

# **‘In The Making’ Connected Communities Project – Employer Perceptions**



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## Background

In 2016 the University of Salford led an AHRC-funded project, “[In the Making](#)” to explore how digital fabrication technologies could empower disabled people<sup>1</sup> to participate more fully in education and employment. This project offered a short course allowing participants to gain training in 3D printing technology. The technology was explored as an avenue through which participants could be creative, and design solutions for their own specific problems.

An external evaluation of the project was undertaken, focusing on participant experiences, with the analysis compiled as a report.<sup>2</sup>

The findings from this pilot project were very positive, with the evaluation identifying the benefits gained by participants and providing constructive suggestions regarding the way forward. The most important messages to emerge were that participants wanted an opportunity to engage in a more formal programme of training, and a chance to develop expertise through work experience.

This has led to two further pieces of work. In the first (featured in this report) the need was addressed to engage directly with employers who utilise digital fabrication technologies. The aim here was to gain an understanding of their perceptions of disabled people as potential employees. This was achieved by carrying out a series of in-depth interviews. The interviews explored the feasibility of offering a more rigorous and structured training programme along with a critical appraisal of any potential benefits, barriers and issues. This report provides a detailed analysis of the evidence generated from these interviews.

<sup>1</sup> When we talk about disabled people, we use the term to mean “anyone with lived experience of disability or health issues”, as articulated by Disability Rights UK (<https://www.disabilityrightsuk.org/>). For a critical account of how such terminology may contribute to the reclaiming of the term “disabled”, please see Alice Wexler and John Derby’s 2015 article, “Art in Institutions: The Emergence of (Disabled) Outsiders” in *Studies in Art Education: A Journal of Issues and Research*. We acknowledge that “disability” and “disabled” are shifting categories, and ones which most of us will inhabit at some point in our lives, if not constantly. Wexler, Alice and John Derby. “Art in Institutions: The Emergence of (Disabled) Outsiders.” *Studies in Art Education: A Journal of Issues and Research* 56, no.2 (2015): 127-141

<sup>2</sup> In The Making, Connected Communities Project – An External Evaluation (2018) Astle, N. Taylor, I. Challenge Multimedia <https://doi.org/10.17866/rd.salford.7736717.v1>

## Introduction

This report falls into two Parts.

Part A informs this study by providing a detailed exploration of relevant aspects of the 'workplace' context. It opens with a very brief section, focusing on the interviewees in the sample, concentrating primarily on their educational experience and qualifications.

Attention switches in the following two sections to the companies themselves, with the reader learning something about the size of each and the range and variety of the work that they undertake, and about how this work is done, with a special emphasis on the use of 3D technology.

A further three sections provide a detailed consideration focusing on the employees. Interviewees reveal what it is they are looking for and the strategies that they use for recruitment.

In a final section, further attention is paid to working practices within the companies, with a particular emphasis on training.

Part A defines the salient features of the product design workplace and identifies the reality for anyone seeking to train or work there. In this study, those going into the workplace will be people with disabilities and Part B explores the issues associated with this.

In its first section, Part B draws on the very positive contributions made by the interviewees to identify the range of benefits that people with disabilities might bring to the product design industry. It also explores issues relating to accessibility, with the general consensus being that such issues are surmountable.

In the following section, the interviewees provide a realistic appraisal of the features of the workplace and explore the implications if a work placement programme were to be incorporated into the training experience.

The final two sections also focus on training, exploring possible models and providing a detailed consideration of the support that placement providers would require.

## **Part A**

### **The Context**

## Section 1. The Interview Sample

Interviews were held with the CEO's/Directors of 10 product design consultancies based in the North West of England. The consultancies were selected as being representative of the product design industry in the region. 9 of the 10 had gained graduate or postgraduate qualifications, the other having achieved HND level. The majority had an engineering background with most having studied product or industrial design.

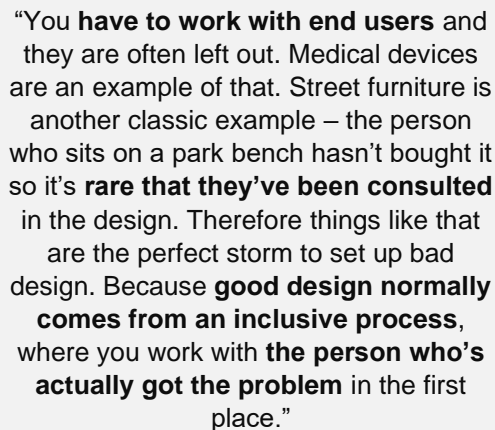
In the following section, attention switches away from the CEO to provide a detailed consideration of what it is that the companies do.

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## Section 2. What the Companies Do

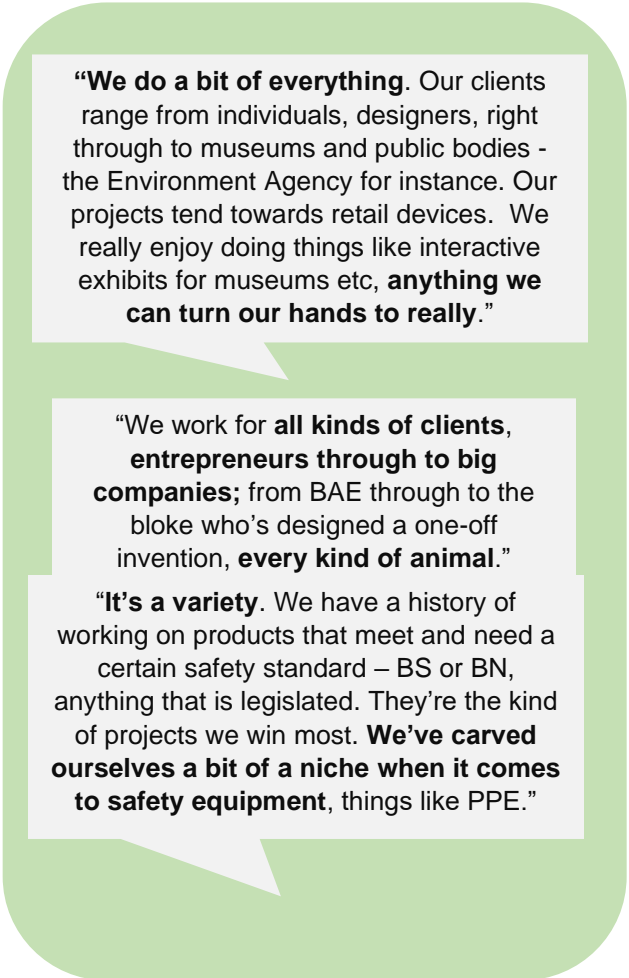
Most of the companies were small enterprises, with 8 having up to 5 employees. In some cases, the companies would bring in additional subcontractors as and when required. The remaining two companies had 13 and 21 employees respectively.

