

The relationship between generic skills and qualifications

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Executive summary

The objective of this research paper was to examine the relationship between qualifications and generic skills. It was undertaken between November 2006 and January 2007 by Experian, on behalf of the Department for Education, Lifelong Learning and Skills and the Welsh Assembly Government. The work drew on the Future Skills Wales 2003 Generic Skills Household Survey, the latest available, current Annual Population Survey data for Wales and academic literature.

Qualifications are a commonly accepted proxy for generic skills with a higher qualified workforce believed to reflect a higher level of generic skills within the workforce. This research shows that the qualification profile of Welsh residents is closely associated with the generic skills profile. However, the relationship is not completely linear, and is mediated by gender, age and labour market experience (determined by industry and occupation).

In terms of qualifications, the Welsh workforce is less skilled than the UK average. More people in Wales have no qualifications or are only qualified to NVQ Level 1; while at the opposite end of the spectrum, fewer hold NVQ level 4 or equivalent.¹

Within Wales, as across the UK, on average men are better qualified than women; while young people are more qualified than older people.

Within Wales, those that are in employment are better qualified than those who are unemployed or otherwise out of the labour market. Amongst those in work, full-time workers are better qualified than part-time workers. There are also significant variations in the qualification profile by industry and by occupation: financial and public service industries have the largest proportions of employees qualified to NVQ level 4 and above and the lowest proportions of people below NVQ level 2; while professionals and associate professionals are generally the most highly qualified.

Welsh residents with higher qualifications report holding higher levels of generic skills. The better qualified are much more confident about their *ICT* abilities; whereas across the board people believed they had good soft skills, such as *communication* and *team work*.

There are variations in the generic skills reported by gender: men report higher levels of technical and motivational skills – *ICT, leadership, management and problem solving skills*; whereas women report higher levels of soft skills.²

There are also variations in the generic skills reported by age: *ICT* skills were much stronger amongst younger respondents; whilst skills such as *leadership, management* and *entrepreneurial* skills all increased with age.

Some generic skills appear to be acquired by experience (both life and job-related) rather than through qualifications: *leadership* and *management* skills are reportedly higher amongst older workers that in general are less likely to report such high levels of *formal qualifications*; similarly, in agriculture, an industry not associated with high level *formal qualifications*, individuals report higher levels of *leadership* and *management* skills than average.

There is a clear relationship between the type of industry and generic skills: those in the manufacturing sector report far lower levels of soft skills. This suggests that for people to make

¹ Source: Annual Population Survey 2006

² 'Soft skills' refers collectively to the generic skills of *communication, understanding customer needs* and *team work*.

the required transition from the manufacturing to the service sector to address the growth in new jobs in that area, a significant focus on the development of softer generic skills will be required.

Generic skills were associated with the types of occupations that individuals worked in. Employees in roles that involved customer interaction, such as sales positions, tended to report higher levels of soft skills; whilst those in skilled craft occupations report higher levels of *problem solving*.

There is evidence that unemployed people underestimate the levels of generic skills that are required in certain occupations: residents in employment reported higher levels of skills, particularly soft skills, than unemployed people believed were required to get the job. This suggests that unemployed people may underestimate, and are also unlikely to possess, the requisite level and range of generic skills required to successfully compete in the labour market.

The findings raise a number of policy considerations.

Increasing awareness among employers and employees about the ways in which generic skills sets straddle industries and occupations may help to facilitate transition of workers across industries (and occupations). This would increase labour market flexibility. For employers the message is about avoiding the use of qualifications as the exclusive filtering device for applicants; while for residents the message is about evidencing relevant skills through life and employment examples.

The qualification levels of many older workers will underestimate their generic skills and ways of accrediting life experience in a more formal way may help to bridge this gap.

The generic *ICT* skills of older people are weaker than their younger counterparts, and older workers who do not rate themselves highly on *ICT* skills will be deterred from many roles. Yet there is a trade-off, with older workers providing alternative generic skills such as *leadership*. There is a clear case here for raising the level of *ICT* skills amongst older workers through the training offer.

There is also a case for accrediting soft skills outside of formal qualifications. This would help give recognition to skills developed through work experience, particularly for older workers and for those who have struggled to excel in formal studies. Increased recognition of Key Skills may help to offset this problem to some extent and place increased emphasis on generic skills.

Introduction

This report investigates the relationship between the generic skills reported by individuals and the level of qualifications they hold. Specifically, it aims to explore the extent to which qualifications can act as a useful proxy for skills, and where this relationship may break down. It also aims to establish whether qualifications are an efficient way to develop the kinds of generic skills required by employers, and what other factors can influence the development of generic skills. This report is concerned with the relationship between generic skills and qualifications, and attention is also drawn to the subset of generic skills referred to as soft skills. Soft skills refer to *communication, understanding customer needs* and *team work*. Soft skills are particularly hard to measure but of crucial importance to organisational success.

The report draws on a variety of sources in order to achieve these objectives. The main body of the report is centred on analysis of the Future Skills Wales 2003 Generic Skills Survey. In order to build on the results provided by the Generic Skills Survey it also draws on the Annual Population Survey as well as a comprehensive review of relevant academic literature. The report is written in the context of an increasing acknowledgement of the need for generic skills in the UK economy, most recently articulated in the Leitch Review of Skills.

Report contents

The coverage of the report is as follows:

- **Chapter one** provides an analysis of the academic debate on the relationship between qualifications and generic skills, as well as the extent to which the demand for skills is increasing.
- **Chapter two** looks at the profile of qualifications and skills in Wales across age, gender and status.
- **Chapter three** looks at the links between qualifications and skills and the jobs that individuals occupy.
- **Chapter four** summarises the findings and raises issues for consideration by policy makers.

1 Do qualifications adequately measure skills?

1.1 OVERVIEW

This chapter analyses the theoretical links between skills and qualification and provides evidence from academic literature. It questions whether qualifications can validly be used as a proxy for skills and highlights the dangers of relying purely on formal qualifications to identify skills. It then looks at the reasons and evidence for the apparent increasing need for generic skills in the workforce and which skills in particular have grown in importance. It argues that with the growth of the service sector and the decline of traditional sectors, soft skills and technical skills, such as *ICT*, are becoming particularly important. Finally, the chapter goes on to look at how UK policy makers are responding to the challenge of increasing generic skills in the workforce and whether or not they have been successful.

1.2 THE LINK BETWEEN QUALIFICATIONS AND SKILLS

It has been well documented in recent academic research that formal qualifications do not provide a perfect proxy for skill levels. The continued usage of qualifications to measure skills rests on the instant availability of qualification statistics, whereas directly measuring skills is often time consuming and costly. It has become increasingly clear, however, that formal qualifications do not capture the range of skills that employers feel they need in order to function productively.

At a theoretical level, the role of qualifications, and their relationship to skills, can be loosely divided into two schools.³ The ‘human capital’ school argues that by gaining qualifications, an individual acquires more skills and in turn becomes more productive. Whilst accepting that the relationship is imperfect, this approach suggests that qualifications provide an adequate measure of the skills available in the workforce. As the workforce becomes more qualified, in turn it becomes more skilled.

