Design Council

CREATIVE
& CULTURAL
SKILLS

Design a new design industry:
Design Skills Consultation

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Contents

1 Executive summary

Background

Upgrading the UK's skills base is a top priority for the government. The design and other creative sectors are currently growing faster than other sectors and are seen as particularly important for national prosperity. This is because, in the emerging global economy, it is accepted that the UK cannot compete on cost and so must seek to compete on added value and creativity.

The context, though, is that competitor nations around the world are investing heavily in design education and developing high-quality design industries that are already competing for UK and international business at considerably lower cost.

The Design Skills Advisory Panel has been brought together through a partnership between the Design Council and Creative & Cultural Skills and includes representatives from across the UK design industry. The Panel aims to make recommendations that will enhance the skills and performance of UK design. And it aims to engage the wider design industry and wider stakeholders in agreeing and taking forward these recommendations.

This Design Skills Consultation document has been developed by the Design Skills Advisory Panel as the first stage in that process. From May to November 2006 the Panel will consult widely on the proposals with designers and other stakeholders throughout the UK. The Panel will then refine the recommendations and publish and take forward a final action plan in partnership with the industry and other stakeholders from early 2007.

Key points

There are exciting opportunities and tremendous challenges ahead for the UK design industry. Design is moving up the agenda, for the government, for businesses and for consumers, but a rapidly evolving business environment means that change must become much more rapid if UK design is to remain world leading in the years ahead.

The UK industry is in healthy shape and has proved agile and adaptive to change in recent years. However, many design firms are fragile and, arguably, lack the basic professional and business skills needed to survive in a globally competitive environment. This will become increasingly apparent in the years to come as UK design faces increased competition from cheaper outsourced alternatives from overseas, and as it is forced to compete in new and emerging markets around the world.

The UK design industry benefits from a well-developed eco-system and a diverse range of design bodies and initiatives aimed at supporting its development. However, none of these bodies has universal support or engagement.

Design education in schools and further and higher education is popular with students and has many strengths. However, it needs to be more closely integrated with practising designers and current design practice so that students develop sufficient understanding of the realities of commercial design practice in addition to applied creative and technical skills. Design employers are poor at providing on-going formal training and professional development for their employees.

The key issue underpinning the Design Skills Consultation is whether the industry has the skills it needs now and for the future. Skills needs and gaps do exist now at every level, particularly in the realm of management and leadership, and they are hampering business performance. But these gaps are relatively modest compared to other sectors. Looking to the future, the impending changes facing the industry suggest the need for a radical reappraisal of how skills are developed at every level in order for UK design to remain competitive.

Summary of proposals

The Design Skills Advisory Panel's consultation proposals are aimed at the long-term development of the UK design industry and its skills base. The key issues the Panel's proposals seek to address are:
– The weak links between design education and current design practice, and the near absence of structured Continuous Professional Development for designers at work
– The cottage industry approach to management and leadership apparent in many businesses
– The lack of a cohesiveness within the industry, which means that clients and the public do not see design as a valuable profession.

The Panel's vision is that:
By 2020 the UK design industry will be viewed as the global epicentre of high-value creative design and innovation.

To achieve this, the Panel believes that the imperative must be to create a more professional and cohesive design industry; one that learns and adapts systematically from and with its clients, other design businesses, other disciplines and design educators. The Panel sees the proposals below as the building blocks for a new system, not the solution to every issue in every area. Therefore, over the course of the consultation the Panel is keen to hear how it can build on these ideas and address unresolved issues.

In summary, the key proposals are to:

Work
– Benchmark and celebrate the creative and professional performance of UK designers and design businesses through an internationally recognised, widely-owned professional accreditation system.

College and University
– Develop enhanced partnerships between design education and industry, linked to professional accreditation for graduates
– Collate and share impartial information on courses and career pathways for prospective students.

School
– Create an up-to-date baseline design curriculum for all
– Increase the involvement of practising designers in schools' design teaching and enhance the professional development of design teachers.

2 Foreword
by the Design Skills Advisory Panel

Over the past year we have met four times as a whole group to develop and agree the proposals that we are consulting on in this document. But the real work took place between those meetings: talking to other designers and experts in the field, such as recruitment consultants, educators and design buyers; visiting schools, colleges and universities to learn about how design education is changing; reviewing newly commissioned research into the current picture of supply and demand in design skills both here and abroad; and, of course, coming together in numerous small group meetings, teleconferences and online discussions to share thinking and develop our proposals.

The context for our proposals on design skills is one of huge opportunities and equally significant threats. Design is well placed to become the engine of a dynamic knowledge-driven economy in the UK. But this outcome is not ours as of right. In his *Review of Creativity in Business* for the Treasury, Sir George Cox described a 'window of opportunity' for the UK to build and capitalise on its creative strengths before the huge strides being made in China, India and the other new economies begin to seriously challenge our creative and value-added sectors in the same way that they have already transformed our manufacturing base and are currently redefining many service sector industries.

It has been encouraging to find in our research that the UK does indeed have a dynamic and diverse design industry fed by an effective and, at times, world class design education system, as the case studies included throughout this Design Skills Consultation indicate. Equally, there are a great many excellent schemes and bodies in place to support and develop design education and the design industry, many of which are summarised in Annex 3. All this is to be celebrated and provides an excellent starting point for our proposals.

That said, skills gaps and issues do exist at every level in the design industry and these are clearly hampering the professionalism and effectiveness of UK design. Some of these issues relate to design education in schools, colleges and universities. But, for us, the more serious issues are:
- The weak links between design education and current design practice and the near absence of structured Continuous Professional Development for designers at work
- The cottage industry approach to management and leadership apparent in many businesses
- The lack of a cohesiveness within the industry, which means that clients and the public do not see design as a valuable profession.

These factors are already the cause of many problems, including the high turnover rate of design businesses and the perceived under-valuing of design by many clients. As we look to a future that will undoubtedly be more competitive and more global, these issues will become increasingly critical.

For us, therefore, the case for strong, unified and urgent action on skills is unequivocal. But such action has to be about more than simply plugging the existing gaps. It must be based on a widely owned vision of where the design industry should be heading. Our vision, which underpins all of our proposals, is that:

By 2020 the UK design industry will be viewed by design buyers and consumers around the world as the global epicentre of high-value creativity and design-led innovation.

Action to achieve this vision can and must come from across the whole design sector. We must work together to keep British design alive and thriving on into the 21st century. We must start by putting in the building blocks for a cohesive industry that pro-actively identifies and develops the skills it needs now and in the future. The world is moving too fast and the competition is too intense for any of us to think we are exempt.

We want the views of as many of you as possible to help us shape and develop the proposals set out here. Section 8 describes how you can respond and we are also publishing a separate summary version of this consultation document, where we describe the issues detailed here as a 'brief' to which we want every designer around the country to respond by setting out their ideas for a new 21st century design industry. We hope that you will get involved and let us know your thoughts.

We will collate responses to the 'brief' after the consultation period closes in November 2006. We will then refine the proposals and work in partnership with government, educators, design organisations and other stakeholders to take them forward from early 2007 onwards.

Design Skills Advisory Panel, May 2006

3 Background

'Skills are fundamental to achieving our ambitions, as individuals, for our families and for our communities. They help businesses create wealth, and they help people realise their potential. So they serve the twin goals of social justice and economic success.'

Tony Blair (Prime Minister), Ruth Kelly (Secretary of State for Education and Skills), Patricia Hewitt (Secretary of State for Trade and Industry), Gordon Brown (Chancellor of the Exchequer) and Alan Johnson (Secretary of State for Work and Pensions), joint foreword to *Skills: Getting on in business, getting on at work*, White Paper, March 2005

Upgrading the UK's skills base is a top priority for the government. Higher skill levels will help raise productivity and build a knowledge-driven economy so that the UK remains competitive in an increasingly global economic future.

The UK's skill levels are generally low compared with other countries, particularly in the areas of basic and intermediate skills. Partly as result, output per hour worked is around 25% higher in the US and Germany than it is in the UK. Perhaps not unrelated to this, designers in the US and Germany are reportedly half as expensive as their UK counterparts.[1]

The national Skills Strategy, published in July 2003, launched an unprecedented cross-governmental approach to raising skills, spearheaded by No 10 and the Treasury but jointly owned by the Departments of Education and Skills, Trade and Industry and Work and Pensions. A follow-up White Paper published last year has extended and fast-forwarded the work to raise skills across the board, while the Treasury's ongoing Leitch Review of how the UK should develop its skills base through to 2020 will report later this year.

The Skills Strategy aims to be demand-led, and therefore gives employers a strong voice in defining needs and a partnership role in delivering action on the ground. Key to this is the creation of a network of 25 employer-led Sector Skills Councils (SSC), covering the major sectors of the economy. Each SSC is charged with developing a Sector Skills Agreement setting out long-term skills needs and how they can be met. Creative & Cultural Skills is the Sector Skills Council which represents design, along with advertising, visual arts, literary arts, performing arts, music, craft and cultural heritage. There are, however, anomalies in that other Sector Skills Councils represent some aspects of design, namely Skillsfast, which covers Fashion and Textiles, and Skillset, which represents Film and Video, including computer design.

In addition to this broad focus on skills, the creative industries as a whole are currently a high priority for policy makers. The UK's creative sector has consistently grown more than twice as fast as the economy as a whole in recent years and now accounts for 8% of the UK's economy.[2] The government's Creative Economy Programme aims to support and build on these strengths through, among other things, a focus on the education and training system.

The Design Council has worked for many years to demonstrate and promote design's role in making businesses more competitive and public services more effective. It also has a long history of leading and supporting the development of industry-relevant design education and skills, for instance through its Design Skills Campaign.

The Design Skills Advisory Panel has been brought together through a partnership between the Design Council and Creative & Cultural Skills. The Panel includes representatives from across the UK design industry, including design businesses, freelance designers, in-house designers, design organisations and educators. Its aim is to make recommendations and to test and enhance theses through consultation with the wider design industry. It will then take forward the agreed measures to enhance the skills and performance of UK design so that it maintains its world-leading performance in a changing global economy.

This Design Skills Consultation is the first stage in that process. As set out in Section 8, over the next six months we will consult widely on the proposals with stakeholders across the country. Following that we will review the feedback and refine the proposals, before publishing a final Design Skills Plan early in 2007. The proposals set out in that final Plan will be piloted and implemented by Creative & Cultural Skills, the Design Council and a range of other stakeholders.

4 The design industry today

4.1 Overview

In this section we set out the context for the proposals by describing the key features of design businesses today and how designers develop their skills through school, college or university and in the workplace.

4.2 Defining design, designers and skills

'Design, stripped to its essence, can be defined as the human nature to shape and make our environment in ways without precedent in nature, to serve our needs and give meaning to our lives.'

Professor John Heskett,
Toothpicks and Logos, OUP, 2002

Britain has always been at the forefront of emerging design practice. As the cradle of the Industrial Revolution, Britain saw the emergence of design as a distinct profession, blending the craftsman's intuitive dexterity with the complex needs of industrial manufacture.

Since then designers have established themselves across the world, supporting, and sometimes leading, the evolving process of global industrialisation. Some countries, such as Japan, Taiwan and Korea, have successfully nurtured indigenous design skills and industries as a key driver of rapid industrialisation, recognising that this will lead to the development of higher value production and brands. Developing countries such as China and India now appear to be emulating this approach.[3]

During two centuries or so of evolution, designers have proved adept at constantly evolving their practice to adapt to the changing environment. This process has accelerated in the last few decades, as manufacturing processes have shifted from mass production to mass customisation, tailoring production to meet individual tastes. As new service industries have grown up to stimulate and meet ever more sophisticated consumer demands, so design has become increasingly diverse and sophisticated in its practices.

Given this diversity, how can we define design in a way that enables us to address the questions at the heart of this Design Skills Consultation, namely: what skills do designers need now and how will these change in the future?

The *Cox Review of Creativity in Business*, commissioned by the Treasury and published in late 2005, usefully defines design as 'creativity deployed to a specific end' and, importantly, focuses on its potential to add value: '(Design) shapes ideas to become practical and attractive propositions for users or customers'.[4]

But how do we define a designer?

Many would argue that we are all designers or, as John Heskett implies above, that design is 'human nature'.

Others argue that designers are 'born' and that, by implication, design skills cannot be learned. For example, Mike Dempsey, the current Master of the Faculty of Royal Designers for Industry, believes that 'at the heart of a truly "creative" individual burns an obsession that is so powerful that, at times, it is all consuming. It starts at a very early age, infecting you like an alien...If this all sounds a bit far out and hippyish to you, then it is clear that you are not one of the chosen few. I'm sorry about that.'[5]

A third school of thought sees designers as those who use a design process, which is essentially a learnable set of tools, activities and habits of mind that can be customised and applied in different ways to a wide range of issues. At times these skills are seen as transformational, helping design buyers and society more widely to identify problems and resolve them.[6] While trained, professional designers would always be expected to use these tools and approaches most expertly, some designers are increasingly seeing the potential for users and consumers to be involved in a process of co-designing products and services.[7] The explosion of individual blogs on the internet over the past year is just one indicator that a vast untapped reservoir of latent creativity and ideas awaits anyone with the ability to tap into it.

For the purposes of this report, the definition of design as a learnable process is clearly most appropriate, although this does not preclude the possibility that some individuals have greater natural talent or that some ways of teaching design are better than others.

When we refer to 'skills' throughout this consultation plan we are essentially referring to the attitudes, skills and knowledge that designers need to be effective in their roles. Writer Shel Perkins defines the essential skill sets for designers as being: talent, technical skills, people skills and business skills.[8] What this classification ignores are some of the design-specific techniques and approaches, such as taking the user's perspective, and the wider management and leadership skills that will be needed by designers as they progress through their careers.

Unilever provides a useful framework for evaluating the skills of its designers, differentiating between:
– Basic appreciation – they use a book to do the job
– Working knowledge – they don't need a book to do the job
– Fully operational – they can write the book and teach people to do the job
– Leading edge – people consult them on how to do the job better.

Of course, the roles that designers actually play differ enormously, from laying out job ads for the local paper to creating luxury items for the rich and working with companies to increase innovation and redefine brands. The snapshots of designers in Box 1 further indicate the huge diversity of roles that designers play and the skills they need to develop.

Some, such as eminent designer Michael Wolff, argue that 'defining disciplines is negative, as designers are mutating', but for the purposes of research the simplest categorisation of today's design disciplines is the one used in the Design Council and DBA's *Design Industry Research 2005*.[9] The categories used – which are described in more detail in Annex 1 – are:
– Communications design
– Product and industrial design
– Interior and exhibition design
– Fashion and textiles design
– Digital and multimedia design
– Service design.

Box 1: Designer snapshots

Caroline and her partner have a furniture design business in Leeds. They've been in business for less than a year and, while both have recently gained degrees, they've also undertaken some computer-based training in the last year. Caroline thinks business skills are an essential part of design education and feels that there should be government funding for teaching business to design students.

Oliver has been a freelance web and print designer in Edinburgh for three years. He's also a part-time lecturer in a local college, but finds that lack of time, the unavailability of suitable courses and his location all make it difficult for him to complete much on-the-job training himself.

Kwame is a graphic designer employed in the in-house team of a further education college in Chester. He's been working as a designer for 15 years but doesn't have a design qualification.

Geraint got his masters degree a year and a half ago and has been a freelance designer in Swansea, specialising in corporate identity since then. Much of his work is for public and government clients in Wales and his turnover is less than £50,000 a year.

Paul is 50 and works in the in-house design team of an automotive manufacturer in Coventry. The business as a whole has a turnover of more than £2million. His employer pays for all of his team's Continuous Professional Development (CPD) and they frequently attend external courses as well as being given informal training by other designers in the business. Every year the team has at least one student on a work placement.

Daljit is a service designer in an in-house team working for a charity in Brighton which employs 300 people across the UK. Daljit's team recruited one graduate and one experienced designer last year. He's pretty satisfied with both although he says that neither of them are very good at communicating design ideas.

Lynn is an interior designer running a 10-person consultancy in Nottingham. Her main clients are in the retail and restaurant sectors. She doesn't think her team need to develop any of their skills and doesn't pay for their CPD, partly because she thinks they might demand more money or leave to find work elsewhere if they have qualifications.

Amelie is 35 and works for a large communications consultancy in Clerkenwell, London. The company recruited four designers last year, three of them graduates. She feels that one of these lacks the drawing skills they really need.

4.3 Design businesses today

4.3.1 Overview

The UK design sector employs more than 185,000 designers and had a total turnover of £11.6billion in 2004-05. Although clearly creative, the workforce lacks diversity and is therefore ill-equipped to work in increasingly multi-cultural and global markets. The industry is particularly concentrated in London and the South East, raising questions about the regional focus of design skills activity going forward.

The industry is constantly evolving, with new and developing disciplines (such as multimedia and service design) and new technologies and ways of working all contributing to a need for new skill sets.

The design consultancy sector in particular is characterised by a small number of large global players and a much larger group of small firms, mostly serving the UK market. Many of these firms are fragile and, arguably, lack the basic professional and business skills needed to survive in a globally competitive environment.

The UK design industry benefits from a well-developed eco-system and a diverse range of design bodies and initiatives aimed at supporting its development. However, none of these bodies has universal support or engagement, which partly explains the lack of common professional standards across the industry.

4.3.2 Who are the designers and where do they work?

'I would love to see more female designers, programmers and directors. Design is a boy hole and that's not good for a balanced approach or studio environment.'

Simon Waterfall, Founder, Poke

There is no such thing as an 'average' designer, as the designer snapshots in the last section make clear. But if one had to describe a 'typical' designer it would be a white, male, twenty or thirty-something graphic designer working in a small in-house team or consultancy in London.

This 'typical' character emerges from what we know of the design industry overall. There are 185,500 designers working in the UK, made up of 134,000 practising designers and an estimated 51,500 design directors and managers.[10] The businesses they work in break down like this:
- 12,450 design consultancies employing approximately 409,200 people, 60,900 of whom are designers.[11]
- An estimated 5,900 in-house design teams employing in the region of 77,100 designers.[12]
- Approximately 47,400 freelance designers who work in different patterns across the consultancy and in-house sectors, as well as independently.[13]

More than half of all these businesses work in communications and digital and multimedia design (See Chart 1). Around two thirds of design businesses work in more than one area, for example 50% of all businesses working in communications also work in digital and multimedia design. But this pattern varies between disciplines - for example 57% of product and industrial designers only work in that discipline. The breakdown between consultancies, in-house teams and freelances in each discipline is roughly equal, although differences do exist. For example, there are many more digital and multimedia consultancies (56%) than in-house teams (33%) but many more in-house product and industrial design teams (38%) than consultancies (16%).

The personal characteristics of the 'typical' designer reflect the fact that a disproportionate number of designers are young (62% are under 40), male (61%) and white (94%).[14]

These figures are a real cause for concern, and not only on moral grounds. Design is a discipline that requires empathy with, and understanding of, the people you are designing for and so a lack of diversity will actually hamper business competitiveness. When putting together a team for a project, leading businesses such as Nissan will consciously seek out designers with the characteristics of the market segment they are designing for. The importance of a diverse workforce will undoubtedly increase in the future as the population gets older and more pluralistic and it must also increase if we are to compete effectively for overseas contracts.

Encouragingly, though, there are some signs that these demographics are changing. For example, of the designers employed in new businesses (operating for less than three years), 9% are from minority ethnic groups. Nevertheless, a key question for the consultation proposals must be how to encourage greater diversity in the design workforce.

4.3.3 Where are design businesses?

Good design is a renaissance attitude that combines technology, cognitive science, human need, and beauty to produce something that the world didn't know it was missing.'
Paola Antonelli, Curator of Architecture and Design, Museum of Modern Art, New York[15]

The 'typical' designer is based in London because almost half (47%) of all design businesses are based in London and the South East (See Chart 2). London and the South East are also home to two thirds (67%) of the larger design businesses that employ 250 people or more, and to the majority (67%) of those with international clients from beyond the EU.

Obviously, none of this in any way denies the fact that there are many great design businesses outside London. There are thriving design clusters in cities such as Manchester and Glasgow, while certain regions have strong design specialisms, such as the West Midlands and South West for product and industrial design, and the South West and East Midlands for interior and exhibition design.

Nevertheless, there are important questions to ask about the regional spread of design in the UK and how it might best be developed into the future.

Chart 1: Which design disciplines do you work in? (%)

Discipline	Design consultancies	Freelances	In-house teams	Total number of businesses
Communications	61	58	59	38,366
Digital & multimedia	56	43	33	29,177
Interior & exhibition design	25	23	20	15,044
Product & industrial design	16	22	38	14,841
Fashion & textiles	6	10	6	5,884
Service design	5	3	6	2,267

Source: *The Business of Design: Design industry research 2005*, Design Council/DBA

In his influential book *The Rise of the Creative Class*,[16] Richard Florida argues that communities that have tolerant attitudes, diverse populations, access to talent (skilled workers) and a focus on high technology are more likely to attract creative individuals and thereby achieve long-term economic success. Although not undisputed, his ideas are important in suggesting that regions can and should actively attract creative individuals.

At a policy level this thinking fits with the role of Regional Development Agencies (RDAs) and the devolved administrations, which are responsible for bringing together the many agencies and institutions involved to actually deliver the Skills Strategy as part of wider regional economic development plans.

Conveniently, these are also the bodies charged by the Treasury with implementing the Cox Review recommendations to roll out the Design Programme for Business – a series of design support services developed by the Design Council – and develop regional Creativity and Innovation Centres, both of which have clear implications for design education and skills development.

Despite this apparent coherence, the practical implications for regional skills policies are complex to say the least. For example, there are currently many excellent further and higher education design courses throughout the UK, as the case studies throughout this document demonstrate. However, the fact is that some of these operate in areas with relatively few design businesses and therefore they find it considerably harder to link with practising designers and offer high quality, local work placements for students. Meanwhile, the rising costs associated with attending university (which will rise further with the introduction of tuition fees from September 2006) are already causing talented students (who might previously have travelled to study on a course that was either more prestigious or a better fit with their needs) to study closer to home.

Chart 2: Number of design businesses in the UK (design consultancies, freelances and in-house design teams), by region

Location	Number of businesses	% of UK total
London	20,436	31
South East	10,512	16
South West	7,091	11
East	4,939	8
East Midlands	4,358	7
West Midlands	3,963	6
Scotland	3,742	6
Yorkshire & the Humber	3,659	6
North West	3,393	5
Wales	1,875	3
North East	1,042	2
Northern Ireland	743	1

Source: *The Business of Design: Design industry research 2005*, Design Council/DBA

4.3.4 How robust are design businesses?

'We are pretty good at promoting our clients' business, but very poor at developing our own. I hope these proposals will raise our collective game.'

Annabel Praeger, Design Industry Skills Director, Creative & Cultural Skills

The 'typical' designer works in a small in-house team or consultancy. Eighty-five per cent of all design businesses employ fewer than five people (See Chart 3).

The number of small agencies appears to be growing rapidly. British Design Innovation (See Annex 3 for details) has surveyed its subscribers in the design consultancy sector on a number of issues for each of the past five years. The data is not comparable to the *Design Industry Research*, which has been used throughout this section so far. Despite this, the BDI data provides a useful indicator of how its members in the consultancy sector have developed over time. While response rates to the BDI survey appear to differ each year and therefore may not be directly comparable year on year, the 2004–05 survey suggests that the number of consultancies employing five people or fewer has grown by a massive 80% in the past five years.[17]

In many ways the number of new design business start-ups is a positive sign of an agile and dynamic industry and of a growth in demand for design services. The *Design Industry Research* found that one third of freelance designers and more than a quarter of design consultancies have been in business three years or less. The highest rate of start-ups is in emerging areas such as digital and multimedia design, where 45% of businesses have been set up in the last three years.

Nevertheless, the key question that must be asked is whether these businesses are sustainable. The evidence here is less encouraging. For example, over half of design business owners do not know what will happen to their businesses after they leave, and only 12% say that the business will carry on under the management of an existing colleague.

Arguably, then, many design businesses are relatively fragile because they lack a professional approach to basic management systems. This leads many commentators to criticise the 'cottage industry' approach of many design businesses.

'Most of the smaller design consultancies are run by designers who happen to run businesses, not businesspeople who happen to be designers. They do need to improve both their communication and commercial skills – just like any other business – to be taken seriously. They can rely on charm, charisma and the creative wow factor only so long before the serious business of return on investment comes into play.'

Jayne Barrett, Managing Director, Elmwood

Accusations that design businesses often lack basic business skills are backed up by recent research by the Design Business Association (See Annex 3 for details). The DBA's survey of 135 consultancies across the UK found that, while salaries increased by an average of 10% in 2005–06, direct charge-out rates fell by 5%, to an average of £96 per hour.

Reporting the findings, *Design Week* quoted financial consultant Jim Surguy, who is clear that the issue is within the consultancies' control. Not only should they argue the case to design buyers for the value they add, but 'design consultancies need to become more efficient and cut down on over servicing, which inflates staff costs,' he says. Mandy Merron, a partner at accountant Willott Kingston Smith, agrees, pointing out that a common feature of more profitable groups is that 'staff are told when to stop the creative work'.[18]

A key question, then, for the proposals is how they can build on the industry's evident dynamism, agility and passion to do a great job, while also making it more sustainable and professional.

Chart 3: Company size by discipline %

Employees	Communi-cations	Digital & multimedia	Interior & exhibition design	Product & industrial design	Total design industry
0–4	85	91	91	79	85
5–9	5	5	3	3	5
10–49	2	3	3	2	3
50–249	2	1	2	8	3
250+	6	2	2	7	5

Source: *The Business of Design: Design industry research 2005*, Design Council/DBA

Key point: new forms of design practice

Every year in the UK, companies pay each other millions of pounds for consumer information, such as what we buy at supermarkets and which magazines we read. A number of years ago, two students at the Royal College of Art (RCA) had the idea of bringing the financial value of that personal data back into the control of the individual, rather than the corporation. They were both product designers by training, but that didn't stop Chris Downs and Lavrans Løvlie asking how valuable it would be if our own purchase history and other marketing-friendly information could be packaged up and sold as a service to companies. That idea proved to be the starting point for an agency that focuses purely on service innovation and design.

