

Methodology Note

The research was undertaken by CIHE between late December 2009 and early February 2010. A sample of almost 100 HR Directors and other senior managers were asked their views on an on-line survey, and 43 per cent responded. This was supplemented by an additional 16 interviews with organisations listed opposite to explore issues and experiences in more depth. The research respondents were drawn from both industrial and business services sectors, and included many of the UK's major businesses, multinational organisations as well as a number of smaller organisations. We are very grateful to all the employers who reponded so quickly to our request for their assistance in our research.

The CIHE would like to thank the CBI for their invaluable support in this research



List of businesses interviewed:

- American Express Technologies
- Atkins
- Atos Origin
- BAE Systems
- Dialog Devices
- E-ON Engineering
- HSBC
- Institute for Employment Studies
- Laser Optical Engineering
- Microsoft
- PRTM
- Qinetiq
- RIM
- Selex Galileo
- Syngenta
- Telefonica Europe O2



Talent Fishing

What Businesses Want from Postgraduates

A CIHE Report for Department of Business, Innovation and Skills

March 2010

Compliled by: Helen Connor, Peter Forbes and Dr David Docherty





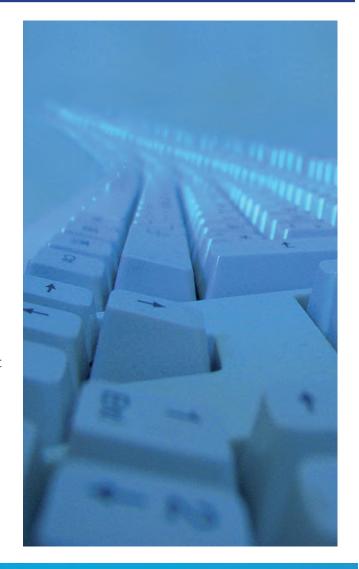
Talent Fishing

"...there is a high demand for, and strong satisfaction with higher degrees, but ... there are still areas where HEIs and businesses must work together to ensure postgraduates have the skills and knowledge that employers need – particularly leadership skills and work experience."

The past ten years or so has seen a spectacular growth in postgraduate education in UK Higher Education Institutions (HEIs), with a thirty-six per cent jump in the number of students studying for higher degrees. But, how much of this is driven by employer-demand? And how much do businesses value and reward these hard-won and sometimes expensively-acquired qualifications?

The Leitch Review of world class skills highlighted the importance of postgraduates in driving innovation, entrepreneurship, management leadership, and research and development. To test these assumptions, we asked senior managers and HR directors in fifty-six businesses – many of them global recruiters – whether they actively seek to recruit postgraduate talent, what qualities they value in postgraduates, and whether UK postgraduates deliver the right high level skills and personal qualities. We asked them separately about masters and doctoral graduates.

This is by definition a snapshot, rather than a survey, but there are consistent and clear themes. We discovered that there is a high demand for, and strong satisfaction with higher degrees, but that there are still areas where HEIs and businesses must work together to ensure postgraduates have the skills and knowledge that employers need – particularly leadership skills and work experience.



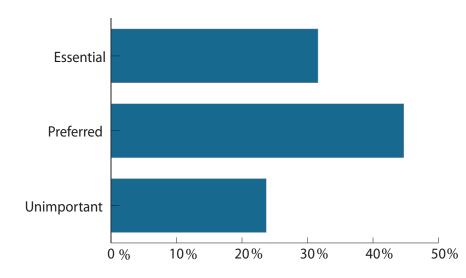


Key Points

The majority of employers sought and valued postgraduates

Seven out of ten employers sought out Masters students, and nine out of ten of those who did, valued the analytical thinking and problemsolving a Masters brings;

How important is it for you to be able to recruit people with masters qualifications?



