

# THE LEGACY OF DESIGN: WHAT CONTRIBUTION DOES A DEGREE MAKE TO YOUR FUTURE DESIGN CAREER?

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## ABSTRACT

Much research has been conducted into the content of design curricula yet limited research has been undertaken into how early career design professionals view their undergraduate studies, and in turn if this experience adequately prepares them for entry into the design industry. This paper explores the relationship between product design curricula and the professional practice of design. The authors consult with early career design product design professionals within the UK to understand the perceived link between their undergraduate studies and the everyday practice of the design industry. Specifically, this paper reports upon the realities of working in the design industry and explores the extent to which their undergraduate training supported the transition from designer-in-training to design professional. Data was gathered via semi structured interviews with early career design product design professionals. The findings of the research indicate that although there is a gap between undergraduate studies and the design industry, and graduates do find the transition into their professional career challenging, on balance graduates feel that a university design education prepares them reasonably well to begin their career as a design professional. The research indicates that an undergraduate design education is perceived as the start of a journey in a professional design career.

*Keywords: design industry, design skills, design curricula, early career design professionals, professional practice*

## 1 INTRODUCTION

This paper explores the relationship between undergraduate product design curricula and the professional practice of design. The authors consult with early career product design professionals to understand the perceived link between their undergraduate studies and their everyday practice. Specifically, this paper reports upon the realities of working in the design industry and explores the extent to which their formal training supported the transition from designer-in-training to design professional. A series of semi-structured interviews with early career design product design professionals were conducted. Respondents' views upon their product design education and professional practice are detailed. The paper concludes with an overview of key relational factors that support the transition of design graduates to design practitioners.

Much research has been conducted into the content of design curricula [1,2]. In recent years, design graduates are increasingly being called upon to not only possess high level design skills, but have a comprehensive understanding of the relationship between design and the business context in which it operates. The educational implications of a changing design industry have, to a great extent, focused upon the need for design graduates to be business savvy while operating in multi-disciplinary contexts. This discourse is characterized by issues of increasing emphasis of design within commerce; multi-disciplinary design engagement; broadening the understanding and skills of tomorrow's design entrepreneurs; blurred career paths for design graduates; and the increasing demand for designers to possess complementary skills that can be applied beyond traditional design boundaries [1,2,3,4].

In product design education, training at undergraduate level largely focuses upon the development of vocational skills that are required to undertake a role of a design practitioner [5]. This approach is embedded in the craft traditions of art and design [6] and links with notions of the artisan designer. The vocational approach employed in undergraduate design education has received much attention

[7,8,9], and continues to be the *modus operandi* in design contexts. Despite new challenges being placed upon design education, Dorst [10] claims that ‘design schools still base their curriculum upon the idea that design is something that that must be learned, not taught’. This raises a key question – How can design students learn the skills they will encounter in practice? McCullagh [11] adds that ‘the studio tradition of *sitting with Nellie* has many strengths’ but he recognizes that the transferal of tacit knowledge by example is not appropriate for all aspects of design education. The ability (or not) of design educators to prepare graduates for the world of work underpins the research contained within this paper.

The design industry is also changing. In a context of increasingly fluid contemporary design practices, traditional roles for design are being challenged [12]. For example, for many years designers have been taught to create artefacts; be it graphic designers creating printed posters, brand elements, pamphlets, postcards, and signage; or product designers creating packaging, white goods, furniture, and electronic goods. Design is now moving beyond the artefact into the realm of product-service-systems where tangible touchpoints form only a part of the practical engagement designers are required to consider [13]. In many ways educators are not moving with the times and changing their curricula quickly enough to be ahead of this change curve. As Sudick [14] affirms, ‘Design was about creating artifacts and we’ve moved past that to now creating contexts in which activities happen, in which people participate collectively’.

In spite of the changing demands being placed upon design education, combined with the shifting ground beneath designers’ feet, UK design education is largely proud of its teaching traditions. Design educators play a key role in the development of the knowledge, skills and understanding of designers-in-training in preparation for the world of work. As a recent policy report notes ‘Creative talent doesn’t appear fully-fledged and successful, but has to be nurtured, developed and stimulated. ... This is where UK universities play a critical role – developing and fostering creative talent and providing an environment where creativity can flourish, producing new ideas and providing cutting-edge research’ [15].