This message is especially pertinent in relation to involving those who identify as disabled. The following comments provide a further insight into the variety and range of work undertaken by these companies:



"You **have to work with end users** and they are often left out. Medical devices are an example of that. Street furniture is another classic example – the person who sits on a park bench hasn't bought it so it's **rare that they've been consulted** in the design. Therefore things like that are the perfect storm to set up bad design. Because **good design normally comes from an inclusive process**, where you work with **the person who's actually got the problem** in the first place."

The comment above is very important. It articulates a working principle which underpins much of what these product design companies do. For successful design it is crucial to directly involve the end user who has the problem.



"**We do a bit of everything.** Our clients range from individuals, designers, right through to museums and public bodies - the Environment Agency for instance. Our projects tend towards retail devices. We really enjoy doing things like interactive exhibits for museums etc, **anything we can turn our hands to really.**"

"We work for **all kinds of clients, entrepreneurs through to big companies**; from BAE through to the bloke who's designed a one-off invention, **every kind of animal.**"

"**It's a variety.** We have a history of working on products that meet and need a certain safety standard – BS or BN, anything that is legislated. They're the kind of projects we win most. **We've carved ourselves a bit of a niche when it comes to safety equipment**, things like PPE."

"I tend to work at quite a high level, often at the strategic end of it, front end of innovation. As in 'what are we trying to achieve' before we start designing. I help with manufacturing, putting supply chains together, regulatory stuff. I do quite a lot of medical."

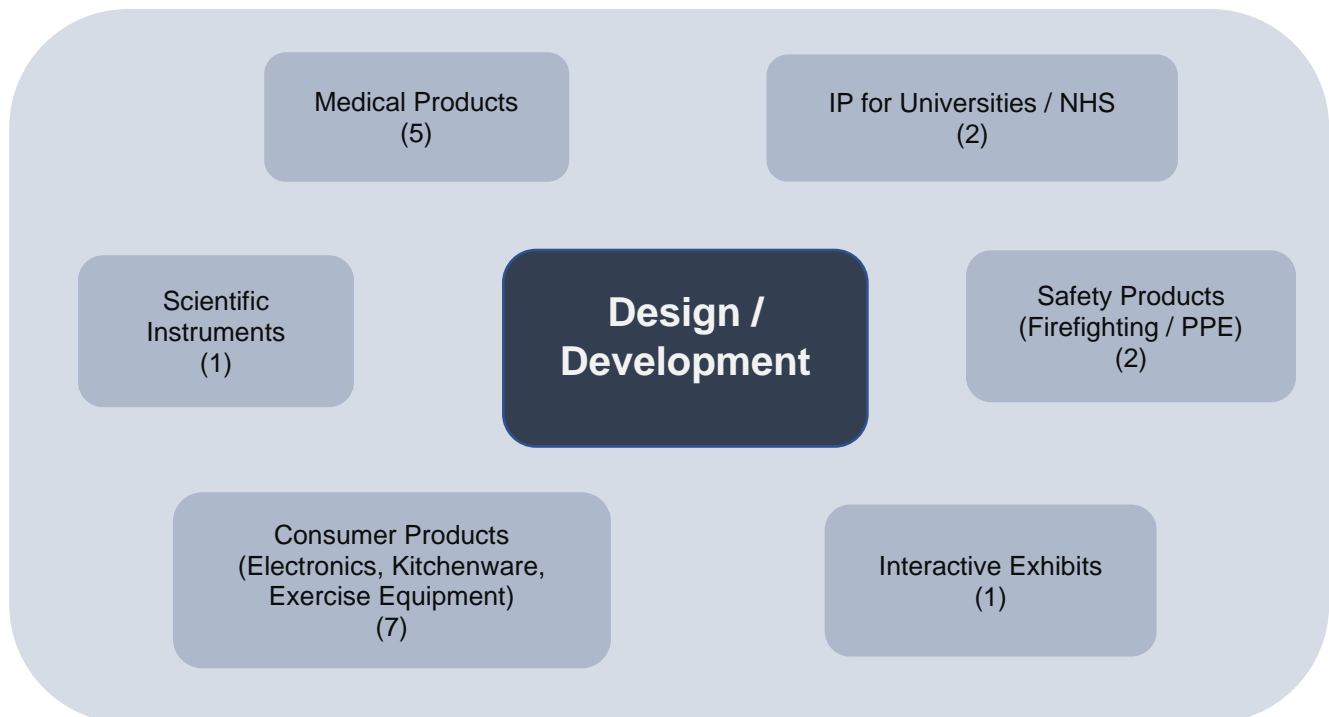
"We work with all sorts of people from startups to the likes of Sony and Siemens. **We work on a very broad range of projects, we do some medical devices.**"

*"We work with all sorts of people from startups to the likes of Sony and Siemens. We work on a very broad range of projects."*

Companies in this sample had a range of clients from inventors/entrepreneurs to large corporations, working on a variety of projects. All were working on consultancy and commercial development work for other companies. Even though some had established a niche clientele, the emphasis still remained on being responsive and versatile.

The graphic below provides a breakdown of the specific work being undertaken.

**Exhibit 1. Work Undertaken – Specific Focus**



Having learned a little of the range and variety of work being undertaken by the companies represented in the sample, the focus now switches on to how these organisations carry out their work, with a particular emphasis on their use of 3D technology.

## Section 3. Use of 3D Technology

All of the companies extensively used CAD and had their own 3D printers. Some also had specialist in-house cutting machines including laser cutters, CNC routers and vinyl cutters.

The comments below illustrate how the potential of the above is being realised in practice:

"We design physical products so that means that we do a lot of conceptual design on paper followed by a lot of work in 3D CAD. Our 3D printer makes perfectly acceptable parts for early iterations to show customers. We tend to farm out our CNC or SLA work to bureaus that have more sophisticated kit, if we need higher specification prototypes."

"We develop designs, embody them in a CAD model, then develop prototypes. We use the in-house machines for much of that and if more high spec or finesse is required we'll go to printing bureaus."