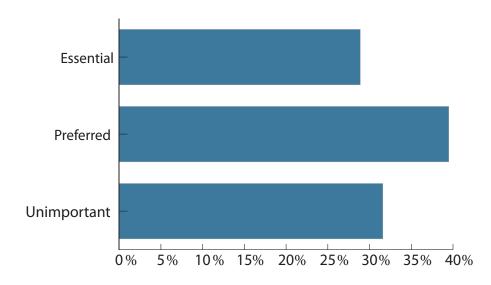
What for you is the value of recruiting staff with Masters (e.g. MSc, MA, MPhil, MRes) qualifications?

Masters	strongly agree	agree	partly agree	disagree	total (excl n/a)
Subject-specific specialist knowledge	46%	34%	14%	9%	35
Research/technical skills	33%	46%	18%	3%	33
Analytical thinking/problem solving skills	52%	40%	6%	3%	33
Maturity	15%	39%	33%	12%	33
New ideas, help innovate	24%	50%	24%	3%	34
Guaranteed high calibre candidates	6%	24%	52%	18%	33
Future leadership potential	16%	34%	44%	6.3%	32



Seven out of ten sought out Ph.D students, and of those who did, nearly nine out of ten valued the subject-specific skills and research and technical skills, and seven out of ten valued the new ideas and innovation such graduates bring to a business.

How important is it for you to be able to recruit people with doctorate qualifications?



What for you is the value of recruiting staff with Doctorate (e.g. PhD, EngD, DPhil) qualifications?

Doctorates	strongly agree	agree	partly agree	disagree	total (excl n/a)
Subject-specific specialist knowledge	62%	24%	6%	9%	34
Research/technical skills	56%	31%	6%	8%	36
Analytical thinking/ problem solving skills	58%	28%	8%	6%	36
Maturity	21%	32%	29%	18%	34
New ideas, help innovate	38%	35%	24%	3%	34
Guaranteed high calibre candidates	10%	26%	55%	23%	31
Future leadership potential	9%	27%	50%	18%	34



There are four types of employers of postgraduates



Trawlers

i. Postgraduates are simply caught up in the net of employers who recruit to meet more general requirements. They do not usually actively seek them out, and treat them little or no differently from first degree graduate applicants in the recruitment process.

'Our graduate recruitment is centred on hiring graduates with a high quality first degree. In the UK, some of the intake may also have a postgraduate qualification but it is not a requirement and is not sought for'.

Senior Manager – Financial Services

'MBA or Masters graduates apply, but more so those with Bachelor's graduates...We don't see any difference in what they do in the company generally speaking. They are paid the same, there is no direct correlation seen in degree and performance, but there is a slight difference in maturity and they can handle the ups and downs of business life better'.

Senior Manager – International IT Services



Spearfishers

ii. Employers who seek postgraduate recruits with specific capabilities to fill specific job roles, usually recruit in small numbers. This group of employers tends to have good links with a university department (or target several universities), which they utilise to ensure a flow of good postgraduate recruits to research or specialist functions. This is an integral part of their higher education relationships and innovation strategies, and they often have long-term research relationships with universities and collaborate in the Collaborative Awards in Science and Engineering Programme.

'The number of postgraduates hired each year is relatively small and in primarily specialist engineering and production teams that require very specific knowledge where a Master or PhD would be required. Perhaps no more than tentwenty of these are required per annum.' Senior manager: Energy



The interviews tended to produce similar findings to the survey. Employers valued postgraduates for:

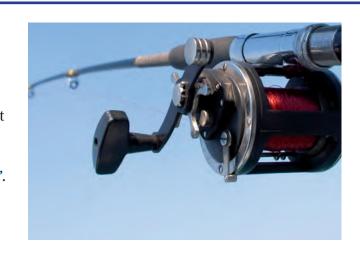
 the specialist knowledge that could be applied quickly in the business, also the latest thinking (having read the latest literature, been to scientific conventions) or new practical techniques (e.g. in x-ray crystallography, surface technology, diagnostics) • and the deeper knowledge of science and technologies underlying business development. In one of the energy businesses, the postgraduate recruits to R&D jobs were expected to be experts in their area, to have the technical in-depth knowledge to solve problems that others in other parts of the company could consult them on.