The partnership between Chris and Lavrans has since grown to 14 people. The group is a varied mix of designers, marketing, branding and usability experts. A multi-disciplinary team tackles each project, with individuals spanning 'specialisms'. For example, designers have marketing knowledge and branding experts are comfortable with the concept of design. It can be a difficult transition for designers to make, but there is a new generation coming through. These new service designers blend traditional product design skills, such as creativity and the ability to think visually, with an increasing focus on understanding the user's lifestyle needs. Added to a heightened sensitivity to sustainability and social responsibility, these skills are then applied to services – which by their nature can often be accessed in a greater variety of ways than products can (think of renting a car compared to using a vacuum cleaner).

Some long-standing 'product' techniques such as prototyping lie at the heart of the approach. But they are supplemented by innovative methods such as developing 'service ecologies' (mapping a holistic view of all those involved in providing and using a service, and the relationships between them), or recreating a complete series of 'service touch points' complete with 'fake' retail outlets, call centre scripts and even newspaper articles.

The client base is varied, from Experian and Fiat, to the BBC and Orange, but they are all benefiting from applying design strategy to services. It is an area in which Chris Downs believes the UK leads the world. 'There are a number of agencies in the UK exporting service design overseas, and we are finding there is a huge appetite for it.'

4.3.5 How is the design industry doing?

'Great design has become as important to competitive advantage as smart technology. In the years ahead, design will become a basic necessity, a ticket to competing in the game of business.'

John A Byrne, Editor, *Fast Company*

Times are currently good for most design businesses. Their total turnover in 2004–05 was approximately £11.6billion, split between: design consultancies £5.1billion, freelance designers £2.0billion, in-house design teams (budget) £5.5billion.[19] Inevitably, the high numbers of small businesses in the sector means that many have small turnovers (See Chart 4).

Forty-three per cent of businesses (and 54% of consultancies) reported an increase in their turnover or budget in 2004–05 compared to the previous year, and nearly a third saw turnover increase by between 20% and 29%. However, the BDI surveys of design consultancies (described above) show that turnover in the consultancy sector has fluctuated widely over the past five years, suggesting that design is highly dependent on the fortunes of the wider economy.[20]

Despite the fragility of performance indicated by the BDI research, there are signs that the underlying demand for design services is rising. Many leading companies in a wide range of business areas and countries, such as Procter & Gamble, Apple, Nokia and Samsung, have successfully adopted design as a key tool to drive innovation and differentiate their products. The success of this approach now appears to be feeding through to industry more widely.[21]

Chart 4: Percentage of design businesses by turnover/budget

Band	Percentage
£2m+	1%
£1m<£2m	2%
£500k<£1m	2%
£250k<£500k	5%
£100k<£250k	13%
£50k<£100k	26%
<£50k	51%
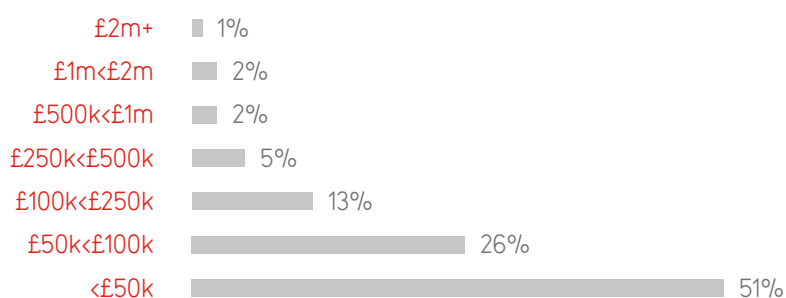
Source: *The Business of Design: Design industry research 2005*, Design Council/DBA

Many commentators see this as part of a fundamental shift in business practice away from simply seeking to compete through efficiency and speed to market, towards a recognition that quality and design are the real differentiators. As Professor Bob Hayes, of Harvard Business School, puts it: 'Fifteen years ago companies competed on price, now it's quality, tomorrow it's design'.[22]

The driver for this shift is consumers, who are consistently looking for quality and design. Seventy-nine percent of respondents in six countries in Europe and Asia (and more interestingly still, 88% of UK respondents) either agree or strongly agree with the statement that 'as a consumer I demand good design', while 63% (and 84% of UK respondents) either agree or strongly agree that 'I will pay extra for things that are well designed'.

All this is good news for UK design businesses and it can only increase the demand for high quality design and skilled designers. But how well placed is the UK design industry to compete with overseas competitors?

4.3.6 How competitive are UK design businesses?

'Design is completely under-valued. If you sold the largest design consultancy in the UK you'd be lucky to get £20million for it – yet compare that to the value we bring to our clients!'
David Worthington, Managing Director, Conran Design Group, and Deputy Chair, Design Skills Advisory Panel

As the next section makes clear, the context that design businesses operate in will, without doubt, become more global in the years ahead. This means both increased competition from overseas designers as well as new opportunities and markets for UK designers to operate in. So how are UK design businesses operating at present and how competitive are they?

Most UK design businesses are still predominantly focused on the domestic market, both in terms of where they see their competition coming from and where their clients are.[23] Only 12% of design consultancies and 23% of in-house teams perceive significant competition coming from outside the UK. (See charts 5 and 6). Of those who do face international competition, nearly two thirds (62%) say it has increased over the past three years.

In terms of clients, only 17% of consultancies say their main clients are outside the UK. Interestingly, though, 16% of small and medium-sized consultancies[24] have some overseas clients compared to 34% of large ones.

The picture that emerges from these figures is of an industry facing increasing competition but that has not yet fully faced up to the reality of globalisation. The exception is perhaps product and industrial design, where 31% of businesses see their main source of competition being outside the EU, as the shift of production to Asia has rapidly increased competition for work from overseas. Product designer and Design Skills Advisory Panel member Mike Corcoran has observed that, 'UK product designers are increasingly working in partnership with overseas designers on delivery and with science and technology partners in UK universities on initial product development.'

Chart 5: Location of competition by business type (%)

Competition location	Design consultancies	Freelance	In-house teams
Local	26	37	18
Regional	25	14	14
Within the UK	37	32	45
Within the EU	4	3	10
Other parts of the world	8	15	13

Source: *The Business of Design: Design industry research 2005*, Design Council/DBA

Chart 6: Location of competition by discipline (%)

Competition location	Communications	Product & industrial design	Interior & exhibition design	Digital & multimedia
Local	37	24	45	34
Regional	18	10	30	15
Within the UK	36	32	24	39
Within the EU	1	3	1	9
Other parts of the world	9	31	0	2

Source: *The Business of Design: Design industry research 2005*, Design Council/DBA

4.4 Design education today

4.4.1 Overview

The UK has pioneered new approaches to design education in schools. Today, design is a popular subject with many strengths, although a number of areas could be improved.

The rapidly increasing numbers of international students studying design in UK universities attests to our world-leading reputation. There have been significant increases in the number of domestic students studying design in further and higher education over the past two decades, raising issues about funding, quality and over-supply of graduates.

Overall, the picture that emerges of design education in the UK is of a system with many strengths which nevertheless needs to be more closely integrated with practising designers and current design practice.

In the workplace, surprisingly few designers (41%) have a degree or equivalent qualification as their highest level of qualification. This reflects the fact that until relatively recently most designers did not study at university before entering the profession. This context means that recruiters in the industry still generally place a relatively low priority on qualifications compared to portfolios and other evidence of ability and experience.

Design employers are poor at providing ongoing formal training and professional development for their employees. This leads to many designers reaching a career 'peak' in their 30s and almost certainly perpetuates the lack of professionalism and basic management systems in many design businesses that were noted in the last section.

4.4.2 Design in schools

'D&T should be moving from the periphery of the school curriculum to its heart, as a model of the combination of knowledge and skills that will be at a premium in the knowledge economy. It is from this best practice that other subjects can learn about effective teaching and learning for innovation.'

Professor David Hargreaves, Former Chief Executive, Qualifications and Curriculum Authority

4.4.2.1 A world-leading curriculum

'Some of the very talented young graduates the BBC employs have come to design almost by accident, having learnt a skill but not a context. I suspect they get little help in schools to envisage the creative careers and opportunities available or to give them a sense of the commercial realities out there. We need to do more to make design teaching truly up to date and relevant and to join it up across different subject and teaching areas within schools. That way, all students can get a feel for how integrated and central design is to their – and our – lives.'

Helen MacKintosh, Head of Editorial & Marketing Services, BBC, and Design Skills Advisory Panel member

The UK's design education system has been emulated around the world. The school curriculum was reformed in 1990, bringing together traditional craft subjects, such as woodwork, metalwork and cookery and introducing a stronger emphasis on creativity and designing along with more technology-based content for the modern world. The new Design & Technology (D&T) curriculum statement (see Box 3 for the updated 1999 version) set out an exciting vision for the subject. Significantly, the new subject was made compulsory for all students to study from primary school through to 16, although since 2004 it has been optional at Key Stage 4 (14–16) and it is currently being reviewed, and potentially reduced, at Key Stage 3 (11–14).

In D&T, pupils design and make products in a wide variety of media, including wood, metal, plastics, electronics, food, textiles and graphic materials. The National Curriculum also specifies the activities through which D&T should be taught: Product Analysis, Focused Practical Tasks, and Design and Make Assignments.[25]

Alongside D&T, the Art & Design curriculum continues to give many school students a grounding in creative and visual communication skills. It is also compulsory from Key Stages 1 to 3 and includes elements of design education, but with a focus on the imaginative and creative (see Box 3 for curriculum statement).

Most students who study design-related subjects at college or university will generally have chosen either D&T and/or Art & Design subjects at GCSE and A Level. That said, the truth is that D&T and Art & Design departments rarely collaborate well in most schools, while the potential for using design thinking and techniques to develop creativity more widely across the curriculum is almost unheard of.

Potential models for this may already be in development elsewhere in the UK. In Scotland and Wales, design forms part of the Technology curriculum area,[26] while Northern Ireland is moving towards a new curriculum framework in which design will form part of a compulsory The World Around Us area up to the end of Key Stage 2 and then part of Science and Technology in secondary schools.

Fifteen years after the new D&T curriculum was introduced in England, it has become one of the most popular subjects in schools. For example, it has the lowest truancy rating of any subject at Key Stage 4[27] and has a higher number of university entrants than any other subject. This popularity may well be related to the fact that D&T is the only subject that guarantees 'hands-on' kinaesthetic learning integrated with its more theoretical aspects.

4.4.2.2 Developing creativity for all students

'Our role as in-house designers requires people who can turn creative, consumer-relevant and business beneficial ideas into real products that can be manufactured and delivered effectively in their millions, while responding to relevant considerations such as sustainability and legislative requirements.'

Richard Parker, Manager, Packaging Design Technology Centre, Unilever, and Design Skills Advisory Panel member

Many, such as Professor David Hargreaves in the quote at the start of this section, argue that D&T is the pre-eminent subject for developing the kind of creative and collaborative thinkers needed for a knowledge economy, and research by the Open University backs this up.[28] It is also a subject that actively promotes multi-disciplinary learning and therefore can be used as a motivational focus for learning across the curriculum, as is being done at the Charter High School for Architecture and Design in Philadelphia (see case study on page 24) and a number of other design high schools across the US. The curriculum work in Northern Ireland described above may provide an interesting transferable model for how this approach could be developed in the UK.

Despite these positive developments, issues exist in D&T in schools at all levels, many of which are highlighted in Boxes 4 and 5. The 2003 D&T Strategy Group report to ministers encapsulates the problem when it states that D&T is 'a maverick in the curriculum...neither a specialist art nor a specialist science.'[29] The danger with this is that design and creativity can end up being squeezed out as teachers are forced to focus on the basics, partly due to a lack of understanding (or even snobbery) among school managers and parents about how central design and creativity have become in the modern world.

Thankfully, there are many examples of interesting and innovative projects to address these issues and improve practice in secondary schools, all of which can be built on through this Plan (see Annex 3 for the key schemes).[30] A question remains, though, as to how, in a rapidly moving field such as design, technological and professional changes in the workplace can be transferred across 24,000 schools in a rapid and effective way. A more active engagement of practising designers with schools may be the only solution.

The 2005 14–19 White Paper sets out plans to create new applied diplomas for this age group, including a Creative and Media Diploma currently being developed by Skillset (Sector Skills Council) in partnership with Creative & Cultural Skills and Skillsfast (Sector Skills Council). The timescale for the development of these critically important qualifications is extremely demanding.

Some related initiatives are already in place in this area, building on existing vocational qualifications and routes, with schools increasingly working in partnership with further education colleges to deliver them. These include Young Apprenticeships in Art & Design, applied and vocational GCSEs in Art & Design and Engineering and Manufacturing, and the BTEC qualifications.

As the 14–19 reforms are fully implemented and a new educational architecture is developed it will be critical to maintain and build design's integrity and breadth across both academic and vocational domains. Design's strength as a subject and a discipline lies in the creative acts of designing and making for the real world: it would weaken either of these if they came to be seen either as purely academic or solely vocational. But design also has a huge role to play in developing the creative and entrepreneurial skills of all students and it is therefore equally important that it is not marginalised in the new structures being created.

Box 3: Design & Technology –
the National Curriculum for England, DfEE/QCA (1999)

Design & Technology prepares pupils to participate in tomorrow's rapidly changing technologies.

They learn to think and intervene creatively to improve the quality of life. The subject calls for pupils to become autonomous and creative problem-solvers, as individuals and as members of a team. They must look for needs, wants and opportunities and respond to them by developing a range of ideas and making products and systems.

They combine practical skills with an understanding of aesthetics, social and environmental issues, function and industrial practices. As they do so, they reflect on and evaluate present and past design and technology, its uses and effects.

Through Design & Technology, all pupils can become discriminating and informed users of products, and become innovators.'

Art & Design statement, National Curriculum for England, 2000

Art & Design stimulates creativity and imagination. It provides visual, tactile and sensory experiences and a unique way of understanding and responding to the world. Pupils use colour, form, texture, pattern and different materials and processes to communicate what they see, feel and think.

Through Art & Design activities they learn to make informed value judgements and aesthetic and practical decisions, becoming actively involved in shaping environments. They explore ideas and meaning in the work of artists, craftspeople and designers. They learn about the diverse roles and functions of art, craft and design in contemporary life, and in different times and cultures.

Understanding, appreciation and enjoyment of the visual arts have the power to enrich our personal and public lives.

Box 4: Design & Technology in primary schools

- Design is taught in primary schools from the Foundation Stage onwards, but is always under pressure from what most schools see as the priority focus on the basics of literacy and numeracy.
- Pupils enjoy the subject and like the opportunities it offers to develop and make their own design ideas and to work independently. [31]
- Achievement in D&T is lower than for other subjects and is good in only two fifths of primary schools. Ofsted notes that the rise in D&T standards 'has been painfully slow', due to the focus on literacy and numeracy.
- 32% of primary teachers lack confidence in D&T. [32]
- There is no good quality training for teachers, as local authorities have shed their subject specialists.
- The focus on the basics also means that 'the breadth and depth of coverage of D&T (has) shrunk in many schools'. [33]

Box 5: Design & Technology in secondary schools

- Making D&T optional at Key Stage 4 is already having an impact on the level of take-up. Almost 40,000 fewer students took D&T GCSEs in 2005 than in 2004 (396,668 down from 437,403). D&T and Art & Design subjects appear to have remained popular at AS and A2 level.
- Ofsted reports that 'Teaching is good or very good in seven schools in ten in Key Stages 3 and 4 and in over four in five schools at post-16'.[34] Results continue to improve, although they are consistently lower than for other subjects.[35]
- D&T teachers are considered the most proficient users of ICT in schools.[36]
- On the negative side, 'the vast majority of schools'[37] still use a "carousel" approach at Key Stage 3, in which students rotate between teachers teaching the different D&T specialisms over the course of a year (and over consecutive years). Each teacher tries to cover the full design process and curriculum requirements, meaning that students experience design as a series of shallow and repetitive, but apparently unconnected, subjects.
- Designing is generally not taught well and many students simply fulfil a brief set by the teacher in a linear and prescribed fashion. Far too much emphasis is put on neat presentation ('neat nonsense') rather than a rigorous process of research and development of innovative ideas that meet a specified need.[38]
- Girls out-performed boys by 17.3% at GCSE in 2004 and middle class pupils out-perform poorer ones, partly because they tend to present their portfolios better.
- Very few D&T teachers have either any experience of actually working in the design industry or any design training. Many D&T teachers are older and approaching retirement and there is an acute shortage of new recruits.[39]
- There is no nationally sustained professional development for D&T teachers.
- 'The nature of the GCSE portfolio assessment makes evidence gathering formulaic and does not encourage innovation'.[40]
- The funding of D&T remains remarkably low, working out at £4 per pupil per year in some schools.

Case study: CHAD – the Charter High School for Architecture and Design

Key points: using design to teach core academic subjects; raising achievement in a deprived area; increasing diversity within the profession

Founded in 1999, CHAD is a state school in Philadelphia that not only teaches traditional design skills, such as architecture, industrial design, colour theory and painting, but also marries design to other subjects such as maths, science, English and social studies. 'Pupils are learning to bring disparate things together into a solution. That's what designers do,' says Claire Gallagher, a former architect who was previously the school's supervisor of curriculum and instruction.

Remarkably, even though CHAD is in a deprived area and most students achieved well below their expected levels before going there, attendance is 95% (compared to 63% in most Philadelphia public high schools). Also, 80% of students go on to two- or four-year college courses, including those at prestigious places such as the Rhode Island School of Design. Furthermore, as in the UK, the US design industry is largely white and middle class, yet 88% of CHAD students are from ethnic minorities.

'No matter what path these students pursue, their experience at this school will enhance their ability to solve problems, understand others, and appreciate the world around them – essential abilities in the Conceptual Age', writes Daniel H Pink in *A Whole New Mind*, from which this case study is taken.

4.4.3 Design in further and higher education

'Ron Arad always says proudly that, through the product design course at the RCA, he makes employable people unemployable. He means that the course should give you confidence to do your own thing.'

Julia Lohmann, RCA graduate[41]

4.4.3.1 A world of choice post-16

'It is imperative that opportunities should exist at all levels of higher education for students to engage with industry, to attempt challenging contextual projects, to have contact with business and industry and yet still utilise that valuable time as a period for exploration, creativity and innovation.'

Penny Egan, Executive Director, RSA

After the relative simplicity of the National Curriculum, the choices on offer to budding designers become far more complex. There are approximately 500 different design courses on offer in further education and more than 2,000 in higher education in England and Wales alone. These cover everything from traditional craft areas, such as ceramics and furniture making, through to the modern design disciplines and more specialist areas, such as mechanical engineering design, yacht design, sound design and sustainable design.

Despite all the choice, there remain a few relatively standard pathways through further and higher education, reflecting the most widely recognised qualifications.

4.4.3.2 Significant change in further and higher education

Today's young designers are technically so far ahead of their predecessors that I think they're very polished.'

Senior designer (communications), *Supply of and Demand for Design* Skills research

The fact is that the further and higher education system has changed enormously since many of today's practising designers were students. Some of the case studies from the UK and abroad included throughout this Consultation Plan indicate some of the exciting ways in which design education is changing to meet the needs of the modern industry. But perhaps the most fundamental change in the UK has been the massive increase in student numbers, particularly over the last decade as the system has sought to reach the government's target of 50% of all young people having the experience of higher education by 2010.

The ramifications of this target have already been enormous and they will reverberate for many years to come. Art & Design subjects have been particularly affected as they have proved popular among students, and so numbers have risen faster than in other areas. However these subjects have also seen a higher than average (over 10% for Design Studies against 3.4% for all subjects[42]) drop in initial applications this year as the first tranche of students make choices for courses on which they will be paying tuition fees.

The most obvious shift in response to the increase in numbers has been from the old atelier system, in which a tutor worked closely with a small group of students, to larger groups and more flexible and modular learning programmes that give the student far more responsibility for managing his or her own learning.

Throughout this process there has been a clear drive from the government to focus on meeting employer needs, most obviously through the introduction of two-year vocational Foundation Degrees. Equally, as the costs of attending university have risen, the student 'consumers' (and their parents) have become increasingly focused on ensuring that their courses will improve their employment prospects.

However, the outcomes of the changes are inevitably complex. For example, many of today's students save money by skipping the broad-based Art Foundation year, while many courses seek to raise graduate employment prospects by focusing students on a narrow design specialism from an early stage. Such graduates might have the right skills for their first job, but will they have the breadth and depth needed to make connections and continue learning as roles evolve? A further issue is that the numbers involved mean that simply finding meaningful work placements in industry for every student is nigh on impossible.

4.4.3.3 Understanding current provision

'I have still to be convinced that the increased numbers issue has been successfully addressed by "more sophisticated teaching methods". I'd like to see some students diverted towards the buying or managing of design, where I believe there is a greater skills shortage than with graduates who enter the industry as practitioners.'

Ben Casey, Chairman and Executive Creative Director, The Chase, and Design Skills Advisory Panel member

In order to understand the range of current provision and how it maps onto what employers say they need, the Design Council commissioned research in partnership with the Higher Education Academy Subject Centre for Art, Design and Media and the Centre for Excellence in Teaching and Learning through Design at the University of Brighton. The research, entitled *Supply of and Demand for Design Skills*, was completed in 2006 and included:

– An international literature review of prior research on supply and demand issues in design skills
– A review of further and higher education prospectuses
– A series of 59 interviews around the UK with practising designers across different disciplines and at different stages of their careers.[43]

The prospectus review (summarised in Box 6) sought to map the actual content of different courses and the delivery approaches used. One of the key issues it highlighted is the difficulty that students and employers have in navigating the complex range of courses available to find one that actually meets their needs. The fact is that as FE and HE providers struggle to attract students and meet their targets (facing swingeing financial penalties if they do not), the marketing of courses through prospectuses becomes increasingly compromised. The prospectus review researchers report that:

'After reviewing a total of 67 UK course websites, the design world comes across as glamorous, fast moving, cutting edge, closely linked to industry and fun. If making a course selection based on the websites alone, a prospective student is likely to come away expecting good employment prospects in a highly attractive industry…Almost all courses make reference to varying degrees of links with industry…There is no doubt that the impression given by the course websites is that of a highly attractive world with lots of opportunity for varying levels of success.'[44]

This does not mean that courses are not high quality. All publicly funded courses must adhere to national benchmarks and they are quality assessed against these. Thus, for FE courses such as BTEC National Diplomas the examining body sets subject specifications which meet the government's National Occupational Standards, while the government's Quality Assurance Agency (QAA) for higher education publishes benchmarks for Foundation and Honours degree courses and inspects provision against them.

Nevertheless, the prospectus review does highlight some difficult questions about how students and employers are informed about the quality and nature of the provision on offer.

Box 6: Key features of further and higher education provision

Taken from the *Supply and Demand* research prospectus review, which involved desk research to review course specifications, prospectuses and/or websites for an illustrative sample of courses in each category (numbers reviewed included in brackets).

- **General comments:** 'Compared to many other academic disciplines, design courses are practical in nature, with workshops, studios and hardware playing a role in luring potential students. Broadly speaking, courses appear to offer more theoretical modules the higher the qualification, culminating in a few post-graduate courses which give more weight to the theoretical. Exams are rare, with almost all assessment continuous and practice-based.

- **Softer skills** (eg, teamworking, communications): The majority of courses will include activities which promote team working and presentation skills. These activities are likely to be: group or collaborative projects, crits (group critiques of students' work) and presentation of a portfolio or design concept. Marketing skills per se are far less in evidence with only a very few courses making specific reference to them. Even fewer courses have any mention of the skills needed to run a business or to prepare a student for self-employment.

- All the **BTEC courses** (16) reviewed followed a very similar structure. They are of two-year duration and are practical courses designed to equip students with skills necessary for the workplace. Only two mentioned work placements and it was the exception rather than the rule that course descriptions mentioned aspects of professional practice or economic/marketing skills.

- **Foundation degrees** (12) last two years. The courses are practical in nature, sometimes claiming to meet occupational needs, and without exception they mention opportunities for further study (either within that centre of learning or elsewhere). Nearly half the courses mention placements, but where they do it is often left unsaid as to whether students need to organise these themselves or if they receive substantial help and encouragement from the institution.

- **Undergraduate courses** (16) generally last three years (Scotland four years) with a longer part-time option available. Courses tend to offer a broad-based introduction to techniques and context in the first year, with any placements in Year 2, and self-directed study/projects in the final year. (NB, approximately 25% of courses offer placements, but with the same caveats mentioned for foundation degrees above). There is a differing mix of the practical and theoretical both across and within disciplines, but generally speaking the more technology-based the course the more practical it is likely to be.

- **Post-graduate courses** (24) 'classically grant the student freedom to pursue more specialised study, either for its own sake or, in certain disciplines, as qualifications for a fast-moving job market.' In addition, study at this level often allows for greater inter-disciplinary collaboration, which can either be seen as a luxury or a necessity. Most courses last one year, with part-time options at two years.

Case study: Enterprise IG

Key point: design companies and education working in partnership

Enterprise IG is a global brand agency employing more than 80 designers in its London office. In 2005, Enterprise set up a scheme aimed at fostering positive relationships with four UK colleges offering BA Hons. Graphic Design courses (Cardiff School of Art and Design, Duncan of Jordanstone College of Art and Design in Dundee, University College Falmouth and Kingston University).

Every year, the scheme offers bursaries (£500 per person) to the top three selected students from each course – 12 in total. In addition, these 12 students are invited to spend three or four paid weeks learning the business of graphic design at Enterprise IG. While there, they are exposed to a breadth of experience and this is monitored and reported on by the agency director in charge of placements.