"We tend to use it for 'proof of concept' or for small-run production where it wouldn't be economical to pay someone else to produce it. The machines can be surprisingly effective."

"What has changed in more recent times is, as the technology has improved, an individual can now produce complete finished products and that's happened in the last five years."

"We're using it more and more for finished products [for the client] as 3D printing technology improves. It's now acceptable to have 3D printed parts on a production quality product."

"We've been using 3D printing from the start of the business, for prototyping and various iterations. In the last year we've been also offering additive manufacturing as well. The machine that we have can actually produce production quality parts rather than just prototypes. So now our work is about 50/50 prototyping and actual production printing."

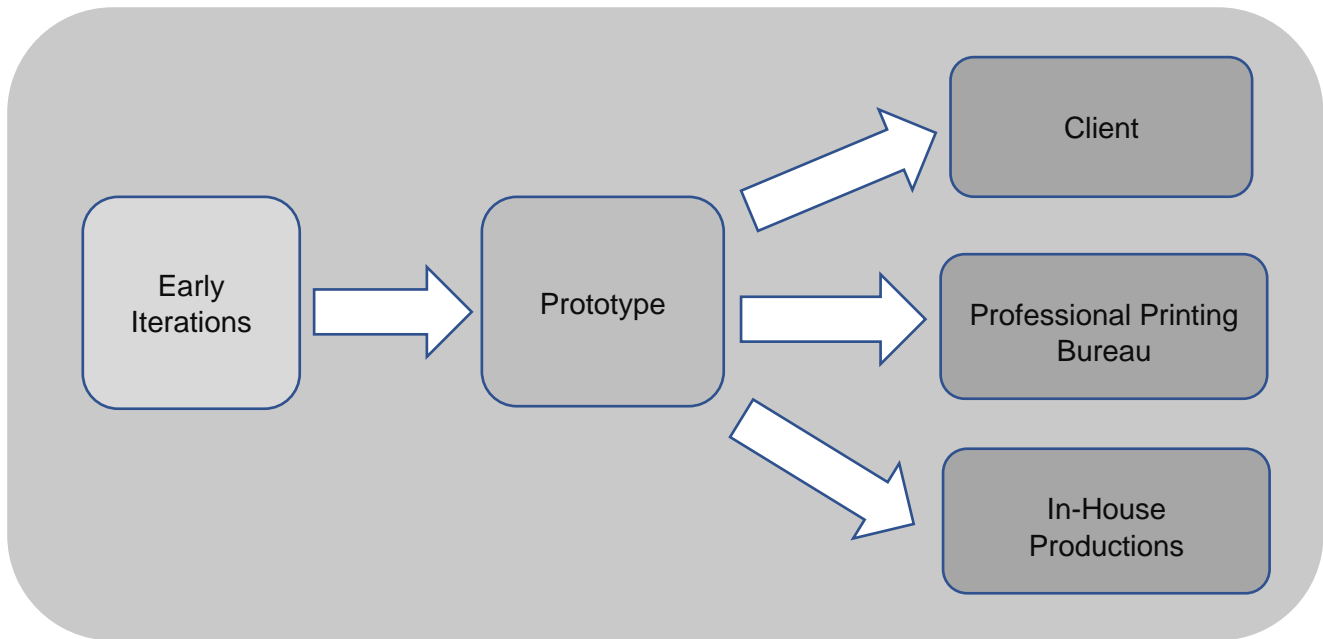
Drawing on the above quotes, the flow chart overleaf provides a simple representation of how 3D technology is being used in the design process across the sample:

*"The machines can be surprisingly effective."*

*"It is now acceptable to have 3D printed parts on a production quality product."*



## Exhibit 2. The Process – Use of 3D Technology



The following messages emerge:

- All of the companies use the technology to develop early iterations.
- Depending upon the quality of in-house machines, the prototype can either be sent directly to the client or enhanced using a specialist printing bureau.
- The quality of 3D technology is constantly improving. Increasingly, companies can now produce finished goods and even undertake small scale production for market.

Having considered how the work is undertaken, the following sections focus on the people at the company carrying out that work. What is the company looking for? How does it recruit and with what result?

## Section 4. Hiring Staff

"Engineering skills, design skills... We're looking for **highly skilled people who can do the job.**"

"My electronics guy has that specific skillset. The other guy is an illustrator and so again has a very specific skillset. **Above all, it's technical skill.** Interpersonal skills are important but it's technical skill I need more than anything."

"It would be first of all the **formal skills – that they can use Solidworks which is the CAD program I use...** and to be able to design for people other than themselves, because the majority of work you do is for other people."

"Interpersonal skills are always important to us, because we have quite a small close-knit team who are working together every day. **There has to be a camaraderie.** We have to **get on with each other**, and be able to **talk openly and work through problems together.** That is probably more important than the technical side."

*"Above all, it's technical skill. Interpersonal skills are important but it's technical skill I need more than anything."*

"With us being a small company everyone has to be front of house, and there's an **expectation that everyone can positively present** the business to clients and build good relationships. So yes, interpersonal skills are very important."

"We need people that are **flexible**, that can **handle change.** On any one day you can be working on four or five different projects and you've **got to be able to switch** from, say an off grid power station to a piece of exercise equipment to a consumer electronic device within the space of a few minutes without that being an issue."