In contrast to the ‘human capital’ approach, ‘signalling’ theory is less optimistic about the role of qualifications in improving the skills of the workforce. In its most extreme form signalling theory suggests that qualifications serve merely to allow high ability candidates to distinguish themselves from less able candidates. Qualifications therefore serve not as a measure of skill but as a measure of a person’s ability to learn, suggesting that skills are over-estimated by measuring qualifications. Skills are overestimated because qualifications do not show what skills an individual possesses, but the likely ability of the individual to learn new skills once he or she has begun employment.

The signalling approach - whilst not widely held in its most extreme form - does provide some explanation as to why many people qualify in areas not related to their chosen profession. Many employers for example recruit graduates regardless of the subject they qualified in, although this would still be compatible with a human capital approach if employers believed that, by studying to degree level, the individual is learning new skills. If qualifications are only loosely related to the nature of work being undertaken, however, then measuring qualifications can overestimate

³ Sparkes, J (1999) *Schools, Education and Social Exclusion*. Centre for Analysis of Social Exclusion Paper 29, London School of Economics.

the levels of relevant skills in the workforce. The workforce is gradually becoming more qualified over time, but unless these qualifications are developing relevant skills then the workforce is not becoming any more skilled.⁴ Skills are also liable to decay over time if not used consistently, whereas qualifications are generally held for life. This may be particularly true of generic skills such as *ICT* or *foreign language* skills. There is a case therefore for arguing that measuring qualifications may overestimate the level of skills in the economy.

Other analysis suggests that qualifications may underestimate the level of skills in the economy. Skills are accumulated outside formal education in activities such as work experience or informal training and yet qualification statistics do not capture this. It has been argued that failing to account for vocational training has often lead employers to overestimate the degree of market failure in the supply of skills.⁵ Qualification statistics typically only measure the highest level of qualification attained by an individual, and this does not capture other qualifications a person may have achieved. Whilst, for example, an individual may hold a degree that is not directly relevant to his or her occupation, a previous qualification, such as A Levels, may have helped to develop certain skills that can still be applied effectively.

Despite the inherent problems of using qualifications as a measure of generic skills, intuitively it seems reasonable to suggest that generic skills increase with qualification levels. As individuals increase their qualifications, for example, it is necessary for them to be increasingly adept at such skills as *literacy*, *problem solving* and the *ability to learn*. It may also be the case that the actual process of educational achievement encourages the development of generic skills. This could be due to the need to work in groups, give presentations in class and manage one's own workload effectively. On the other hand, it is often argued that such skills as *communication* and *team work* are more effectively developed through work experience.

Dickerson and Green found that almost all non-manual generic skills increase with educational qualifications.^{6&7} This may be expected for skills such as *numeracy* and *literacy*, but is not so easily explained for skills such as *communication* and *team work*. Unfortunately, it is very difficult to address whether it is education that improves generic skills, or whether the most academically able individuals are more likely to acquire generic skills due to innate ability. Interestingly, however, the research showed that those with degrees have on average slightly less 'technical know-how' than those without, suggesting a partial trade-off between obtaining extra qualifications and obtaining relevant skills.

1.3 THE CHANGING DEMAND FOR GENERIC SKILLS

Recent evidence suggests that certain generic skills are becoming increasingly important over time.⁸ Flatter management structures mean employees are increasingly taking responsibility for managing their own workload, increasing the need for skills such as *initiative*, *leadership* and *management*. There is also an increased emphasis on informal team work, increasing the need for basic *communication* and negotiation skills.⁹

⁴ Smeaton, B. and Hughes, M. (2003) *Investigating Intermediate Skills*. Learning and Skills Development Agency (LSDA).

⁵ Keep, E. (2006) *Market Failure in Skills*. Sector Skills Development Agency (SSDA).

⁶ Dickerson, A. and Green, F. (2002) *The Growth and Valuation of Generic Skills*. UKC Discussion Papers in Economics.

⁷ Dickerson and Green treat all generic skills as non-manual with the exception of physical skills which they characterize as the exercise of strength and stamina.

⁸ Dickerson, A. and Green, F. (2004) *The Growth and Valuation of Computing and Other Generic Skills*. Oxford University Press.

⁹ National Skills Task Force (2000) *Skills for All: Proposals for a National Skills Agenda*. Department for Education and Employment (DfEE).

The growing emphasis on generic skills in the workplace was re-emphasised in the recent Leitch Review.¹⁰ As the review argues, the increasing pressures of globalisation will continue to restructure the UK economy away from traditional manufacturing-based employment and towards specialist and technical employment. Previously ‘technical’ skills such as *ICT* will increasingly be seen as core requirements for employment, whilst the demand for managers and professionals will continue to increase.

Using evidence from the 1997 and 2001 Skills Survey of the Employed British Workforce, Dickerson and Green have provided quantitative evidence to show that there has been a significant increase in the average level of every generic skill required in the workplace between 1997 and 2001.¹¹ Assuming that a worker is required to at least partially fulfil the skills requirements of an occupation, this leads the authors to conclude that not only demand for generic skills, but also the supply of generic skills has increased. The authors also show, however, that this phenomenon is not being driven purely by younger, more skilled, workers replacing less skilled older workers. Within each broad age band the skills of the workforce were found to have increased.

The growth of computing, or *ICT* skills, has been of particular significance in recent years.¹² In general there has been a significant trend of individuals improving their computing skills from a ‘straightforward’ to a ‘moderate’ level. This suggests an upgrade in skills from a level involving basic tasks, such as printing an invoice, to more complicated tasks such as working with spreadsheets and using email. Reflecting the increased demand for generic skills is evidence of a ‘pay premium’ for those possessing skills such as computing and task management.

1.4 THE FOCUS OF EDUCATION ON GENERIC SKILLS

In recent years the Government has responded to the evidence that generic skills have become increasingly important. As a result, several initiatives have been implemented that have attempted to increase the extent to which common qualifications develop the generic skills required by employers. In 2000 the Government introduced a Key Skills Qualification that is available across all post-16 education routes, and specifically addresses generic skills such as *ICT*, *problem solving* and the application of *numeracy*. There have also been attempts to explicitly increase the generic skill elements of existing GCSE qualifications.¹³

In addition to formal measures to help develop generic skills, the National Skills Task Force highlighted the need for a greater emphasis on the ‘socialisation function’ of school activities.¹⁴ This includes activities such as sports, citizenship classes and school plays, all of which can help children develop the generic skills that will serve them well in the future. In January 2007 the Department for Education and Skills also announced a £10 million funding drive for music in schools, in response to the Music Manifesto report *Making Every Child’s Music Matter*. Education Secretary Alan Johnson has argued that music can help to boost children’s confidence, team work and language skills.¹⁵

¹⁰ Leitch Review of Skills (2005) *Skills in the UK: the Long Term Challenge (interim report)*. HMSO.

¹¹ Dickerson, A. and Green, F. (2004) *The Growth and Valuation of Computing and Other Generic Skills*. Oxford University Press.

¹² *Ibid.*

¹³ Dickerson, A. and Green, F. (2002) *The Growth and Valuation of Generic Skills*. UKC Discussion Papers in Economics.

¹⁴ National Skills Task Force (2000) *Skills for All: Proposals for a National Skills Agenda*. Department for Education and Employment (DfEE).

¹⁵ DfES Press Release (2007) *£10 million Funding to Boost Music Education*. Government News Network.