Ideally, the most suitable students are then offered permanent employment within the agency on completion of their courses. Tutors from the colleges involved are also invited to visit the agency, which is seen as one way in which they can keep up to date with working practices.

'Everyone benefits', says Enterprise's Executive Creative Director Glenn Tutssel. 'We get well rounded students who we know have certain capabilities we are comfortable with, and they slot into the culture. We are looking to employ the cream of the crop from the best of the colleges.'

4.4.3.4 How many design students are there and how many do we need?

'There are too many students graduating each year with less than adequate skills – fewer but better design schools more focused on all aspects of the industry would be a start.'

Jo Peters, Recruitment Director, Jo Peters & Associates Ltd

In 2003-04, 160,000 people studied on design-related courses in further education in England and Wales, which ranged from part-time pottery classes to full-time Higher National Diplomas. Fifty-four per cent of these students were under 19 and 61% studied full-time.[45]

In the same year in higher education there were 56,785 design studies students throughout the UK, a 6% rise on the previous year. Interestingly, over the same period there was a 32% rise in the number of postgraduate students from overseas studying design studies in the UK. (see Chart 5)

138,205 students completed design courses in FE in 2003-04, while 16,205 HE students graduated with qualifications in design studies. To put these figures in context, the Design Council *Design Industry Research* showed that 39% of the 17,297 new recruits to design consultancies and in-house design teams in 2004-05 came direct from college and/or university, which equates to 6,745 people.

It is not altogether clear where the remaining graduates and college leavers go. The Higher Education Statistics Agency tracks graduates six months after they leave university. Its 'Destination of Leavers' survey for 2003-04 found that 54% of design studies students had gone into full-time paid work (including self-employment), which was only slightly lower than the 58% of all students leaving higher education in full-time work. The work these design graduates were doing spanned a wide range, but it is difficult to gain a clear picture of how this breaks down from the data available. Among the remaining design studies students:
– 11% were in part-time work
– 10% had gone on to further study
– 10% were assumed to be unemployed (compared to 5% of all students).[46]

Chart 5: HE student numbers in 2002–03 and 2003–04

Level of study	Origin	2002–03	2003–04	% increase 2002–03 to 2003–04
All postgraduate total	UK	2,395	2,720	14
	Overseas	1,380	1,825	32
	Total	3,775	4,545	20
All undergraduate total	UK	44,610	46,540	4
	Overseas	5,230	5,700	9
	Total	49,840	52,240	5
Grand total		53,615	56,785	6

Source: HESA Student Record 2002–03 & 2003–04.

The Destinations and Reflections: Careers of art, craft and design graduates research by the Centre for Research into Quality at the University of Central England is the only available longitudinal study of design destinations. It tracked the careers of 2,000 Art & Design graduates from 14 institutions and was published in 1999. The research suggested that about 80% of design graduates ultimately end up working in related roles, even if it takes them a few years to build up a portfolio, undertake further training and get a job:[47] Obviously, this figure may well have changed since the late 1990s when the research was done, particularly since student numbers have grown since then, but the research does indicate that the longer-term picture on graduate employment is more complex than may at first appear.

Despite this, it is important to note that many practising designers are critical of the recent expansion in student numbers. The Supply and Demand research interviews with practising designers found that senior designers in particular feel that there is now an excess of courses and students, which they believe is having a detrimental effect, for example through:
– Students spending less time with their tutors
– Students competing for limited resources (eg, studio time)
– Some students on courses who do not have enough talent or motivation to become successful designers
– Design companies spending too much time sifting or fending off CVs.

Some also feel that it is morally wrong, as the following quote indicates:

'It's like taking on someone who is 5' 2" and 14 stone and telling them "do this course on modelling and you'll become a supermodel at the end of it" – they can't all do it.'
Senior designer (interiors/exhibitions), Supply and Demand for Design Skills research

Nevertheless, there are solid counter arguments to justify the large numbers of design graduates, even if they do not all end up becoming designers. Firstly, the Design Industry Research found that there are around 350,000 people working in design consultancies alone as non-designers. While some design management courses do exist, more could be done to actively develop design students for these ancillary roles. Secondly, designers often complain that design buyers (and managers and the wider public more generally) do not really understand design. Therefore, increasing the numbers of design graduates working in related fields will help bridge this gap in understanding, while also helping to ensure that design thinking and approaches are applied in a range of areas that could benefit. In the long term such an approach could help to reduce the need for programmes, such as the Design Programme for Business recommended by the Cox Review, to apply design thinking to other business areas.

But for these arguments to work in practice it seems clear that design courses must do more to actively help students who are unlikely to become professional designers to identify alternative careers. Equally, courses must actively support those students to develop related skills, such as marketing and buying, which will help them find alternative jobs. This is already being done in some places, as the University of Central Lancashire case study on page 67 indicates. Team projects where students take on different roles, such as putting on a fashion show, provide ideal opportunities for such development. But more could be done, for instance through establishing stronger links with other departments such as Business Studies and Marketing, as the multi-disciplinary course case studies from Helsinki, Stamford and London Business School on page 49 show.

Case study: University of Strathclyde, Department of Design Manufacture and Engineering Management

Key point: Product Design course with emphasis on client and project management

This university department offers a portfolio of courses focused on product realisation, with the Product Design Engineering course being at the more creative end of this spectrum. However, creating viable products rather than indulging in design in a vacuum is one of its core principles. Furthermore, students are exposed to project management processes, team working, and inter-disciplinary co-operation from year one.

'We talk about our business being "creating, making, managing",' says Jill MacBryde, the Department's Director of Teaching and Learning. 'No matter which course the student chooses to study, he or she will always have a grounding in all three areas. I think this is one of the great strengths our students have, being able to see the whole picture.'

Making these experiences 'real' is the challenge in any academic environment. Strathclyde's response is to make contact with industry and alumni part of the learning experience. It includes regular guest speakers, industry placements and live projects.

In the fourth and fifth year of all Masters degrees, students are required to undertake a group-based industry project. This is operated under what is called the Product Development Partnership (PDP) Scheme, a mechanism that enables companies to realise products (and processes) through collaboration with multi-disciplinary teams. Companies benefit through getting access to fresh ideas, a multi-disciplinary team and university equipment and facilities. Students get the opportunity to work with real clients, and also experience of working in a multi-disciplinary team, with client deadlines, budgets and real issues around intellectual property. Each team has a company contact and a university mentor. The university mentors include both full-time university staff and also visiting professors, however day-to-day client relationships are managed by the students themselves.

4.4.3.5 User perceptions: What do design students and employers think of design education?

'I honestly don't think there was anything I did at college that made me think "oh that's a waste of time"... but maybe you could teach the kids to work quicker, then you could pack more in.'

Junior designer (communications),
Supply of and Demand for Design Skills research

The most comprehensive survey of student views of their higher education courses, the government's 2005 National Student Satisfaction Survey, showed that final year Art & Design graduates in England, Wales and Northern Ireland are broadly satisfied with their courses, giving them an average score of 3.69 out of 5, which is equivalent to 74%.

That said, Art & Design students were less satisfied than students in any other subject. The students assessed their courses across a range of areas, including teaching, assessment and feedback, and organisation and management, with the latter scoring the lowest average satisfaction rating. No detailed follow-up has yet been completed to understand why Art & Design students are less satisfied, although some have suggested that it is because job prospects in Art & Design are worse or because low funding levels impact heavily on such resource-intensive subjects.

Among employers, the *Design Industry Research* found that the vast majority of design businesses recruiting directly from college and university were either completely (42%) or quite (48%) satisfied with those they took on. (See Chart 6)

Chart 6: Level of satisfaction with the competence of designers recruited directly from college or university (%)

	Design consultancies	In-house teams
Completely satisfied	41	43
Quite satisfied	47	51
Not very satisfied	10	6
Not satisfied at all	2	*
Base	160	195

* = less than 1%

Source: *The Business of Design: Design industry research 2005*, Design Council/DBA

Despite this satisfaction, practising designers generally feel that design educators could be better linked with industry and do more to keep pace with changes in design practice. The *Higher Education Skills Mapping* research for the Design Council in 2005 found that many designers would like to see greater industry involvement in design courses[48] (see Chart 7), and this is backed up by the qualitative Supply and Demand research interviews where, for example, one senior designer commented:

'College tutors need to spend more time with businesses... it was like the scales falling from his eyes (when a tutor came in to spend time here)!'
Senior designer (communications), *Supply of and Demand for Design Skills* research

Chart 7: Proportions agreeing or strongly agreeing with measures to improve the quality of initial design education and training

Measure	%
Require full-time lecturers to spend time working in the industry	95
Require all students to complete extensive work experience	88
Create more employer-based vocational training such as apprenticeships	88
Increase the number of practising designers working in education	87
Design courses accredited by the industry	80

Source: Higher Education Skills Mapping, Design Council 2005

Box 7: Comparing UK and international design skills

1. The *Supply and Demand* research literature review looked at published research on design skills in Australia, the US, Germany, Italy, Finland and Japan. There was scant information in some of the countries, but overall the review concluded that:

   'There are similarities between the international markets and the UK, but also differences. The literature would suggest that whatever issues there are in the UK industry, they are not as acute as elsewhere.'

2. A selection of 22 internationally renowned courses in the US and Europe were studied in the *Supply and Demand* prospectus review. Not surprisingly (given the nature of the international courses selected) the review noted that: 'Generally courses were covering similar academic territory as in Britain, but they all appeared to be of a very high standard, equating to perhaps the best of the courses available here.'

3. Writing about design education in the US recently, author Ralph Caplan articulated many of the concerns that could be applied to the UK situation: 'The training of airline pilots leads directly to the operations they perform in flying. Designers are more likely to get training that has no immediate bearing on jobs open to them and to develop values that are at odds with those of many employers. The disparity between campus and outside world, between academia and commerce, between ambition and achievement, is not peculiar to the universe of design, but it seems more dramatic there.'[49]

4. Separate research by Professor John Heskett, of Hong Kong Polytechnic University, covering design in China, South Korea and Taiwan found that in Korea:

   'Investment in education has been substantial and general standards are very high. In terms of design education, some basic facts are: there are currently 256 universities and junior colleges with design-related departments; there are over 36,000 graduates per year; almost all universities have masters programmes and over 30 have PhDs in design.

   'Not only are design departments found in prestigious universities such as Seoul National University, but also at the Korean Applied Institute of Science and Technology (KAIST), an elite institution with generous financing intended to act as a role model for education across the country and a spearhead in Korea's research efforts. The fact that design is positioned in this elite institution for science and technology is itself worthy of note.

   'The system (in Korea) is not without problems, however, with the number of people annually graduating from design-related courses in universities and colleges increasing from 28,583 in 1998 to 36,397 in 2002, up around 27% over the past five years. All the evidence is that this has exacerbated problems of over-supply.'[50]

   In China, Heskett reported that, despite impressive investment that will do doubt pay off in the long term, at present:

   'Much design education is poor, lacking trained or practising tutors and with poor facilities, while the influence of rote learning leads to a lack of initiative. Consequently, in business there are severe problems in designing more complex products or systems, where skills of superficial design are inadequate to understand the nature of intricate problems.'[51]

4.4.4 Design skills in the workplace

'No one has had formal training at this company – nobody's progressed at all.'

Junior designer (communications),
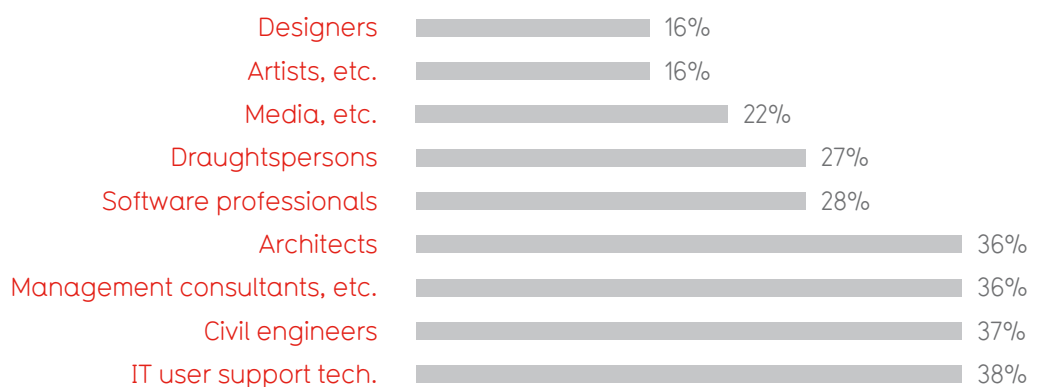*Supply of and Demand for Design Skills* research

4.4.4.1 How do (or don't) design companies develop their people?

'We tend to learn on the job and from each other. I don't think I had ever really thought about having a structured training plan for the company until I did a management training course myself.'

John Corcoran, Partner, Wire Design, and Design Skills Advisory Panel member

Design businesses are generally poor at developing their people. Both the *Design Industry Research* and *Supply and Demand* research paint a picture of an industry that learns primarily on the job, and where formal training and development is rare. This view is confirmed by comparing the proportion of designers involved in job-related training to other similar occupational groups, which shows that they do less formal learning than any other group except artists (see Chart 8).

Chart 8: Proportion of job-related training in last 13 weeks

Designers	16%
Artists, etc.	16%
Media, etc.	22%
Draughtspersons	27%
Software professionals	28%
Architects	36%
Management consultants, etc.	36%
Civil engineers	37%
IT user support tech.	38%

Source: Annual Labour Force Survey, ONS, 2002–03

The means for developing skills are diverse (see Chart 9), although the *Supply and Demand* research emphasised that the general tendency is to rely on informal mentoring and learning on the job.

Overall, 68% of businesses pay for all of their designers' continued professional development (CPD), and 13% pay for part of it. This proportion rises with annual turnover or design budget and with the length of time the business has been operating. Larger businesses are also more likely to use a wider range of approaches to develop people's skills. In-house design teams are more likely to pay for at least part of their designers' CPD (91%) than consultancies (75%). (See Chart 10).

The assumption has to be that individual designers working in those firms that do not pay for professional development or that pay for only part of it, must pay their own costs or do no formal learning. It is also the case that some graduates looking for their first job will self-fund professional practice courses with the industry bodies listed in Annex 3 to make themselves more employable.

Chart 9: Ways of maintaining and developing abilities (%)

Means	Design consultancies	Freelances	In-house teams
Informal mentoring/coaching	40	17	45
External courses	31	28	55
Using computer-based packages	27	24	36
Internal courses	15	–	33
Formal training from other designers	12	8	23
None of the above	27	45	12

Source: *The Business of Design: Design industry research 2005*, Design Council/DBA

Chart 10: Proportion of the costs of designers' continued professional development paid for by design businesses (%)

Proportion	Design consultancies	In-house teams
All of it	63	77
Part of it	12	14
None	25	10

Source: *The Business of Design: Design industry research 2005*, Design Council/DBA

The barriers to training most commonly reported by design businesses were lack of time (38%) and cost (34%), but a third (33%) thought there were no barriers. Twelve per cent of freelances are restricted by unavailability of suitable courses, compared to just 5% of design consultancies and in-house teams. (See Chart 11).

Designers are generally considered to be curious and active learners in the context of their work and lives, which perhaps explains the tendency not to engage in formal learning. The *Supply and Demand* research certainly indicates that for some designers there is a passive acceptance of lack of formal Continuous Professional Development.

But along with this comes an acceptance that many designers' careers 'peak' in their early 30s. This is generally because the small size of most businesses leaves little room for career progression, with the cottage industry approach to management described in the last section meaning that training and development planning is rare. While larger agencies might provide alternative career routes into project and client management roles, there is rarely any formal development available to support such a move. Also, many designers do not see themselves as natural managers and do not want to stop designing. For many, the only realistic way through this is self-employment, although this does not necessarily appeal to those with family or other responsibilities.

This poor learning culture in design businesses appears to relate directly to the cottage industry approach to management and leadership identified in the previous sections. Small and often short-lived companies often seem to lack basic professional standards and management skills and this extends to how they treat their people. The impact this has on the careers and long-term motivation of designers is a key issue for the consultation proposals to address.

Chart 11: Barriers to providing or accessing the required development support or training (%)

Barriers	Design consultancies	Freelances	In-house teams
None	37	30	44
Lack of time	32	41	23
Cost	27	36	26
Unavailability of suitable courses	5	12	5
Other	7	6	5
Don't know	6	3	6

Source: *The Business of Design: Design industry research 2005*, Design Council/DBA

Case study: IDEO

Key point: people development for business success

As a leading product and service innovation consultancy, Ideo is known for many things, but one thing that has played a relatively unheralded role in its success is its model for appraising and developing employees.

Annual appraisals have been part of the firm's culture for some time, but two years ago it introduced a much more structured, consistent and transparent approach to staff development and remuneration. Everyone, including senior management, is appraised against core competencies of Content, Client, Culture, Commerce, Mentoring and Leadership, with different degrees of competencies expected at different grades.

The benefits have been widespread, but in particular it has helped consultants in their late 20 and early 30s, who perhaps for the first time can see a clear, transparent career path, to move up through the consultancy. By highlighting the different skills and responsibilities involved in design, such as project management and client management, it has implicitly helped designers achieve them. Skills gaps are identified and training and learning solutions put in place (either using internal or external expertise). In the words of IDEO London leader Mat Hunter, it has 'helped us harness talent rather than suppress it'. And the result of developing more rounded, multi-skilled consultants? 'We grow the business'.

Case study: The Team

Key points: developing an employer brand through Investors in People accreditation

The Team is a second generation, 40-strong, London-based branding and design agency. In 2004 the business recognised it had reached a tipping point where the need for specialist human resources (HR) advice had become vital for it to perform to its true potential. An additional benefit would be that a clear commitment to professional development and a strong employer brand in this area would help attract high calibre people.

The Team has engineered an unusual model in HR practice that has won many plaudits and resulted in an Investors in People (IIP) award. It has also brought a tenfold return on the investment by halving recruitment costs and increasing productivity by 12%.

The key to the approach is a virtual HR programme that orchestrates four specialist skills at the appropriate moment: consultancy, coaching, accreditation and mentoring.

Consultancy – rather than recruiting an HR manager, The Team selected a consultant through the Chartered Institute of Personnel and Development's 'in company' scheme to design a self-managing HR framework. He is now retained for one day a month.

Coaching – to inform the design of the framework, a coach was brought in to lead a personal and team coaching programme, which highlighted employees' needs. This three-month process provided the insight for the HR consultant to recommend:
– A self-managed personal development portfolio system for all employees
– A people-management solution for recruitment, induction, appraisal and legal requirements
– A system of staff-led HR, IT and client services Reference Groups to improve business practice .

Accreditation – applying for IIP was a demonstration of commitment but, despite expectations, it hasn't involved red tape or been a one-off event. Accreditation involves in depth coaching from IIP assessors, who then spend time with all staff to see if they experience a consistent approach to learning and development. This process has helped the business define its succession strategy, develop its business vision and benchmark progress with the HR consultant.

Mentoring – as a result of IIP, The Team has introduced a mentoring programme for all staff, created an Associate Group of senior employees to develop a succession pathway and developed a strategic alliance with the Work Foundation.

Two years on, The Team has a series of best practice people management procedures in place, and is considered a first-rate employer within the design industry. As Managing Partner Julian Grice, who is also a Design Skills Advisory Panel member, comments: 'Despite having no dedicated HR personnel, we actually spend less time managing staff now and more time running our increasingly successful business.'

5 The design sector and design skills: tomorrow

5.1 Overview

While resolving today's issues is clearly important, the real challenge for design skills activity is to anticipate the needs of the future. What will business and society look like in 2020 and how might the design industry flex and adapt to respond? What should we be doing now to ensure that we have the right skills in place when we get there?

This section is based on published projections and data where available and it has been developed through a number of visioning exercises with designers, including the Design Skills Advisory Panel. Several members of the Panel were also interviewed on their views of the future, and selected quotes are included here. The scenarios at the end of the section were developed by design graduates from Central Saint Martins School of Art and Design who are currently participating in the Innovation Lab graduate development programme.

The first part of this section – What is driving change? – identifies the key local and global trends that are most likely to have an impact on the design industry in the medium to long term (10-20 years). This follows the PESTEL (Political, Economy, Society, Technology, Environment, Legal) categories, although the Political context of a global commitment to free markets and competition is taken as given, while the national commitment to design and the creative industries has already been described.

The second section – How might the design industry respond? - indicates ways in which the design industry might reconfigure itself to address these changing needs.

5.2 What is driving change?

5.2.1. Economy

'The increasing openness of the global economy means that fewer and fewer industries, including in the service sector, are sheltered from international competition...The UK's future success and prosperity will depend upon it being well placed to succeed in high-skill, high value-added service and manufacturing industries. This in turn will depend upon the UK having a sufficiently highly skilled workforce.'

Skills in the Global Economy, HMT, 2004

It has long been recognised that the UK cannot compete with low-wage economies in producing cheap commoditised consumer goods. But the assumption until recently has been that developed nations would retain the high skilled, white collar jobs. This was naïve, as the 2004 Department of Trade and Industry's Five Year Programme makes clear: 'Developing countries are increasingly competing with us for highly-skilled work, while the explosion of information and communications technologies is opening our service sectors to international competition.'[52]

Some of the key trends include:

New market opportunities – Economic development in the BRIC countries (Brazil, Russia, India and China) will lead to a massive expansion of global markets. Between 2005 and 2015 more than 800 million people will have crossed the annual income threshold of $3,000. In 2025, it is calculated that approximately 200 million people in these economies will have annual incomes above $15,000. The resulting surge in consumer demand will not be restricted to basic goods but will extend to higher-priced branded goods as well. In order to enter these markets UK businesses and designers will need to work hard to understand local needs and form partnerships on the ground if they are to deliver on a large scale.

New forms of competition – China and India are predicted to be the main global suppliers of manufacturing and service industries by 2050. These countries are investing heavily in scientific research and design education, positioning themselves as global R&D centres, and they are already hosting multinational companies such as Intel, General Electric, GlaxoSmithKline and Microsoft. It is estimated that 10% of US legal work and 12% of accounting will be undertaken in India within five years, while a recently launched joint venture – New Delhi TV – is offering creative services such as editing, post-production and archiving to the world's media companies at a fraction of the costs in the West.[53]

As global economic power shifts east it seems likely that many of the UK's current economic advantages, which accrue from being the fourth or fifth largest economy in the world and from our position on the edge of the EU trading bloc, will be lost.

UK plc moving up the value chain – The inescapable conclusion, described in the 2003 DTI Innovation Report, is that UK businesses in every sector must compete by continually moving up the value chain, a process largely driven by design and innovation, while simultaneously improving productivity to match international levels.[54] If this is achieved, global economic growth will potentially provide a platform for more jobs in Britain[55] by driving international markets in areas where Britain does well, such as business services, education, hi-tech manufacturing and the creative industries.[56]

5.2.2 Society

'When the goal is truly innovative products and markets, simply being customer-led is not enough. Of course it is important to listen to customers, but it is hard to be a market leader if you do no more than that.'

Gary Hamel and C K Pralahad[57]

Just as the Industrial Revolution was driven by and, in turn, came to drive, massive societal shifts such as urbanisation and a new class structure, so globalisation is inextricably connected to changes in society.

Some of the key trends include:

Demographic change – The British population will be older but more diverse in 2020. The number of over-60s is expected to rise from 20% of the population today to 30% in 2020, with the number of under-30s diminishing proportionately. The pensions crisis will force more people to work beyond 65, while immigration from Europe and further afield will continue to plug the skills and demographic gaps.

New ways of working – Work and employment patterns are likely to change in the following ways:[58]
– An 'hourglass'-shaped labour market will see good jobs at the top pulling away from 'Mcjobs' at the bottom and creating a job gap in the middle.
– Many workers will find themselves in a seller's market. Employers will be strapped for skills as fewer young people will be entering the workforce.
– Service provision will increase and the proliferation of advisors, mentors, coaches and other support personnel will create many new jobs.
– The feminisation of the workforce will continue, though work will also need to become more family friendly as large numbers of women opt in and out of work.

– The demands on employers and employees for ever-higher levels of skills will increase. Technology will up-skill not down-skill the workforce. By 2020 two thirds of school leavers under 30 may enter higher education, against just over two fifths today.[59]

Empowered consumers – A democratising trend is already visible in many spheres, from politics to education to product development. Professor Eric von Hippel, of MIT's Sloan School of Management, has already shown how companies are involving 'lead users' in driving innovation to great commercial advantage, while mass customisation is becoming increasingly common. Future citizens, users and consumers will increasingly expect to be able to co-create the knowledge, policies, products and services that affect their lives.

New health priorities – Healthcare provision is likely to change in response to an increasing number of chronically ill patients in an ageing society – from an emphasis on curing the sick to preventing illness from developing in the first place.[60]

A focus on leisure and personal fulfillment – Assuming that UK plc does continue to perform, an older, wealthier population will increasingly be able to concentrate on personal and emotional fulfillment. As a result, the leisure economy will grow and entertainment media will further evolve as mobile phones, PCs and digital (interactive) TVs converge.[61]

5.2.3 Technology

'More transformational than technology itself is the shift in behaviour that it enables. We work not just globally but instantaneously. We are forming communities and relationships in new ways (12 % of American newlyweds last year met online). More than two billion people now use cellphones. We send 9,000 billion emails a year. We do a billion Google searches a day, over half not in the English language. For perhaps the first time in history, geography is not the primary constraint on the boundaries of social and economic organisation.'

Ian David, Managing Director, McKinsey & Company

Predictions relating to the pace and extent of technological innovation are less definitive in scope but more radical in their implications.

Some of the key trends include:

Pervasive technology – By 2020, computers will be 4,000 times more powerful than they are today.[62] Telecommunications will be speedier and cheaper, with most domestic consumers having an 'always on' connection through PCs, mobile devices or digital televisions.