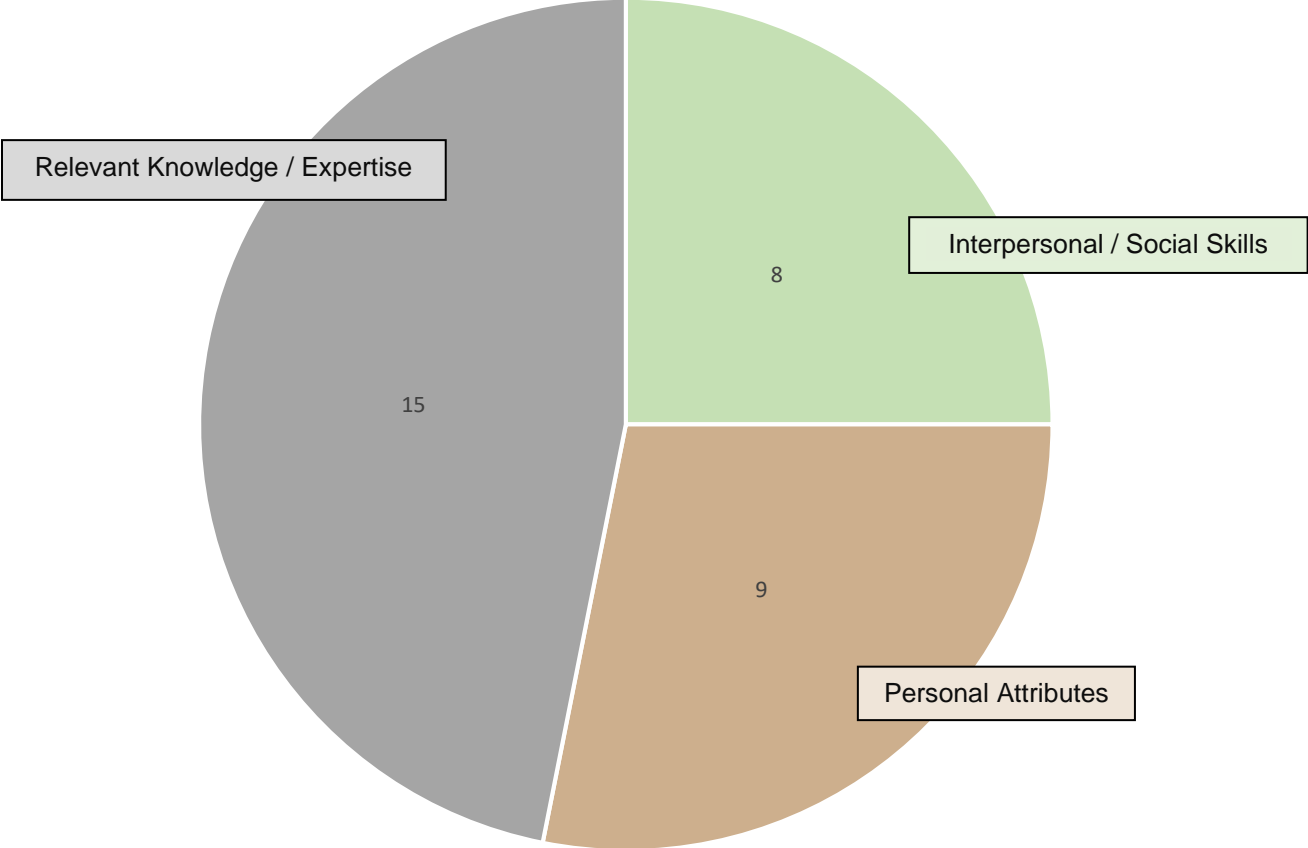
"Being able to question themselves, being reflective is very important. At every stage, you've got to be asking 'is this right?' 'Is this what's needed?' And if not, not being scared to try something that might not work, not being scared to fail."

*"We have to get on with each other, and be able to talk openly and work through problems together."*

The comments sequenced above provide an analysis of what employers are looking for when recruiting new staff. What is required is a mixture of technical knowledge and expertise, interpersonal and social skills, and personal attributes deemed pertinent to the type of work being undertaken, with the relative importance of each of these differing from company to company.

A more detailed breakdown of the analysis is presented below in Exhibits 3 and 4:

**Exhibit 3. What Employers Look For  
(N = 32)**

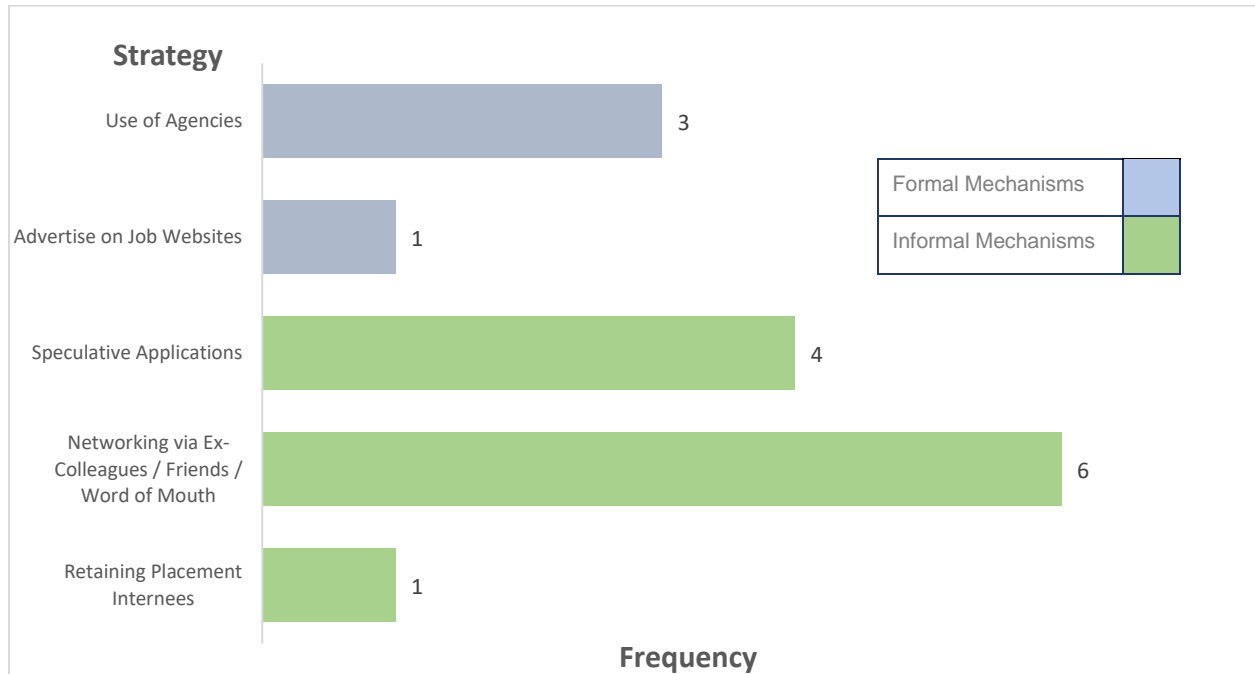


**Exhibit 4. What Employers Look For – A Breakdown**

Aspect	Breakdown
<div data-bbox="293 405 651 594"> <b>Relevant Knowledge / Expertise (15)</b> </div>	<ul style="list-style-type: none"> <li>Knowledge/skills relating to relevant discipline e.g. engineering, design, maths and electronics</li> <li>Specific skills relating to use of CAD, undertaking research, writing reports</li> </ul>
<div data-bbox="306 825 651 1014"> <b>Social / Interpersonal Skills (8)</b> </div>	<p>Social/interpersonal skills associated with:</p> <ul style="list-style-type: none"> <li>Working with others as part of a team</li> <li>Relating to customers</li> </ul>
<div data-bbox="300 1255 641 1417"> <b>Personal Attributes (9)</b> </div>	<p>Attributes relating to:</p> <ul style="list-style-type: none"> <li>Self: including: self-confidence, self-motivation, being able to work independently, flexibility, not being afraid to fail</li> <li>Problem solving e.g. being able to break down big problems into smaller elements</li> <li>Professionalism including being questioning and reflective, and having attention to detail</li> </ul>