Despite recent Government initiatives, there is evidence to suggest that common qualifications are failing to adequately develop the generic skills required by employers. A 2002 CBI Employment Trends Survey showed that eight per cent of employers were dissatisfied with the 'key skills' of graduates, whilst twenty four per cent were dissatisfied with the key skills of school leavers. 'Key skills' included many generic skills such as *communication*, *problem solving* and *ICT*. Moreover, when asked about self-management, another generic skill, eleven per cent of employers were dissatisfied with graduates and thirty one per cent of employers were dissatisfied with school leavers. Similarly, and more recently, Future Skills Wales 2003 found dissatisfaction with the generic skills of school leavers, college leavers and graduates. Amongst establishments recruiting school and college leavers, forty-nine per cent reported skills gaps, with *communication* skills the main concern reported by thirty nine per cent, followed by *showing initiative* (twenty two per cent), *numeracy* (nineteen per cent) and *literacy* (nineteen per cent). Amongst the third of establishments in Wales recruiting graduates, skills gaps were also reported with *communication* again being the greatest concern (twenty seven per cent) followed by *showing initiative* (eighteen per cent) and work experience (thirteen per cent), although *literacy* and *numeracy* were less of an issue than for school and college leavers.¹⁶

More proposals are in the pipeline however to ensure that formal qualifications and courses go further in helping to develop generic skills. At Key Stage 3 this will include a new online test in *ICT*, with a target of eighty five per cent of fourteen year olds achieving National Curriculum Level Five in English, maths and *ICT* by 2007. At Key Stage 4 a new GCSE Diploma is being introduced, which will be awarded when pupils achieve five or more grades at A*-C, which must include English and maths. It will also become impossible for any pupil to achieve a grade C or above in English or maths without achieving 'functional' status. 'Functional' status will be recognised in its own right for those pupils who do not manage to achieve grade C at GCSE level.

¹⁶ Business Strategies from Experian (October 2003) *Future Skills Wales 2003 Generic Skills Survey. Full report*. Section 2.4 details the recruitment practices of employers including evidence on the skills gaps of school, college and graduate recruits. www.futureskillswales.com / www.sgiliaudyfodolcymru.com.

2 The qualifications and generic skills of people in Wales

2.1 OVERVIEW

This chapter analyses the qualifications and generic skills of residents in Wales. It provides an evidence base showing how qualifications and skills vary by gender, age and status and analyses why such variation is apparent. The chapter also looks at the specific relationship between qualifications and skills. It analyses whether respondents with higher qualifications also report higher levels of skills and whether there are any specific groups of people that appear to be lacking particular skills.

Having reviewed the evidence, the chapter finds that males are typically more qualified than females, whilst younger respondents are more qualified than older respondents. The chapter finds that more qualified individuals report higher levels of skills, although on closer inspection the relationship is not so clear. Despite being less qualified on average, older people report higher levels of leadership and management skills than younger people, whilst females report higher levels of soft skills than males.

2.2 PROFILE OF QUALIFICATIONS IN WALES

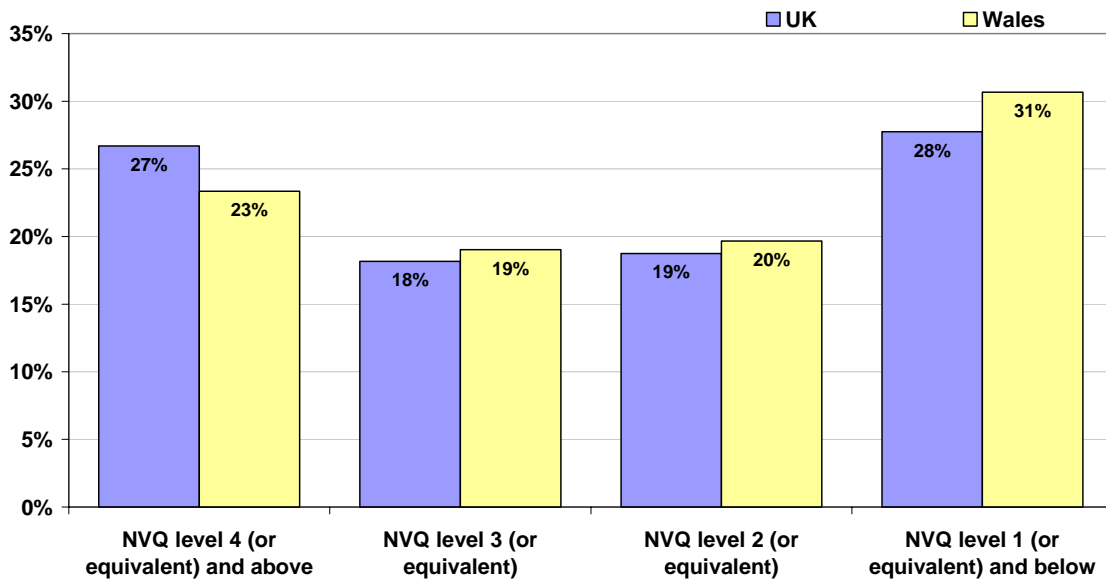
On average, residents in Wales are slightly less qualified than in the UK as a whole. Evidence from the Annual Population Survey suggests that there are fewer graduates in Wales and more people qualified below NVQ level 2. Twenty three per cent of Welsh residents are qualified to NVQ level 4 (graduate level) or above, below the UK average of 27 per cent, whilst 31 per cent of Welsh residents are not qualified to at least NVQ level 2, compared to 29 per cent in the UK. NVQ level 2 is the current level at which an individual is considered to possess ‘intermediate skills’, although the Leitch Review has argued that by 2020 this will have risen to NVQ level 3. This is due to the increasing reliance of the UK economy on technical occupations and the decline of traditional manual occupations.

Whilst residents in Wales are typically less qualified than in the UK as a whole, by international standards the UK performs poorly. The UK is 15th out of 30 in the prevalence of low skills in the OECD, with treble the amount of over 25 year olds (11 per cent) lacking the equivalent of a basic school leaving qualification than the top performing countries.¹⁷

¹⁷ The Leitch Review of Skills (2006) *Prosperity for All in the Global Economy – World Class Skills (final report)*. The Stationery Office.

Figure 2.1: Qualifications of Welsh and UK residents

Qualifications of UK and Welsh residents (% of total)



Source: Annual Population Survey, Spring 2006

Similar results were found for Wales in the Future Skills Wales (FSW) 2003 Generic Skills Survey. This found that 37 per cent of Welsh residents had not reached NVQ level 2, whilst 25 per cent were qualified to NVQ level 4 or above.