Managing technology and information – We are already entering an age where access to information is free, or nearly so.[63] As information grows and becomes more pervasive its management, 'packaging' (through systems or models) and application will become increasingly critical factors in generating value.

Humanising technology – Current and future biotechnological innovations have the potential to affect some of the most complex problems facing humankind, such as the prevention and cure of global epidemics, solving the food crisis in famine-ridden countries, and preventing ecological disasters. The key challenge for industry in the coming years will concern the ability to exploit technologies that already exist.[64] Design's role will be in 'humanising' these technologies for users.

5.2.4 Environment

'Sustainability is one of the greatest challenges we face today as a global society. Design has enormous potential for meeting the challenge but, despite some excellent work in the UK's education sector, we are still a long way off embedding it into basic design practices. If UK designers can seize this ground it will give them a huge competitive advantage as the wider world catches on.'

Gary Hamel and C K Pralahad

Global warming, rising sea levels and increased pollution will push environmental issues high up the political agenda. Some of the key issues include:

Meeting legislation requirements – UK and EU legislation is currently the primary driver for sustainable design, with the government's March 2005 Sustainable Development Strategy *Securing the Future* emphasising initiatives both to promote the supply of sustainable goods and services ('supply push') and create demand ('demand pull'). Despite this, the evidence of impact to date is weak and neither manufacturers nor designers are significantly addressing the issue as yet, although the assumption is that this will change in the future.[65]

The rise of ethical consumers – The rising profile of 'ethical consumption' is already driving demand for sustainable solutions from the bottom up. The surprising popularity of Toyota's hybrid car, the Prius, in the US is a case in point. Ethical consumers may comprise up to 13% of consumers worldwide.

Sustainable pioneers – Despite the slow pace of concerted global action to address sustainability, not helped by the US's refusal to accept the existence of global warming, some countries and cities are forging ahead. For example, Sweden has set a target of moving its entire economy to renewable energy sources and being 'oil-free' by 2020.[66] Investing in workable, proprietary solutions to environmental issues now could pay back tenfold once legislation and consumer demand for environmental products and services catch up.

Designing new solutions – Designers have a clear role to play in designing more sustainable products and in driving up demand for sustainable lifestyles. But their greatest impact may be in developing entirely new solutions, such as models of shared services and products as opposed to private ownership.[67]

Case study: Art Center, Pasadena, California

Key points: multi-disciplinary teams working on industry-sponsored projects; a programme exploring new social applications for design.

Art Center's Transdiscipinary Studio brings together 'upper-term' students from different departments within the art school to work together on sponsored projects. In these Funded Educational Projects (FEPS) students develop specific business ideas and strategies for corporate sponsors in settings that replicate real-world work environments. Students might work together to create product development or branding strategies encompassing product, packaging, environment and marketing.

An initiative that overlaps with the Transdisciplinary Studios is the Design Matters programme, which explores the social and humanitarian benefits of design and responsible business. Design Matters' mission is to engage students, faculty, and staff in an on going exploration of the links between design projects and issues of social and humanitarian importance, empowering designers to take on a unique leadership role through creative problem-solving and using efficient technologies. The programme identifies issues with a social-ethical dimension and brokers projects between local and international partners and the college, where these projects are integrated into the curriculum. Through this programme, Art Center attained NGO status from the UN.

5.2.5 Legal

'I believe that more could be done to emphasise the role and management of creativity and design in innovation.'
Sir George Cox, *Cox Review of Creativity in Business*, HM Treasury, 2005

The legal framework in which design resides is clearly critical, and many aspects of it, for example on sustainability, have been referred to above. Additional areas for consideration include:

– An increasing emphasis on **inclusive practice around age and disability**. For example, graphic and multimedia designers in the US are already responsible for meeting usability legislation requirements on behalf of their clients. On the employment side, design employers here are subject to the Disability Discrimination Act while public sector procurers increasingly require design suppliers to demonstrate adherence to inclusive employment practices.

– An ever increasing emphasis on **managing risks**, particularly around Health and Safety issues. Arguably this increases insurance premiums and fosters a tendency by clients to play safe and avoid innovation.

– Changes in **copyright and intellectual property law**, partly in response to the huge scale of black market counterfeiting of branded products around the world, affect the ways in which designers can capture and exploit the value of their work.

– **Company reporting requirements**: One of the key aspects of this for design is the definition of Research and Development (R&D), which in the UK includes some aspects of design research but not areas such as prototyping or branding. This affects how companies report design expenditure and the support that it receives from policies such as R&D tax credits. In future it is possible to imagine that R&D will increasingly be broadened to cover 'innovation' expenditure (or Research, Development and Design as it is sometimes termed) as the government recognises the benefits that such wider design activities have on company performance.

5.3 How might the design industry respond?

5.3.1 Design is becoming more strategic and being applied on a widening canvass.

'Most of the world's unanswered design challenges reside in the world of multi-faceted systems, and these need to be attacked using synthesis. This is what designers are trained to do, and habitually do, working through the medium of projects. But designers usually only tackle contained projects (like a plane, a building or a plate). To remain competitive we ought to develop our design skills to move upstream, to tackle transport (not the plane), cities (not individual buildings), and nutrition and well-being (not the plate). The bigger the question, the harder the project and the broader the understanding that is needed.'

Professor Chris Wise, Expedition Engineering and Imperial College

In a changing world, design is increasingly seen by leading businesses as the discipline that will set them apart from their competitors, primarily by giving them privileged insight into what their consumers really want. In the process, the traditional emphasis on design as a superficial, often elitist, aesthetic treatment is shifting towards a view of design as a broader set of skills and methodologies. As Nico Macdonald puts it, design has been recognised as 'a quality, and a way of thinking and doing, that has enormous untapped potential for business, and for society as a whole'.[68]

Some of the outcomes from this include:

Strategic design – Design is moving upstream, into the realms of business strategy. *Business Week* recently reported that 'by showing global corporations how to change their organisations to focus on the consumer, design consultancy IDEO is becoming much more than a design company. Indeed, it is now a rival to traditional purveyors of corporate advice, the management consulting companies'.[69]

Design's edges are blurring – As design expands into new areas the boundaries between the disciplines are blurring. Designers will increasingly be working alongside engineers, software developers, marketers and management consultants in a single practice.

'The key challenge for us is constantly evolving as a business – it feels like we are jumping from one log to another as they flow downstream. You can't design things in isolation any longer – you can't design a cooker without designing a kitchen. You need to understand the bigger picture, understanding the customer more deeply. I started out by designing plastic moulded products and moved on to designing trains and planes. We could now design buildings.'

Paul Priestman, Director, Priestman Goode, and Chair, Design Skills Advisory Panel

In particular, design's ability to utilise emotional mechanisms (such as aesthetics, taste, pleasure and memory) for commercial benefit and to integrate brand values into products and services is giving it an increasing role in marketing.[70] As a result designers and advertising agencies are beginning to cover similar ground.

The blurring of boundaries between some branding and design agencies has affected the types of skills needed to deliver many of the projects. Companies increasingly seek designers who not only have formal-functional design understanding, but a sound grasp of marketing, business and communications.

'An interesting shift is happening with regard to the advertising industry and our relationship with marketers is quite complex. I would like to think that the value of innovation and design has become much greater in the eyes of clients, who realise that brand messages and brand experiences have to be integrated into the design of the product or service. TV advertising is losing its force and companies are realising they need to pay more attention to design.'

Graham Shearsby, Group Creative Director, Design Bridge, and Design Skills Advisory Panel member

Case studies: Multi-disciplinary learning to solve big, messy problems

Key point: multi-disciplinary project-based learning bringing together design, business and science/technology disciplines to develop creative skills

London Business School and University of the Arts London: Centre for Creative Business

The Centre for Creative Business - a joint initiative between LBS and UAL – offers a course module entitled New Creative Ventures, which is delivered at London Business School. The module is open to MBA and MA students from the two institutions and focuses on turning creative ideas into commercial ventures. The course runs for a full term and includes a group project, in which students from both schools work collaboratively to develop business plans, and culminates in a pitch to investors in the style of TV show *Dragon's Den*.

In 2005, its first year, the course attracted 70 students – half from each institution - with student feedback conveying 94% satisfaction and two business plans attracting funding. In the second year the number of students applying for the module has nearly doubled.

International Design Business Management programme (IDBM), Finland

IDBM is a joint teaching and research programme of three institutions: the Helsinki School of Economics, the University of Art and Design Helsinki and Helsinki University of Technology. Each year around 15 students are drawn from each institution to take part in courses and form mixed discipline teams which tackle a year-long project commissioned by industry. The programme teaches future marketers, engineers and designers to make full use of their own skills and potential as members of an inter-disciplinary team.

Hasso Plattner Institute of Design at Stanford (D-School), USA

Set up in 2005, the D-School offers classes and industry-linked projects to post-graduate students from several departments, so that they come to regard design as an holistic approach and set of methods for solving big, complex problems. The D-School merges disciplines, encouraging students to collaborate, innovate and push the limits of their creativity through design-centred thinking. Following an introductory course on design thinking, students are offered courses in areas such as social entrepreneurship, experience design and business prototyping using user-centred and team-based design methods on industry projects.

Design is colonising new applications and markets: Elsewhere, designers are forging new applications and markets for design, working in non-visual areas such as services, experiences and systems.[71]

Services in particular are emerging as a key growth area. In Western economies, services outweigh manufacturing in both exports and direct foreign investment. They are labour intensive and weak in R&D, presenting very different challenges to designers and design educators. Developing ways to engage with new sectors such as financial services, IT, wholesale, construction and management will provide designers with new markets and opportunities.

Another, more tangible, growth area for designers is digital gaming. Here, designers are dealing not just with virtual environments but with a new medium for the integration of brand messages.

'The growth of gaming will definitely affect our area. Being able to integrate brand messages into gaming is a growth area and there is an explosion of this type of activity at the moment, especially in Asia. The old advertising models are slowly giving way to the realisation of the massive change that is going on and the possibilities of using new technologies instead of TV. While this is obvious for the younger markets, a lot of work needs to be done on the grey market, which is getting bigger and where awareness of new technologies still needs to be built.'

Daljit Singh, Creative Director, Digit, and Design Skills Advisory Panel member

Finally, the public sector offers an increasingly significant market for design services, although the bureaucracy involved is not without its problems. As the Cox Review highlighted, public sector procurement approaches still tend to focus on cost rather than value, but much work is being done to recalibrate this. If this work is successful, the massive budgets being spent on physical and technological infrastructure as well as the equally significant revenue budgets devoted to maintaining services for consumers and citizens will become available.

Case study: PDD Group Ltd

Key point: new forms of multi-disciplinary practice

The location of PDD's studio in a quiet residential area of West London belies the strong acumen and success of this product innovation consultancy.

PDD's work comes in the form of ad-hoc projects, joint ventures and licensing. In all of this work, the company breaks down potential design barriers by ensuring that multi-disciplinary specialists work collaboratively. More than 70 of these specialists from around the world (behavioural psychologists, design engineers, semioticians, industrial designers, innovation planners and technologists and so on) have worked with PDD to guide its thinking in an entirely original way and ensure that designs are always built with both users and clients in mind. As Head of Business Development Lara Hawketts says: 'Such a diverse team of disciplines and the integration of such a team on a client project minimises risk for the client, increases speed to market and ultimately gives our client the best chance of success and market growth.'

PDD is also committed to the development of design students. Carbonate, a PDD subsidiary, launched the Innovation Competition, whereby students are encouraged to commercialise their ideas and take them to market. As Paul Pankhurst, founder of PDD, says: 'For the UK design industry to remain competitive, we must seek to take the intellectual high ground by being product innovators rather than implementers. The Innovation Competition... encourages a new generation of idea creators.'

Each year, PDD also offers several one-year placements to students, many of whom are then employed full-time after graduation. Senior Project Manager Julian Swan said: 'Within the first month the student is expected to contribute to projects, and by the end of the placement they are generally considered valuable members of the design team. Without this link there would be a lack of realism between the undergraduate's education period and embarking on their career in industry.' PDD's placement scheme also helps the company build its relationships with colleges and course tutors and guide elements of course content.

5.3.2 The globalisation of design

'The assumption that the Indian designer is equivalent to the US designer (only less expensive), misses important distinctions. It's not that one is better than the other, either, but that they are two very different practitioners, each with unique abilities and perspectives.'

Niti Bhan, design industry commentator[72]

The spread of manufacturing and, more recently, research and development (R&D) to developing countries is already affecting the UK design industry, particularly product design, where much of the fulfillment work happens overseas near to the manufacturing base.

Countries such as India and China are already developing their design skills base and UK post-graduate courses are filled with overseas students, many of whom will apply the knowledge they gain in their home countries. In the medium term, it is inevitable that these counties will be delivering higher value design services.

Globally commoditised design services –
One view of the future is of UK designers utilising technology and global networks to compete on cost in their existing markets. Questions that arise from this include:
– Will design costs be globally benchmarked, meaning that UK design fees have to drop to remain competitive?
– Will UK design companies outsource their fulfillment work overseas to reduce costs, using technology to provide 24/7 project solutions? What will the impact of that be on the workforce?
– Will the UK be able to maintain a leadership role once our domestic manufacturing base – which has traditionally had a symbiotic relationship with UK designers – has gone?

Certainly all of these scenarios are possible, although they need not be seen as negative, given the projected growth in emerging markets that will require designed goods and services. Many design firms are already opening offices in China, where they employ a mix of local and expatriate designers.

'Nissan currently has three major design hubs in the US, UK and Japan, with spokes in developing countries. There we use a mixture of local and Western designers. They currently don't have the skills base to deliver these projects, but this will change. China will have the skill set in 10 years' time, which will invariably lower UK prices.'

David Godber, Director, Nissan Design Europe, and Design Skills Advisory Panel member

At present many of these global agencies are still establishing workable solutions: developing partnerships, setting up new offices, working around the clock and travelling a lot. Increasingly a more substantial design infrastructure will develop in China and India that will supply local knowledge of markets, language, culture and legislation. As this happens, UK designers will need to recognise the differences and strengths that local designers can offer and adapt their own practices accordingly, as the earlier quote from Niti Bahn implies.

5.3.3 New types of design business

'The kind of projects we see in the future will be much more international, as the markets in Asia grow and the focus of the economy changes. There will also be a difference in resource allocation. We are now finding there are very good architecture practices in India and they are very cheap, but when you work in these countries you find yourself spread too thin.'
Rashied Din, Director, Din Associates, and Design Skills Advisory Panel member

A protected domestic market for design? Despite the potential scale of all this change, it is important to reflect that much will also remain the same. Most of the West's GDP comes from services that are locally designed and delivered, rather than traded internationally, and this seems likely to remain the case for some time. McKinsey & Company estimates that in 2008 only 160 million jobs, or about 11% of the projected 1.46 billion service jobs worldwide, could in theory be carried out remotely.[73]

'Rising competition from abroad adds pressure to an industry already long overdue for an overhaul and perhaps not equipped to support its clients or the development of our economy.'
Professor Janice Kirkpatrick, Director, Graven Images

So how might UK design businesses adapt in the face of all this change and what will the implications be for skills?

A split between high and low value design? Many commentators anticipate that a handful of design consultancies will grow to dominate the area of 'large project' commissions. Much as today the biggest projects are done by a small number of multinational management consultancies, advertising agencies, engineering firms and logistics companies. Similarly we will see the rise of multinational design agencies.

'Companies like Landor in the US are setting the trend in terms of separating the supply end from the strategic end of their operations, supplying both high-end strategic brand and marketing direction and design services that feed it or serve other clients.'
David Worthington, Managing Director, Conran Design Group, and Deputy Chair, Design Skills Advisory Panel

'I see a situation where design agencies aggregate under the umbrella of bigger agencies. Small shops will always exist in our business because they are more flexible and can deliver tactical solutions. But as the industry grows and companies make fuller use of interactive technologies the specialist knowledge will be drawn together.'

Daljit Singh, Creative Director, Digit, and Design Skills Advisory Panel member

This shift is about more than just scale and capacity to deliver on a global scale. The implication is clear that high value, original and strategic design thinking in areas such as innovation and brand leadership will increasingly be separated from lower value development, production and implementation work. This could mean the end of the freelance as much fulfilment work shifts overseas, but equally, the point in the previous section that many parts of the domestic market will continue to need local design services means that small design businesses will continue serving local industry on tactical projects.

'We will see much more of a gap between big and small companies; medium-sized companies will find it difficult to survive.'

David Godber, Director, Nissan Design Europe, and Design Skills Advisory Panel member

Increased competition – Competition in the industry is already intensifying. As a result, designers are having to turn around projects to shorter timescales and open pitching is becoming more popular.

'I predict there will be fewer competitions with more emphasis on the development of long-term relationships...the huge investment in competitive creative pitches is not always worthwhile. The best solutions come from good client-designer relationships with time invested by both parties.'

Ros Scott, Operations Director, Dalziel and Pow, and Design Skills Advisory Panel member

Rising insurance costs – As indicated above, one of the key drivers likely to affect this shift in the design industry will be the mounting cost of insurance. Designers are taking an increasing role in the design of complex electro-mechanical products, advertising campaigns and systems. As their role in such large, risky projects grows, so will their insurance costs. This is likely to contribute to the formation of a small number of large design agencies that can afford to insure themselves against failure.

'Professional indemnity will create a market, not barriers. It exists in other sectors and insurance costs will only help regulate the process.'

David Godber, Director, Nissan Design Europe, and Design Skills Advisory Panel member

Responsibility for legal standards – Again, as indicated above, in the future, designers will need to take more and more responsibility for maintaining standards of usability and safety as well as ethical and environmental issues.

5.4. Future scenarios

Design 2020
Four scenarios by the Design Laboratory

The following scenarios were developed by the Design Laboratory, a creative consultancy that sits within Central Saint Martins College of Art and Design's Innovation Centre. The Design Laboratory is an autonomous commercial entity which offers a range of design research and development services to private and public sector clients. It was created as a bridge between higher education and the commercial industries, providing a platform for fresh talent through structured work placement opportunities for design graduates. Working alongside a core team of senior designers, paid interns are given the opportunity to expand their skills base by operating in a multi-disciplinary environment, working to real briefs, budgets and deadlines.

'One thing we have learnt at the Royal College of Art since establishing InnovationRCA is how valuable fresh ideas can be to business organisations facing tight legal constraints and fierce competitive pressures. But our experience also shows that creativity works best when it is a catalyst within the framework of a collaborative team.'
Professor Jeremy Myerson, InnovationRCA, Royal College of Art

New approaches to capturing value: For clients, the process of buying in design will be based on increasingly sophisticated methods of calculating return on investment, with design agencies required to demonstrate the value they add in quantifiable ways.

On the designers' side, there is likely to be a demand for more joint ownership of intellectual property with clients and even a refusal to work on a fee-only basis. Some designers already engage in their own product development and then licence the products to manufacturers or retailers. The growth of larger agencies with the legal and administrative resources to manage this, along with stronger international action to prevent design piracy may facilitate a wider shift.

'I would like to see more education and communication so that designers can be better equipped with knowledge and understanding of the rights that protect them in order to create a safer commercial framework from which to "sell" design. Creating sound and robust anti-copying strategies is the way forward.'

Dids Macdonald, ACID

Marylyn Matisse

Hello! I'm Marylyn Matisse. I'm 18 and I currently live in Vauxhall with my parents.

I'm interested in DIY design and media. When I was 13, just for fun I created a blog to share my passion – www.zd.com (I'd change the name, if I could be bothered). Blogs are great: I learn so much from people online and I love spending time finding interesting stuff. And wow, man, there is a lot out there. Ultimately, I think this is the best way to enrich everyone's knowledge: sharing information is so much more interesting than going to school.

Since I first started the blog, using my friend James's open source software idea, loads has changed up to the point that the blog's now become a famous brand and is one of the BBC's biggest online cultural hubs, where you can find the bookest people from all over the world. A year after the blog's creation we started to team up with hip new rock bands and experimental DJs. Then some friends who'd done game programming got interested and helped me develop the personalised software that I use for its maintenance. Three years ago with some of my best colleagues we founded *ZD-URBAN* making games, music, art, and just stuff that we could sell on eBay. We weren't into it for the money, so we decided to donate all the money we made to kids and families collecting cotton in some of the worst possible conditions. Katharine Hamnett started the trend about 10 years ago.

The community is now 5,000 strong and you won't believe how many things I am learning. We collaborate with other bloggers and are constantly developing. Just to give you an example, there is this guy, Courtney, who is Director of Agripina Soares Agrimodas Ltd., a women's fashion company based in Brazil. He trained in pattern cutting at LCF, London, and he has been making ZD T-shirts and underwear that are just...wow! In the same process I involved Dorian from NY and Giorgio from Prato, Italy. Giorgio is very helpful in sourcing textiles as well.

Last year we launched our first fashion collection with a range of accessories – a bit street but definitely not kids' stuff. ZD have now received a couple of offers from M&S and a new fashion line for Adidas. The best bit and my greatest satisfaction is that they do not really care about how old I am; and I mean... I am the boss...;-)

What would I like to do next? I want to change the world, of course.

James Bryant

Hi, this is James Bryant. I'm 65, I live in Cornwall by the sea and have another base in San Francisco. I love to keep myself fit and try to spend all the time I can surfing, skating and playing urban golf – health is the basis for what I consider successful living.

I graduated in London during the 80's in product design and specialised further with an MA in Human Factors at MIT. I progressed to become Head of Human Factors for Fitch in the States, where working in close contact with different departments allowed me to understand the whole design process, including branding, marketing and retail positioning.

I now specialise in facilitating co-operation and inter-disciplinary collaborations as well as bringing multiple stakeholders to the table to solve problems collaboratively. I currently work as a consultant for Apple, Microsoft, the NHS and Beijing Transport among others. I work from home between 10 and 70 hours a week. Far from being too little or too much I guess it all depends on what you define as work. I collaborate with a network of highly skilled and specialised designers and IT architects with whom I do most of my work on a 'virtual' platform. With today's 3D hologram technology it's like having them here during video conferencing. Communication is everything and the time I save on travelling I can invest in myself. I don't like the idea of 'going to work' as my work is part of my lifestyle.

Besides all this, I spend two days every month as Head of Transformation Design at the RCA, which brings together human factors, ergonomics, user-centred design research, advanced facilitation and interactive design. One of our main goals is to make our graduates the most professional, knowledgeable and authoritative in all matters concerning usability, safety, efficiency, sustainability and legal aspects of design. We need to maintain the high standards that have made UK designers so successful over the past 40 or 50 years, although I worry that so many of our best young designers are now studying overseas. Many of them never come back as the opportunities in Asia and India are so much greater, but the danger is that they won't be around to support the next generation.

Sarah Jane

My name is Sarah Jane. I am 48 and work as Strategic Design Director of the BIG Group. I'm married with two grown-up children and I speak fluent French, Italian and Portuguese and I'm learning Mandarin – fast! Born in Manchester, I graduated in Fashion Design and have quite recently finished an MDA in Environmental Design and Economics at the London School of Economics.

BIG was established in 2009, primarily to work on the London Olympics, where it emphasised healthy living through ethical consumption. Since then it has rapidly become a global environmental management, design and branding agency. We work with companies not only to improve their image, but more importantly to find ecological and resourceful solutions.

Over the years the BIG group has incorporated some large fashion labels as well as advertising and brand agencies and we now have 2,900 employees across 15 countries. We are particularly strong in China and we are currently expanding rapidly in Russia. Our portfolio comprises companies from Coca Cola, Prada, and Intel to the LDA and the Polish government. Since 2013 we have been working closely with the Chinese government to integrate sustainable production and working practices in the textile and manufacturing industries. One change I've noticed over the past 10 years is that we now routinely present to company boards and at big finance meetings, which wasn't the case when I first started out.

We have high employment standards and we select our employees from the best and most qualified teams across the world. We require all our designers to have professional accreditation and most of them also have the EDUK sustainable design certificate. Our head office and main training facility is in London, since that's where the accreditation happens and where the leading thinkers are mostly based, especially in the environmental field. BIG takes its role in advancing creative education seriously, for instance through sponsoring a specialist design secondary school in Bray, and through our BIG Foundation which runs an annual international student competition and takes on 60 students each year on a structured placement scheme.

Sahil Patel

My name is Sahil Patel. I was born in Mumbai in 1987 and studied industrial design at IIT Guwahati in India. I speak English and Spanish, Hindi, Punjabi and some Sanskrit. On graduation I was torn between a job offer I had from Idiom Mumbai and an offer of a UK Design Diversity Fellowship. I decided to go with the Fellowship, since I have family in the UK and the salaries there were much higher then!

I started on a placement as an industrial designer at Dyson and then took the Business and Creativity MBA at the London Business School. During my time at LBS I developed a pioneering software application which facilitates project sharing between designers and clients. I worked on it with a friend in India who has IT skills tailored to collaborative management of R&D processes. I've always felt that Indian designers are better problem solvers than UK ones. Perhaps it's our culture, where the expression 'I do not know how it is not done' reflects the fact that we have to find solutions whatever the resources available.

Anyway, the software was the seed that developed into LMCA, the London Mumbai Creative Alliance, which I set up with a friend from LBS. LMCA has design and product development hubs in both cities and taps into a cluster of more than 2,000 designers, engineers, business, marketing and usability specialists between the two cities, who are mainly freelances. We recently acquired a 10,000 square metre design studio where we have meetings with clients, brainstorming sessions, prototyping facilities and top-of-the-range software. LMCA is on the rosters of some of the biggest FMCG companies, but competition is fierce and we always dedicate at least 10% of our resources to pitching for new work.

LMCA is unique in that we enable our members to develop and share their work with each other and with clients. We provide our designers with a strong brand affiliation and project management support but also with in-house training, insurance and legal advice. We consult on patent issues and develop strategies for market placement as well as helping small design firms sell or lease their designs to big companies. Most of our senior staff training is done in London where a lot of the planning is done and most of our clients still have their headquarters. In Mumbai we do most of the programming, modelling and overseeing of the nitty-gritty production.

