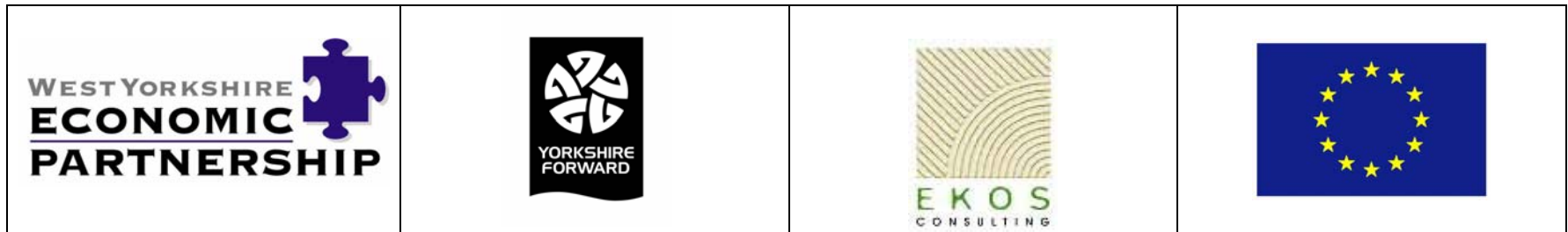


West Yorkshire
Strategic Economic Assessment

RES 3: Skilled People Benefiting Business

Final
September 2006



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3 Skilled People Benefiting Business

3.1 Introduction to the Chapter

This Chapter of the Strategic Economic Assessment examines the skills base of the adult population in West Yorkshire and how this relates to business needs. It relates to RES Objective 3 - Skilled People Benefiting Business. RES Objective 3 has six sub-objectives, as follows:

- create a new enthusiasm for learning and increase attainment;
- improve basic skills and skills for everyday work;
- improve skills for technicians, crafts people and managers;
- improve the skills of people already in work and the potential workforce;
- improve higher level skills to capture the potential of people with degrees; and
- use research and evidence on skills needs and business demand to guide action.

Workforce skills are well established as a major contributory factor to an area's productivity – the existence of a highly skilled workforce is vital if an area is to attract inward investment, grow its indigenous business base and foster innovation and enterprise. There is a widely held belief that with the increasing pace of technological change and business globalisation, the importance of a skilled population to an area's productivity will increase over time.

Skills are equally important for the economic well being of individuals. For individuals in work, there is a clear link between skills (as measured by the qualifications they hold) and earnings. For those out of work, there is a greater likelihood of being unemployed or on other benefits if skills levels are low.

3.2 Headlines

Young People

In Bradford, only 46% of 16 year olds achieve the threshold of 5 GCSEs Grade A* - C – 10% points below the England average of 56%. With the exception of Wakefield, results are also below the national average in the other districts.

Wakefield has improved its GCSE performance rapidly since 1997, moving from 7% points below the England average in 1997 to in-line with the England average in 2005.

The GCSE performance gap between pupils from all areas and pupils from deprived areas is significantly wider than the national average in Leeds and Wakefield.

In 2005, over 6,000 16 year olds were Not in Education, Employment or Training. This is equivalent to 9% of the cohort and is higher than the national figure of 7.1%.

West Yorkshire performs relatively poorly in terms of the proportion of young people who reach Level 2 or above by age 19 – only 60% reach this level (England = 67%), leaving 40% of young people lacking the skills needed for employability.

Adult Skills

Calderdale and Leeds are above the England average in terms of economically active adults at Level 3 or above, indicating a relatively well qualified workforce. Wakefield and Bradford are both well below the England average, indicating that these districts are likely to find it harder to increase productivity.

The West Yorkshire Household Survey reveals a number of groups of people who are significantly more likely than the population as a whole to have no qualifications. Across the entire West Yorkshire population, 21% of people have no qualifications – the figure for people with a disability is 39%. Only 15% of people in work have no qualifications. This increases to 27% of the unemployed and 28% of the economically inactive.

Workforce Skills

Businesses in West Yorkshire are the most likely within the region to cite the high level of workforce skills as contributing most to their competitiveness – 64% do so.