Anglers

iii. Employers may prefer postgraduates because they are expected to have a distinct advantage over a first degree graduate for a particular role or function and because they are more mature and can contribute more quickly to the business. However, in some instances, an applicant with a good first degree plus work experience may be equally suitable.

'...someone with a postgraduate qualification can draw on this to demonstrate their technical proficiency'. Senior Manager – International Telecoms





Harvesters

iv. Employers may use multiple means of attracting and retaining postgraduate talent for different parts of the business. These often hire specialists into research roles, but generalists into finance, HR, and other professional functions.

There is a fifth category who do not employ postgraduates.

Baitless

v. Employers which do not seek to recruit postgraduates, mainly because they do not see a higher degree qualification as having any value and is therefore not a job requirement. There is no lure on either side.



Key enabling factors

Specialist knowledge is a crucial advantage

- A distinct advantage of postgraduate over first degree graduate recruits is the discipline-specific
 specialist knowledge they are likely to possess and which can be applied directly to help
 businesses develop. Employers also expect to benefit from postgraduates' greater independent
 thinking, self-confidence and maturity and, for example, EPSRC's Knowledge Transfer Accounts,
 which amongst its approaches link business innovators with university staff and students, will
 begin to meet this need.
- The survey showed that employers with a need for specialist skills highly value the specialist knowledge and research that a higher degree and in particular a Ph.D or Eng.D brings. As Stronger Together, the CBI Report on business-higher eduation relationship notes, The Engineering Doctorate, where postgraduates spend sevent-five percent of their time working with businesses, is particularly welcome, as are the Doctoral Training Centres, where issues of leadership and business innovation are explicitly addressed. And many without such a need, favour postgraduates because they have been given more intellectual stretch and so are able to handle greater levels of complexity and ambiguity than first degree graduates.



Employers value more engagement on Continuous Professional Development



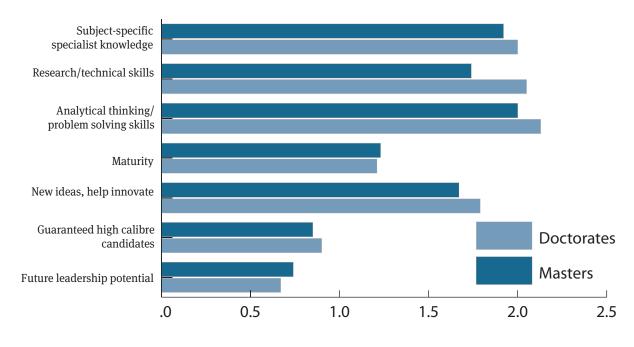
- Postgraduate study is also a distinctive feature of many employers' continuing professional development (CPD) programmes, more offer part-time Masters than PhDs. Some employers prefer to train their existing workforce to postgraduate level, rather than undertake targeted recruitment of postgraduates.
- For some, though, structured in-house training and technical courses not provided by universities are the preferred option. The trend towards more modularised postgraduate learning was welcomed as helping to facilitate postgraduate education participation by employees.



Employers' concerns

Whilst it is widely accepted that recruiting postgraduates is important and can add value to an organisation, some employers expressed concerns.

Value - average scores



Is a postgraduate degree a guarantor of quality?

- Only one in ten employers of Ph.D graduates, and fewer than that for Masters, agree strongly that the qualification is a guarantor of a high-quality candidates.
- The increasing plethora and perceived variable quality

 of postgraduate qualifications puzzles some employers,
 who question how much some programmes stretch
 graduate students. Clearly there are marketing issues
 which the HE sector must address further to get clear
 and consistent messages to employers.
- Masters students are not hired for their leadership potential (an attribute crucial to modern business life.)

'Specialist knowledge, ability to research, solve problems and to a lesser extent innovate are important attributes of this type of postgraduate qualification. Unfortunately, these qualifications in no way provide an indication of "high calibre" or "future leadership potential".'

Senior business leader: Utilities

Outside of niche or very specialist areas, employers see few distinctive differences between PhD and Masters graduates. Much seems to depend on individual attributes and talent, but also the quality and relevance of their postgraduate programme or university attended. EngDocs, however, are clearly preferred over PhD qualifications for engineering firms.