6 Are there skills gaps in design?

6.1 Overview

The key issue underpinning the Design Skills Consultation is the need to identify the skills that the design industry will need to be successful in 2020. This involves establishing the industry's current skills needs and whether they are being met, as well as the much harder task of anticipating future trends and needs.

Skills needs and gaps currently exist at every level, particularly in management and leadership. These gaps are hampering business performance, although they appear to be relatively modest when compared with other sectors.

Design employers are broadly satisfied with the quality of design graduates, although there is concern that the rise in student numbers in higher education is leading to a dilution of standards and quality. The most common issue raised in relation to higher education is that it is not linked closely enough with practising designers and that, partly as a result, it does not develop students' understanding of how to apply their skills in a commercial context.

There is also more anecdotal evidence that skills gaps relating to business development and client management exist at senior levels across the industry.

Looking to the future, the impending changes described in the previous section suggest the need for a radical reappraisal of how skills are developed at every level in order for UK design to remain competitive into the future. A review of the UK's current competitive advantages suggests that there is much to build on in taking such a reappraisal forward.

6.2 Designers' skills and employers' needs

'Nearly all companies said they could find real talent, though it may mean wading through a lot of CVs. But most are panning for gold (ie, optimistic), rather than looking for a needle in a haystack (pessimistic).'

Supply of and Demand for Design Skills research

The design industry's approach to recruitment largely reflects the cottage industry approach to people management described in section 4.

The sector is growing overall. In the 12 months prior to the *Design Industry Research*, 17,297 designers were recruited by 8,072 design consultancies and in-house teams, which was about twice the number that left those businesses. Digital & multimedia was the most likely discipline to recruit (47%) and, interestingly, also the least likely to lose employees (14%). (See Chart 12).

The most common source of new staff is college or university (39%), although design consultancies (42%) are more likely to recruit graduates than in-house teams (34%). (See Chart 13). Other, presumably more experienced, staff are recruited from design consultancies (24%), freelance practice (15%), and in-house design teams (11%).

Chart 12: Number of designers recruited in the last 12 months by discipline (%)

	Communications industrial design	Product & exhibition	Interior & design	Digital & multimedia
0	60	55	65	53
1–4	38	41	32	46
5+	2	4	3	1

Source: *The Business of Design: Design industry research 2005*, Design Council/DBA

Chart 13: Sources of designers recruited in the past 12 months (%)

Recruitment source	Design consultancies	In-house teams
College or university	42	34
Design consultancies	23	24
Freelance practice	18	11
In-house design teams	5	21

Source: *The Business of Design: Design industry research 2005*, Design Council/DBA

According to the Labour Force Survey (which excludes design managers and leaders), 41% of designers have a degree or equivalent qualification as their highest level of qualification. Self-employed designers are slightly more likely to have a degree or equivalent (45%). (See Chart 14).

Design employers largely seem to recruit people with the same level of qualification that they have themselves. For example, 55% of design employers with an undergraduate degree require their recruits to have the same, and 32% of respondents with a Higher National Diploma require an HND.

Overall though, design employers are surprisingly disinterested in qualifications when they recruit. Thirty-two per cent of design consultancies and 24% of in-house design teams say that they do not 'require' the designers that work for them to have any design qualifications. Some of the most common reasons given by employers for not requiring qualifications are that they prioritise experience, a good portfolio or evidence of creative ability (see Charts 15 and 16). Perhaps even more so than in other sectors, designers build relationships based on face-to-face contact and chemistry and rely on the visual impact of a portfolio over paper qualifications.

Chart 14: Qualifications held by designers

Qualification	%
Degree or equivalent	41
Other higher education	15
GCE A Level or equivalent	22
GCSE grades A-C or equivalent	12
Other qualifications	7
No qualification	3

Source: Annual Labour Force Survey 2003-04

Chart 15: Employers' base level qualification requirements (%)

Qualification	Design consultancies	In-house teams
Higher degree	1	1
Undergraduate degree	34	39
Higher National Diploma	8	13
National Diploma	2	2
A-level or GCSE/O-level	2	1
Other	3	9
Don't require qualification	32	24
Don't require qualification: good portfolio more important	6	1
Don't require qualification: experience more important	7	5
Don't require qualification: creativity/ability more important	1	*

Source: *The Business of Design: Design industry research 2005*, Design Council/DBA
*= less than 1%

Chart 16: Employers' base level qualification requirements, by discipline (%)

Qualification	Communications	Product & industrial design	Interior & exhibition design	Digital & multimedia
Higher degree	0	1	0	0
Degree	35	41	37	25
HND/ Certificate	11	17	6	5
National Diploma	1	2	1	1
A-level, GCSE/O-level	2	1	0	1
Don't require a design qualification	31	21	27	40
Don't require qualification: good portfolio more important	5	1	2	11
Don't require qualification: experience more important	7	4	9	10
Don't require qualification: creativity/ability more important	1	0	3	0
N/A	7	4	5	4
Other	13	14	24	25

Source: *The Business of Design: Design industry research 2005*, Design Council/DBA

6.3 Are there skills gaps in the design industry?

'We have a great deal of difficulty sorting the wheat from the chaff... We can't have people who can't write, can't spell and can't communicate.'
Senior designer, (product) *Supply of and Demand for Design Skills* research

As stated above, the key issue underpinning this Design Skills Consultation is the need to identify the skills the design industry needs to be successful in 2020. The starting point for this is to identify current skills gaps and shortages, whether among graduates leaving colleges and universities or among more senior staff. A key measure of this is whether businesses say they experience difficulties in filling vacancies.

Design employers find that about one in four jobs is currently hard to fill, partly due to candidates lacking the required skills.[74] This figure compares well with sectors such as architecture, where employers find 55% of their vacancies hard to fill, but is significant nonetheless. (See Chart 17). The main reasons design employers find vacancies hard to fill are the low number of applicants with the required skills (61%) and a lack of work experience (29%). The main skills they report as difficult to obtain are technical and practical skills (45%) and communication skills (42%).

Chart 17: Recruitment difficulties (%)

Occupation	Hard-to-fill vacancies	Skill shortage vacancies
IT service delivery	19	13
Media associate prof.	20	13
Designers	25	17
ICT professionals	27	18
Business/stats. professions	29	21
Artistic & literary	27	22
Engineering professionals	46	28
Draughtspersons, etc.	51	30
Architects, surveyors, etc.	55	37

Source: NESS, 2003[75]

The main impact of recruitment problems for design companies is to increase the workload on other staff (93%) and to create difficulties meeting customer service objectives (60%). The primary responses to these problems are to expand recruitment channels (68%), increase advertising and recruitment spend (53%) and redefine existing jobs (53%).

These findings, from the National Employer Skills Survey on the current skills gaps in design, are to some extent contradicted by the literature review conducted as part of the *Supply and Demand* research, although this may be because the *Supply and Demand* research looked at graduate skills rather than across the entire industry. It concluded that:

'On the basis of the existing literature, there is little evidence of a significant skills gap in the industry compared to UK business as a whole...This is not to say there is perfect synchronicity between the supply and demand for design skills, just that overall evidence does not suggest it is currently a significant industry problem.'[76]

The review differentiates between technical design skills and work-based (or transferable) skills and concludes that:

'Without encouraging complacency, research seems to suggest the supply of graduates with good technical design skills is generally pretty good...(But) the vast majority of the research reviewed highlights or refers to the same conclusion – design graduates are technically able, but often lack the skills to implement this ability easily in the workplace environment.'[77]

The *Supply and Demand* research also involved interviews with 59 practising designers at different stages of their careers. About half of these felt that there was a skills gap, but nearly all felt able to recruit the talent they needed, even if they had to develop some skills in weaker areas. In the main, their criticisms were aimed more at the students they did not recruit than those they did, with a strong feeling that many of the students currently graduating have little chance of finding work because they do not have any innate design skills in the first place.

6.4 What are the current skills gaps?

'There are ways of motivating and retaining staff that are far cheaper than salary hikes. Consultancies should be looking for more creative approaches that tap into the lives of the people that work for them and what makes them tick. This kind of incentive goes beyond monetary value.'

Deborah Dawton, Chief Executive, Design Business Association, and Design Skills Advisory Panel member

The *Supply and Demand* interviews with practising designers revealed in detail the actual skills that design employers are looking for and issues that currently exist. The research report groups the skills employers say they are looking for into three categories:

Pure design skills
- Ability to be realistic in their ideas
- Empathy with clients/consumers
- Creative spark
- An 'eye' for good design
- Curiosity and passion for design
- Basic drawing skills
- Core software skills.

Workplace skills
- Ability to articulate ideas
- Ability to take criticism
- Team working skills
- Ability to work to deadlines.

Discipline-specific skills
- For example, rendering for product design; pattern cutting for fashion design; typography for communications etc.

Within these areas, some of the key issues raised are highlighted in Boxes 9 and 10. Somewhat depressingly, the *Destinations and Reflections* research carried out with design graduates almost a decade earlier had found similar results in terms of the skills gaps they perceived from their courses on entering work.

What comes across most consistently from all the research is the issue of students needing skills to be able to apply their design knowledge and operate effectively in the workplace.

For example, the vast majority of design businesses responding to the *Design Industry Research* thought that business skills were either essential (49%) or useful (44%) as part of the design curriculum. Freelances (53%) were particularly likely to value these, in line with the *Supply and Demand* findings quoted in Box 10.

Similarly, from the student perspective, *Destinations and Reflections* states that:

'One area of concern expressed by many Art & Design graduates was
the relatively poor level of contact with the world of work. There were insufficient work-linked projects, employment-related visits or work experience opportunities, such as embedded placements... Only 29% of the sample had undertaken work placement(s) as part of their course...Of these, 59% had a total placement time of less than six weeks and only 7% had work experience of 35 weeks or more.'

The most common solution to these issues, which is raised by both graduates and employers, is well structured placements. For example *Destinations and Reflections* states that:

'A substantial majority (70%) of those who had undertaken placements of any length found them both useful and important... Graduates who have had some form of work experience are significantly more likely to have been, or to currently be in, full-time permanent employment than those who have had no work experience.'

In the *Supply and Demand* research, practising designers at all levels were clear that placements offered huge benefits in this area, both to the student, the college and the company involved, although many had experienced placements that were too short and/or unstructured to be of real use.

'Placements benefit everyone – students are often a breath of fresh air.'

Junior designer (communications), *Supply of and Demand for Design Skills* research

'I learnt more on my placement than I did in my two previous years at college.'

Middleweight designer (interior/exhibitions), *Supply of and Demand for Design Skills* research

'What do students get out of it? Reality.'

Middleweight designer (multimedia), *Supply of and Demand for Design Skills* research

'The year we didn't take on any placement students was deadly for us.'

Senior designer (product), *Supply of and Demand for Design Skills* research

This issue of work-related skills and how courses can instil them is a key one for the consultation proposals to focus on.

Case Study: Graphic Design Course, University of Central Lancashire

Key point: the role of the placement and helping those not destined to become designers to find alternative career routes

The graphic design course at the University of Central Lancashire in Preston has acquired a reputation for producing high quality, commercially aware graduates through consistent, long-standing links with industry.

The university boasts a strong alumni group, which feeds back to the course by offering tutorials and placements to students. The course was one of the first in the country to emphasise the importance of work experience by pioneering the 'thick sandwich course' – a minimum of six months in industry before the final year. Its success led many courses in the UK to introduce similar programmes.

The subsequent rise in student numbers has led to a revised curricular structure and to the placement programme becoming optional. In nearly all cases students who go on placements graduate with the highest marks and get the best jobs after graduation. Thus the placement programme has come to differentiate those most likely to get a job as designers from those more likely to migrate to other sectors. To support the latter group, the course is now planning to offer alternative routes, integrating courses from other faculties in their final year, to offer students a more rounded education to help them enter the workforce.

Box 9: Design employers' views of current skills gaps and shortages

Ability to be realistic in their ideas:
The biggest source of criticism was that students are not taught to apply design in the real world.

'A lot of work at college is very shallow, for example "Design a poster for the next Oasis album". It should be "Oasis are not as popular as they used to be, design a poster to address this."'
Senior designer (communications),
Supply of and Demand for Design Skills research

Empathy with clients/consumers
Many agencies see themselves as problem solvers, not just designers. To do this they want staff who can see the client's (and the user's) point of view. They see some students who can make this connection, but wish more would.

Creative spark/An 'eye' for good design/Curiosity and passion for design

'They must have passion – live it, breathe it, eat it, sleep it! When they are out of the office they must be like a cultural sponge!'
Senior designer (communications),
Supply of and Demand for Design Skills research

Basic drawing skills
A near-universal theme was the importance of basic drawing skills, even in the age of CAD, partly so as to be able to refine ideas with a client on the hoof. There were isolated criticisms of students' abilities, but constant reference to the value of drawing.

'The essential skills are drawing, drawing and drawing.'
Senior designer (interiors),
Supply of and Demand for Design Skills research

Core software skills – Given the abundance of different software, employers seem realistic in their expectations. They see some packages as core to a discipline, and expect new designers to be proficient in them. That said, there are big variations in perceptions of skill levels. Some courses are seen to actively teach the software, while others do not have the IT resources available, or do not give them enough emphasis in the course, meaning that only those with the motivation to learn develop the requisite skills. This leads a few employers to feel there is a lack of basic skills and a few students to criticise their courses' IT funding.

Ability to articulate ideas – Designers – junior and senior – felt it essential to be able to talk through designs and persuade clients of their value. Most agreed that 'crits' are invaluable in developing this ability, but few felt that presentation skills were actively taught.

Ability to take criticism – Middleweight and senior designers often emphasised the critical nature of clients (and of senior designers). As a result, designers must be resilient and able to respond confidently to criticism, but at the same time ready to accept it constructively. There is also a perception among clients that designers can seem arrogant.[78] Students need to be able to work with clients to sell their ideas but there are isolated perceptions that some graduates are precious rather than confident.

Team-working skills – Interestingly, few employers criticised new graduates for not being team-workers - there seemed to be a sense that this is a social skill as much as a 'design' skill. Only a few junior designers came out of university with greater team working skills than they went in with. Usually these were gained through staging exhibitions, or through occasional coursework.

Ability to work to deadlines – One finding emerging more often than any other was the contrast between 'agency time' and 'academic time'. Junior designers voluntarily suggested courses should include tighter deadlines on some coursework.

Box 10: Design employers' views of current skills gaps and shortages in specific disciplines

There was no systematic evidence of gaps in niche technical skills in the disciplines covered by the *Supply and Demand* research. However, there were variations in the perceptions of skills gaps and needs between the different disciplines. These included:

- Product Design is changing more rapidly in the face of China's growth. This means that the next five years will require ever greater emphasis on market analysis, knowing what the customer wants and having an international perspective. Perhaps because of this change, product designers also appeared to be the most critical of education, although the best courses were praised.
- Fashion and textiles designers valued craft skills most and had less structured career progression. They sometimes felt that courses forced students to specialise too early.
- Communications designers seemed happiest with the quality of the courses on offer.
- Digital and multimedia designers were the most amorphous (perhaps reflecting the fact that culturally this discipline still straddles film, video and design sectors) and, as has been mentioned above, had the least reliance on formal specialised courses.
- Interiors and exhibitions designers felt that courses had improved since the 80s and 90s, but still saw a need to cover building regulations, planning and practical issues in more depth, reflecting a shift from design being about 'decoration' towards 'interior architecture'.
- Freelances require different skills, including self-motivation, self-confidence and the basics in marketing and project management. Although the former two are seen to be largely personal qualities, courses are not seen to be adequately addressing the latter two.

6.5 Current skills gaps in management and leadership

'I think it's value that rules the world. There's an awful lot of evidence across an awful lot of categories that consumers will pay more for better design.'

A G Lafley, Chief Executive, Procter & Gamble

Section 4 described the UK's design industry as, in many respects, a cottage industry – one that lacks basic professionalism in areas such as people management, financial management and succession planning, with the result that many design companies do not thrive or survive. Clearly, this implies some key skills gaps among the managers and leaders who run these companies.

In order to probe these issues the Panel asked design clients about their perceptions of design businesses' performance. And it asked recruitment consultants about where they see the key skills gaps. The Panel commissioned a small-scale telephone survey and also held a workshop with design clients, along with a separate consultation seminar with recruitment consultants (see Annex 2 for details).

The design clients were clear that, at best, the industry provides an exemplary service to clients throughout the design process and that there are many very creative agencies around. Elements of this service include:
- Well articulated problem solving resulting in innovative, creative ideas at affordable prices
- A real ability to engage and draw out the best information to expand clients' thinking and briefs
- A professional understanding – better than clients' own – of how all media and channels can work together to complement traditional methods.

This was balanced with a real concern about designers' ability to understand a client's business and the financial, market and cultural constraints that they work within. Many designers are essentially unsophisticated at understanding how to be commercially relevant – a view that chimes interestingly with the designers' view of the skills of new graduates.

These issues were also hinted at by the recruitment agencies, who stated that it can be hard to find experienced account directors at senior levels with a deep understanding of client needs and how to service them, and that senior creatives sometimes lack skills in understanding and delivering on business needs.

Perhaps more worryingly, given the global context described earlier, the design clients sensed a lack of ability among designers to deliver solutions that really transcend cultural and language barriers. In the main, UK designers' solutions are based on UK design trends and habits, UK companies and UK history.

The key management issues for design agencies that the clients identified were:
- Retaining the best staff
- Continuing the drive away from a *craft-based industry* towards a *profession*
- Recognising that project management skills add value to their business – and that the basics should be understood and practiced by all members of the team.

6.6 Future skills gaps: what will we need for 2020?

'It's not just that Indian designers are talented and well-educated or even that a senior designer in Mumbai gets paid about an eighth as much as their UK equivalent. The real challenge to the UK design industry is the hunger that Indian designers have to succeed. You just don't see that in London.'

David Griffiths, former Identity Manager, Royal Mail, and advisor to Indian design businesses

The changes ahead for the design industry, set out in the previous section, are fundamental. The development of a global, commoditised marketplace for design services and a split between high-value strategic design and lower-value fulfilment work will require new types of business and new ways of working at every level. Every one of the changes described has enormous implications for design education and skills and the proposals in this consultation must prepare the ground for this work to begin now if the 'window of opportunity' is not to be missed.

For example, simply keeping up with emerging practice as design moves upstream and becomes increasingly multi-disciplinary will require a fundamental rethink of the current ad hoc approaches to Continuous Professional Development that exist in most firms.

Equally, working globally and in partnership (both remotely and face to face) with overseas designers and suppliers will require language and communication skills that go way beyond current needs, while designing in, and for, different cultures and contexts will stretch designers' abilities and methodologies to the limits.

Design managers and leaders will need to be on the steepest learning curve of all if their businesses are to survive and thrive. Reshaping business strategy to enter new markets and manage workflows in hugely complex environments will require high levels of professionalism as well as a fine-tuned ability to scope future trends and issues. Meanwhile, keeping up with legislative requirements across borders and ensuring that professional indemnity insurance covers any mistakes will increase the need for sophisticated risk management skills.

This brief summary of future skills needs is far from comprehensive and there are many other needs that could be extrapolated from the trends described in the last section. Equally, there are no doubt many other future needs that can never be anticipated but that will emerge as technology and practice moves on. But identifying every single future need is not the aim here. Rather, our priority must be to understand where we are now and also to identify the emerging trends so that we can put in place the building blocks needed to develop skills as and when they are needed so the UK retains a competitive advantage.

6.7 Understanding the UK's long-term competitive advantage

'Our greatest asset in the UK may actually be the maturity of our design eco-system. By that I mean not just the breadth of design expertise, but also the range of supply chain services available and the wider infrastructure. Other nations can copy our ideas and knowledge, but they can't easily recreate our systems, so this could be our main competitive advantage. The question is how we can maintain and leverage it to best effect.'

David Griffiths, former Identity Manager, Royal Mail, and advisor to Indian design businesses

David Griffiths' quote provides a useful starting point for considering whether the UK has, or can create, a long-term competitive advantage for its design industry. There is certainly no doubt that some cities and regions in the UK have the mature eco-system that Griffiths describes, although we must be aware that this can lead to an insularity and smugness that could be our undoing. As Griffiths himself points out:

'I think UK designers today are in danger of repeating the mistake that the UK's manufacturers made in the 1960s when they laughed at the quality of Japanese and Taiwanese products. Ten years later they were blown out of the water.'

Equally, as the examples in Box 11 show, countries around the world are actively implementing design policies and building design infrastructures that could quickly leapfrog our own. That said, it is worth noting that our competitors around the world all seem to be equally concerned that they are not producing the right skills.

For example, Nirmala Sankaran, Chief Executive of HeyMath, an Indian-based education company, recently commented: 'If we do not allow our students to ask why, but just keep on telling them how, then we are only going to get the transactional type of outsourcing, not the high-end things that require complex interactions and judgement to understand another person's needs...We have a creative problem in this country.'[79]

Another strength that the UK can certainly build on is its strong global reputation for design. Asked which country they most associated with 'good design', members of the public in six European and Asian countries ranked the UK sixth in the world, behind Italy, Japan, Sweden, Germany and the USA.[80]

A third strength for the UK is that it has numerous design bodies and initiatives in place to support design education and the profession (see Annex 3 for summaries of the key bodies and schemes). These bodies and initiatives do much good work and this will provide an excellent starting point for taking forward many of the proposals set out in this consultation. However, it is important to recognise that the net impact of these bodies and initiatives on practising designers in the UK at present is minimal. For example, the *Design Industry Research* revealed that only 30% of design businesses are members of any business or trade body (including Chambers of Commerce and the Federation of Small Businesses which account for 8% each). Only very small proportions of businesses or individual designers are members of the specified design organisations.[81]

In summary, the need to come together to work much more cohesively as a national industry to identify and address skills needs and gaps appears to be key. If UK design businesses and designers can learn from each other and stay ahead of the learning curve they will be able to build a global reputation for high value creativity and professional practice, giving them a strong competitive advantage. The role for the government in supporting this development is strongly indicated by the international examples in Box 11.

Box 11 Design policy around the world

The UK is not alone in recognising the value of design in moving businesses up the value chain.

New Zealand – The mission of New Zealand's design strategy is to make its businesses international leaders through design. Over the next five years, the primary objective is to make at least 50 existing businesses internationally competitive through design leadership, generating an additional $500million in export earnings in year five. By year 10 these businesses are targeted to produce an additional $2.5billion through design.[82]

South Korea – The government's third Five Year National Strategy for Design set the target of supporting design's contribution to businesses and the national economy, in part through achieving 6–8 new global brands. The strategy is led by the Korea Institute of Design Promotion with a budget of US $25million. The number of Koreans graduating from design-related universities and colleges has increased by 27% over the past five years from 28,583 to 36,397.[83]

Scandinavia – Finland, Sweden, Denmark and Norway have all supported Design 2005 campaigns as part of wider efforts to promote design. Finland's efforts mark the culmination of its policy programme to support design in business, which has included the National Technology Agency of Finland and the Academy of Finland investing €30million in research programmes with Finnish firms.

Victoria State, Australia – A consultation was launched in 2004 to improve on its $10.2million series of initiatives announced in 2002 to build design capability. The 2004 consultation described the Design Council's Design Immersion Programme and suggested that future measures: 'Might include developing a demonstration programme similar to that in the UK'.[84]

7 Proposals for action

7.1 Overview of the proposals

The Design Skills Advisory Panel's consultation proposals are aimed at the long-term development of the UK design industry and its skills base. Our starting point in this must be to celebrate and build on the existing, hugely successful, creative and dynamic strengths of the industry. Nevertheless, as the fast approaching global challenges described in Section 5 make clear, we must be prepared to think differently if we are to survive.

The proposals are divided into three areas, Work, College and University, and School, to reflect the three key stages of a designer's learning and skills development journey. In summary, our key proposals are to:

Work
– Benchmark and celebrate the creative and professional performance of UK designers and design businesses through an internationally recognised, widely-owned professional accreditation system.

College and University
– Develop enhanced partnerships between design education and industry, linked to professional accreditation for graduates
– Collate and share impartial information on courses and career pathways for prospective students.

School
– Create an up to date baseline design curriculum for all
– Increase the involvement of practising designers in schools and enhance the professional development of design teachers.

At the end of this section we also outline some of the other areas and ideas that we are still considering how to address and that we want to explore further through the consultation process. These include areas such as sustainable design skills, the diversity of the workforce and developing design leadership skills.

7.2 What is the context for the proposals?

The previous sections on the design industry today and tomorrow and the skills gaps that exist now and will appear as we prepare for 2020 provide the critical context for our proposals. The detail throughout this consultation plan is essential, but in the Strengths, Weaknesses, Opportunities and Threats diagram below we bring together the key points that our proposals seek to address.

Diagram 2: SWOT analysis of UK design industry

Strengths	Weaknesses
– The government is committed to design and the creative industries, and to tackling skills gaps. – The UK has many world-leading designers and design businesses and has a dynamic, growing industry. – The demand for design services is increasing. – Design education is popular and is widely perceived as world-leading – There are many good schemes and bodies working to enhance design education and support the design industry. The proposals can build on these.	– Design is largely a cottage industry with many small, locally focused and fragile businesses. – The value of design is still not recognised by many businesses. – Design businesses are poor at developing their people, resulting in skills gaps, poor performance and wasted talent. – The design workforce lacks diversity and multi-cultural awareness. – Links between design education and practising designers are generally weak. – The industry is fragmented and lacks awareness of the need to change.
Threats	**Opportunities**
– Many competitor nations already have well developed design education systems, successful design businesses and extensive national design promotion policies in place. – Clients perceive a lack of professionalism and global awareness in UK design businesses. – Quality controls over design and business practice are weak and there is no widely recognised national professional development system for designers. – The quality and reputation of UK design education is under threat as student numbers rise without equivalent increases in funding.	– Globalisation is opening up new markets and opportunities and some UK design businesses are already competing globally. – Design is being applied in new business areas and is developing a more strategic role in some businesses. – Sustainability is rising up the agenda and UK designers have the potential to build on existing strengths in sustainable design education. – The UK's design industry has a strong reputation for design around the world and is leading the development of design practice in many areas. – The UK has a mature design eco-system that can provide a platform for global competitive advantage.