The two main sources of information on skills gaps in the workforce are the Regional Trends Survey and the National Employer Skills Survey. In the NESS, an employee with a skills gap is one who lacks proficiency in their current role because one or more skills is not sufficiently developed. For West Yorkshire as a whole, 22% of employers report some staff with skills gaps - well above the England average of 16%. In Leeds, the figure is 24%. Soft skills (e.g. oral communication) and technical skills are those most frequently cited as lacking.

Bradford employers train fewer of their employees than in the other districts. Bradford also has the lowest incidence of employers providing training and a relatively low skilled workforce.

The West Yorkshire household survey allows us to analyse training behaviour by individual characteristics. Young people (16-24) are significantly more likely to have participated in training than the over 50s – 77% versus 45%. A far lower proportion of people with disabilities undertook training than average – 37% versus 61%. People working in small businesses are less likely than those in large businesses to have participated in training (50% versus 80%). This latter finding is mirrored nationally (NESS).

Employers in West Yorkshire find it most difficult to recruit people in Personal Service occupations. This may indicate a need for more Level 2 provision in areas within this broad occupational category.

NESS 2005 obtained information about the particular types of skills that employers found difficult to obtain. Technical and practical skills (excluding IT) were the most frequently mentioned problem – lacking in six out of ten skills shortage vacancies. Communication (oral and written) was also ranked highly. This mirrors employers assessment of skills gaps within their current workforce.

There is a high incidence of skills shortage vacancies in West Yorkshire within some sector skills councils: Skills for Health – 70% of vacancies; Construction Skills – 49% of vacancies; and Energy and Utility Skills - 41% of vacancies.

West Yorkshire's occupational structure is forecast to change very little over the next ten years. In terms of the qualification levels needed, there is likely to be a need for more people qualified to Level 2 – the minimum requirement for medium skilled occupations – and also for Level 3 - reflecting a need for intermediate skills in medium skilled occupations as companies look to move up the value chain. The need for more Level 3 qualified employees is confirmed by LSC analysis of skills needs in key sectors.

In many sectors, there is a need for softer skills such as team working and better management skills.

3.3 Strategic Context

Business globalisation and technological change, coupled with the rapid rise of emerging economies, particularly India and China, will place an ever increasing premium on workforce skills. This realisation has seen a much greater focus on skills in government economic policy in recent years and this is now feeding through into policy on compulsory education and lifelong learning and downwards into the delivery system.

The major national policies developed with the intention to develop the skills of the population are the 14-19 strategy and the Skills Agenda.

3.3.1 14-19 Strategy

The major national policy initiative focused on the skills of young people is the 14-19 strategy¹. The policy is a response to the low post-16 participation rate in England – which is one of the lowest in the industrialised world - and the high proportion of young people who have not attained Level 2 by age 19. Level 2 attainment refers to the achievement of five good GCSE passes (grades A*-C) and is viewed by government as the minimum requirement for someone to progress successfully in employment.

The aim of 14-19 policy is to develop an education system that can be tailored to the individual needs of young people, to ensure they have the opportunities to achieve their potential. More specifically, the 14-19 reform proposals address four priorities:

¹ 14-19 Education Skills, 2005, Department for Education and Skills

- Ensure that every young person leaves education with the basics of English and maths, so that they can function effectively in work and life;
- Establish vocational education and qualifications which have the same value and recognition as GCSEs and A levels;
- Establish a higher degree of stretch for the most able learners, in ways that help Universities distinguish better between the most talented applicants; and
- Develop education and training that motivates and engages the disengaged and the disaffected.

At the centre of the reform programme is the creation of a new national curriculum and qualifications entitlement. There will be a choice of routes for young people from the age of 14, as follows:

- **General diploma:** to be awarded to those young people achieving the equivalent of 5 A*-C grade GCSEs, including English and maths; and
- **Specialised Diplomas:** occupation specific programmes designed by employers, these will develop young people's knowledge, understanding and skills through a combination of general and applied education.

In any area, it is highly unlikely that the entitlement could be delivered by a single institution. Even if feasible, it is unlikely that this would be desirable, given the varying strengths of schools, colleges and private training providers in local areas. Providers will need to work collaboratively to ensure that they deliver the entitlement in the most appropriate way.