## Section 5. How Companies Recruit

**Exhibit 5. Recruitment Strategies  
(N=10)**



Employers were using a range of mechanisms, both formal and informal, with a strong tendency to rely on the latter, especially favouring word of mouth and responding to speculative applications.

## Section 6. The Employees

In general, experienced and fully skilled people were preferred, with the vast majority (9 interviewees) taking only those with a degree or higher level qualification.

A majority (7 of the 10 in the sample) had taken on people with degrees in product or industrial design. People with engineering qualifications were also strongly represented. It is clear that recruitment results in a workforce whose characteristics strongly reflect those of the CEO/Director.

The final section in Part A moves on to consider the characteristics of the working environment, scrutinising particularly the training practices being adopted to develop staff capability.

## Section 7. Working Practices

The employers confirm that there is potential for flexibility in relation to where the work can be carried out, with a number of combinations of 'at home' and office work being used. However there was some preference for the office when it was essential for employees to work as a team, for effective mentoring and support and where there was a need to produce a physical product.

The interviews enabled employers to explore issues related to training. An analysis of responses is represented below:

"We're looking for **highly skilled people** who can do the job."

"They come fully qualified. The last person had 15 years experience. We've had a few who have come straight from graduation, at least with a first or a 2-1. We **haven't got time** to support people or carry them. They have to be earning money from day one."

"We're not big enough to have students or any people who **can't add value immediately**. So now we tend to have people who are experienced, fully qualified. With a company of our size it doesn't work having people who aren't fully skilled."

"I need to employ younger people and train them up because the kind of people I'd like to have in this business I **couldn't afford** to employ. **I can develop younger employees**, they can learn a lot."

"Our approach has usually been to take people from university or just after, and develop them. We expect it **to take time to build skills and expertise**. So far, our training is in-house, because of needs and availability."

*"We're not big enough to have students or any people who can't add value immediately. So now we tend to have people who are experienced, fully qualified."*

As already noted, the general pattern is to employ fully skilled people. This means that very little time is required to get new arrivals up to speed. They are productive from the outset and can add value immediately. However, in some cases, for cost reasons, there was a preference to bringing in newly qualified graduates as trainees, with the employer willing to spend time to build the necessary expertise.

*"Our approach has usually been to take people from University or just after and develop them. We expect it to take time to build skills and expertise."*

Part A has defined the salient features of the working environment of the product design companies in this sample and this determines the reality for anyone seeking to train or work there. In this study, those going into the workplace will be people with disabilities. In Part B the issues associated with this will be explored, starting with a detailed consideration of the benefits they might bring, as identified by the interviewees.

## **Part B**

# **Employing People with Disabilities – The Issues**

## Section 8. The Potential Benefits

None of the companies had a formal policy regarding disability, nor was there any awareness of any funding that might be available to support this. In addition, to date, only one interviewee had ever had a job application from someone who formally identified as disabled.

However, much more positive messages emerged when interviewees were asked to identify the possible benefits that people with disabilities might bring to their industry.

All of the interviewees were able to identify benefits that would be gained from having disabled people actively involved in product design. The messages that emerged are represented below:

““When you’re designing anything it’s **good to have a range of insights** and that applies to architects, engineers, designers and people who make digital content. They should be **representative of their users**. Now the way around that is to do consultations but **you often make so many assumptions** before you reach consultation stage that you’ve **ruled out things that could have been really useful**. So, actually **having someone in your design team who represents the section you’re designing for is incredibly useful**.”

“If we are designing something for a medical device then having a disability could definitely be a positive, because you have a potential user of that device, or someone who has **experienced bad equipment and bad design** in the past **and knows what to avoid**.”

“As a product designer, it’s important to **put yourself into the mind of the user**. At the moment I’m working on a project about paediatric mobility. I’ve come into contact with people who have disabilities, some very serious. That is something I’d never been exposed to before. **It’s given me real insight**. I believe that, with the **insight they bring**, if disabled people were actually involved from the start [in the design process] rather than just in testing, it could **cut out a lot of wasteful design and lead to a better product**.”

“I would probably say disabled people can bring a **different perspective on the world**. We have **our life experiences** and that **can influence how we go about our design process** and also the products we produce. A disabled person would have a **different approach to things**. I believe most consumer products can benefit from a disabled perspective.”

“Anyone that lives through an experience **has a better understanding of that element of life**. For example I worked with two wheelchair design companies, and those chaps who headed up both of those companies were actually disabled wheelchair users themselves. Because of that, their products were designed in a manner **much more beneficial to a disabled person**. Obviously they’d **been in that environment** all their adult life. **They knew the issues, how difficult** certain things were for a wheelchair user. For someone who’s going to be in a wheelchair their whole life, **design issues that address those problems become crucial**, and you can only really understand those issues if you’ve **been through them yourself**.”



"Thinking of a project we did. It was about being able to print 3D prosthetic hands for disabled children. The prosthetics were relatively cheap. They could be reprinted as the child grew and modified really easily. We quite quickly found that the **clients wanted to adjust and change** the devices. So rather than having a hand that was the equivalent of their normal functioning hand, they were starting to say '**can it do something different** or extra?' They had all kinds of ideas which were potentially possible and **they got all these ideas by having closer access to the design process**, by being involved in that. I think **it's essential to have the end user involved in the design process** and that goes for any of the work we do. It's no use just coming up with an idea and inflicting it."

"More and more of the projects we're doing have electronics in them and therefore have software written to them. We're trying to bring that more in-house. I think **people with autism can be great with coding, electronics and programming** because they thrive on elements that are dependable and don't change. **Their attention to detail can be incredible.**"

"Having employees who are on the **autistic spectrum** can be **immensely beneficial** to our industry. It's the obsession with detail. In some aspects of our work, we need people with **fantastic attention to detail**. We're having to assemble medical devices and they have to be made **precisely and with a great deal of care**. What better fit for some people? And I would be positively seeking out that kind of person."