7.3 Our vision and objectives for the proposals

'I think our proposals will provide an essential platform for the industry to move forward on a professional basis. But what I'm really interested in is how we can build on this platform and stretch the thinking to make us world leaders: What would a sustainable design industry look like? How do we address the diversity issue? Do we need a design academy to really develop the top talent? Can we do a Jamie's School Dinners TV campaign for design and get creative thinking into the lifeblood of every school?'

Julian Grice, Managing Director, The Team, and Design Skills Advisory Panel member

Based on the analysis, thinking and research throughout this document, our vision is that:

By 2020 the UK design industry will be viewed by design buyers and consumers around the world as the global epicentre of high-value creativity and design-led innovation.

To achieve this we believe that the imperative must be to create a more professional and joined-up design industry, one that learns and adapts systematically from and with its clients, other design businesses, other disciplines and design educators.
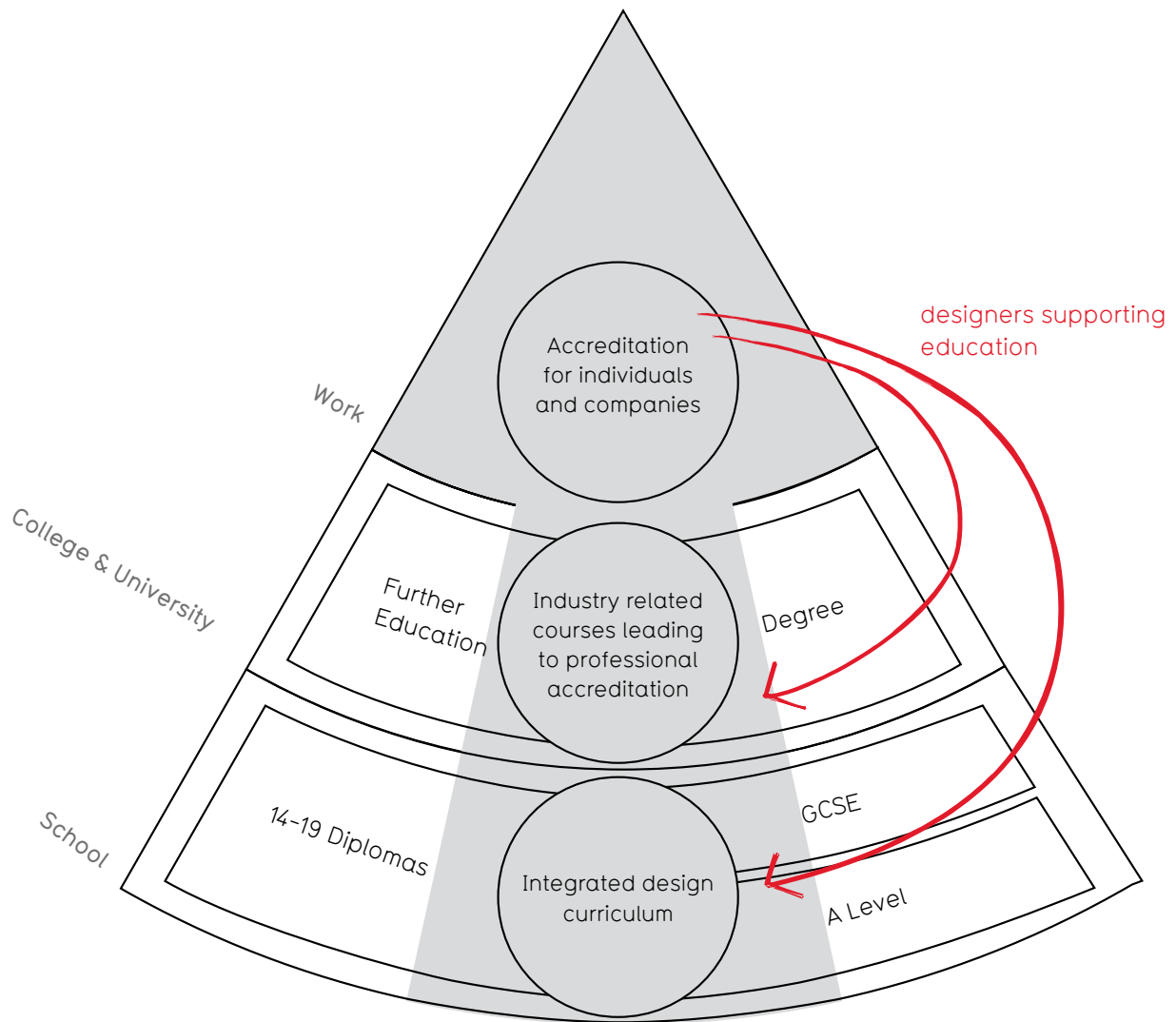
Our objectives for our proposals are:
- Learning ahead of the curve: to develop systemic ways of capturing and sharing effective design practice
- Communicating our value: to find innovative ways of measuring and communicating the value that design adds
- Learning to compete: to enhance the professionalism and resilience of UK design businesses so that they continue to grow and compete in a global economy
- Building learning cultures: to address current and emerging skills gaps by building learning cultures within design businesses and by enabling individuals to manage their own careers and development more effectively.
- Laying the foundations: to develop strong design awareness in all pupils leading to high-quality, employer-backed, design learning pathways that meet current and emerging skills needs.

At this stage, the proposals are very much outline ideas. We now need feedback from across the design community to help us shape and develop them further.

The 'map' below offers an overview of the proposals and how they fit together.

Design Skills Development Plan

Diagram: A cone/fan divided into three bands labelled (from top) Work, College & University, and School.

- **Work** — Accreditation for individuals and companies
- **College & University** — Further Education, Industry related courses leading to professional accreditation, Degree
- **School** — 14-19 Diplomas, Integrated design curriculum, GCSE, A Level

designers supporting education

7.4 Work: proposals in detail

'I believe that we are definitely on the right track with the idea of professional accreditation. Professionalising the design industry is a great step forward for the industry as a whole. I am convinced that this is the right message to send to the government, and it will be essential for designers throughout the UK to be involved in the creating the future face of the design industry.'

Ingrid Baron, Senior designer, IDEO London, and Design Skills Advisory Panel member

Our proposal is to benchmark and celebrate the creative and professional performance of UK designers and design businesses through an internationally recognised, widely-owned professional accreditation system.

A widely respected and adopted quality-assured accreditation system would meet the objectives described above and thereby transform UK design from a disparate mix of individuals and small businesses into a professional and joined-up design industry. Critically, such a system would provide a platform for addressing current and emerging skills gaps on a collective basis and in partnership with design educators and trainers.

The system we envisage would be:
–　About continually learning from the best in design practice
–　Simple, robust, flexible and available to all, but not easy
–　Valuable to designers, design businesses and clients
–　Applicable to all design sectors
–　Portable for individual designers as they move between jobs
–　About actively developing the design leaders of the future
–　About promoting professionalism as well as creativity
–　A means of articulating and valuing design effectiveness
–　A way of bringing together, capturing and communicating British design's USP at home and abroad.

We see the key benefits of such a system as:
1　Helping individual design businesses to market themselves and enabling the design industry as a whole to capture and communicate the value that it adds

2　Enabling UK designers, design businesses and their clients to benchmark their performance against best practice and thereby raise their game

3　Providing a framework for design businesses and designers to anticipate skills needs and to identify and develop talent

4　Facilitating effective partnerships between design educators and practising designers, thereby ensuring relevance, quality and capacity in courses that choose to participate

5　Giving leadership, coherence and a single powerful voice to the entire industry.

In practice the system will have two separate but linked components – a version for design businesses and a version for individuals.

Following feedback from the consultation we will need to develop and prototype a working system and brand. This could include self-assessment (by the design business or individual) and 360° assessment (from the business's clients or the individual's tutors/managers/clients) backed by light-touch but rigorous quality assurance.

At the heart of the system there will need to be a set of clear standards that remain dynamic in response to the changing needs of the marketplace. For design businesses the standards might cover areas of creative and professional practice; specialist operational, legal and fiscal practices; and people management and development. Individual standards would cover many of the same areas, but would be attuned to the stage of the individual's career, offering accreditation at different levels. The individual scheme would need to have flexible, but rigorous, entry routes and would certainly require a commitment to Continuous Professional Development. In the longer term an on-going role in promoting and managing the scheme and assuming its quality will also be necessary.

A key aspect of the corporate standard would be that businesses would have to employ a percentage of individuals with design professional accreditation or accreditation in another profession, such as accountancy. This would drive participation in the individual scheme. The corporate standard would also require that staff are given a reasonable number of days per year to work with design educators or students. This would bring CPD 'points' for the individual but, more importantly, increase the pool of designers available to work in education. It would therefore underpin the success of the College and University recommendations in the next section.

Case study: Campbell and Co Interpretive planning and interior design

For this Edinburgh-based interpretive planning and design agency, working across disciplines is something that's been second nature for the past 10 years. When planning the vision for visitor destinations such as the Royal Yacht Britannia, its interior designer will work as part of an integral team of multimedia, interpretive planning and graphic design experts, and, more often than not, the client. Getting acclimatised to such multi-disciplinary team-working can be challenging for new employees, but, in the words of MD David Campbell, the pay-offs are huge: 'It means we develop the designs as a team, people find their individual roles more interesting, and it means we can bring together all the client's aspirations in one place.'

Interestingly for what is a relatively small consultancy, ISO 9001 2000 accreditation is central to its way of working. Admittedly, it is a prerequisite for tendering for a number of public sector clients, but it offers other benefits as well. 'Although designers are often not, by their nature, form-fillers, we've managed to develop a system that works for us, and helps make sense of what are often complex projects.' Campbell & Co has found it speeds up working rather than slowing it down, because it helps teams move quickly and confidently from one stage to the next.

And it seems to be an approach that works, from the Falkirk Wheel to the Royal Mews at Buckingham Palace.

7.5 College and University: proposals in detail

'Further and higher education courses have increasingly developed links with employers locally, nationally and in some cases internationally. Everyone in education will welcome an opportunity to further enhance this partnership to ensure that graduates have the skills and knowledge required by the global economy of the future.'

Barbara Jones, Assistant Principal – Director of Curriculum, Cleveland College of Art and Design, and Design Skills Advisory Panel member

Our proposals are to:
– Develop enhanced partnerships between design education and industry, linked to the individual professional accreditation scheme proposed above
– Collate and share impartial information on courses and career pathways for prospective students and career advisors.

The objectives for these proposals are to:
– Build on the existing strengths of our world-leading design education
– Ensure that the content of design courses remains relevant and is benchmarked against professional standards
– Create more effective links between design practice and design education and maintain the current professional knowledge of course tutors where necessary
– Help students make the right choice of course and help providers to develop clear career pathways.

Develop enhanced partnerships between design education and industry

The essence of the first proposal is that all FE and HE design education institutions would be given the choice of whether to participate. Those which did would have to align the content of their courses with the standards set for the first stage of individual professional accreditation, as described above.

Doing this would activate support from the pool of accredited trained designers to help with course development, delivery and assessment. This involvement would ensure that the course meets the industry standard.

By aligning their courses in this way, institutions would increase the employability of their graduates by preparing them for the first stage of professional accreditation. This, in turn, would help the courses to market their provision as the best route into a career in the industry.

Alignment with the standards for the first stage of professional recognition might include a requirement for the course to offer:
– Work experience – structured placements, sandwich courses, live projects etc
– Business context – an understanding of the end-user and of the commercial realities of client businesses
– International context – language skills and applying design in a global market
– Sustainable design methods
– Strategic design skills
– Multi-disciplinary projects and/or modules – working across design, culture, business, social and technology subjects.

'Ensuring that designers develop the right skills to meet the challenges of the 21st century must be at the top of design education's "to-do list". But creating the conditions for this to happen means developing the appropriate links with business and industry.'

Susan Hewer, Head of Design, RSA, and Design Skills Advisory Panel member

The college or university would need to demonstrate that it had aligned its provision with these criteria and appoint a trained, accredited designer as an external assessor, whose role it would be to ensure that the professional accreditation standards were being met.

We envisage that the individual student, rather than the course, would actually be professionally accredited and that full accreditation may not be possible until the individual has spent some time working as a designer. By implication, simply completing the modules on a course would not automatically lead to accreditation, although students on courses that include the elements above would be far more likely to achieve accreditation.

Institutions that participate would be matched with trained, accredited designers and would negotiate a formal partnership agreement on how they would work together. Support from the designers could include: teaching on courses, supporting live projects, providing work placements for students or mentoring tutors.

While we wish to keep the spirit of this proposal intact, we would welcome thoughts on how such a system might work in the light of existing Quality Assurance Agency precepts, the Bologna Agreement and FE quality assurance arrangements.

Finally, our view is that courses could do more to actively structure learning opportunities that make design skills transferable while also developing alternative, high quality career pathways for those who will not find work as designers, whether in the design industry or more widely. We are keen to explore, therefore, how the proposals could support the work of colleges and universities to help those design students who are unlikely to become designers in identifying and develoing alternative career options, as the University of Central Lancashire course described in the case study on page 67 is already doing.

Case study: Design Academy Eindhoven, The Netherlands

Key points: innovative approaches to teaching and strong industry-driven curriculum

In 2003 the *New York Times* described the Design Academy in Eindhoven as 'without question, currently the best design academy in the world', while in 2005 *Icon* magazine listed it as one of the top five most influential people/institutions affecting the design world, claiming that it had eclipsed the Royal College of Art as 'the school turning out the hottest young prospects.'

The Academy's success is attributed to its unique multi-disciplinary teaching approach, good industry links and a raft of influential, internationally renowned designers and thinkers driving the curriculum.

The heads of the design departments are all practising design leaders. They do not teach, but rather they formulate the curriculum, choose tutors and define the departments' assessment criteria.

The Academy explicitly avoids grooming its students for specific, preconceived roles in industry and enables individuals to 'roam' through different departments and to share projects with students from different year groups.

The four-year undergraduate programme is divided in two distinct sub-systems, taking place on different days of the week and employing different staff; work experience is required as part of the course and international placements are encouraged. Students spend half their time in a system of eight design departments which are theme-based rather than discipline-based (the themes include 'well-being', 'identity', 'leisure', etc). The other half is spent in a system called Compass, which offers students a choice of subjects that provide the skills and tools needed to execute design projects. These range from specialist craft and software skills to marketing and management and are mostly taught by experts in those particular areas.

Develop impartial, quality assured information on courses for prospective students.

'A key issue in raising design's profile as a profession is the need to make sure the career opportunities it offers are understood by pupils and parents alike at the time when important decisions about further education are being made.'
Andy Bone, Co-Founder, Four IV, and Design Skills Advisory Panel member

The prospectus review carried out for the *Supply and Demand* research showed that the current information available to prospective students on the quality and content of courses is highly variable and difficult to make sense of. As a result, it seems more than likely that many students make the wrong choice of course.

Therefore, we are proposing that objective information about courses – including their industry links, the quality of student work and data on graduate employment – should be made available for inclusion in the proposed Creative Choices website in order to enable students to identify the right courses for them (see box 12 below). The site should add value to the government's existing Teaching Quality Information (TQI) website by offering quality assured, impartial information focussing on how courses support career progression both within and beyond the design industry.

Box 12
Creative Choices – outline

Creative Choices will be an online education and career management toolkit that helps people make decisions about careers and how to train or qualify for them. Currently being developed by Creative & Cultural Skills, Creative Choices will feature input and endorsement from industry representatives from each of the six creative and cultural sub-sectors. Help with funding, content and service provision, and promotion will come from important relationships with partners.

While primarily aimed at young people aged 14 and above, Creative Choices will also help adults looking to refresh or alter their careers, training, or education.

Creative Choices will potentially fulfill many roles:
– A connection to one-to-one support and advice - via telephone, email and instant messaging
– A source of easily accessible, tailored information – both official and anecdotal – on careers, courses and vocational training, and the skills they involve
– A means of establishing and updating a 'skills passport'
– A source of industry-approved advice on employability in the sector
– A set of templates and guidance for employers, learning providers and those studying and working in the sector to contribute experiences, evidence, insight, evaluation and advice about careers for the benefit of others
– A system and incentives for learners to contribute to longitudinal research about progression routes within the creative and cultural sector
– A source of live data on people's choices and career progression across the sector for researchers and designers of education and training
– Some users may link to Creative Choices from Creative Apprenticeships to investigate apprenticeship options and alternatives.

7.6 Schools: proposals in detail

'There are so many questions around design skills that we want to explore further throughout the consultation and development process: What are the skills trends? How do you best develop skills in the context of design? What skills do designers gain informally and how can these map onto a formal process? How can we capture the value that skills add to individuals and businesses?'

Lesley Morris, Head of Design Skills, Design Council

Our proposals are to:
– Create an up-to-date baseline design curriculum for all school children
– Increase the involvement of practising designers in schools and enhance the professional development of design teachers.

The objectives for these proposals are to:
– Ensure that every UK school child has the creative and design skills and awareness needed to thrive in a 21st century knowledge economy
– Clarify the relationship between the academic and vocational routes into design as the new 14–19 infrastructure is developed
– Develop Design & Technology teachers' skills so that they are up to date and relate to current practice
– Ensure that all young people and their parents have clear information about the career options available in design.

Create an up-to-date baseline design curriculum for all school children

Our proposal is that the design elements of both the academic (D&T and Art & Design) curriculum and applied (14–19) routes should be structured around a common design curriculum. This should be based on clear 'focus strands' that reflect the key design disciplines. Content in each strand will be specific, but there will also be common 'core design skills' that are actively developed across each of the focus strands.

We have identified the following focus strands and core design skills:

Focus strands
– Built environment
– Product design
– Fashion and textiles
– Communication/graphic design
– Service design.

Core design skills
– Design process
– Design appreciation and critical judgement
– Design management – global business and commercial context, adding and evaluating value, marketing
– Cultural context – global historical, social and cultural awareness
– Technology – ICT, materials, making, manufacture
– Creative challenge – research, problem solving, analysis, awareness, experimentation and risk-taking
– Design values and practices - sustainability, aesthetic, user-centered and multi-disciplinary approaches, morals/ethics
– Communicating – visual, written, oral, and kinaesthetic modes, teamwork and persuasion.

Service design is a new discipline, as the live/work case study on page x shows. It may therefore need to be incorporated initially into other focus strands or delayed until teacher development allows for its widespread roll-out.

Some aspects of the core design skills overlap with wider Key/Core Skills/Generic Learning (eg, written communication and team-work). Our view is that these generic skills should be embedded within subject areas as much as possible (in the way that ICT skills are already embedded within D&T in schools), since real contexts and learning opportunities will be far more motivating to young people than endless de-contextualised literacy and numeracy catch-ups.

This common curriculum should feature in the revised Key Stage 3 curriculum and subject statement being developed by the Qualifications and Curriculum Authority and in the forthcoming Key Stage 4 review.

The 14–19 Creative and Media Diploma, currently being developed by Skillset with Creative & Cultural Skills and Skillsfast, should also adopt this approach. We are concerned that the broad 'Creative and Media' title of the new diploma may be unhelpful, although we recognise and welcome the importance of maintaining breadth and a range of options for young people.

Many aspects of design also fit into 14–19 Diplomas being developed by other Sector Skills Councils (eg, Engineering being developed by SummitSkills; Process and Manufacture – ProSkills UK; Retail – Skillsmart Retail; Science, Engineering and Manufacturing Technologies – SEMTA; IT and Telecommunications – e-skills; and Construction – Construction Skills). We are keen to see design mapped across the new 14–19 architecture and to ensure that its current strengths in the academic GCSE/A-level route are not diminished.

Increase the involvement of practising designers with schools and enhance the professional development of design teachers

As noted in Section 4, over 50% of practising D&T teachers have no training in design and it is rare for practising designers to be involved in schools, although the value of this has been shown by schemes such as Designers into Schools Week and joinedupdesignforschools.

A high proportion of D&T teachers are also approaching retirement and there is a need to boost the recruitment and development of the next generation. Part of the issue here is that the current approach to training teachers is to place them in schools, where they learn from existing teachers. The fact that new teachers may be learning 'bad' practice from older teachers not trained in design increases the need to initiate a high-quality professional development programme for teachers.

A further need for this programme comes from the proposal above to create a new design curriculum.

Therefore we are proposing new regional centres of excellence for design teaching. These could:
– Be based within or linked to the regional centres of Creativity and Innovation proposed in the Cox Review, existing education facilities, existing good practice schools (such as Specialist Technology Colleges) and/or new retail developments
– Include student exhibition space, conference facilities and high quality CPD and teaching materials development, with staff to manage and build connections with schools and regional design sector.

A comprehensive service to match designers with schools, building on the professional accreditation scheme requirement for working with education, is also needed.

Design in schools would also benefit from the development of the Creative Choices portal by Creative & Cultural Skills to communicate clear design pathways to young people and parents.

Box 13
Some more ideas...

The Panel believes that the proposals set out in this section so far will form the foundations of a stronger and more successful design industry. Over the course of the consultation we are keen to hear designers' and design educators' views on these proposals and how we can build and enhance them.

But these proposals will not solve everything. Many of the issues identified earlier in this document, for example around sustainability and diversity, will need further action. During the course of our work we have explored many other ideas that we think have potential. Some of these are listed below, and we are keen to explore during the course of the consultation how these and other ideas could be integrated with the core proposals to build a better design industry.

- How could we do more to recognise and celebrate companies and individuals who excel in learning and skills?
- Should there be financial incentives for companies and/or individuals to train via the accreditation scheme?
- Should the professional accreditation include a right to time off for training?
- Would a skills passport scheme help capture and record people's learning achievements and portfolios?
- Do we need a design leadership academy or fast track leaders programmes?
- Do we need to train clients?
- Do we need an employer-led skills academy?
- How can we encourage and support teacher placements in design companies?
- Do we need a graduate apprenticeship programme?
- How can we really promote diversity in the industry?
- How can we develop sustainability skills and make sure that clients actually make use of them?
- In the long run, should it become compulsory to have professional accreditation in order to call yourself a designer?

8 Your views

'Wherever there is a good course there are good, dedicated tutors. They are the experts. If industry wants more out of education it should offer them practical support, not tell them how to do their job.'
Ben Casey, Chairman and Executive Creative Director, The Chase, and Design Skills Advisory Panel member

This consultation is a critical opportunity for designers and educators throughout the design community to comment and help us develop the Design Skills Advisory Panel's ideas before they are finalised and presented to the government. Following that, the agreed recommendations will be published in a final action plan early in 2007 before being developed and taken forward by the appropriate bodies.

It is important to note that there are already many excellent organisations, schemes and initiatives in place to support designers and the design industry. Many of these are summarised in Annex 3, although this list is by no means exhaustive. Clearly, the potential exists for one or more of the existing bodies to take forward the proposals described, however at this stage our concern is with gauging the design industry's views on **what** is needed, rather than **who** should do it or **how** it should be done.

During the consultation period (until the end of October 2006) the Panel is very keen to engage in real dialogue with as many designers and educators as possible. It will do this through:
– A communications campaign – Keep British Design Alive – which will encourage people to read the summary version of this consultation document and respond to the ideas
– The campaign website www.keepbritishdesignalive.com, where there is a questionnaire seeking your views on the ideas set out in section 7
– A series of research focus groups and workshops throughout the UK with designers and educators to gain in-depth qualitative responses and insight around the ideas
– A series of regional events and debates, details of which will be posted on the campaign website.

Please do give us your thoughts and ideas by completing the questionnaire on www.keepbritishdesignalive.com . Alternatively, if you want to send in a more detailed response to any of the analysis or ideas in this document, send it to skills@designcouncil.org.uk by 1 November 2006.

To register your views and ideas go to… www.keepbritishdesignalive.com

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10 *The Business of Design: Design industry research 2005*, Design Council/DBA.

11 Most of the data in this section comes from the *Business of Design: Design industry research 2005* publication, commissioned by the Design Council in association with the DBA, and was based on 2,433 telephone interviews with design businesses.

12 About two-thirds (65%) of the businesses with in-house design teams are in the private sector and almost all the remainder (30%) are in the public sector, with only small numbers in the charity, voluntary or community sector. Source: *The Business of Design: Design industry research 2005*, Design Council/DBA.

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Annex 1:
How the design sector is categorised

Standard Industrial Code

The government's Standard Industrial Code for design businesses is sub-class 74.87/2 'Speciality Design Services'. The Inter-Departmental Business Register (IDBR) maintained by the Office for National Statistics and compiled for VAT and PAYE information records 4,525 design businesses under this SIC code. There are, however, some limitations to the scope of this SIC code as it makes some important omissions, such as product and industrial, web and exhibition design.

Standard Occupational Code

The government's Standard Occupational Code for designers lies under the sub-group 342 Design Associate Professionals (the minor groups included in this sub-group are 3421 – Graphic designers, and 3422 – Product, clothing and relevant designers).

Design disciplines

The Design Council and Design Business Association's survey of UK design businesses, published as *The Business of Design – Design Industry Research 2005*, described the design industry in terms of six specific design disciplines (see below).

Response rates to the survey from designers working in the different disciplines varied, reflecting the different sizes of the disciplines. As a result, not all the disciplines are included in all the tables included in this document, reflecting response rates that were too low to be statistically reliable. Service design is included in some tables reflecting open questions where respondents were asked to self-define the design services they offer. Service design is defined as the design of services, but is perhaps best understood by looking at the live|work case study on page 15.

The sources (and, by extension, the classification used) for statistics quoted throughout this document are indicated, either in the main text or in the endnotes. However, it is important to note that Creative & Cultural Skills does not have responsibility for Fashion and Textiles (which comes under the remit of SkillsFast) and that, while it comes into the overall Creative & Cultural Skills footprint, advertising is covered by a separate Skills Consultation.