National level targets (short-term and long-term) supported by 14-19 reform include:

- Increase attainment of Level 2 by age 19 from 67% in 2004 to at least 70% in 2006 and by a further 2 percentage points by 2008;
- Increase the proportion of young people who attain Level 3 by age 19;
- Increase the number of young people completing apprenticeships by 75% by 2007/8 as compared to 2002/3;
- Increase the number of young people participating in education at 17 from 75% now to 90% by 2015; and
- Reduce the proportion of young people not in education, employment or training (NEET) by 2 percentage points by 2010.

3.3.2 Skills Policy

Skills Policy has developed rapidly since the publication of the Skills Strategy White Paper² in July 2003. A further White Paper followed in March 2005³ and the Leitch Review of UK Skills Needs is ongoing. The December 2005 Interim Report⁴ from the Leitch Review stresses the importance of skills for the UK economy and its weak position relative to many competitor nations, despite recent improvements. For example:

- Over a third of adults in the UK do not have a basic school-leaving qualification – double the proportion of Canada and Germany;
- Five million people have no qualifications at all; and
- One in six adults does not have the literacy skills expected of an 11 year old and half do not have these levels of functional numeracy.

At a basic level, the two primary aims of Skills Policy are to increase the competitiveness of the UK economy by:

- **Increasing the demand for skills from employers and individuals.** The establishment of the Sector Skills Councils and new workforce training programmes such as Train2Gain are designed to address the need to increase employer propensity to train;
- **Reforming the supply of skills training,** making it responsive to increased demand and more focused on skills needed for employability. Recent policy in the FE sector designed to address this includes the establishment of Centres of Vocational Excellence (COVEs) in FE sector institutions, and funding reform, including the introduction of the adult level 2 entitlement. The recent Further Education Reform White Paper⁵ calls for the FE system to further increase its focus on the needs of employers and employability skills.

For many businesses, the lack of basic numeracy and literacy skills within the workforce is a major constraint on productivity. The Skills for Life national strategy is designed to improve adult literacy and numeracy in England and has a target of helping 1.5 million adults improve their skills by 2007.

² Skills Strategy White Paper, 2003, Department for Education and Skills

³ 'Skills: Getting on in business, getting on at work', 2005, Department for Education and Skills

⁴ Skills in the UK: The long-term challenge, 2005, Leitch Review of Skills

⁵ Further Education: Raising Skills, Improving Life Chances, 2006, Department for Education and Skills

3.3.3 Local Priorities

The sub region has five Local Education Authorities: Bradford; Calderdale; Kirklees; Leeds; and Wakefield. The LEAs are responsible for the provision and funding of primary and secondary education. School sixth form education in the sub-region is funded by the Learning and Skills Council West Yorkshire. Work based learning (WBL) providers and Further Education (FE) colleges are also funded by the LSC.

The LSC West Yorkshire's priorities are to:

- Improve achievement of Level 2 at 19;
- Increase the proportion of West Yorkshire employers engaging with the Further Education (FE) college network;
- Continue to reduce the number of people with Basic Skills needs;
- Further Improve GCSE results and access to level 2 learning post-16 for those not achieving 5 A*-C at GCSE; and
- Increase take-up of vocational learning amongst minority ethnic groups.

The LSC and LEAs both fund Adult and Community Learning, which is often focused on adult basic skills needs and in many instances is delivered by Voluntary and Community Organisations.

3.4 Performance of the Compulsory Education System

The performance of the compulsory education system, in terms of the skills it imparts to young people before they move on to further education or work, is vital to the success of the sub-region. This section uses data published by the Department for Education and Skills on the performance of pupils in the maintained sector (state schools) in West Yorkshire.

3.4.1 A note on educational 'levels'

Within the chapter, we refer at various stages to education levels. In our discussion of Key Stage 2 (KS2) results - national tests are taken by eleven year olds at the end of their primary education – we refer to the proportion achieving level 4. Level 4 is a defined standard which an eleven year old should achieve in these tests. This is the only 'level' that we refer to in pre-16 education and it should not be confused with level 4 in post-16 education.