Respondents stressed the importance of ensuring good design by incorporating a range of insights into the design process. Disabled people would bring special insights, helping the design team to avoid making assumptions and preventing them from ruling things out.

Disabled people would bring to the design process insights gained from their particular life experiences. Although people with disabilities are engaged widely in the testing phase of many projects, arguments were made for incorporating them earlier in the process, by having them participate in the actual design. Through their life experience, designers with disabilities would bring a greater understanding of the issues. They would know how difficult certain things are for users. They would have "experienced bad design" and know "what to avoid". They could change original designs and make insightful modifications. As a result, their employment could cut "wasteful design and lead to better products".

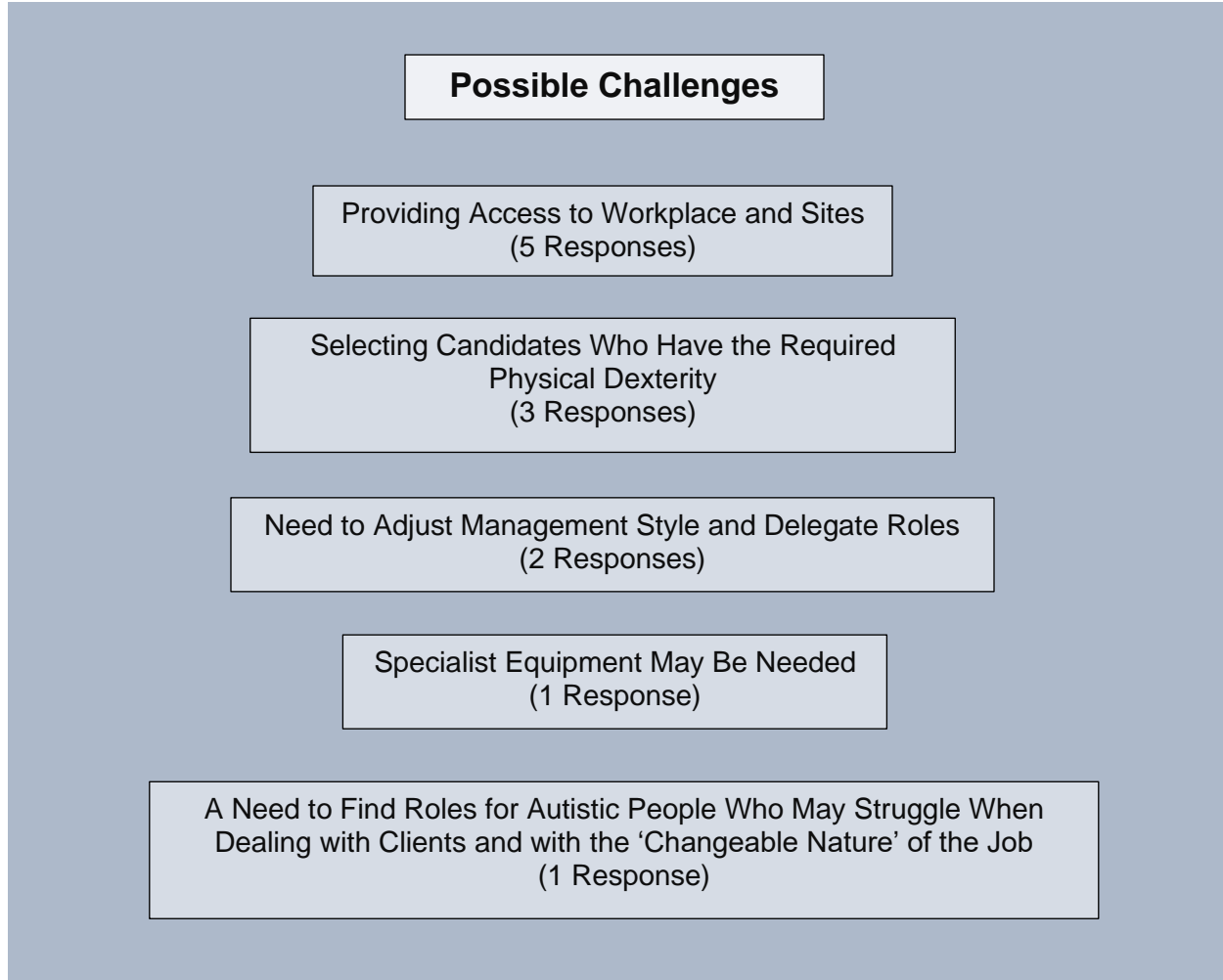
*"If we are doing something for a medical device then having a disability could definitely be a positive, because you have a potential user of that device, or someone who has experienced bad equipment and bad design in the past and knows what to avoid."*

Five interviewees made particular mention of the benefits that autistic employees could bring. They identified specific areas of the design process where autistic people would excel, primarily as a result of their scrupulous attention to detail.

These are very positive messages. Clearly, the interviewees felt that employing people with disabilities has the potential to enhance the product design industry.

The employers were also fully aware of the challenges that could be associated with employing a disabled person (see Exhibit 6 overleaf).

## Exhibit 6. Employing Disabled People – Possible Challenges



However, the messages were clear: all of these issues could be surmounted.

From the evidence presented earlier, before they could be considered for employment, the starting point would have to be to give disabled people the appropriate level of knowledge and expertise in product design. How best can this be achieved? What part in this can these companies play?

The interviews explored these questions and a detailed analysis of employer opinion is provided in the following section.

## Section 9. Employing People with Disabilities – The Workplace as a Training Environment

“Because the market’s so volatile, our main focus is making sure we have enough work coming in to keep us in business. **We can’t commit to taking on someone because we don’t know what we’ll be working on next month, or even if we will have work.** We don’t work on long term projects and we have to be flexible for our customers.”

“Taking on a trainee is a long term strategy, and right now **I don’t think we can think long term, we’re surviving.**”

“Our business model is based on selling time, and if we take longer to complete a project because we’re training someone, then we’re not generating revenue. We’ve always noticed **a big dip in revenue whenever we’ve had a trainee** and that would be an issue whether they’re disabled or able-bodied.”