Postgraduates often lack work-wisdom, which is a loose collection of requirements based around commercial nous, understanding of the market, willingness to put aside personal interests to focus on what the business needs, team-working and maturity. On the whole, deficiencies in the behavioural skills such as employability and cultural fit, which businesses seek from all graduates nowadays, are more of a concern than deficiencies in technical skills. Nearly seven in ten employers agree that Ph.Ds find it difficult to adapt to non academic environments.

PhDs are 'too unworldly and interested too much in their own pet research'.

Senior business leader: Engineering

'...technical qualifications are a given. Hiring is much more to do with a cultural fit: can you give a pitch, can you work in teams? We don't want academic-bented people'.

Senior business leader: Technology

'PhDs are often too narrow and over-focused – the 'step-over' from an academic environment to a commercial one is a tough one.'

Senior business leader: International Telecoms.

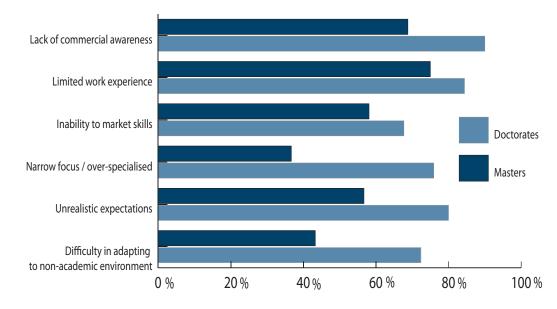
'Sometimes Ph.Ds have lost the basics of their subject on the way.'

Senior business leader: Biotech

A postgraduate degree is no indicator of leadership potential

• Leitch points to management leadership as something postgraduates degrees deliver. However, employers currently do not score postgraduates highly on this measure; this must be an area of further work for both business and higher education.

Issues for employers when seeking to recruit Masters and Doctorates





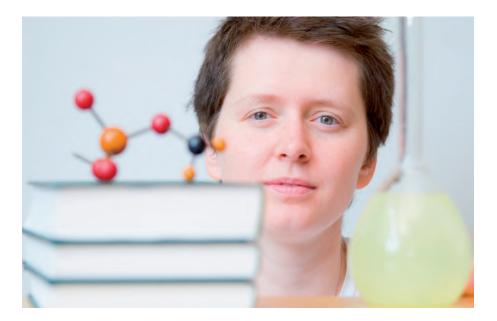
Conclusion

Businesses value postgraduates. And they agree that postgraduate degrees deliver valuable high level research and development skills. However, in order to pass the other Leitch tests of innovation, entrepreneurship, and leadership, businesses see some challenges.

Businesses believe that HEIs should build on a great deal of good work already being undertaken and engage further with employers and professional bodies in designing and accrediting courses to increase the relevance of such courses to businesses. Although there is a great deal of good collaborative work, some of the problems identified by employers show that the HE sector must raise its game in terms of branding and marketing of such courses and awards.

More attention must be paid to developing work-wisdom through the full range of ways of engaging graduate students in real-world business challenges. Businesses must play their part in this and work with Higher Education Institutions to help develop work-wise postgraduates. And businesses need more flexible and focussed CPD relevant to their needs.

Leadership and entrepreneurship should not be regarded as bolt-ons to 'real' education. These are crucial high-level skills and must be part of the make-up of postgraduates who will make a significant contribution to businesses. Businesses and universities must build on good work going on across the sector and collaborate more to develop these expertise.





The CIHE is a strategic leadership network of businesses and higher education executives promoting a system of higher learning that leads to greater market competitiveness and a better society.

It does so by:

- Strategic reviews of major economic and social problems that the combined weight of the leadership and their organisations can help resolve.
- Evidence-based policy initiatives.
- Lobbying for key changes in government and para-government policies.
- Experimental initiatives between individual members to produce case studies of successful interactions.
- Media interventions that prompt questions, promote debate and influence opinion formers.