Design discipline	Definition
Communications design	Graphics, Brand, Print, Information design, Corporate identity
Product and industrial design	Consumer/household products, Furniture, Industrial design (incl. automotive design, engineering design, medical products)
Interior and exhibition design	Retail design, Office planning/workplace design, Lighting, Display systems, Exhibition design
Fashion and textiles design	Fashion, Textiles
Digital and multimedia design	Website, Animation, Film and television idents, Digital design, Interaction design
Other	Incl. advertising, aerospace design, building design, landscape design, jewellery design, mechanical design, etc.

Annex 2:

Membership of the Design Skills Advisory Panel and the organisations and individuals involved in developing the proposals so far

DESIGN SKILLS ADVISORY PANEL

Paul Priestman – Chair
Priestman Goode

David Worthington – Deputy Chair
Conran Design Group

DESIGN EMPLOYERS
GRAPHIC COMMUNICATIONS AND BRANDING

Julian Grice
The Team

Nina Jenkins
The Partners

Graham Shearsby
Design Bridge

Ben Casey
The Chase

Sue Balsom
FBA

Daniel Ibbotson
Graphical House

Peter Melling
The Core

PRODUCT AND INDUSTRIAL DESIGN

Ingrid Baron
IDEO

Mike Corcoran
The Product Group

INTERIOR AND RETAIL DESIGN

Rasshied Din
Din Associates

Andy Bone
Four IV

Rosalyn Scott
Dalziel and Pow

DIGITAL MEDIA DESIGN

Daljit Singh
Digit

John Corcoran
Wire Design

IN-HOUSE DESIGN DEPARTMENTS

David Godber
Nissan Design Europe (London)

Helen MacKintosh
BBC

Richard Parker
Unilever

Jon Turner
Boots

DESIGN ORGANISATIONS

Deborah Dawton
Design Business Association

Frank Peters
The Chartered Society of Designers
The Design Association

Susan Hewer
RSA

Chris Thompson
D&AD

Jane McCarthy
Design Museum

DESIGN EDUCATION
FURTHER AND HIGHER EDUCATION

Barbara Jones
Cleveland College of Art and Design

Joyce Palmer
Arts Institute at Bournemouth

SCHOOLS

Kevin Jones
Specialist Schools Trust

MANAGEMENT AND SECRETARIAT

Lesley Morris
Head of Design Skills, Design Council

Annabel Praeger
Design Industry Skills Director, Creative & Cultural Skills

This Design Skills Consultation
was written by
Toby Greany with
Aviv Katz, Design Council

Pre-launch consultation sessions, visits and events

Events

| Design Skills Debate – An audience with Michael Bierut | April 19th 2005 |

| Design Skills Debate – The Seven Ages of Design | September 15th 2005 |

Speakers

Kenneth Grange

Ross Lovegrove

Sarah Wigglesworth

Naresh Ramchandani

Simon Waterfall

Julia Lohmann

Fabian Herrman

Danny McNeil

Consultation sessions

Consultation with recruitment consultants		November 30th 2005
Name	Organisation	Specialist Area
Melanie Bennett	Recruit Media	Various
Kim Crawford	Periscope	Account Management
Stuart Newman	Network	Interior Design

Educators' seminar		November 30th 2005
Name	Institution	Specialist Area
Su Em Sans	Cleveland College of Arts	Graphic Design
Mark Lamey	University of Central Lancashire	Head of Design
Michael Leek	Amersham and High Wycombe College	Head of Art and Design
Kate Moore	Leeds College of Art and Design	Aim Higher Co-ordinator
Alison Johnson	University of Teeside	Graphic Design
Yorrick Benjamin	University College, Falmouth	3D Design for Sustainability
John Coles	University of Middlesex	Interior Design
Malcolm Kennard	University of Kingston	Graphic Communication
Rhinnaon Robinson	Cumbria Institute of the Arts	Graphic Design
Roger Sale	University of East London	Industrial Design
John Tedder	Liverpool John Moores University	Product Design
Bill Hart	Director, Synchonicity Consultants	Education
Joe Heapy	Director, Engine	Design

Design Partners meeting		February 6th 2006

CHEAD working group		February 13th 2006 March 8th 2006
Name	Insitition	
Rod Bugg	Wimbledon School of Art	Principal
Gerard Moran	De Montfort University	Dean of Faculty of Art and Design
Elizabeth Rouse	University of the Arts	Pro-Rector of Academic development and Quality
Maureen Wayman	Manchester Metropolitan University	Dean of Faculty of Art and Design

2020 vision session	February 28th 2006
Name	**Company**
Matt Baxter	300million
Martin Lawless	300million
Peter Inglis	4c design ltd
Nina Warburton	Alloy Total Product Design
Lulu Laidlaw-Smith	Blue Marlin
Jasmin Hirani	Core-Create Ltd
Zuleika Burnett	Core-Create Ltd
Tony Walford	Corporate Edge
Liz Gosling	Corporate Edge
Mary Canale	DC Group
Celestine Phelan	Event Communications
Ashley Goodall	Fitch
Jane Chittenden	Format Design
Simon Robertson	Identity Limited
Andrew Knowles	jones knowles ritchie
Lisa Robertson	Jupiter Design
Mark Shaw	Jupiter Design
Jim Orkney	Kinneir Dufort
Jim Bodoh	Lloyd Northover
Neil Hudspeth	Lloyd Northover
Jim Northover	Lloyd Northover
Gary Cooke	Open Agency
Caroline Hagen	Reach Design
Ian Robson	Robson Dowry
Tim Corvin	Sieberthead Limited
Max du Bois	Spencer du Bois
John Spencer	Spencer du Bois
Claire Biscard	Spencer du Bois
Jane Price-Hunt	Templar Downie
Harriet Devoy	The Chase
Harry Ellis	The Design Fulcrum
John Corcoran	Wire Design
Jonathan Ford	Pearlfisher
Mike Branson	**Pearlfisher**
Shan Preddy	**The Preddy Consultancy**

Design buyers' session	March 3rd 2006
Name	Company
Bridget Middleton	BBC
Isabel Saiz	National Trust Enterprises (Ltd)
Fanny Sigler	COI
Fiona Lydon	Arts Council
Kate Fairchild	BAA
Rob Sinclair-Barnes	First Choice

Stakeholder breakfast	March 21st 2006
Name	Company
Sebastian Conran	Conran & Partners
Lucas Dietrich	Thames & Hudson
Michael Wolff	Michael Wolff & Company
John Mathers	Enterprise IG

Visits

The Arts Institute at Bournemouth

Panel members visited the Arts Institute at Bournemouth, where they were able to see evidence of live projects and the way the Institute has been working directly with industry. They also had the opportunity to meet both students and tutors in their working environments.

Schools

Panel members paid visits to the John Cabot Technology College in Bristol and the Ashfield School in Kirkby-in-Ashfield, Nottinghamshire, where they were able to witness D&T teaching.

Annex 3:

Key design education and skills organisations and initiatives in the UK

This annex includes short summaries of the main organisations and initiatives that support design in:
– Schools
– Colleges and Universities
– Work.

The broad criteria for inclusion are that the organisation/initiative is on-going or recently completed; that it operates at a significant scale and that it supports the:
– Professional development of design educators
– Design learning of design students
– Development of innovative approaches to delivering design education and/or the design curriculum
– Advancement of design research
– Design education and/or policy infrastructure
– Professional development of practising designers and/or design businesses
– Design learning for design buyers/clients.

Individual schools and colleges have not been included.

Arkwright Scholarship

The purpose of the programme is to encourage the most talented British youngsters to consider a career in design or engineering. The programme believes that this will help ensure the UK's future prosperity. It awards high-ability 15–16 year-old students scholarships during their 'A' Level/Scottish Highers, with all awards funded by industry partners and charitable trusts.

Arkwright Scholars pass a rigorous selection process and will be ambassadors of the Design & Technology and Maths departments in their schools. In September 2005, 172 scholarships were awarded. Scholars are actively encouraged to develop a partnership with their sponsor, which can result in work experience, specialist support for their Design & Technology project and even sponsorship through university.

Scholars have access to:
– Arkwright Alumni
– Adopt-a-Scholar Scheme (for charity-sponsored Scholars to gain work experience)
– Career awareness days
– Networking opportunities
– Personal development opportunities.

The value of the Scholarship is £1,800 over the scholars' two A Level/Higher years. It is divided between the Scholar, the school's Design & Technology department and the programme itself. The Arkwright Scholarships Trust has 510 member schools.

www.arkwright.org.uk

Audi Foundation

The Audi Design Foundation is an independent charity established in 1997 by Audi UK. Run by a team of people from the design community, it is dedicated to giving young people the chance to springboard their design careers, ultimately advancing innovation and challenging conventional design wisdom in the UK. The Foundation offers a wide range of services in the form of events, grants, awards and educational resources.

Audi Innovation Awards
Focused on the work of design students aged between 11 and 14, these are centered on a series of curriculum-based design projects and are designed to encourage new ways of thinking and creative problem-solving.

Designs of Substance
This challenges final year university students to design initiatives to help developing communities around the world. Students are encouraged to think about design which makes a difference, rather than design which is simply aesthetically pleasing. Winners have the opportunity to visit the communities that they've helped. For example, in 2004, final year students from Brunel University worked to improve the quality of life for communities in Brazil's favelas.

Educational resources
These are designed to inspire and challenge students and support teachers in the fields of engineering and design.

www.audidesignfoundation.org

Creative Partnerships

Creative Partnerships, part of the Arts Council England, provides school children across England with the opportunity to develop their creativity.

It achieves its aims by:
– Helping schools to identify their individual needs
– Enabling schools to develop long-term partnerships with organisations (such as theatres, dance studios and website designers) to help them meet these needs
– Encouraging use of all the UK's creative resources
– Conducting its own local, national and international research into areas such as creative risk-taking, methods for creative learning and how the creative and cultural sectors can most effectively work with schools
– Encouraging creativity within all subjects of the National Curriculum
– Providing access to a wide range of publications, case studies and conference papers.

Funding in 2005–06 came from the Department for Culture, Media and Sport (£32m) and Department for Education and Skills (£2.5m). It also pursues business partnerships to help fund individual programmes.

www.creative-partnerships.com

The Design and Technology Association

The Design and Technology Association is a professional association representing all those involved in Design & Technology education and associated subject areas in secondary education. It is committed to securing, developing and augmenting excellence in Design & Technology education and enabling individuals, institutions and communities to achieve their maximum potential.

The Design and Technology Association is an educational charity and is governed by a Council of Management.

Its members enjoy a wide variety of benefits, including a range of newsletters and magazines, downloadable information, regional networks, training and a range of discounts on products and services.

The CADCAM in Schools Programme

The Design and Technology Association was involved (together with NAAIDT, HMI and Ofsted) in helping schools develop their CADCAM capabilities. Schools can now continue to develop their expertise from the 30 CADCAM reference and support centres, a website dedicated to developing CADCAM training and related conferences.

www.data.org.uk

DfES – Key Stage 3 Strategy D&T Strand

Design & Technology has a Programme of Study (PoS) for Key Stages 1–3, meaning that all students of these ages must be taught the subject.
Key Stage 3 PoS is split into broad sections, each designed to offer students the chance to:
– Develop their designing and making skills
– Improve their understanding of tools, equipment, materials and components
– Nurture their creativity
– Develop their understanding of technological processes, products, manufacturing – and how each of these contributes to society
– Encourage students to apply their D&T understanding to what they're learning in other subjects.

Since Design & Technology isn't a Core Subject, teachers are able to teach as much or as little of this PoS, in whichever order they see fit. Guidance is, however, provided to teachers to help them work out the best programme for their students. Guidance is also provided as to how D&T fits in with other subjects, particularly ICT, mathematics and English.

www.standards.dfes.gov.uk

Design Museum

One of the world's leading museums of design, fashion and architecture, the Design Museum has a constantly changing programme of exhibitions combining insights into design history with exciting innovations in contemporary design. The museum attracts up to 250,000 people a year, many of whom are aged between18 and 30.

In addition to its exhibitions, the Design Museum has a lively programme of talks by leading designers, architects and design commentators, as well as evening and weekend courses for adult learners. The Design Museum also runs the prestigious annual Designer of the Year award, for which visitors to the museum (and to the Designer of the Year website) are invited to vote.

The Design Museum website offers extensive information about design and design history in the online research archives Design at the Design Museum and the Digital Design Museum. Teaching resources are also available to download from the website.

www.designmuseum.org

The National Association of Advisers And Inspectors in Design and Technology (NAAIDT)

NAAIDT is an organisation comprising individual and corporate members, all of whom have joined to enhance Design & Technology education in UK schools. Members exchange information with one another and work with other relevant agencies, always promoting the highest standards in their fields. NAAIDT believes that all Design & Technology education should be placed in as practical and real a context as possible, so that pupils can truly contribute to the society in which they live.

Members of NAAIDT benefit from a range of services:
- The Leadership and Management Database, which features positive examples from schools and other institutions
- The Project Exchange, which provides teachers and others with the opportunity to share ideas for Design & Technology projects and activities
- The portfolio of assessed work, a searchable collection of previous years' coursework and examination work
- The CADCAM Gallery, a collection of CAD drawings and resulting models developed by Design & Technology teachers
- The Design & Technology Milestones database, a gallery of products of all types selected by pupils, teachers and NAAIDT members as being significant developments of the last millennium
- D&T Online, which, at its simplest, comprises an extensive database of information potentially relating to all focus areas of D&T. It also has an interactive designer section which enables users to access information in a live designing situation to support and enhance their design decisions. Additionally, users without access to sophisticated CNC equipment may link with those who have, to enable components to be manufactured remotely.

- The Free and Easy project aims to make CADCAM possible at low cost. Through the project, users may acquire all information, design details and software needed to manufacture a CADCAM machine using readily available parts for a few hundred pounds.
- A discussion forum and complete list of members' contact details
- The NAAIDT Newsletter, circulated automatically to all members. Archived copies are now posted in the Members' section of the website.

NAAIDT has good working partnerships with many suppliers of Design & Technology-related products.

www.naaidt.org.uk

The Sorrell Foundation
(and Joined-up Design for Schools)

The Foundation's aim is to inspire creativity in young people and improve quality of life through good design. It creates and tests new initiatives and ideas and seeks ways to join up public services such as health and education with the UK's design community. Its work aims both to provide immediate benefits and create models with long-term value.

One initiative is joinedupdesignforschools. This began in 2000 and explores ways in which good design can improve the quality of life in schools. It does this primarily by listening to pupils and giving them the chance to take full control of and responsibility for the work. By doing this, the pupils develop a range of creative and life skills.

By 2004, the project had been run in 60 schools and more than 10,000 pupils had benefited from it. Initial results were presented in an exhibition at the Victoria and Albert Museum, London, in spring 2005. The exhibition then toured the country and has been visited by more than 40,000 people, involving more schools in the process.

Pupils on the programme identified 12 common issues that they would like addressed in schools. These ranged from the quality and atmosphere of the interiors, to improvements in communication between pupils, teachers and parents. The programme highlighted that engaging the pupils leads to relevant, practical solutions for all areas of the school's design.

www.thesorrellfoundation.com

Young Creative Network

YCN is a member-based organisation existing to inspire, support and give visibility to new creative ideas and thinking. Its website has been developed to promote its broad-based design projects and to facilitate the interaction between the best new talent in design and communication internationally. It doesn't have an upper age limit to membership although its awards are only offered to candidates under 30. Typically, membership begins at age 16, rather than any younger.

YCN's work focuses on its annual award programme. Briefs tend to be written by prestigious organisations and the most outstanding entries are showcased in YCN's annual publication and as part of its annual exhibition in the Fashion Space Gallery at London College of Fashion.

Members can also find information on YCN's website relating to the very latest creative job opportunities, all requiring up to three years' experience.

Launching later this year (2006), the website will outline the creative study opportunities available at leading educational institutions internationally. This will be in the form of two directories specific to undergraduate and postgraduate study.

The website also offers members 'blogging' opportunities.

Additionally, the website offers a 'Featured' section, where members are able to upload their own work for consideration and comment by others.

www.ycnonline.com

Young Foresight

Young Foresight is an educational initiative for Design & Technology within the English and Welsh National Curriculum. It is for pupils in Year 9 (age 13–14) but has also been used successfully with both older and younger pupils. Its services can be utilised by both teachers and pupils.

Supported by the DfES and the DTI, Young Foresight is aimed at giving students direct experience in all the skills needed to create successful products or services, from conceptualisation and design, to adaptability in the market place. It stems from the belief that current Design & Technology teaching is limiting.

Pupils work in teams, using new and emerging technologies as a basis for their designs. They justify their design decisions by group discussions and class presentations, which helps to develop their communication skills, creativity and design ability.

Pupils are encouraged to design ideas which are not limited by the resources available to them if they were to have to make them. They are also encouraged to write their own design briefs. In this way, the programme goes beyond resource limitations at school and encourages pupils to think about how design is conducted in the 'real' world.

The programme is supported by educational resources including DVDs, region-specific subject matter and a Product Gallery on the website. Visitors can find designs, ideas and services designed by school/college pupils who have taken part in Young Foresight.

www.youngforesight.org

Art, Design and Media (ADM) Subject Centre of HE Academy

The Subject Centre for Art, Design, Media (ADM) is part of the Higher Education Academy (HEA) established by the Higher Education Funding Councils for England, Northern Ireland, Scotland & Wales. The centre is located at the University of Brighton.

Its aim is to promote high quality learning and teaching in subject communities and create opportunities for professional development. It achieves this by:
– Creating partnerships with subject associations and professional bodies in the UK and abroad
– Working with Subject Centres, the Higher Education Academy, key agencies and other initiatives
– Managing and operating a Subject Centre and regional networks
– Awarding funding to related works. Recent funding has gone to The ADM Subject Centre Learning and Teaching Project Fund, the Pedagogic Research Project Fund and the HE in FE Project Fund. It has also jointly funded the Cultural Studies Project Fund.
– Conducting on-going research that can support and enhance the development of skills in the Art, Design and Media sectors, the outcomes of which feed into policy and inform the practices of Higher Education Institutions.

www.brighton.ac.uk/adm-hea

Council For Higher Education in Art and Design (CHEAD)

CHEAD is an association of 80 educational institutions with degree or postgraduate provision in Art & Design. It provides a forum for debate and exchange of information and ideas and seeks to inform, influence and initiate policy in Art & Design higher education at national and other levels.

It produces a register of external examiners and validators for the benefit of its members.
There is an Executive Committee of elected officers and members, as well as a Council.

It also has a formal relationship with UCAS regarding consultation on matters relating to admissions to Art & Design courses.

www.chead.net

National Arts Learning Network (NALN)

The National Arts Learning Network is a partnership of the specialist art, design and performing arts institutions in England, led by University of the Arts London. This is a four-year, HEFCE-funded project to widen participation in higher education in the arts.

More specifically, its aims are to:
– Increase the number of learners with vocational qualifications or those already at work, progressing to selective specialist programmes at FdA, BA and post-graduate levels
– Ensure that employers recruit individuals who reflect the diversity of the UK population
– Ensure that institutions continue to focus on excellence by reflecting the diverse nature of their student population
– Continue to make progress in meeting government targets for widening participation within the creative sector.

Its focus is on supporting the student from the time of applying to HE college through to continuing study and employment. It does this by creating clear vocational progression routes to HE as well as offering CPD. It works closely with the Sector Skills Councils and on a local level with each partner education college. It also works to develop additional qualifications at all levels to meet employer needs. All its work is underpinned by research.

www.arts.ac.uk/naln.htm

National Council for Graduate Entrepreneurship (NCGE)

By understanding the circumstances in which graduate entrepreneurship can flourish, and by promoting a culture of entrepreneurship within higher education, NCGE's goal is to influence, inspire, and increase the number of, students and graduates who give serious thought to self-employment or business start-up.

It achieves this broad strategy through a number of initiatives and activities focused on influencing government policy, identifying and promoting good and interesting working practice and instilling students and graduates with confidence.

More specifically, its activities include:
– NCGE's Graduate Entrepreneurship Observatory, the UK's 'intelligence source' on graduate entrepreneurship and related themes in the form of a searchable database
– NCGE Research Papers – documents highlighting key findings
– NCGE's Research Community – a register of individuals and organisations engaged in researching graduate entrepreneurship
– Flying Start, a new programme to give thousands of students the opportunity to start their own business. It will start with regional rallies which will give students the chance to see if the entrepreneur's lifestyle is the right choice for them. At the end of the event, students are asked to make a pledge to take next steps. This will be followed by an online support system to maintain momentum. Between 15 and 20 students will then be selected to join the Flying Start programme where they will be fully supported to develop their ideas and seek funding.

www.ncge.org.uk

Anti Copying in Design
(ACID)

ACID is a not-for-profit membership trade organisation, set up for designers and manufacturers to combat the growing threat of plagiarism in the design and creative industries. By helping its members to understand and protect their rights, ACID's aim is to prevent intellectual property rights abuse. ACID provides a framework for those who believe that their IP rights have been infringed and has recently introduced a cost effective intellectual property insurance scheme with React, supported by underwriters Hiscox.

ACID achieves its objectives via education, believing that knowledge and understanding of intellectual property rights is a key strength in creating a preventative and deterrent design management strategy. Protection and full exploitation of the rights that subsist in a company's portfolio are underpinned by support from ACID, both at grass roots level and through expert intellectual property legal advisors, IP legal and membership hotlines. Members are expected to adhere to the letter and spirit of the Principles of the ACID Code of Conduct.

ACID is also actively involved in the lobbying process at national and international levels to improve legal protection and standardise the administration of intellectual property rights. ACID LOBBY is an action group and a leading voice for all designers on IP matters.

www.acid.uk.com

British Design Innovation
(and its Design Directories)

Established in 1993, British Design Innovation is a not-for-profit membership organisation with a focus on collaborative innovation and strategic user-centered design.

The membership comprises strategically-led product, proposition, brand, commercial interior, new media, packaging and service design agencies as well as university innovation departments, in-house design and innovation teams, innovation agencies, PhDs, entrepreneurs, dealmakers and Art & Design faculties and their graduates.

This unique mix is designed to foster creative knowledge transfer to assist collaborative innovation.

The BDI website attracts more than 400,000 unique visitors every year and facilitates an estimated £100million of fee-based income to the design & innovation sector.

BDI undertakes industry-wide research studies including the annual Design Industry Valuation Survey, as well as topical surveys on industry issues such as pitching versus productivity, and opinion-based surveys such as the changing design industry business model, accreditation and copyright.

BDI provides its members with the following services:
– Promotion of business services; case studies, personnel profiles, and press material through dedicated online directories (Design Agency Directory, Design and Innovation Directory, Graduate Directory)
– Use of the BDI marque on members' own credentials and marketing collateral
– A full suite of professional documentation including appointment procedures, briefing tools, non-disclosure agreements, IPR contracts and project management tools.
– BDI recommendation service assisting design users in professionally identifying and appointing best qualified agencies
– Training tools for course directors to help final year students to understand how a designer is briefed, evaluated and appointed by clients
– A Design and Innovation newswire delivered to 1,200 publications and a further 10,000 opinion formers worldwide on a monthly basis
– Access to an international database of design awards, events and media organisations
– Participation in Propositions into Profit – a collaborative design and innovation framework of deal making events held in the UK and abroad
– Membership network lunches and industry briefings
– Export advisory services, events, media communications and international trade missions
– Export, IPR and employment helplines.

www.britishdesign.co.uk
www.britishdesigninnovation.org

British Interactive Multimedia Association (BIMA)

The British Interactive Multimedia Association (BIMA) is the trade association representing the diverse interests of the UK interactive industry, across both industry and education.

Its goals are to:
– Facilitate the exchange of information and advice on the technology, application and business of new media (between government, corporates and creative media)
– Promote the use of interactive technology to business and the public
– Provide access to market data and intelligence through links with government departments and professional bodies
– Hold regular talks and conferences on key industry issues
– Seek opportunities for funding to promote the interests of UK new media abroad
– Set up opportunities for training, networking and recruitment
– Set standards in industry, eg copyright issues, contractual matters, codes of conduct
– Represent and champion the UK multimedia industry internationally.

BIMA provides a series of case studies on real-life projects used by a wide variety of website visitors who want to get a better idea about the industry and the way interactive solutions are developed. BIMA's annual awards set the standard for the industry, celebrating creative excellence and craftsmanship.

www.bima.co.uk

British Interior Design Association (BIDA)

The British Interior Design Association (BIDA) was formed through the amalgamation of the Interior Decorators & Designers Association and the UK chapter of the International Interior Design Association. BIDA is an Associate Member of the International Federation of Interior Architects & Designers.

It exists to promote and support the interior design and decoration professions and is committed to the advancement of the professional practice of interior design and to the creation of a comprehensive vision for the design challenges of the future.

BIDA aspires to:
– Foster high standards of design and increase public awareness of the importance of good design in all aspects of daily life
– Emphasise the environmental and aesthetic implications of design
– Encourage excellence in design through education, training and continuing professional development of individual practitioners
– Support the mentoring of students and new designers in order to create a solid foundation for the future strength of the profession
– Stimulate open debate with other professional institutions and bodies involved in the interior design industry nationally and internationally
– Achieve the registration of all practising interior designers.

Those requiring its members' services can search online. Although BIDA doesn't offer any formal careers advice, its website directs visitors to known course establishments and recruitment consultants.

www.bida.org

Centre for Sustainable Design (Cfsd)

The Centre for Sustainable Design facilitates discussion and research on eco-design and broader sustainability considerations in product and service development. This is achieved through training, workshops, conferences, research, consultancy, publications and the internet. The centre also acts as an information clearing house and a focus for innovative thinking, and is an internationally recognised centre of excellence.

It was established in 1995 within the Faculty of Design at The Surrey Institute of Art & Design, University College.