## **2 RESEARCH METHODS AND FINDINGS**

Limited research has been undertaken into how early career design professionals view their undergraduate studies, and how in turn this experience prepares them for design practice. In light of the above issues, this paper explores the following questions:

1. How does a university experience prepare graduates for entry into the design industry?
2. What aspects of working in the design industry were unexpected?
3. What would you have liked to know before leaving university to help with the transition into professional designer?
4. What can you only really learn on the job?

The authors conducted a series of semi structured interviews with design professionals working in the UK, which provided a broad spectrum of responses. Those questioned were all previous graduates of the Product Design course at the University of Salford (UK) and ranged in their years of experience since graduating from two to five years. The interviews were conducted face-to-face away from their work place. The questions were circulated to the respondents’ prior to the interview itself enabling a relaxed free flowing conversation to be had. The interviews were audio recorded to ensure all responses were accurately captured and analysed using thematic analysis.

Those questioned had experience of a variety of roles as product designers including lighting, web, graphics, packaging, and retail design; working as independent designers and/or ‘in-house’ within larger organizations. Although the interviewees had experienced a wide range of roles a number of common themes emerged from the four questions asked. Section 2.1-2.4 details the responses for each question and provides direct evidence from the respondents in respect of their perception and reflections on their undergraduate design education

### **2.1 Preparation for entry into industry**

All interviewees suggested that university provided a ‘foundation level’ of understanding regarding the design process, methods, tools and skills the designer uses. The experience offered a level of confidence in handling design projects, ask one respondent commented: “*My degree course provided me with a structure to the way I design, a process or spine to work with. This gave me a level of confidence in approaching projects.*” It was considered that their courses did this via the breadth and

scope of the projects undertaken, engaging students in the various elements required to function as a practicing designer. Because of the project based nature of the degree courses in design there was a strong emphasis on managing time and working to deadlines, although the interviewees suggested this helped in the preparation for industry it was really no match for the real thing of boss or client imposed deadlines. One respondent describes his university experience as an awakening to this process:

*“I think it [my degree] began to prepare me for working in industry, it began an awakening process but on graduating I was in the sense of understanding design, I was quite naive as a designer. I was really wet behind the ears but my degree began an awakening.”*

Overall the experience of the degree made design feel ‘real’ for all those questioned, in the sense that it really does happen and the design industry is real and the processes and skills you learn can be applied. Anecdotal staff stories of their own experiences also help build a sense of reality, as this comment suggests: *“Staff communicating their experience of being a designer helped to frame understanding of the design industry, making the design industry real.”*

## **2.2 Unexpected aspects of working in industry**

There were a number of unexpected realities met by all our interviewees upon their entry into professional design practice. In particular the pace of work that is expected was the most significant realization for all those questioned. The volume of work required to be done, often in very short time scales came as a big shock as the following respondent affirms:

*“I wasn’t ready for the speed of work required, the expectations and level of responsibility placed upon designers. I also wasn’t prepared for was the understanding that industry knows nothing about design. This was something that I needed to go through tacitly.”*

Interfacing with clients and the importance of interpersonal skills is also seen as a highly important part of the designers daily working activities, being able to listen, understand and interpret clients needs (or demands) is crucial in building good working relationships, even within your own organization getting things done requires the right approach. Understanding a client’s language and aligning your terminology is highly important to success, as the following comment highlights: *“The direct nature of interfacing with clients and needing to know your clients ‘language’ in order to get your pint across to specific people. I have found that using the right terminology is key to success.”* In addition to the commercial realities of shifting deadlines and client satisfaction, the level of responsibility that accompanies making design decisions also hit graduates as a hard reality. *“The level and amount of responsibility was bigger than I expected. As a designer you live and die by what you deliver as the final outcome. I wasn’t really ready for that.”*

## **2.3 Gaps in knowledge**

Reflecting on the comments given to the previous questions, the responses here were largely focused around how design courses could try and build more understanding of the realities involved in working within the industry and the commercial context in which design exists. All the interviewees highlighted the relationship between business and design as being highly significant and an important fact that graduates need to get their head around fast. As the following respondent details, the importance of commercial awareness is still essential:

*“Businesses relationship to design is really crucial to understand and also the ‘spectrum’ of different inputs required in reality to get a new design off the ground. It’s a fact that design is a largely commercial venture and designers are employed to make companies money.”*

All those questioned suggested a greater level of industry input or opportunities to work with industry as part of their degree course would have proven beneficial. Providing insights to the commercial realities of design, for example the balance of creativity against commercial constraints and the spectrum of work that design graduates may actually get involved in. *“More input from industry experts could have helped me to understand what options were out there. That is something that would have helped me to make a better informed decision about my career.”* This comment was further reinforced by another respondent highlighting the value of work placement experience. *“Learning more about how to get work place experience as in reality most companies want to see this.”* One interviewee suggested that having a greater awareness of your own strengths and weaknesses and

being open to discussion of this more as part of the learning experience may have provided a better understanding of the scope and nature of work that was appropriate or achievable for graduates to aspire to. *“Being aware of yourself and your skills more, understanding what you are good at, or what suits you best so you can then promote yourself and move in a more direct career direction.”*

## 2.4 On the job learning

There are many realities to working within an industry that were considered things you can only really learn on the job. Although it was recognized that tutors may try to simulate commercial situations or scenarios to help build real world awareness. The realization that projects are bigger than the designer is significant. While at university each project is essentially your own, but projects in reality are complex and often involving a mixture of stakeholders, requiring a strong team ethic to achieve results within deadlines and commercial constraints. How to act and how you fit into an organization is knowledge that can only be developed and tested truly in the work place, as the following highlights:

*“Perhaps how you as a designer actually fit into a commercial organization or team of people, and the extent of ‘specific’ knowledge required to get a job done. Working collectively as the team, where your job starts and someone else’s stops is very blurred. You build an understanding and knowledge of other peoples work that you need to be aware of.”*

Highlighted by all those interviewed was the importance of being able to build relationships and ‘get on with people’ as a crucial part of working life. A designer’s ego needs to be tempered quickly if you want clients to come back, as this respondent reflects on: *“As a graduate you have a huge ego which needs to be popped ASAP otherwise it’s like pushing water up a hill! You have to listen to what the client is saying not just tell them what you want to do or how great you think your idea is.”* The perception of design and the designer’s role continues to be mixed amongst the broad audience of potential design users. It appears that a designer’s first job in many cases is still to communicate the value of design, as this respondent demonstrates: *“You learn that the market doesn’t understand product design and you need to be there to understand that. Industry thinks that you’re some kind of magician and you can fix everything by waving your magic wand.”*

## 2.5 Summary of findings

This research has identified the need to prepare graduates more effectively for entry into industry. For example, respondents strongly stated shock at the level of responsibility placed upon them early in their professional design career. Additionally, the speed that designers needed to operate at was something that respondents were not prepared for. Although respondents identified a number of issues that they didn’t feel prepared for, or even capable of undertaking upon their entry into industry, they also highlighted a number of areas where university had provided them with key experiences in preparation and support for the transition between university and the real world. Examples included problem solving skills, communication and presentation competencies, and technical awareness such as 3D CAD and digital visualization. The table below summarizes key findings from the research in terms of the transition of design graduates into design professionals. The table is categorized in terms of design and business based issues.

Table 1. Transition of design graduates into design professionals

	<b>Design know-how</b>	<b>Business know-how</b>
<b>1. Level of preparedness</b>	<ul style="list-style-type: none"> <li>- Confidence that I could become a designer - uni started a journey that has continued into industry</li> <li>- Problem solving and creative skills – drawing, model making, presentation</li> <li>- Presentation and communication – both traditional and 3D CAD and digital visualization skills</li> <li>- Awareness of the design process – a structure to the process of designing</li> <li>- Appreciation of tutors as designers – helped to make design ‘real’</li> </ul>	<ul style="list-style-type: none"> <li>- Project management and time planning – emulation of compressed timescales during projects</li> <li>- Awareness of business issues related to design – New Product Development as a process</li> <li>- The breadth of design as an industry – the wide spectrum of design</li> </ul>