In post-16 education, there are four levels that are typically referred to. The 'levels' refer to a specified standard of educational attainment, and are broadly defined as follows:

Level	Description
1	Level 1 attainment is equivalent to low grades (D-G) in five or more GCSEs.
2	Level 2 attainment is achieved if someone gains five or more good passes at GCSE (where a good pass is a grade A*, A, B or C) or an equivalent qualification such as an NVQ2. Level 2 is generally seen as the minimum level required for productive participation in the workforce, and would allow someone to perform a 'moderately' skilled job.
3	Level 3 attainment is achieved if someone gains two or more A level passes or an equivalent qualification (e.g. NVQ3). It is the level required for more technical work and for entry to HE.
4	Level 4 attainment is achieved if someone gains a first degree (e.g. BSc, BA) or an equivalent vocational qualification, such as an NVQ4.
5	Level 5 attainment is achieved if someone gains a further degree (e.g. MSc) or an advanced vocational qualification (e.g. NVQ5).

3.4.2 Pupil numbers

The performance of the compulsory education system, in terms of the skills it imparts to young people before they move on to further education or work, is vital to the success of the sub-region. In 2004, there were 371,000 young people in schools across the sub-region.

Number of pupils by type of school in West Yorkshire (January 2004)

	Primary	Secondary	CTCs & Academies	All Schools*
Bradford	51,120	34,670	1080	92,460
Calderdale	19,380	15,440	0	36,530
Kirklees	36,450	26,780	0	66,400
Leeds	63,680	48,080	0	118,330
Wakefield	29,970	22,390	0	57,590
West Yorkshire	200,600	147,360	0	371,310

Source: LSC: Leeds in Depth 2006

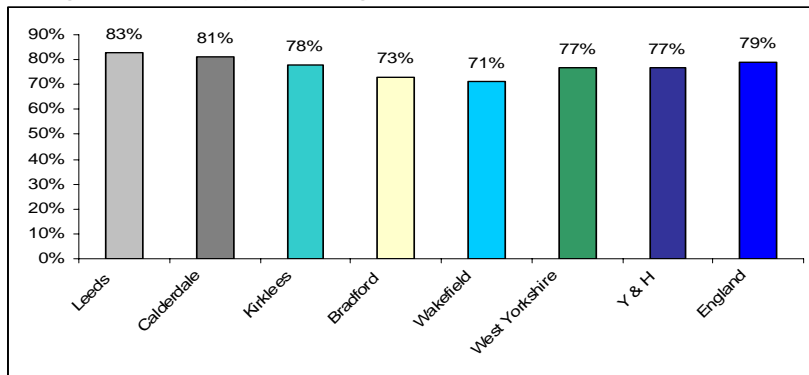
*All schools includes pupils in LEA maintained nurseries, LEA maintained secondary schools, pupil referral units, and independent secondary schools in addition to the categories in the table.

3.4.3 Primary Education: Key Stage 2 Results

National curriculum Key Stage (KS) 2 tests are taken by eleven year olds at the end of their primary education. National Curriculum tests measure pupils' attainment against the levels set by the National Curriculum. Standards have been designed so that most pupils will progress by approximately one level every two years, so that by the end of Key Stage 2, pupils are expected to have achieved Level 4. Pupils are tested in English, Maths and Science.

KS2 English results for each West Yorkshire local authority district, Yorkshire and Humber, and England are shown below. The performance of pupils in Leeds and Calderdale is above the Yorkshire and Humber and England averages. Results in Kirklees are close to the England average and above the Y&H average. Bradford and Wakefield are well below the Y&H and England averages.

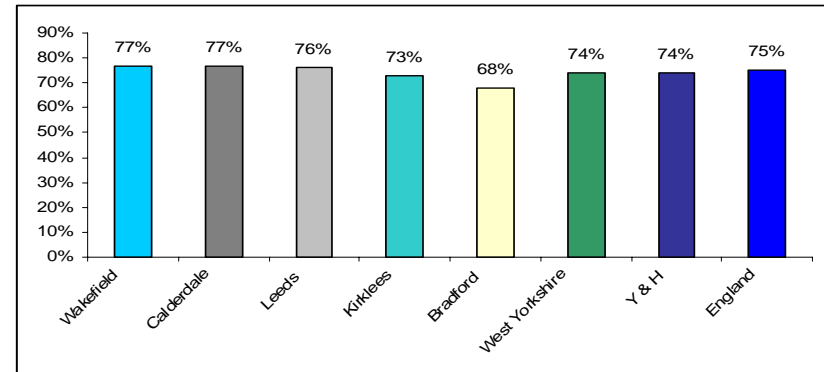
KS2 English - Percent of Pupils Achieving Level 4 or Level 5 2004/05



Source: http://www.dfes.gov.uk/inyourarea/statics/gor_D_2.shtml

KS2 Maths results are shown below. Results in Wakefield, Calderdale and Leeds are above regional and England averages, and in Kirklees and Bradford are below them. The strong performance of Wakefield is in contrast to its relatively poor performance in English.