Its conferences, workshops, research and training projects (including distance learning) focus on three core areas:
– Managing eco-design
– Sustainable solutions
– Environmental communications.

CfSD edits The Journal of Sustainable Product Design, which is a quarterly refereed publication supported by experts from academia and business worldwide.

Its website has links to a number of related sites.

www.cfsd.org.uk

Chartered Society of Designers

The Chartered Society of Designers (CSD), established in 1930, is the world's largest chartered body of professional designers and is unique in representing designers of all disciplines. It is governed by Royal Charter and its members are required to practice to the highest professional standards. Various membership categories are operated but Membership and Fellowship is only awarded to qualified designers who prove their professional capability during an admission assessment. The Society is a registered charity.

CSD's Charter objects are to:
– Promote the professionalism of design
– Further design practice
– Encourage the study of design techniques.

The CSD offers a number of benefits to its members:
– Use of the affix MCSD or FCSD
– A client matching service
– The Designer magazine. Articles and news are sourced from around the world. Every issue carries details of current training and CSD events.
– A Continuing Professional Development scheme. Those members achieving 100 points in any one year receive a Professional Practice Certificate and their achievement is highlighted on their CSD website profiles
– Discounts on CPD training and events
– Awards, which span all career stages and disciplines, including students. Business networking opportunities nationally and regionally
– Free portfolio on CSD Directory.

www.csd.org.uk

D&AD

D&AD is an educational charity whose purpose is to set creative standards, educate, inspire and promote good design and advertising globally. The D&AD Global Student Awards, alongside 17 other education initiatives, have been improving the relationships between education and the creative industries for the past 30 years. The Student Awards set live industry challenges to design and advertising students and provide one of the most recognised pathways into employment in the creative industries.

D&AD works with and unites creative industry with universities and colleges teaching design, advertising and communication through its University Network. It also runs extensive education programmes for students and postgraduates, graduating creatives, tutors and course leaders, and working designers and creatives. In addition, D&AD runs 'Workout', a series of more than 30 professional development sessions run by creative professionals for creative professionals.

Primarily funded by industry, each year D&AD invests more than £2m in its education programmes.

It offers a number of services:
– Professional development courses for designers and creatives
– A number of awards including D&AD Global Awards, D&AD Global Student Awards and D&AD Best New Blood
– Online showcases for the world's best emerging talent – D&AD talentpool
– Advertising workshops and Design workshops for students and graduates, providing industry-focused learning and job opportunities
– Online recruitment service, connecting graduates with employers, and a networking service for those looking for a creative partner
– The D&AD New Blood exhibition, the largest annual graduate showcase for graphic design, digital media and advertising graduates
– Portfolio surgeries and match-making services for design/advertising courses and industry partners
– Industry-focused professional development for tutors and course leaders
– Industry-based case studies and teaching resources.

Membership is open to those with an interest and passion for creativity and design.

www.dandad.org

The Design Association

The Design Association (DA) operates the DA Accreditation Programme for design businesses and in-house design teams. It was launched in March 2006 by The Chartered Society of Designers and is funded by companies which embark on the accreditation programme.

Accreditation is underpinned by membership which can only be maintained by undertaking a yearly accreditation review. Accreditation is based on a set of design and business criteria and key performance indicators that have been researched and identified as markers of design business best practice.

Benefits of DA Accredited Member status include:
– Use of the DA marque
– Matching service
– IP registration facility for all work
– £25,000 copyright insurance cover
– Standard design and business documentation pack.

The DA also operates the DA Academy, which provides a structured programme of training in support of design business best practice.

www.design-association.org

Design Business Association

The Design Business Association exists to:
– Promote the industry's professional excellence
– Promote the impact of effective design on improving the quality of people's lives.

It achieves this by offering its members a variety of services:
– Advice and support on how to manage and grow a design business
– Promotion of productive partnerships between commerce and the design industry
– A set of standards and Code of Conduct
– Training programmes
– A sense of community and networking opportunities
– Events and debates.

Its professional training programmes are aimed at everyone working in design. Its modules cover a range of subjects such as the marketing of a design consultancy, presentation skills, financial management, career development and design and the law. The modular approach allows members to select the subjects most relevant to their business needs.

www.dba.org.uk

The National Endowment for Science, Technology and the Arts (NESTA)

NESTA works to transform the UK's capacity for innovation. It invests in all stages of the innovation process, backing new ideas and funding new ventures that stimulate entrepreneurship.

NESTA aims to be a powerful catalyst for innovation in the UK. Its strong evidence base helps to influence policy. Its partnerships and networks broker ideas across sectors, accelerating the process of innovation. Its pioneering models of investment are being adopted by organisations throughout the UK.

Underpinning their work is the fundamental view that successful innovation fuels long-term economic and social progress in the UK.

www.nesta.org.uk

Royal Institute of British Architects (RIBA)

The Royal Institute of British Architects is the UK body for architecture and the architectural profession. It provides support for its 35,000 members in the form of training, technical services, publications and events, and set standards for the education of architects, both in the UK and overseas. With government, RIBA works to improve the design quality of public buildings, new homes and new communities. Its annual regional award schemes recognise outstanding architecture and culminate in the RIBA Stirling Prize. At the Victoria and Albert Museum, RIBA hosts exhibitions, archives, talks and shared study facilities in partnership with the V&A. And, from its London headquarters, it helps the public to learn more about the built environment through information services, websites and a library that includes an unrivalled collection of books a nd photographs.

www.riba.org
www.architecture.com

RSA – including Inclusive
Design and Design Directions

The Royal Society for the encouragement of Arts, Manufactures and Commerce (RSA) is an independent, non-aligned, multi-disciplinary registered charity with more than 25,000 Fellows. It encourages sustainable economic development and the release of human potential through a programme of projects, lectures, seminars and practical projects which relate to the RSA's five manifesto challenges.

Inclusive Design
The RSA Inclusive Design Resource is a website concerned with ensuring that environments, products, services and interfaces work for people of all ages and abilities. It achieves this by bringing together new and existing information in a user-friendly, interesting and accessible way. The website is aimed at design students, tutors, professional designers, design managers and policy makers. It was also developed to introduce newcomers to key concepts, examples and design/research methods, and to help practitioners build up their own tools and techniques.

RSA Design Directions
This is a student award scheme which offers challenging projects with a strong social context. It aims to have a positive influence on design curriculums by offering projects which promote cross-disciplinary thinking, encourage academic enquiry, support student innovation and develop a relevant and appropriate mindset and skills set for the 21st century.

www.thersa.org.uk
www.inclusivedesign.org.uk
www.rsadesigndirections.org

Creative Ireland

Creative Ireland is the online home for the creative Irish design community. Creative Ireland is committed to promoting Irish design talent throughout the world via the internet.

Its website offers four distinct services, namely:
– Directory of organisations, segmented by industry sector
– Jobs offered, jobs wanted
– Discussion forums
– News and events.

www.creativeireland.com

Creative London

Creative London is part of the London Development Agency. Its policies, programmes and ideas are based on the findings of a six-month inquiry by the Mayor's Commission on the Creative Industries. The Commission identified common barriers to the success of creative enterprises in London. Creative London seeks to reflect the diversity of London's population and offer practical support to creative enterprises of all sizes and at all stages of business growth.

Its initiatives include:
– Development of Creative Hubs across London to open up opportunities, connect people and offer platforms to showcase work
– London Innovation, which backs innovation in business, funding up to 50% of project costs
– The Creative London Intellectual Property Advice Service ('Own It'), provides the creative industries with everything they need to know about how to market and profit financially from creativity, including understanding intellectual property, copyright, design rights, trademarks, patents and licences. Advice, information and assistance are free. The programme has been developed in partnership with The London College of Communication and the University of The Arts London.
– The Creative Space Agency, which helps businesses find the space they need (inexpensively)
– The Supporting Talent to Enterprise Programme (STEP), which offers intuitive training from industry experts, workplace experience and accredited qualifications for students. It is delivered by the Non-Formal Learning Sector Organisations (NFLS), which means that is not officially recognised as a further or higher education institution.

www.creativelondon.org.uk

Cultural Enterprise

Cultural Enterprise is the Business Support Agency for the Creative Industries in Wales. It helps those setting up a creative business as well as those already running one. Creative businesses include visual art (including photography), theatre and dance, craft, writing and publishing, graphic and product design, fashion and architecture, radio and new media.

Assistance comes in the form of:
– Mentoring
– Relevant research
– Online factsheets
– Referrals to other helpful organisations
– Cultural Enterprise E-bulletin (news)
– Networking sessions among creative and business communities.

Cultural Enterprise is funded by the Arts Council of Wales and the Welsh Assembly government.

www.cultural-enterprise.com

Design Wales

Design Wales provides comprehensive advice and support services on all issues related to design. Its services are provided free to all businesses in Wales and it is funded by the National Assembly for Wales.

Design Wales also supports the delivery of design-related education in Wales by visiting schools and distributing case study material, usually delivered via CD ROM, PowerPoint presentations and workshops.

(Design Wales encompasses the services of the former Welsh Design Advisory Service).

www.designwales.org.uk

Design Commission for Wales

The Design Commission for Wales is a national organisation established and funded by the National Assembly for Wales. Its mission and aims are to:
- Champion high standards of architecture, landscape and urban design in Wales
- Promote a wider understanding of the importance of quality in the built environment
- Support skill building
- Encourage social inclusion and sustainable development
- Promote design practice compatible with the National Assembly Sustainable Development Scheme
- Promote best practice in energy efficiency, waste disposal and public transport
- Promote design practice compatible with the highest standards in relation to equal opportunity and social inclusion.

DCFW and its partners are active throughout Wales. It views itself as a resource available to local authorities, other design professionals and the wider public. It acts as a non-statutory consultee within the planning process through its Design Review programme. The Design Review panel comprises professionals from the fields of urban design, architecture and planning as well as transport and sustainability.

A priority for DCFW is the implementation of training and skills development programmes designed to support professionals in the field. Additionally, its schools and communities education programme will form a platform for broader lifelong learning and professional skills programmes.

www.dcfw.org

Design Initiative

The Design Initiative promotes good design, visual arts and contemporary craft from the North West. It is a specialist regional agency which works directly with practitioners and commissioners to expand the market in the North West and make it a centre for quality design practice.

It provides practical advice and specialist information to commissioners, purchasers and producers of design, craft and visual arts and also offers one-to-one advice sessions for creative professionals (including advice on portfolio development, presentation or where to look for business support).

It also offers commissioners of design an impartial matchmaking service together with free professional advice on all aspects of the commissioning process. Commissioners can also visit the 'Find a Creative' area of the website to access mini portfolios of many of the region's creative professionals.

The Design Initiative also organises an on-going programme of activity such as publications, regular topical seminars and workshops (for both practitioners and commissioners), events and awards schemes and trade shows. These are all aimed at supporting and promoting young design businesses from the North West in new markets regionally, nationally and internationally. Offices are based in Liverpool and Manchester.

www.designinit.org.uk

The Lighthouse

Based in Glasgow, The Lighthouse provides an opportunity to experience architecture and design through a changing programme of exhibitions, education and life-long learning, networking, events and initiatives.

Its vision is to develop the links between design, architecture, and the creative industries. Since opening, the centre has welcomed well over one million visitors.

The Lighthouse is operated as a charitable trust, its funding coming from a combination of public and private sources. Its annual turnover is £2.5million. The building comprises 1,400 square metres of exhibition space. It shows 15–20 exhibitions a year, many of which are of international stature. The Lighthouse also contains a Charles Rennie Mackintosh interpretation centre and a dedicated education floor which includes a workshop, computer laboratory, gallery space and an innovative project called the Urban Learning Space.

The Lighthouse runs conferences and events including a Creative Entrepreneurs Club for practitioners in the cultural industries and a Forum for Innovation in Public Art. The Lighthouse also plays a leading role in several key networks including the European Forum on Architecture, The Bureau of European Design Associations and the European Design Forum.

www.thelighthouse.co.uk

Scottish Ecological Design Association (SEDA)

SEDA has played a critical role in moving the environment onto the agenda of government and business, and into the general consciousness of Scotland.

Its ethos is an understanding of the inter-dependence of the Earth's eco-systems and the importance of a 'design' approach to development and production which both protects and encourages biodiversity and resource conservation.

More specifically, it seeks to promote:
- The design of materials, products, projects, systems, environments and communities which are benign to living species and planetary ecology
- Professional and consumer awareness of ecological design and choices
- Inter-disciplinary contacts between those who wish to incorporate ecological concerns into their creative and productive work
- Education and the involvement of young people to facilitate the spread of eco-design in the training of designers and innovators
- Research, evaluation and the setting of standards for ecological projects, services, materials and products.

The Association awards an annual student travel grant of up to £1,500, open to matriculated students on any design-related course at Scottish higher education and further education establishments. It is also undertaking development of three web-based guides on design for deconstruction, airtightness and chemical reduction in buildings. The design guides will be available on the SEDA website.

SEDA welcomes new members and is open to all. It meets regularly for discussions in different cities and also sends out regular email bulletins and in-depth magazines to members.

www.seda2.org

Design Research Society

The Design Research Society is a multi-disciplinary society with members across the world. Its aims are to:
- Secure recognition for design as a creative act common to many disciplines
- Build understanding of research and its relationship with education and practice
- Advance the theory and practice of design.

It pursues its aims by:
- Encouraging scholarship and knowledge in design
- Contributing to the development of doctoral education and research
- Sharing knowledge across design disciplines
- Facilitating networks to exchange ideas, experience and research findings
- Promoting and disseminating research findings (via digital discussion forums, conferences, journals, including Design Studies, and newsletters)
- Promoting awareness of design research
- Organising and sponsoring conferences and publishing proceedings
- Responding to consultative documents
- Collaborating with other bodies
- Lobbying on behalf of members' research interests
- Sponsoring email discussion groups and a monthly emailed newsletter (Design Research News)
- Recognising excellence in design research through awards (including The Design Studies Award and the Lifetime Achievement Award).

www.designresearchsociety.org

Commission for Architecture and the Built Environment (CABE)

CABE's aim is to improve people's quality of life through good design. It encourages policy makers to create places that are safe, attractive and efficiently run. CABE's activities include:
– Review of significant building and public space design
– Providing free advice to public agencies commissioning new designs
– Supporting public agencies with their in-house design expertise
– Conducting research and running campaigns about design
– Providing better education for both the public and people within the industry.

Specific training courses available include:
– Stand up for your Space, for people involved in designing public spaces
– Making Places – information about careers within the industry
– Urban Design Summer School, a three-day programme for leaders within the industry.

www.cabe.org.uk

Creative & Cultural Skills

The UK government has set up the Skills for Business network – the 'umbrella' organisation for the Sector Skills Councils – with the aim of boosting productivity and profitability through skills development across all industries. Creative & Cultural Skills is the Sector Skills Council for the creative and cultural industries, which include advertising, crafts, cultural heritage, design, music, performing, literary and visual arts.

Like all Sector Skills Councils, Creative & Cultural Skills is employer-led and works to improve the education, training and skills available to the sector to ensure that the UK remains economically competitive.

Projects that Creative & Cultural Skills are championing include:
– Creative Knowledge Lab – intelligence on their sectors
– Creative Choices – a web portal to help provide individuals and employers with more independent, consumer-orientated intelligence on courses
– Cultural Leadership Programme – a development scheme for future leaders set up with the Arts Council England and the Museums, Libraries and Archives Council
– Creative Apprenticeships – publicly supported work-based placements
– Young Apprenticeships – a vocational Key Stage 4 qualification
– Creative & Media Specialist Diploma – an occupational – based qualification for 14 year-olds set up with Skillset and Skillsfast-UK
– Creative Learning Accounts – financial support for learners
– Creative Diversity – an alliance to improve the levels of ethic minority and under-represented groups in the creative and cultural industries set up with EQ .

Creative & Cultural Skills has set up the Design Industry Skills Advisory Panel, in collaboration with the Design Council, to help provide it with the 'brief' from the design industry for employer-led skills development in the UK.

www.ccskills.org.uk

DCMS HE Forum and Creative Economy Programme

The Creative Industries Higher and Further Education Forum brings together key representatives of higher education, further education, creative industries, education and research. It looks into how to further strengthen the connections between HE, FE and the creative industries, as a follow-up to the Lambert Review of business-university collaboration.

 The Forum has task sub-groups to progress two key areas of interest:

Research & Knowledge Transfer
<http://www.culture.gov.uk/creative_industries/
education_and_skills_issues/research_and_
knowledge_transfer_task_group.htm>
This group considers how to improve the existing level of research and knowledge transfer between higher education institutions and the creative industries at the sectoral and sub-regional level. It's a two-year project, led by the Arts and Humanities Research Council (AHRC) in partnership with DCMS. It will a) identify the forms of knowledge transfer needed for a sector that does not fit classical knowledge transfer models and b) put in place pilot schemes and incentives as the project develops.

Entrepreneurship
<http://www.culture.gov.uk/creative_industries/
education_and_skills_issues/skills_and_
entrepreneurship_task_group.htm>
This group considered how to promote the development of entrepreneurial skills among graduates and how to avoid skill shortages by getting the skills supply to match the needs of creative companies more closely. The Task Group will be publishing its recommendations in May 2006.

www.culture.gov.uk/creative_industries/education_and_skills_issues/

The Creative Economy Programme was established to help to contribute to the goal of making the UK the world's creative hub. The programme is centered on seven issues that are the key drivers of productivity in the creative industries. Groups for each of these seven issues have been created, drawing on expertise from across a range of stakeholders. Each group has two broad aims:
– Investigate the coherence of government-supported projects, identifying gaps and overlaps
– Push forward policy development, making suggestions for how the government can better support the creative industries.

Parallel to this, the DCMS will be undertaking a wide-ranging programme of industry meetings and summits to ensure that the creative industries themselves can have a say in how the government supports them.

www.culture.gov.uk/creative_industries/creative+economy+programme.htm

Design Council

The Design Council is the UK's national strategic body on design. It aims to strengthen and support the economy and society by demonstrating and promoting the vital role of design in making businesses more competitive and public services more effective.

The Design Council's work includes:
– A national programme of design support for managers
– A ten-year public design promotion in UK regions
– Campaigns to accelerate innovation and transformation in industry and the public sector through practical interventions promoting the strategic use of design
– Projects generating new thinking on how design can be used to tackle key economic and social challenges.

Its Design Skills Campaign aims to help business, technology and design students to develop design skills that will help them contribute to prosperity and quality of life. The campaign team also co-ordinates the activity of the Design Skills Advisory Panel together with Creative & Cultural Skills.

www.designcouncil.org.uk

Design Partners

Design Partners brings together business, trade bodies, trade associations stakeholders and individuals from the industry to enhance export performance of the design sector. It achieves this by:
– Considering where and how UK Trade & Investment and stakeholders can best support the industry's efforts
– Co-ordinating the activities of design industry bodies and government agencies and departments
– Developing design-related policies, programmes and activities to help exporters develop overseas trade capability and new opportunities
– Identifying suitable target markets for the design industry
– Bringing together the UK design industry's representative bodies with a range of relevant and timely services to increase their export potential.
– Helping to co-ordinate support programmes relevant to those markets
– Helping to build partnerships in appropriate markets
– Undertaking research on the design industry and overseas markets.

Members include:
– UK Trade & Investment
– Department of Culture, Media and Sport
– Foreign and Commonwealth Office
– British Council
– British Design Initiative
– British European Design Group
– Chartered Society of Designers
– The Crafts Council
– British Design and Art Direction
– Design Business Association
– Designersblock
– The Design Trust
– Design Council.

http://www.culture.gov.uk/creative_industries/exporting_the_creative_industries/design_partners.htm

The Helen Hamlyn Research Centre

The Helen Hamlyn Research Centre, set up at the Royal College of Art in 1999, works to:
– Promote a socially inclusive approach to design
– Alert designers and industry to the implications of a changing society.

Its work is centred on four social change themes and its focus is on RCA students, new graduates and professionals in business and industry.
A range of external commercial, academic, government and charitable partners are engaged in its work.

Examples of the social change themes it follows are:
– The design effects of an ageing population
– The design impact of changing patterns of work
– New design thinking on mobility for all
– Design that meets the needs of disabled people.

It runs these programmes:
– The Design for our Future Selves award, where students address social challenges through design briefs and end-products. Each project receives a small research bursary. Students also gain access to the centre's experts, workshops and literature.
– The Helen Hamlyn Research Associates Programme, which enables graduates to undertake one-year industry-funded projects within the RCA studios
– The Small Business Programme, which helps small firms to innovate via networks, events and publications
– The Include programme, an international network and series of conferences which aim to develop the theory and practice of inclusive design
– I-design, which provides guidance on inclusive design methodologies.

www.hhrc.rca.ac.uk

Technology Education Research Unit (TERU) at Goldsmiths College

TERU was founded in response to the belief that Design & Technology in the school curriculum was desperately under-researched. Its principal purpose is to:
– Better understand the values and contribution of design and technology in schools
– Enable research funding agencies to contribute to the growth of that knowledge.

Specific projects include:
– The Attainable Utopias Network (AU), a catalyst and incubator for new ideas and relationships within society, business and the not-for-profit sector. Its mission is to enhance the long-term well-being of humanity and encourage a deeper respect for the biosphere. AU seeks to integrate altruistic, long-term, or 'blue sky' design thinking with inter-disciplinary collaboration. So far it has attracted around £100,000 from a range of sources, including £50,000 from EPSRC for research into 'design synergy'.
– The Interaction Research Group, which pursues practice-based research on technology for everyday life. Using methodologies that extend system evaluation, it explores values and activities around curiosity, play, reflection and interpretation. This usually results in innovative system prototypes that are deployed with volunteers so that their long-term experiences can be assessed. The group's current research primarily involves domestic environments, seeking to move beyond the hype surrounding internet appliances and 'smart' home systems.
– The Inbetween Design Research group, which explores the tensions created through the emergence of technologies that offer new modes and experiences of urban space.

www.goldsmiths.ac.uk

Parliamentary Design Group

Design Management Institute

The Associate Parliamentary Group for Design and Innovation was established in 1997 and operates under the working name 'Parliamentary Design Group' or PDG.

The Parliamentary Design Group is a dynamic all-party forum dedicated to inspiring and engaging parliamentarians about the value of effective design in stimulating and supporting UK economic growth.

Its aims are to:
–   Ensure design is considered throughout the policy development process
–   Elevate the standard of debate on design in both Houses of Parliament
–   Encourage parliamentarians to see design in business as fundamental to the success of the UK economy
–   Encourage MPs to see local design success as part of regional growth
–   Facilitate more informed decision making and cross- departmental co-ordination
–   Encourage effective design to be procured in the UK in a more serious and sustainable way
–   Provide a network for constructive dialogue between central and local government, industry, voluntary sector bodies and the public about the benefits of the effective use of design.

The group holds regular meetings in Parliament, giving key stakeholders the opportunity to contribute their expertise in these discussions. Its programme of events has been designed to bring together key stakeholders from every region of the UK, joining up with parliamentarians, industry and design practitioners to help define workable solutions to key economic and social challenges.

www.designinparliament.org.uk

The Design Management Institute (DMI) is an international non-profit organisation based in Boston, US, that seeks to heighten awareness of design as an essential part of business strategy. It achieves this through a series of conferences, seminars, membership programmes and publications. Some more specific examples of its work include:
–   The DMI Case Study Programme, focused on developing teaching case studies in the format and to the standards developed by the Harvard Business School
–   The DMI Academic Review is a publication that diffuses design management research into the management world
–   DMI Seminar, focused on providing practical and actionable strategies to transform design and innovation into high-value business resources.

DMI membership comprises of professionals from corporations, consultancies, the public sector, and universities.

DMI will also soon be offering DMI International, a global community of design managers whose aim will be to understand and meet the regional and local professional needs of its members.

www.dmi.org

International Council of Graphic Design Associations (ICOGRADA)

Icograda is the world body for professional graphic design and visual communication. Founded in 1963, it is a voluntary, non-political representative and advisory assembly of associations, concerned with graphic design, visual communication, design management, design promotion and design education. It promotes graphic designers' vital role in society and commerce and unifies their voices worldwide.

More specifically, its aims are to:
- Raise the standards of design, professional practice and ethics
- Raise the professional status of the graphic designer
- Further the appreciation of designers' professional achievements
- Extend design's contribution to understanding among people
- Promote the exchange of information, views and research
- Contribute to design education – theory, practice and conduct
- Co-ordinate matters of professional practice and conduct
- Establish international standards and procedures
- Hold congresses, conferences, seminars and symposia
- Publish and distribute information concerned with graphic design.

It has 63 Full Members, 18 Associate Members, 11 Affiliate Members, 71 Education Members and hundreds of Friends of Icograda within 57 countries.

www.icograda.org

International Council of Societies of Industrial Design (ICSID) and the IDA

ICSID facilitates co-operation and interaction among around 150 Member Societies in more than 50 countries. Members include professional associations, promotional societies, educational institutions, government bodies and businesses. They collaborate to establish an international platform through which design institutions worldwide can stay in touch, share common interests and new experiences, share resources and be heard as a powerful voice.

The aims of ICSID are to:
- Research design principles and the evolution of design
- Further the status of design, and the protection of intellectual property rights
- Further design education and the continuing development of practising designers
- Promote design activities and well designed products and services
- Develop a better understanding of design for the benefit of everyone.

ICSID's Interdesign is a forum in which mid-career designers from different countries and cultures work together with local experts for an intensive two-week period, exploring design issues of national, regional and global importance. Interdesign workshops focus on subjects of international significance.

The International Design Alliance (IDA)
The IDA is a venture between Icograda and ICSID based on the desire to 'do together what we cannot do alone', concentrating on opportunities arising from multi-disciplinary collaboration. It aims to bring the benefits of design to world bodies, governments, business and society.

www.icsid.org

The Design Skills Advisory Panel and this consultation
are the result of a unique partnership between
Creative & Cultural Skills and the Design Council

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