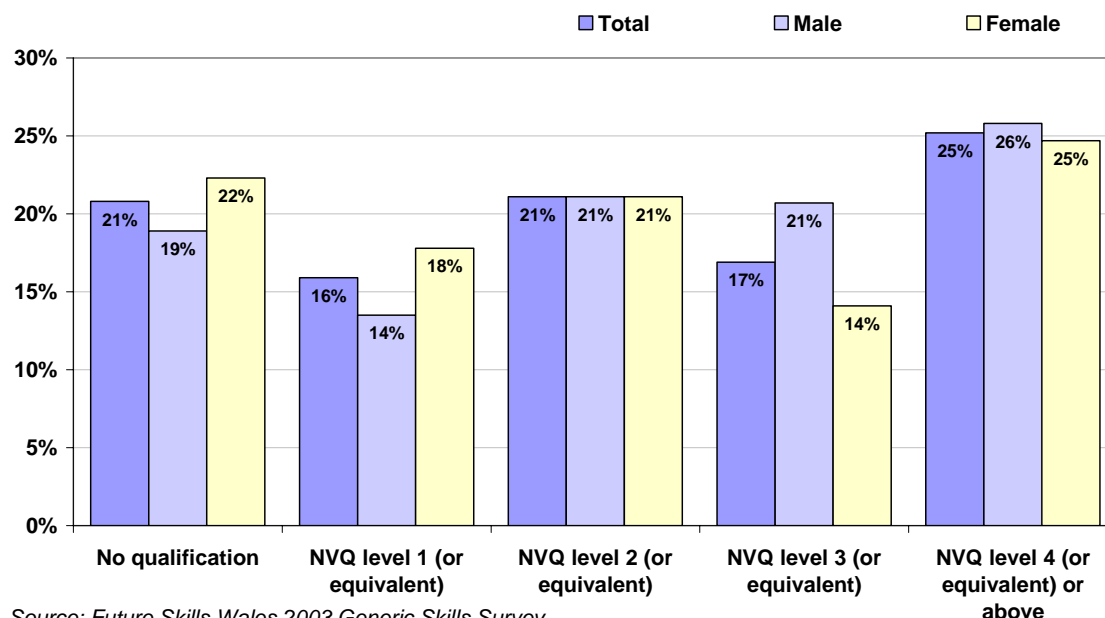
Qualifications by age and gender¹⁸

Evidence from the FSW 2003 Generic Skills Survey suggests that the female population is less qualified than the male population, although this pattern does not hold at NVQ level 4. There is a greater proportion of females holding no qualifications than males; and a greater proportion of females are qualified below NVQ level 2. Forty per cent of females had not reached NVQ level 2, compared to thirty three per cent of males. At NVQ level 4 however, which involves passing a degree or equivalent, the difference between males and females almost completely disappears. Around a quarter of males and females reached NVQ level 4 or above.¹⁹ The variation in qualifications by gender is shown in Figure 2.2

¹⁸ While the Annual Population Survey is the more usual source of profiles of educational achievement for residents and the labour force, we present profiles derived from Future Skills Wales 2003 as this provides the context against which we discuss the generic skills profiles in subsequent text.

¹⁹ 25.8 per cent of males are qualified to NVQ level 4 or higher, compared to 24.7 per cent of females

Figure 2.2: Qualifications of Welsh residents by gender
Qualifications of Welsh residents by gender (% of total)



Source: Future Skills Wales 2003 Generic Skills Survey

The qualification profile of Welsh residents by age is shown in Table 2.1. Analysing the qualifications held by different age groups is partially distorted by the fact that many individuals, particularly in the younger age groups, are still in the process of gaining qualifications. It should come as no surprise therefore to see a small proportion, just 14 per cent, of 16-24 year olds qualified to NVQ level 4 or above.

Despite this difficulty, the data clearly shows that the older age groups are less qualified than the younger age groups. The most highly qualified cohort is the 25-34 year olds, whilst the 55-64 year olds are the least qualified. One in four people aged between 55 and 64 hold no qualifications, compared to less than one in five of the total population. For the 25-34 age group this number is just one in ten.

Table 2.1: Qualifications of Welsh residents by age

	All people (%)	16 -24 (%)	25-34 (%)	35-44 (%)	45 – 54 (%)	55-64 (%)
NVQ5 or equivalent	5	1	6	6	7	4
NVQ4 or equivalent	18	8	25	21	18	18
NVQ3 or equivalent	22	35	22	18	19	16
NVQ2 or equivalent	29	36	28	30	27	24
NVQ1 or below	8	4	8	9	8	11
No qualifications	17	15	10	14	20	26

Source: Annual Population Survey, 2006.

Qualifications by status

Those who are employed have higher qualifications than the unemployed and the long term sick or disabled. Almost half of the long term sick or disabled have no qualifications, whilst 59 per cent have failed to reach NVQ level 2. Those who are unemployed also have below average levels of qualification, with just over half failing to reach NVQ level 2 or above. Seventy two per cent of those who are employed are qualified at NVQ level 2 or above.

As expected, full time workers are more qualified than part time workers. Thirty three per cent (one third) of full time workers are educated to degree level or higher, compared to 26 per cent (roughly one quarter) of part time workers. Full time workers are also more likely to have reached NVQ level 2 and less likely to have no qualifications at all. These findings are shown in Table 2.2 below.

Table 2.2: Qualifications of Welsh Residents by status

	Full Time (%)	Part Time (%)	Employed (FT or PT, %)	Unemployed (%)	Long term sick or disabled (%)	Retired (%)
No qualifications	13	18	14	26	45	21
NVQ1 or below	13	18	14	25	14	12
NVQ2 or equivalent	21	24	22	25	19	17
NVQ3 or equivalent	20	14	18	10	11	15
NVQ4 or equivalent	24	21	23	9	8	25
NVQ5 or equivalent	9	5	9	4	2	10

Base = all people

Source: Future Skills Wales, Generic Skills Survey 2003

2.3 PROFILE OF GENERIC SKILLS IN WALES

Generic skills and qualifications

Table 2.3 compares the qualifications respondents hold with their assessment of their own level of generic skills. For the purpose of clarity the respondents' assessment of their skill levels (i.e. don't have, basic, intermediate, high and advanced) have been converted into numerical values (for more detail see the bottom of table 2.3).

Comparing the generic skills respondents believe they have with their qualifications, it is clear that more qualified individuals report higher levels of generic skills. For example, respondents with a qualification equivalent to NVQ level 5 and above rate their *management* skills more highly than those with lower levels of formal qualifications. This relationship is true across the spectrum of generic skills, ranging from technical skills such as *ICT* to soft skills such as *team work* and *communication*.

As expected, those with higher qualifications have more confidence in their *literacy* and *numeracy* ability, and also their *foreign language* skills. *Welsh language* skills do not increase uniformly with qualifications, with little overall difference between the mean scores of the highest and lowest qualification brackets. As with foreign language skills however, scores were uniformly low, showing that the majority of people rated their skills as 'basic' or below.

ICT skills displayed the largest range between low and high qualifications. Those with no qualifications on average rated themselves as having 'basic' ICT skills, whilst those at NVQ level 5 rated their skills as 'high'. There was less variance for the softer skills such as *understanding customer needs* and *team work*, where at all levels respondents generally considered their skills to be high.

Whilst generic skills appear to increase uniformly with qualifications, these results do not automatically support a pure human capital thesis that qualifications develop generic skills. These results are entirely plausible if signalling theory is correct, because the most able individuals are more likely to gain strong qualifications and also more likely to be able to develop generic skills independent of their qualifications. *Management* skills for example may be developed primarily through experience, but it is only those individuals with good qualifications that are given the opportunity to gain the relevant experience in the workforce.

It is also important to note that the survey results correspond to individuals' perceptions of their own generic skills, which may not correspond perfectly with their actual level of generic skills. This again may serve to increase the apparent correlation between generic skills and qualifications. Those with higher qualifications are likely to have more confidence in their own ability and therefore rate their generic skills more highly. The true difference between generic skills across qualification levels may not be as high as individuals perceive it to be.