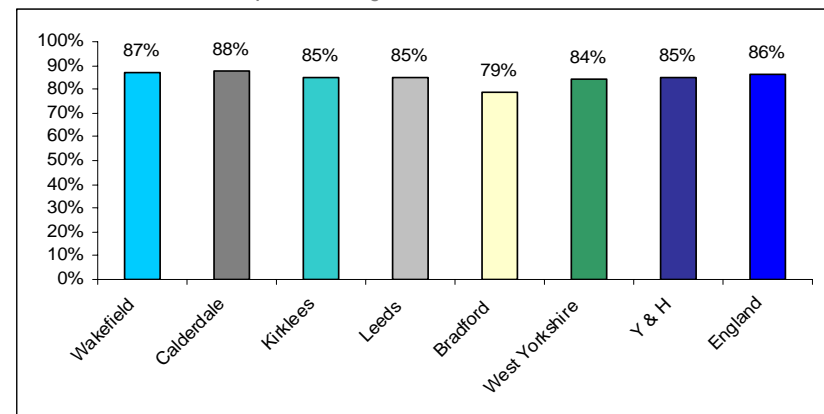
KS2 Maths - Percent of Pupils Achieving Level 4 or Level 5 2004/05



Source: http://www.dfes.gov.uk/inyourarea/statics/gor_D_2.shtml

Results in Science are shown below. Bradford is an outlier with results well below regional and England averages.

KS2 Science - Percent of Pupils Achieving Level 4 or Above 2004/05



Source: DfES Statistical First Releases - Key Stage 2 attainment in 2004/05 for each Local Authority

For KS2, data is not published by ethnic group, Special Educational Needs (SEN) status, disability, or Free School Meals status.

Across the five districts, KS2 results in Bradford are relatively weak in English, Maths and Science. This is despite a very rapid improvement in results since 1997 – shown in the tables below for English and Maths. Bradford starts from a low base, but the rate of improvement in both subjects is significantly above the England average, with a resultant narrowing of the performance gap.

Improvement in % Pupils Achieving Level 4 or above in Key Stage 2 English

	1997	2005	% Change
Bradford	54	73	35.2
Kirklees	57	77	35.1
Calderdale	60	81	35.0
Leeds	63	79	25.4
Wakefield	60	75	25.0
Y & H	60	77	28.3
England	63	79	25.4

Improvement in % Pupils Achieving Level 4 or Above in Key Stage 2 Maths

	1997	2005	% Change
Bradford	50	68	36.0
Wakefield	59	77	30.5
Kirklees	58	73	25.9
Calderdale	62	77	24.2
Leeds	63	76	20.6
Y & H	60	74	23.3
England	62	75	21.0

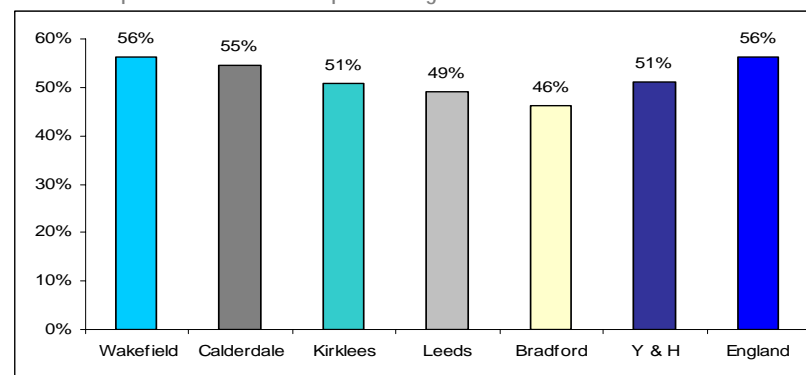
Source: DfES, In Your Area

3.4.4 Secondary Education: GCSE Results

Pupils sit GCSE or equivalent examinations at the end of their compulsory secondary education, age 16. The headline measure of performance is the proportion of pupils in a school or area that achieve 5 good GCSE passes, where a good pass is either an A*, A, B or C grade. Pupils who achieve five good GCSE passes or better have attained Level 2 – this is the minimum level of attainment deemed necessary for productive participation in the workforce.

