design approaches of focusing on users can gain valuable insights to innovating new customer experiences.

Service Design also contributes to addressing social challenges. The Service Design firm, Snook, questioned the gap between British Police and the community. The firm initiated the MyPolice project, as an online platform to change the relationships between the Police and the community. The process involved simple user research methods to identify how the people want the Police to behave and to serve the community, so that they can inform the force of their concerns. The outcome has since changed the connections between the two parties. This has further helped the Police to target and help prevent crime more easily (see Currie and Drummond 2011, pp.44-47).

These examples show that Service Design is valuable in contemporary society. Design education needs to therefore deliver content that allows students to develop skills and knowledge in this direction. The design profession also needs to expand its horizon from retail objects to include the service economy.

## Design Thinking as the fundamental framework to Service Design

ECU Design is adapting Design Thinking as a thinking framework and approach to teach Service Design. Design Thinking refers to the methods that designers use to identify and approach complex situations with the aim to create radical innovations (Lande 2011, p.211). The contribution of Design Thinking in economical and social growth has been proven to be valuable. According to Nussbaum (2011):

... the contributions of Design Thinking to the field of design and to society at large are immense. By formalizing the tacit values and behaviors of design, Design Thinking was able to move designers and the power of design from a focus on artifact and aesthetics within a narrow consumerist marketplace to the much wider social space of systems and society. We face huge forces of disruption, the rise and fall of generations, the spread of social media technologies, the urbanization of the planet, the rise and fall of nations, global warming, and overpopulation. Together these forces are eroding our economic, social, and political systems in a once-in-a-century kind of way. Design Thinking made design system-conscious at a key moment in time.

From this point of view, Design Thinking expands the designers' role from being specialists in aesthetics and marketing of retail products to contributing radical yet powerful innovations to the growing and changing society. Its user-centred and bottom-up approaches contribute to sustainable development in all areas.

While Design Thinking is slowly taking shape and getting recognition in Western Australia, it is important to educate design students so that they will be able to practice and research in this field. To practice Design Thinking, designers are required to consistently apply user-centred design methods, able to work trans-disciplinarily, and be literate in fields beyond aesthetic design. ECU Design has identified a need to expand design education to align with changes in global design professions, and is committed to provide study content that will generate graduates who can adapt to the new challenges.

The first step is to embed Design Thinking content in all undergraduate units across 2D and 3D Design. The aim is to generate thinking designers who can merge practice and research. The characteristics of Design Thinking that underpin design education content at ECU are:

- **User-centred approach:** Designers need to consider a product and/or service from a bottom-up point-of-view, which focuses heavily on end users' experiences. This focus produces design outcomes that circulate around empowering end users and the organisations involved;
- **Co-design and co-creation:** Design is shifting from 'design for people' to 'design with people'. This approach allows services and systems to be developed together with users and stakeholders. The outcome of this method is effective systems and services that will contribute a vast return on social investments. ECU Design students are gradually being introduced to ethnographical and co-creation methods;
- **Visualisation techniques:** Designers are trained as visual thinkers – they sketch ideas and develop opportunities in visual forms. The impact of this method can be huge if applied to other disciplines. For examples, the visualisation of an organisation's structure in a glance, or to map users' experiences in a cohesive manner that will help service providers in understanding their

services holistically. At ECU Design, students are encouraged to utilise visuals not just as presentation tools, but also as thinking tools;

- **Deconstructing situations:** One of the strongest skills a good designer has is the ability to approach a given problem from multiple directions. This includes asking the right, and sometimes silly but necessary, questions. This attribute is commonly seen in deconstructing an existing issue into segments and re-designing new experiences to provide more effective and innovative solutions;
- **Trans-disciplinary:** Design Thinking embraces diversity of knowledge and skill. This approach emphasises design methods as catalysts to react with various stakeholders involved in social sectors. At ECU, two levels of trans-disciplinarity are pursued: content between the 2D and 3D Design streams are now drawn closer, and students are encouraged to explore design opportunities outside of common design disciplines; and students are expected to be involved in social innovation, sustainability, and service delivery.

These attributes are being introduced and emphasised in undergraduate content. Students have shown progress in developing methods and thinking in their design works.

## Our initiatives

Service design at ECU Design takes shape through the social and functional design projects. Socially focused projects, such as wayfinding and civic identity, connect students with the public and real clients through collaborative practice and social design workshops. For example, Collaborative Design is a unit that sets out to teach students some skills for working with others. The syllabus includes: asking effective questions; negotiation; group process skills, including card sorts; running meetings; group dynamics and other basics of working with others. The focus of the unit is working with others. Students learn by using techniques, methods and processes that help facilitate teamwork and working with client groups.