Table 2.3: The correlation between generic skills and qualifications

What level of skills do you currently have?	All	No qualifications	NVQ Level 1	NVQ Level 2	NVQ Level 3	NVQ Level 4	NVQ Level 5
Formal qualification	3.1	1.6	2.6	3.1	3.5	4.1	4.5
Numeracy	3.6	3.0	3.4	3.6	3.7	4.0	4.2
Literacy	3.8	3.2	3.6	3.8	3.9	4.3	4.5
Welsh Language	1.7	1.5	1.6	1.7	1.8	1.8	1.8
Foreign Language	1.4	1.1	1.2	1.4	1.4	1.7	2.0
Problem Solving Skills	3.7	3.2	3.5	3.6	3.9	4.1	4.3
Communication	4.1	3.6	3.9	4.1	4.2	4.4	4.6
Ability to follow instructions	4.1	3.7	4.0	4.1	4.2	4.2	4.3
ICT skills	2.8	1.9	2.4	2.8	3.1	3.4	3.7
Ability to learn	3.8	3.3	3.6	3.8	4.0	4.2	4.4
Showing initiative	4.0	3.6	3.8	4.0	4.1	4.2	4.4
Leadership skills	3.5	3.0	3.3	3.5	3.7	3.9	4.1
Management skills	3.0	2.3	2.6	2.9	3.1	3.6	3.9
Organising own learning and development	3.4	2.9	3.1	3.4	3.6	3.9	4.1
Team work	4.0	3.7	3.8	4.0	4.1	4.2	4.4
Understanding customer needs	4.1	3.7	3.9	4.1	4.1	4.3	4.3
Entrepreneurial skills	2.4	2.0	2.1	2.4	2.5	2.7	2.9
Adaptivity/ flexibility	4.0	3.6	3.8	4.0	4.1	4.2	4.3

Notes: The figures in this table were calculated by assigning a numerical value to responses and then creating an average. Scores were assigned as follows:

Don't have this skill – 1 point

Possess the skill to a basic level – 2 points

Intermediated skill level – 3 points

Highly skilled – 4 points

Advanced skills – 5 points

Source: Future Skills Wales 2003 Generic Skills Survey.

Generic skills by gender

The profile of generic skills by gender is found in Table 2.4. Previously we have shown that in general females in Wales are less qualified than males, with a greater proportion of females possessing no qualifications and far fewer females qualified to at least NVQ level 2. This finding was reflected when respondents were asked their perceptions of their generic skills levels, as males rated their *formal qualifications* slightly higher than females. This finding was also true for the level of *numeracy* respondents felt they had, although females rated themselves more highly on their level of *literacy* and *Welsh* and *foreign language* skills.

The trend that emerges from the survey results is that male respondents rate themselves more highly than female respondents on skills related to technical and motivational ability, whereas females rated themselves higher on softer skills. The surveys found that the average score males had given themselves was higher than the equivalent female scores for *problem solving skills*, *ICT skills*, *leadership skills*, *management skills* and *entrepreneurial skills*. Females on the other hand tended to rate themselves more highly on skills such as *understanding customer needs*, *team work* and *communication*.

It is important again to bear in mind, however, that these scores relate to an individual's perceptions of his or her own generic skills, which may not correspond exactly to their actual level of generic skills. What the results show therefore is that males *perceive* themselves to be better at technical skills and females *perceive* themselves to be better at soft skills. This is likely to reflect differences in how males and females view or value such skills, with males placing greater weight on more tangible, technical skills whilst females value softer skills. It may also reflect occupational structures, as technical occupations concentrated in industries such as construction are occupied by a larger percentage of males than females, whereas customer service occupations are typically female dominated. When the base was restricted to those currently in employment for example, the difference between the female and male scores for *understanding customer needs* increased.

Table 2.4: Generic skills of Welsh residents by gender

What level of skills do you currently have?	All people	Male	Female
Formal qualification	3.1	3.2	3.1
Numeracy	3.6	3.7	3.5
Literacy	3.8	3.8	3.9
Welsh Language	1.7	1.6	1.7
Foreign Language	1.4	1.4	1.5
Problem Solving Skills	3.7	3.8	3.6
Communication	4.1	4.0	4.1
Ability to follow instructions	4.1	4.1	4.1
ICT skills	2.8	2.9	2.7
Ability to learn	3.8	3.9	3.8
Showing initiative	4.0	4.0	4.0
Leadership skills	3.5	3.6	3.5
Management skills	3.0	3.1	2.9
Organising own learning and development	3.4	3.4	3.4
Team work	4.0	4.0	4.0
Understanding customer needs	4.1	4.0	4.1
Entrepreneurial skills	2.4	2.6	2.3
Adaptivity/ flexibility	4.0	4.0	4.0

Base = all people (those in employment and those out of work)

Notes: The figures in this table were calculated by assigning a numerical value to responses and then creating an average. Scores were assigned as follows:

Don't have this skill – 1 point

Possess the skill to a basic level – 2 points

Intermediated skill level – 3 points

Highly skilled – 4 points

Advanced skills – 5 points

Source: Future Skills Wales, Generic Skills Survey 2003.

Generic skills by age

Previously it was shown that older age groups tend to be less qualified than younger age groups: the 55-64 age group was less qualified than the average, and the 25-34 age group was the most qualified. This reality is reflected in the respondents' perceptions of their level of formal qualifications, which is highest amongst 25-34 year olds and lowest amongst 55-64 year olds. *ICT* also shows a clear downward trend across age groups, with those aged 55-64 years rating themselves much lower than those aged 16-24 years. The trends are shown in table 2.5.

While *ICT* skills are rated more highly by younger respondents, many generic skills increased with age, calling into question the strict relationship between qualifications and generic skills. Skills such as *leadership*, *management* and *entrepreneurial skills* all showed a clear positive relationship with the age of the respondent. As older age groups are in general less qualified than average, these skills appear to be affected by age more than qualifications. This is likely to reflect the importance of life and work experience in developing these skills, as well as the fact that the older one is the more likely is it that such skills have been called on, developed and tested.

Assuming that age is a good proxy for work experience, these results also highlight the positive impact of work experience on generic skills. It is likely therefore that people with higher qualifications have better generic skills partly because they are given more responsibility and opportunity to develop in employment. This would lend support to the earlier hypothesis that by

judging the skills of the workforce purely on formal qualifications, and thereby ignoring work experience, employers may be overestimating the extent of skills shortages in the workforce.

Table 2.5: Generic skills of Welsh residents by age

What level of skills do you currently have?	Age				
	16 -24	25-34	35-44	45 - 54	55-64
Formal qualification	3.2	3.3	3.1	3.1	3.0
Numeracy	3.5	3.6	3.6	3.6	3.6
Literacy	3.7	3.8	3.8	3.8	3.8
Welsh Language	1.9	1.7	1.6	1.7	1.6
Foreign Language	1.6	1.5	1.3	1.4	1.4
Problem Solving Skills	3.5	3.8	3.8	3.7	3.8
Communication	4.0	4.1	4.1	4.1	4.0
Ability to follow instructions	4.1	4.1	4.1	4.0	4.0
ICT skills	3.3	3.0	2.8	2.6	2.3
Ability to learn	3.9	3.9	3.9	3.7	3.8
Showing initiative	3.8	4.1	4.0	4.0	4.0
Leadership skills	3.3	3.6	3.6	3.5	3.7
Management skills	2.6	3.0	3.1	3.1	3.3
Organising own learning and development	3.4	3.5	3.5	3.4	3.4
Team work	4.0	4.1	4.0	4.0	3.9
Understanding customer needs	3.9	4.1	4.1	4.1	4.0
Entrepreneurial skills	2.3	2.4	2.4	2.5	2.6
Adaptivity/ flexibility	3.8	4.0	4.0	4.1	4.0

Notes: The figures in this table were calculated by assigning a numerical value to responses and then creating an average. Scores were assigned as follows:

Don't have this skill – 1 point

Possess the skill to a basic level – 2 points

Intermediated skill level – 3 points

Highly skilled – 4 points

Advanced skills – 5 points

Base = all people (those in employment and those out of work)

Source: Future Skills Wales, Generic Skills Survey 2003.