The chart below shows the proportion of pupils achieving 5 A*- C grades in the academic year 2004/05. Wakefield has the highest achievement rate, with 56% at or above the 5 A*-C threshold, and is the only West Yorkshire district which is above the England average. In Bradford, only 46% of 16 year olds achieve the threshold – 10% points below the England average of 56%.

GCSE and Equivalent - Percent of Pupils Gaining 5 A* - C 2004/05



Source: DfES, In Your Area

Although its current performance in GCSEs is relatively weak, of all the five districts, Bradford has seen the most rapid rate of improvement in GCSE results since 1997, as shown below. Wakefield has also improved rapidly, moving from 7% points below the England average in 1997 to in-line with the England average in 2005.

Pupils achieving 5 A*-C GCSE or Equivalent - Improvement 1997-2005

District / Area	1997	2005	% Change
Bradford	29	46.3	60.2
Wakefield	38	56.4	48.8
Calderdale	38	54.6	42.9
Leeds	37	49.2	31.6
Kirklees	40	50.8	28.6
Yorkshire and Humber	38	51.2	35.1
England	45.1	56.3	24.8

Source: DfES, In Your Area

Nationally, GCSE results vary by pupil characteristics. The discussion considers the extent to which national differences are present in the West Yorkshire LEAs.

There are high numbers of pupils from a Black, Asian and Minority Ethnic (BAME) background at school in West Yorkshire. Pupils from the Asian ethnic group make up a high proportion of the minority ethnic pupil numbers. Nationally, pupils from the Asian ethnic group do better than average (59% achieving 5 A*-C, versus 55% for pupils from all ethnic groups), but in all West Yorkshire districts, Asian pupils perform below the district average. It is recognised that this could be a result of using the broad ethnic group for comparative purposes – unfortunately the DfES data is published for broad ethnic group.

GCSE and Equivalent - Percent of Pupils Achieving 5 A* - C by Ethnicity, 2005 (number of students achieving and as a percentage of the cohort)

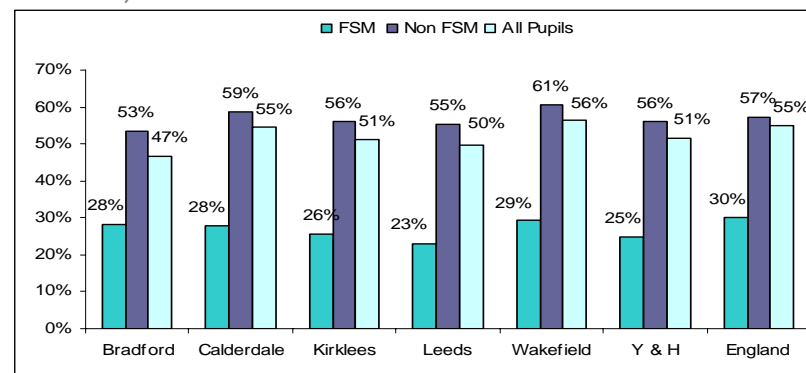
*	White		Mixed		Asian		Black		Chinese		All	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
B	4085	48	98	47	1,686	45	66	49	9	67	6,013	47
C	2282	55	26	58	228	54	14	79	x	x	2,582	55
K	3613	53	146	31	671	49	78	42	11	82	4,566	51
L	7315	51	184	40	543	46	256	39	33	79	8,475	50
W	3880	56	12	83	99	55	8	50	9	100	4,041	56
Y&H	54949	52	798	44	3,849	47	680	43	163	82	61,718	51
E	486694	55	12,048	55	34,962	59	19,919	46	2,279	82	583,036	55