Learning in the unit is both by research into the topics and by applying processes to tasks. There are two assignments: the first is to run a focus group on a piece of design work. The design could be a poster, a piece of furniture, a space, or any designed artefact. The second assignment asks students to take on a broad unframed challenge, a 'wicked problem' (Buchanan 1992). The topic for this assignment was 'The First Year Experience'. For most universities the first year experience dictates a range of things such as retention, and pass-fail rates, and is an important area for monitoring and improving. To carry out the first assignment, students will need to be able to manage groups, ask effective questions and be able to be objective in assessing a design's effectiveness. This assignment helps develop their organisational and team working skills. It teaches them to ask questions using basic questioning frameworks such as SWOT (Strengths, Weaknesses, Opportunities and Threats) and ORID (Objective, Reflective, Interpretive and Decisional) (Hogan 1999). In the second assignment Students are introduced to the school's first year

coordinator and also the dean of teaching and learning. They are asked to consider these as part of their information gathering. By this time we've covered some basics of questioning, and students use questions to gain information on the dimensions of the problem. This forms part of the first stage of the Value Management design process. This step is also important in any co-design process. Identification of stakeholders and their inclusion into the design process is important to most Design Thinking approaches.

Another example is the Identity unit, where the introduction of service design provides students with new insights into design processes. Previously, the unit focused on designing brand identity for businesses through artifacts such as logos, stationary, and a style guide. While this unit content was adequate to assist students in developing skills designing and producing branding artifacts, it was difficult to direct students to investigate more about user experience of a corporate identity. Figure 1 shows an example of branding stationaries that was previously the focus of Identity Unit. In year 2012, the unit took on the idea of innovating experiences in the City of Perth. Students were given the opportunity to observe and analyse improvement opportunities in Perth City. They then had the semester to develop user-centred solutions that contribute to solving social, economic and environmental issues. This project allowed students to develop questioning minds and to explore empathic design methods. For example, a student, Kellie Parsons, observed that Perth's commercial and business districts are too corporate and lack liveliness. She also identified that bus stops in these districts are under-utilised. She proposed to activate these bus stops into games as the means to bring life and fun into the city (see Figure 2). Another student, Stephen Ward, explored ways to overcome traffic congestion in Perth. Through conversations with users and user-design processes, he proposed to activate the river system as a public transport channel (see Figure 3). The City of Perth projects saw students exploring ethnographic methods and user-centred design processes. The works were exhibited at the City Town Hall, and have received good public feedback regarding designers reaching out to their communities. These efforts are already showing positive results when students begin to think and talk about design outcomes as services and experiences. Students' feedbacks from online evaluations are positive. Comments included:

- The approach and freedom within the unit allowed students to develop individual ideas. The collaboration during class time that allowed us to talk to each other and reflect on each others ideas/work was very constructive;
- Challenging, creative, out of the box thinking;
- Learning about different design aspect that I was unfamiliar with;
- Engaged in real life n think [creatively];
- Challenging, made you think outside the square;
- We got to be a part of something real with the Perth community, apply it to our local area.





Figure 1 The assignment for Identity Unit that was previously focusing on branding artifacts such as stationaries (work by Helen Croker).