3 Workforce skills and labour market experience

3.1 OVERVIEW

This chapter analyses how qualifications and skills vary across industries and occupations. It finds a clear relationship between different sectors and different qualifications and skills. Those employed in the top sectors, and typically the highest paid, reported the highest levels of both qualifications and skills, whereas those in the lowest sectors reported the lowest levels of qualifications and skills. The analysis again finds however that the relationship between skills and qualifications and jobs that people occupy is not linear, and that certain workers appear to specialise in certain skills. Managerial workers appear to specialise in leadership skills whilst sales assistants appear to specialise in customer service skills.

Finally, the chapter looks at the perceptions that unemployed residents have on the generic skills required in the workforce. It finds that the generic skills unemployed workers believe are required for specific roles are consistently lower than the skills workers in those roles claim to possess.

3.2 QUALIFICATIONS BY INDUSTRY AND OCCUPATION

Analysing qualifications across different industries shows that those in finance and business services and the public sector are typically more qualified than those in traditional industries such as manufacturing and construction. The findings are shown in Table 3.1.

The highest qualified individuals are largely found in the public and financial services sectors, where in both instances over a third of the workforce is qualified to at least degree level. In both cases only a small percentage of workers have no qualifications, whilst 78 per cent of financial workers and 73 per cent of public sector workers are qualified to at least NVQ level 2.

In contrast to this are the more traditional manual industries such as agriculture and manufacturing. In both agriculture and manufacturing over 30 per cent of the workforce have no qualifications, whilst almost half are qualified below NVQ level 2. Construction workers are on average more qualified than their counterparts in manufacturing and 61 per cent are qualified to NVQ level 2 or above. Construction workers are notably more likely than manufacturing workers to be qualified to NVQ level 3, but have a below average proportion qualified to NVQ level 4 or above. This largely reflects the occupational structure and the specific need for NVQ level 3 equivalent qualifications in the craft occupations that dominate the sector.

Unexpectedly, the agricultural sector, while a disproportionate share of its workforce compared to other sectors lack qualifications (i.e. they either have none or hold NVQ level 1) the share of those with NVQ level 5 is above average.

Table 3.1: Qualifications of Welsh residents by industry

	All (%)	Agriculture, hunting, forestry and fishing (%)	Manufacturing (%)	Construction (%)	Distribution, hotels and restaurants (%)	Transport and communications (%)	Banking, finance, insurance, and other services (%)	Public administration, education and health (%)	Energy and water (%)
No qualifications	21	32	31	23	28	18	10	14	8
NVQ1 or below	16	18	17	16	23	19	12	13	10
NVQ2 or equivalent	21	20	20	21	25	28	25	18	22
NVQ3 or equivalent	17	13	16	24	14	18	19	14	34
NVQ4 or equivalent	19	11	12	12	9	13	23	30	17
NVQ5 or equivalent	6	7	4	3	2	4	11	11	8

Base = all individuals

Source: Future Skills Wales, Generic Skills Survey 2003.

At an occupational level, and shown in Table 3.2, it is again found that those in typically manual occupations are less qualified than those in service orientated occupations. Employees in ‘elementary’ occupations are the least qualified, with 39 per cent having no qualifications and just 7 per cent having a degree or higher. ‘Process, plant and machine operatives’ have a similar qualification structure, with large proportions of the workforce possessing no qualifications and over half of the workforce not reaching NVQ level 2.

The highest proportions of workers qualified at NVQ level 3 are found in skilled trades and administrative and secretarial occupations. As was found for the construction industry above, it is likely that this reflects a need for more technical qualifications that are often taken at this level. Interestingly however, there are also large numbers of administrative and secretarial workers who are qualified to NVQ level 4 (degree level). 25 per cent of workers in this occupation hold a degree or higher, possibly being partially explained by the hypothesis that increasing numbers of graduates are ‘over-qualified’ for their occupation.²⁰ It is also likely that large numbers of graduates view administrative occupations as short-term work, and occupy such roles whilst looking for a more permanent job. A large proportion of these graduates are female employees returning to work after looking after small children, or finding work that fits around parenting responsibilities.

Finally, it is clear that the highest qualifications are typically found in professional and associate professional occupations. Professional occupations in particular are held by individuals with high qualifications, with 84 per cent of workers being qualified to degree level or above. Just 3 per cent of professional workers are not qualified to NVQ level 2 or higher.

* Question relates to current or last job. Those who have never worked are un-coded.

²⁰ Chevalier, A (2000) *Graduate Over-Education in the UK*. Centre for the Economics of Education, London School of Economics.

Table 3.2: Qualifications of Welsh residents by occupation

	Managers and senior officials (%)	Professional (%)	Associate professional and technical (%)	Administrative and secretarial (%)	Skilled trades (%)	Personal service (%)	Sales and customer service (%)	Process, plant and machine operatives (%)	Elementary (%)
No qualifications	11	2	3	8	24	18	21	37	39
NVQ1 or below	11	1	8	16	15	21	21	21	24
NVQ2 or equivalent	21	6	17	28	24	27	28	21	22
NVQ3 or equivalent	18	8	15	24	27	17	18	14	9
NVQ4 or equivalent	28	53	46	20	9	15	8	6	5
NVQ5 or equivalent	11	31	11	5	2	3	3	2	2

Base = all individuals*

Source: Future Skills Wales, Generic Skills Survey 2003.

3.3 GENERIC SKILLS BY INDUSTRY

Not only do employees in finance and professional services and the public sector report the highest levels of formal qualifications, but these workers also reported the highest levels of generic skills, ranging from technical *ICT* skills to soft skills such as *communication* and *team work*. Table 3.3 shows the results.

Manufacturing workers declared the lowest levels of qualifications and skills, with notably low scores for soft skills. Manufacturing workers reported the lowest levels of *communication skills*, *team work*, *understanding customer needs* and *entrepreneurial skills*, illustrating the nature of the work in traditional manufacturing industries. As highlighted in the Leitch Review, the decline of the manufacturing sector suggests that such employees will need to acquire new skills in order to participate successfully in the new technical and service-based industries.