<b>2. Unexpected aspects</b>	<ul style="list-style-type: none"> <li>- Level of competency required in design for manufacture – constraints and limitations are real</li> <li>- The pace and speed of work required</li> <li>- Level of responsibility much higher than expected</li> </ul>	<ul style="list-style-type: none"> <li>- Terminology - the need to use and understand and use business language to gain credibility</li> <li>- Industry knows little about design and what designers can (and can't) do, i.e. designers are not magicians</li> <li>- Interpersonal skill and the need to 'get on with colleagues and clients'</li> <li>- The need to build your own 'brand' as a designer – earns credibility</li> </ul>
<b>3. Gaps in knowledge</b>	<ul style="list-style-type: none"> <li>- Team working is essential to being a successful designers in industry</li> <li>- More awareness of design as a process rather than hoping that the creative lightning will strike</li> <li>- Internships and even more links with the design industry to bridge the gap between university and the real world</li> <li>- Talking to people about design work openly helps to develop better ideas</li> </ul>	<ul style="list-style-type: none"> <li>- The need for a thick skin and the ability to take criticism openly</li> <li>- The economics of design – how to calculate daily rate, charge clients, etc</li> <li>- Awareness of personal strengths and weaknesses both in design and more broadly in business</li> <li>- Lack of actual control over what 'design' can influence in business</li> </ul>
<b>4. On the job learning</b>	<ul style="list-style-type: none"> <li>- Design isn't a 9-5 job – the job must get done whatever it takes</li> <li>- Design is a cog in a complex commercial machine</li> </ul>	<ul style="list-style-type: none"> <li>- Truly being able to multitask</li> <li>- Deadlines are deadlines – they never move back, only forward</li> <li>- Your boss and clients are direct – tutors aren't always tough enough</li> <li>- Your graduate ego will, and should, be popped – listen to clients and don't go off on a personal tangent just because you think it's good!</li> </ul>

### 3 CONCLUSIONS

It is clear that there is a gap between the experience of design students and some of the working practices of design professionals. This is to be expected and is something that the authors feel should be respected. Within an educational context risk taking and experimentation should be encouraged. University is where designers begin the development of their professional skills, intuition and instinct, yet this is only the start of the development of such competencies. As their career builds, designers are able to draw upon more and more project experience and bring this to bear upon each new challenge. There are a number of key findings that this research has identified:

- Design is part of business – it's a commercial activity. There is a need for designers to understand, and be able to engage with business terminology, concepts and approaches. This is essential to developing the credibility of design within organizations.
- Design skills help designers to define and solve problems and ultimately communicate this to clients. Creative problem solving, visualization and communication underpin designers' ability to add value to commercial organizations. Without such fundamental skills, the designers' USP would be diminished.
- There are a range of business based skills that design education is not successfully embedding in the curriculum. These include awareness of client needs versus designer whims, team working and interpersonal skills, deadlines are deadlines, the pace of work required, and the economics of design. All of the above areas are normally included in contemporary product design curricula but there is obviously a gap in the theoretical understanding and real-world application of this knowledge.
- Design education is doing a good job of preparing graduates for entry into industry but becoming a designer is a journey, one that takes longer than a three year degree. A design degree provides graduates with the basics and importantly the ability to go out and continue to learn. The learn-to-learn approach often tacitly embedded within design degrees is an important yet underestimated competency.

- There should be recognition from industry that graduates do not yet possess the full range of abilities of an experienced designer and should be treated as such. Employers have responsibility in both the recruitment and development of graduates as early career professionals. Academics and the design industry should explore a broader range of real-world activities for students to engage in as part of their university training.

As this paper set out to explore the contribution a degree makes to a future career in design, it will conclude with a brief response to this intent. Any degree cannot fully prepare graduates for entry into the plethora of avenues within industry that they may pursue, yet design degrees provide a range of discipline specific and transferable skills, knowledge and understanding. Where perhaps design educators are not being as effective as they need to be is in the identification of such issues. We as educators may need to help graduates more effectively to identify these issues and draw out their commercial contribution and ability to add value to organizations. We also may need to be a little tougher on students to get them ready for the (harsh) realities of the real world!

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