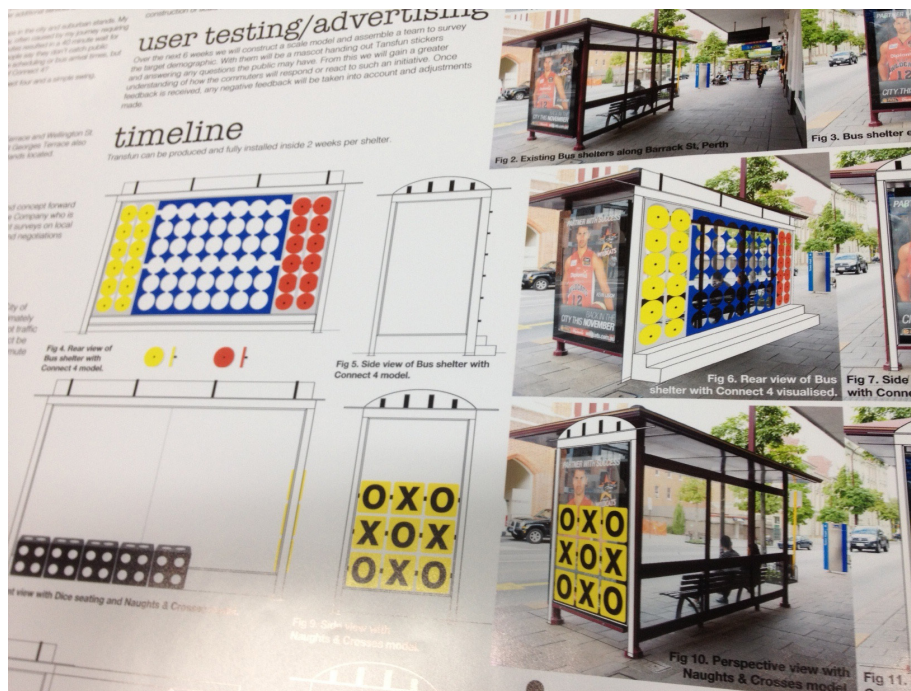


Figure 2 Student, Kellie Parsons, proposed to turn bus stops in Perth City to games, with the aim of injecting fun into the environment.



Figure 3 Student, Stephen Ward, proposed a system to activate Perth's river into public transport platforms.

In another project students were given a context and site - Joondalup shopping centre. This context was framed for the students as a 'wicked problem' where sub-problems needed to be addressed. Students then needed to identify manageable problems (eg: wayfinding, theft, accessibility, brand identity, etc) that contribute to the overall issues in the shopping centre. Methods used included

- Field trips;
- observations;
- ethnographical research (students reflecting on their own role as users);
- precedent studies

The outcome included design interventions such as small parks to change the sense of place of negative areas (loitering of youths, etc), wayfinding systems, crime prevention solutions for specific shops. An example of a service-based outcome came from a Norwegian student who discussed her reaction on coming to Western Australia and seeing the constant sales signs at shopping centres. After living here for a while she realised that the reasons for the sales were largely invented, for example 'closing down sales', 'excess stock', and 'renovation sales'. For her project to apply design as an intervention to innovate

shopping experiences, she devised a set of seasonal events that could be used by all the shopkeepers at the centre. The concept was to make the sales a whole of centre event each being regular annual events. The intention was to dramatically raise the profile of each of the sales seasons. This is a good example of a student project that focuses on system and service redesign to enhance users' experiences.

## Expected outcomes in timeline (6 months - 24 months)

Students' attitude to design has shifted in the short period of time that this approach has been in place. They are now seeing design as a broader field than simply the application of the elements and principles of design. For the past four years Western Australia has adopted a new design curriculum for year 11 and 12 school students. Within the curriculum, students' are now required to consider environmental and political dimensions of design as well as economic and cultural. This means that many students are already thinking of design as a social agent when they arrive at university. Our new approach enables us to build on these foundations and to provide challenges beyond the superficial aspects of design. Evidence of these developments is observed:

- Students have begun to ask questions about stakeholders' interaction and thinking, as well as concerns about production;
- Students' design outcomes now include using visualisation to display complex situations and invisible relationships to focusing creativity more on generating new experiences rather than new objects;
- Students' design processes now show greater empathy with stakeholders' emotions.

These observations show that ECU Design students are starting to understand and adapt to the fundamentals of service design.

## Recommendations and Feedback

Less than 12 months into the new course, student project outcomes are radically different from those of previous assignments. Unframed problems and interdisciplinary approaches within the context of student-driven education are producing resonant artifacts and systems. Meanwhile, student evaluations of content and teaching are showing increased satisfaction.

For this new direction to be universally accepted by students it is important to manage students' expectations of the design courses that we offer. Some of the units we offer are more technical and

instrumental in nature, and it is important to balance the content-rich parts of the course with the process-rich components. One example of a content heavy unit is Glass Design, where students are taught technical aspects of glass production and produce glass objects using a number of techniques. There is also a production unit that focuses on the development of prototypes from an original concept. Students may favour approaches at either end of our delivery spectrum, and we encourage them to find their own preferred modes of working.

The problem for us is to clearly state what it is that the design areas offer and to let students know that they will need to work across these domains to become a well-grounded and well-rounded designer. It will be important in developing our marketing material, student expos and web site to show the spread of approaches while emphasising what we believe to be the way forward and the way that we would like to be perceived by our stakeholders.

## Conclusion

The teaching of service design might not be new to some design institutes and practices, but this is a new opportunity in Western Australia where the majority of the design industry and the broader community are unaware of the service economy. Being the first institution to introduce service design content, ECU is leading Western Australian design education and the design profession into a new era. This shift can be a complex journey, but within 12 short months, there are clear developments in students' thinking and design processes. With the consistent emphases on Design Thinking, creative intelligence, research culture, and the expansion of design boundaries, there is no doubt ECU Design will help initiate a new and more sustainable design future in Western Australia.

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