* Question relates to current or last job. Those who have never worked are un-coded

Table 3.3: Generic skills of Welsh residents by industry

What level of skills do you currently have?	All	Agriculture, hunting, forestry and fishing	Manufacturing	Construction	Distribution, hotels and restaurants	Transport and communications	Banking, finance, insurance, and other services	Public administration, education and health	Energy and water
Formal qualification	3.1	2.8	2.8	3.2	2.7	3.1	3.5	3.4	3.3
Numeracy	3.6	3.3	3.5	3.7	3.6	3.7	3.9	3.6	3.7
Literacy	3.8	3.4	3.6	3.7	3.7	3.8	4.1	4.0	3.6
Welsh Language	1.7	2.0	1.4	1.5	1.6	1.5	1.6	1.9	1.8
Foreign Language	1.4	1.2	1.3	1.3	1.4	1.4	1.5	1.5	1.5
Problem Solving Skills	3.7	3.5	3.6	3.8	3.5	3.8	4.0	3.8	3.9
Communication	4.1	3.9	3.8	3.9	4.0	4.1	4.2	4.3	4.1
Ability to follow instructions	4.1	4.2	4.0	4.1	4.0	4.1	4.1	4.2	4.0
ICT skills	2.8	2.6	2.7	2.3	2.5	2.8	3.5	2.9	3.1
Ability to learn	3.8	3.9	3.7	3.8	3.7	3.9	4.0	3.9	3.9
Showing initiative	4.0	3.8	3.8	4.0	3.9	4.0	4.1	4.1	4.1
Leadership skills	3.5	3.9	3.3	3.6	3.4	3.5	3.7	3.7	3.7
Management skills	3.0	3.9	2.6	3.0	2.9	3.0	3.3	3.2	3.0
Organising own learning and development	3.4	3.2	3.3	3.4	3.3	3.4	3.7	3.6	3.4
Team work	4.0	4.1	3.9	3.9	4.0	3.9	4.0	4.1	3.9
Understanding customer needs	4.1	4.0	3.7	4.0	4.1	4.1	4.3	4.2	3.9
Entrepreneurial skills	2.4	2.8	2.2	2.6	2.5	2.6	2.7	2.3	2.6
Adaptivity/ flexibility	4.0	4.0	3.9	3.9	3.9	4.0	4.1	4.1	4.0

Base = all people (those in employment and those out of work)**

Source: Future Skills Wales, Generic Skills Survey 2003.

3.4 GENERIC SKILLS BY OCCUPATION

Across the whole range of generic skills, managers and professionals, who were typically the most qualified groups of workers, reported having the highest levels of generic skills. Conversely, those in elementary occupations, typically the least qualified, reported the lowest skills. The largest discrepancy across skills is in *formal education*, ranging from a mean score of 4.3 amongst professionals to 2.3 amongst elementary workers. This range is reduced somewhat however when respondents were specifically asked about their basic skills such as *numeracy* and *literacy*. The results are shown in Table 3.4.

Clearly there is some evidence that the levels of generic skills are closely correlated with the *levels* of occupation that individuals occupy, with those in higher level occupations generally reporting higher generic skills. That said, this relationship is not completely linear, and there is also a close association between generic skills reported and the *types* of skills required in different occupational roles.

Managers for example reported the highest levels of *management, leadership, problem solving and entrepreneurial skills*. Those in customer-facing occupations, notably those in 'personal service' and 'sales and customer service', reported high levels of what are often termed soft

* Industry relates to current or last job. Those who have never worked are coded as not applicable.

skills such as *communication* and *understanding customer needs*. Elementary workers and machine operatives notably reported much lower levels of these skills. Administrative and secretarial workers, along with professionals, reported the strongest *ICT skills*. This is likely to reflect the nature of their work, which is increasingly computer based. It may also reflect the earlier finding that a large proportion of the workforce in administrative jobs is educated to NVQ level 4.

The correlation between certain occupations and certain generic skills suggests that generic skills can be developed outside of formal education or formal qualifications. Those in sales and customer service occupations, for example, were found to have higher skills in *understanding customer needs* than professionals, despite on average being significantly less qualified. While clearly employers will always seek skill sets specific to the roles they are recruiting for, it is unlikely that individuals enter these positions with the complete skill set required. Rather, working within these positions allows individuals to (further) develop these skills.

This does, however, raise concerns that certain occupations do not give individuals the opportunity to develop a broad range of generic skills. The low levels of soft skills reported by those in manual occupations, for example, reflects both the lack of skills amongst those working in these occupations, but also the fact that these types of skills are not always required in sectors employing manual workers. Consequently it is unlikely that these soft skills will be developed on the job, and it is unlikely that such workers will make a successful transition to any service sector role without additional training and support.

Despite workers from certain occupations seemingly specialising in certain generic skills, there are problems with comparing skills across occupations. Professionals, for example, may consider their *customer needs* skills to be weaker than their *problem solving* skills and therefore declare that they are weak at understanding customer needs. In reality, they may still be better at understanding customer needs than sales personnel if these skills were measured objectively. Similarly, a professional worker highly proficient in using computer packages may consider themselves to have advanced *ICT skills*, but when compared to a computer programmer, who would also consider themselves to have advanced skills, their abilities are clearly not comparable. The actual level of skills across occupations is difficult to gauge therefore because respondents will tend to compare their abilities against those required for *their own* role, rather than for *all* roles and therefore the measure is relative rather than objective.

Table 3.4: Generic skills of Welsh residents by occupation

What level of skills do you currently have?	Managers and senior officials	Professional	Associate professional and technical	Administrative and secretarial	Skilled trades	Personal service	Sales and customer service	Process, plant and machine operatives	Elementary
Formal qualification	3.5	4.3	3.8	3.4	3.0	3.0	2.9	2.7	2.3
Numeracy	4.1	4.1	3.8	3.8	3.5	3.3	3.6	3.3	3.2
Literacy	4.1	4.4	4.1	4.1	3.6	3.7	3.8	3.4	3.4
Welsh Language	1.6	2.1	1.7	1.7	1.6	1.8	1.5	1.4	1.6
Foreign Language	1.5	1.9	1.6	1.4	1.3	1.3	1.4	1.2	1.3
Problem Solving Skills	4.3	4.2	4.1	3.7	3.8	3.6	3.6	3.4	3.2
Communication	4.4	4.5	4.4	4.2	3.8	4.2	4.1	3.7	3.7
Ability to follow instructions	4.1	4.3	4.2	4.1	4.0	4.1	4.0	4.0	3.9
ICT skills	3.3	3.6	3.2	3.6	2.4	2.3	2.9	2.3	2.1
Ability to learn	4.1	4.3	4.1	3.9	3.8	3.7	3.8	3.6	3.5
Showing initiative	4.3	4.3	4.2	4.0	4.0	4.0	3.9	3.8	3.7
Leadership skills	4.1	4.1	3.9	3.4	3.5	3.6	3.4	3.2	3.0
Management skills	4.1	3.8	3.5	2.9	2.9	2.8	2.8	2.4	2.3
Organising own learning and development	3.8	4.0	3.8	3.5	3.3	3.4	3.4	3.1	2.9
Team work	4.2	4.3	4.2	4.0	3.9	4.0	4.0	3.8	3.8
Understanding customer needs	4.4	4.2	4.3	4.1	4.0	4.3	4.3	3.6	3.7
Entrepreneurial skills	3.2	2.8	2.6	2.3	2.5	2.2	2.4	2.1	2.0
Adaptability/flexibility	4.3	4.3	4.2	4.0	4.0	4.0	3.9	3.8	3.7

Base = all people (those in employment and those out of work)*
 Source: *Future Skills Wales, Generic Skills Survey 2003.*

3.5 PERCEPTIONS OF GENERIC SKILLS REQUIRED IN EMPLOYMENT

To gain a broader picture of the relationship between generic skills and occupations, those respondents who were out of work were asked to declare the level of generic skills they believed were needed to get the job they wanted. Interestingly, on almost every account the unemployed individuals reported lower levels of generic skills required than the individuals who work in the occupations reported they actually had. This suggests that unemployed individuals are underestimating the skills they need in order to compete successfully for jobs against those already in the labour market. Table 3.5 shows the levels and types of skills that unemployed residents believe are needed to find employment.