“To employ someone or offer work experience to someone who doesn’t have a product design degree I would have to dedicate a lot more time, and if they’ve only got a limited amount of skill. **There’s a limited amount of jobs I could give them here to be productive and learn from.**”

“We tend to get more benefit as a company if the trainee or internee is at university level or above. That’s because we’re so heavily design oriented and we don’t have that many consistent repetitive tasks we can assign people to. We have dipped into engineering apprenticeships before but **what we struggle with is our ability to make the time and space available to give them real training** – we don’t just want people operating a photocopier.”

“It would be heavily dependent on us having the sustained period of activity that we could fit them into. It can be quite sporadic and **there are times when the tasks we’re doing just wouldn’t lend themselves to a student getting experience.**”

“The nature of consultancies like ours is that they do require people who are highly educated and people who are also self-sufficient and able to solve problems. **It’s not an ideal environment for nurturing people.**”

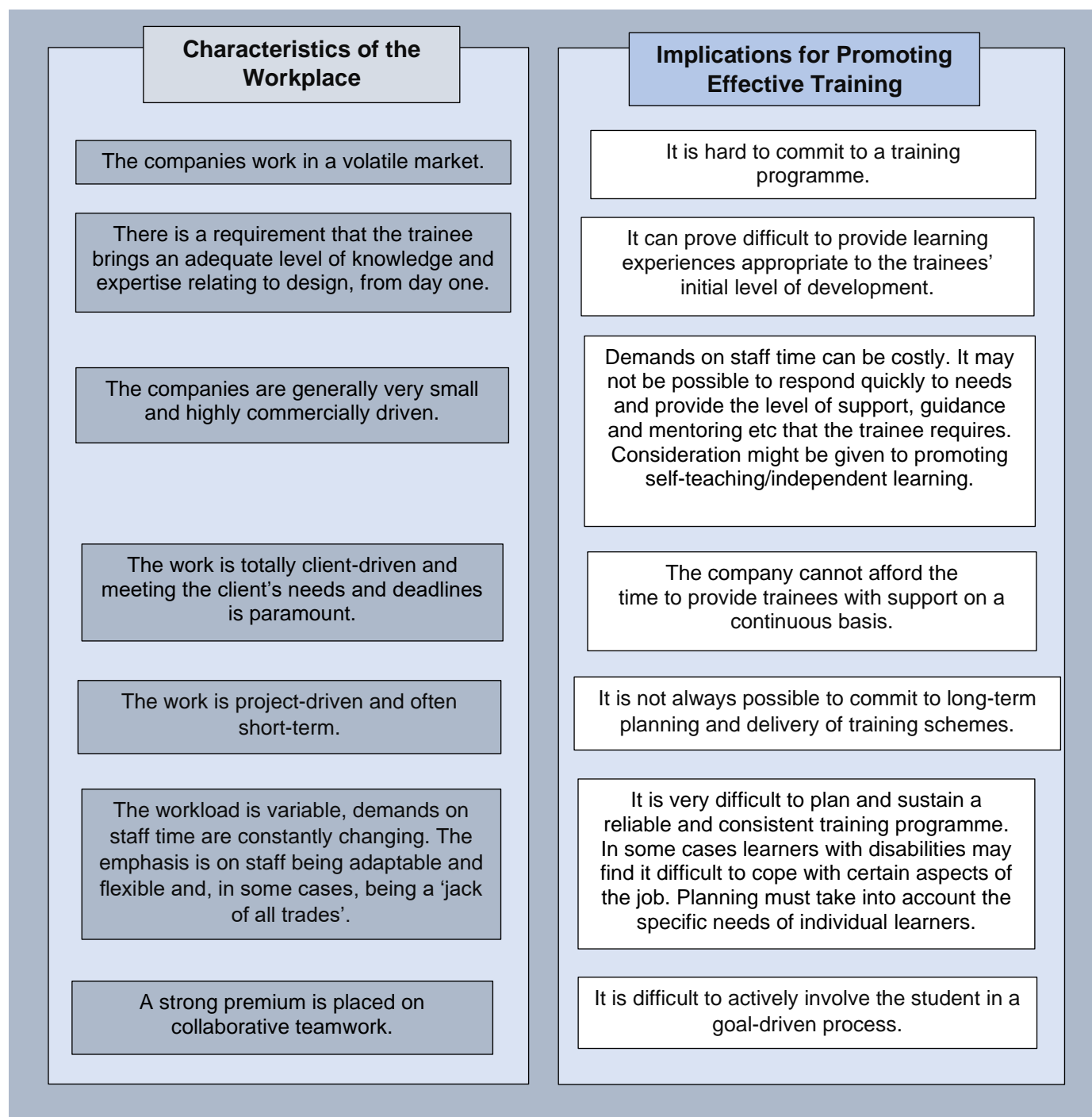
The opening three comments above provide an insight into the nature of the commercial world in which these companies are operating. The market is volatile. Projects are strongly client-driven and usually short term. Economic success is uncertain. All of these factors impact on the capacity of these SME’s to provide a stimulating and rewarding learning experience for trainees.

In addition, the message is repeated that trainees would have to bring with them a level of knowledge and expertise in product design appropriate to the work of the company.

The final quote focuses on the nature of the workplace, which could impact negatively on the training experience being offered.

The table overleaf, based on comments provided throughout the interviews, gives a more detailed analysis:

## Exhibit 7. Characteristics of the Workplace



What we have here is a realistic appraisal which delineates the characteristics of the workplace and then identifies what would be the consequences of incorporating a training programme there. Certainly, the interviewees were very positive about employing people with disabilities, and were convinced of the real benefits this could bring to their company. If the aim is to offer people with disabilities a rigorous and structured training programme, and to locate this in part in the workplace, serious consideration must be given to the messages presented in Exhibit 7 above.

Training remains the theme in the next section, with possible models explored.

## Section 10. The Training Model

The interviews explored employers' perceptions on how training could best be provided.

Most respondents explored the possibilities by considering the merits of different 'traditional approaches' to training, with support provided for several approaches. Once again, their judgement was based on the nature of the industry, where work was strongly client and project based. Employers largely favoured longer placements, as the quotes below illustrate:

"Placement needs to be more than one day or it is a **'meaningless experience'**."

"One or two days a week over at least a few months so the student can **see a project through**. This would be **more useful to them and the employer**."

"One or two days a week over at least a few months so the student can **build relationships and overcome shyness**."

"At least one week and preferably two or three weeks at a time, **so you can see a job through from start to finish**."