* Occupation relates to current or last job. Those who have never worked are coded as not applicable.

Table 3.5: Perceptions of the skills required to get a job amongst unemployed residents

At what level are skills required to get the job you want?	Managers and senior officials	Professional	Associate professional and technical	Administrative and secretarial	Skilled trades	Personal service	Sales and customer service	Process, plant and machine operatives	Elementary
Formal qualification	3.2	3.8	3.5	3.2	2.9	3.0	3.2	2.6	2.8
Numeracy	3.9	3.9	3.7	3.6	3.2	3.0	3.5	3.0	3.0
Literacy	3.7	3.9	4.0	3.8	3.2	3.4	3.8	3.0	3.3
Welsh Language	2.1	1.8	2.0	2.0	1.7	2.2	1.8	1.5	1.6
Foreign Language	1.1	1.4	1.7	1.6	1.3	1.5	1.5	1.3	1.4
Problem Solving Skills	3.9	3.9	3.7	3.6	3.2	3.3	3.3	3.0	3.1
Communication	4.4	4.1	4.3	4.1	3.6	4.2	4.1	3.3	3.6
Ability to follow instructions	4.0	4.0	4.0	4.0	3.9	4.0	3.9	3.6	3.7
ICT skills	2.9	3.4	3.3	3.2	2.6	2.5	3.2	2.3	2.2
Ability to learn	3.6	4.1	4.0	3.8	3.5	3.6	3.7	3.2	3.4
Showing initiative	4.2	4.1	4.2	3.9	3.7	3.9	3.8	3.5	3.6
Leadership skills	3.9	4.0	4.0	3.4	3.2	3.4	3.4	2.7	2.9
Management skills	3.7	3.6	3.5	3.0	2.6	2.8	2.8	2.0	2.1
Organising own learning and development	3.5	3.9	3.7	3.3	3.2	3.3	3.4	2.8	2.8
Team work	4.0	4.3	4.0	3.9	3.6	3.9	3.9	3.5	3.6
Understanding customer needs	4.4	4.1	4.0	4.2	3.8	4.2	4.1	3.5	3.8
Entrepreneurial skills	3.0	2.8	2.4	2.5	2.6	2.4	2.7	2.2	2.3
Adaptability/flexibility	4.1	4.2	4.0	4.1	3.6	4.0	3.9	3.5	3.6
Base = those not working									
Source: Future Skills Wales, Generic Skills Survey 2003.									

Across the range of occupations, the levels of *literacy* and *numeracy* respondents believed they needed in order to get a job were lower than those reported by the individuals currently in employment. Perhaps most importantly, unemployed individuals consistently underestimated the levels of soft skills that are required in the workplace. The level of soft skills those out of work believed were required in *communication*, *showing initiative*, *team work* and *understanding customer needs* were significantly lower in each occupation than the skills declared by people working. These skills are particularly important in personal service, sales and customer service roles, and yet with the exception of communication skills, unemployed individuals underestimated the level of skills required in all of the soft skills mentioned above.

4 Conclusion and policy issues

The research in this paper drew on the Future Skills Wales 2003 Generic Skills Survey to examine the relationship between qualifications and generic skills. It found that there is a relationship between the qualifications an individual possesses and their generic skills levels, but that this correlation is not completely linear, and varies by gender, age and labour market experience. Moreover, while qualifications do act as an indicator of generic skills, they also act as a facilitator to gaining generic skills by enabling individuals to access labour market opportunities and thereby develop their generic skills on the job.

Qualifications are therefore a proxy for generic skills to some extent, but by no means a perfect one. As a consequence when reviewing and monitoring progress against the skills for productivity agenda, it will be important to take a wider view, considering factors such as unaccredited workplace-based training/mentoring and adult learning.

Indeed, **generic skills are also developed through labour market experience** and over-emphasis on qualifications can act to 'lock out' those with few qualifications from the labour market. Qualifications generally allow individuals to access labour market opportunities, within which they will further develop generic skills (through experiential learning as well as more formal employer investment in training).

The labour market is in a constant state of flux and those in employment change with it, while those outside the workforce are left behind. As a consequence those trying access the labour market are doubly disadvantaged: not only do they lack the basic level and range of skills required to obtain employment, but the skills of those working in comparable jobs are being maintained and honed on the job leaving them more able to compete for any new job openings. Moreover, there is evidence to suggest that **the unemployed have unrealistic perceptions of the marketplace and fail to fully appreciate the extent of generic skills required to secure a job.**

Qualifications are not such a good proxy for the skills of older people as they are for those of younger people. While older people are generally less well qualified, they tend to report higher levels of generic skills (with the exception of *ICT*). This highlights the important role that workforce (and life) experience can play in the development of generic skills, particularly *leadership, managerial* and *entrepreneurial* skills. In an increasingly dynamic economy this also highlights the growing need for employees to be able to transfer the skills they learn in the workplace to the wider market.

Indeed, people generally tend to obtain qualifications at one point in time (i.e. when they are younger) and then add to these skills through experience and (often unaccredited) training and learning. Moreover, there has been an increase in the proportion of highly qualified people within each age cohort, with the proportion of the population undertaking accredited learning at all levels much higher today than thirty or forty years previously.

As a consequence, older people will be less horizontally and vertically mobile in the labour market as, despite possessing high levels of generic skills, they lack the currency required to signal these skills through formal qualifications. Similarly, older people that are out of work will not only require support in developing the skills they lack (often those skills that are in a constant state of change or that are or have become increasingly important such as *ICT* skills), but will also require additional support in evidencing the skills they do possess.

Qualifications are a better proxy of skills for some occupations than others. Some occupations that typically require low levels of formal qualifications and are consequently seen as relatively low skilled, such as Sales and Customer Service roles actually require high levels of generic skills, particularly *communication, understanding customer needs, team working, ability to follow instructions* and *ICT*. Organisations with high requirements in terms of formal qualifications may lose out on potentially valuable workers. However, anecdotal evidence suggests that many graduate entry schemes (which require a relatively high level of qualifications) also place a strong emphasis on generic skills. Research recently undertaken for the FSW Partnership on employer perceptions of graduate skills shows that employers expect graduates to possess strong generic skills, particularly the *ability to learn, organising own learning and development, showing initiative* and *communication skills*.

Conversely, those looking to make the transition from employment in declining traditional industries to the growing service economy will face very real barriers, as the skill sets required by those working within manufacturing, for example, may vary significantly to those skill sets required by service sector employers.

Finally, it is important to note that while qualifications are an imperfect measure of generic skills, they are currently the best available measure. Indeed, it is extremely difficult to gauge the actual generic skills of an individual, even through direct surveys, as the list of generic skills is long and heterogeneous, an individual's perceptions of their skills will be influenced by a variety of factors and individuals typically gauge their proficiency within the context of their current role. The real challenge remains the embedding of generic skills within existing qualifications to strengthen the link between the two.

Appendix A

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