"A minimum of three weeks so the student can **immerse and understand day-to-day tasks**."

"A full time placement, as **we are project-based. The college needs to be the day-release element, not the workplace**."

What emerges here is that, by giving the workplace providers a prominent and extended role, they are better able to address some of the issues identified earlier in Exhibit 7.

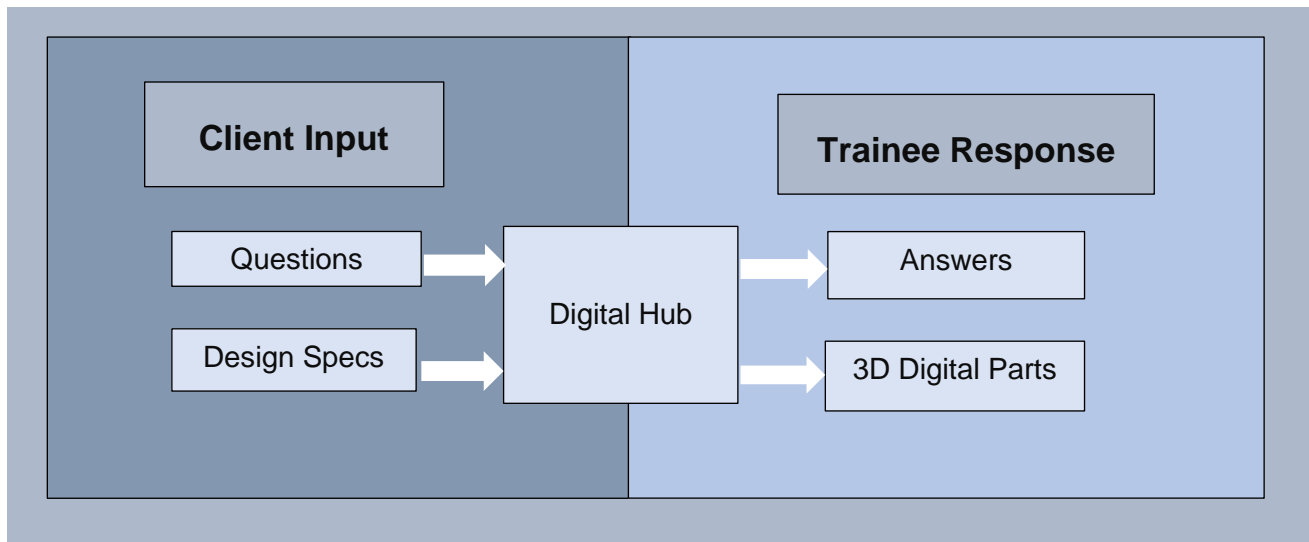
One further suggestion, again addressing the issues, would do away with a formal placement altogether, replacing this with the setting up of a 'digital hub'.

This approach is described below, using the actual words from the interview:

"I don't know if there actually has to be any 'taking on'. Why doesn't Salford set up a **digital hub** so you effectively have a point of contact. If they **build a portal** and the students are plugged into it, it's then a **digital transaction space** so that it may be questions coming in from clients and answers going back, or it could even be design requirements coming in and 3D parts going back. In this model, even when the student is not physically at college, they can still **plug in at home**, which is the way a lot of employment is going."

Exhibit 8 below provides a diagrammatic representation of this model:

**Exhibit 8. The Digital Hub**



In the final section, a further aspect of the work placement experience is considered: Supporting the Placement.

## Section 11. Supporting the Placement

The employees were able to make constructive suggestions on how support could be provided to make the training experience successful, as represented below.

"In a small organisation our admin capability is more limited so we do need help with that. **Taking off that administrative overhead is always going to make it easier** to say yes to these things. If there are funds provided to cover our overheads it makes the whole thing much more likely to be acceptable to both parties."

"Specifically we charge £85 an hour so if I'm supervising someone and not generating revenue we lose that, plus the cost of me not doing my normal job. There needs to be **serious funding to not negatively affect our business.**"

"If the scheme took one designer away from doing what they normally do, then we've lost £600, but if we could get **serious funding to support us in doing it** then we'd be happy to take a student."

"I'm not qualified to judge if our environment is perfectly suited to any particular disability. So I suppose it would be really useful for someone from the University to **assess the workplace to make sure it's suitable for their needs.** If we want both parties to benefit, we can make the changes required then."

"We would need to look at the office setup – we'd need a **full assessment** to make sure the office was safe and met the student's requirements."

"It would be very useful if, say we were to take someone on, and the University was to tailor the educational aspect to meet our specific needs for the job we're currently doing. **The training that the University does with the student should meet our needs.**"

*"It would be really useful for someone from the University to assess the workplace to make sure it's suitable for their needs. If we want both parties to benefit, we can make the changes required then, if any."*

Being given financial support emerged as the employers' major need. This would enable the companies to meet overhead costs and provide some recompense to offset the loss of earnings. In addition, some interviewees required the University to use their expertise to undertake a workplace assessment relating to its suitability to offer training to disabled people.

Finally, when the University was planning its education programme, there was a need to focus on the actual workplace, providing an education programme which matched the specific needs of the partner company.

## Some Concluding Comments

The main message to emerge from Part A is that these companies will seek to employ people who have gained knowledge and expertise by studying to at least degree level. This determines how they recruit, what training they put on offer and what is expected from day one when an employee joins the company. One way forward would be to build on the success of the 'In the Making' project, and establish a training course that would allow disabled students to progress to undergraduate level.

In Part B the emphasis shifts to provide a consideration of issues relating specifically to the employment of disabled people in product design. Employers were very positive. Although they acknowledged that there were real issues relating to accessibility, there was a consensus that these could be surmounted. They were also able to identify a range of benefits. Employing disabled people would help increase the diversity of the product design workforce. Crucially, the life experience of disabled people would bring a unique insight to the process, providing a deep understanding of the problems they were addressing in their design work.

The employers provided a realistic appraisal of the features of the workplace, and they explored the implications of these if work placements were to be offered to disabled people. What emerged was that, in reality, the SME workplace environment – volatile market, high pressure, client and results driven, unpredictable workload – is not conducive to providing effective training for any student, disabled or otherwise.

However, employer response was constructive, with interviewees exploring a number of possible work experience models. One suggestion with real potential emerged. If the University were to establish a 'hub', this would enable employers to bring projects to the students for them to undertake. This would overcome the vagaries of the workplace and still provide a real-life experience.