Source: DfES Statistical First Releases - Achievements at GCSE and Equivalents for pupils at the end of Key Stage 4, in maintained schools, in 2005, by Local Authority and ethnicity

* B (Bradford), C (Calderdale), K (Kirklees), L (Leeds), W (Wakefield), Y&H (Yorkshire and Humber), E (England)

GCSE results can also be analysed by level of deprivation, as measured by whether a pupil is entitled to free school meals (FSM). In West Yorkshire in 2004/05, 18% of the GCSE cohort was eligible for FSM, 4,700 pupils in total. Nationally, only 30% of pupils with FSM entitlement achieve 5 GCSE (A*-C), compared to 57% of pupils not entitled to FSM - a 27% points gap. In West Yorkshire, the performance gap between the two groups is 32% in Wakefield and Leeds, which indicates an issue with the quality of education for pupils from more deprived backgrounds in these districts.

GCSE and Equivalent – Percent of Pupils Achieving 5 A* - C by Deprivation (FSM – Free School Meals)



Source: DfES Statistical First Release - Achievements at GCSE and Equivalents for pupils at the end of Key Stage 4, in maintained schools, in 2005, by Local Authority and free school meal eligibility

The table below shows GCSE results by Special Educational Needs (SEN) assessment. In West Yorkshire, 18.4% of the GCSE cohort in 2004/05 had SEN, 4.8% with a statement and 13.6% without. The significant gap nationally between pupils with identified special educational needs and those without is also seen in West Yorkshire, although the relatively strong performance of Wakefield should be noted. There may be best practice lessons from Wakefield's approach to young people with special educational needs.

GCSE and Equivalent – % Pupils Achieving 5 A* - C by SEN (Special Educational Needs)

	No identified SEN	SEN without a statement	SEN with a statement	All pupils
Bradford	54	18	6	47
Calderdale	61	15	9	55
Kirklees	59	11	6	51
Leeds	57	12	7	50
Wakefield	62	22	12	56
Y & H	59	14	6	51
England	63	17	7	55

Source: DfES: Achievements at GCSE and Equivalents for pupils at the end of Key Stage 4, in maintained schools, in 2005, by Local Authority and Special Educational Needs

In Bradford, only 46% of 16 year olds achieve the 5 A*-C GCSE threshold – 10% points below the England average of 56%. With the exception of Wakefield, results are also below the national average in the other districts.

Wakefield has improved its GCSE performance rapidly since 1997, moving from 7% points below the England average in 1997 to in-line with the England average in 2005.

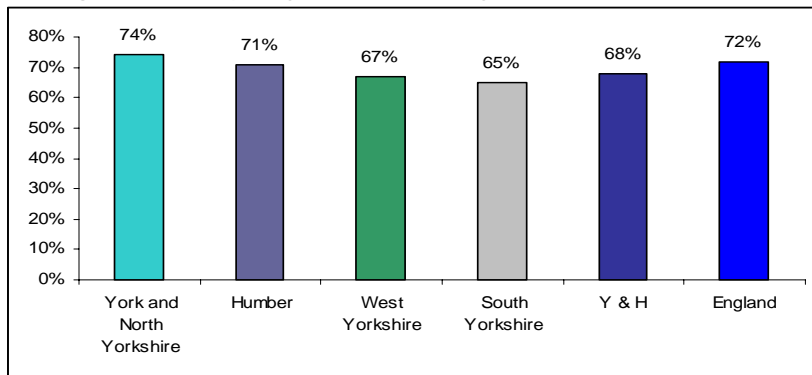
Pupils from the Asian ethnic group make up a high proportion of the minority ethnic pupil numbers. Nationally, pupils from the Asian ethnic group do better than average (59% achieving 5 A*-C, versus 55% for pupils from all ethnic groups), but in each West Yorkshire district, Asian pupils perform below the district average for pupils from all ethnic groups.

The performance gap between pupils from all areas and pupils from deprived areas is significantly wider than the national average in Leeds and Wakefield.

3.5 Destinations at 16

The proportion of 16 year olds in West Yorkshire progressing into formal education on leaving compulsory education is 67%, 5% points below the England average. Many of those with employment or other destinations will not have achieved a Level 2 qualification – seen as the level required for successful workforce participation.

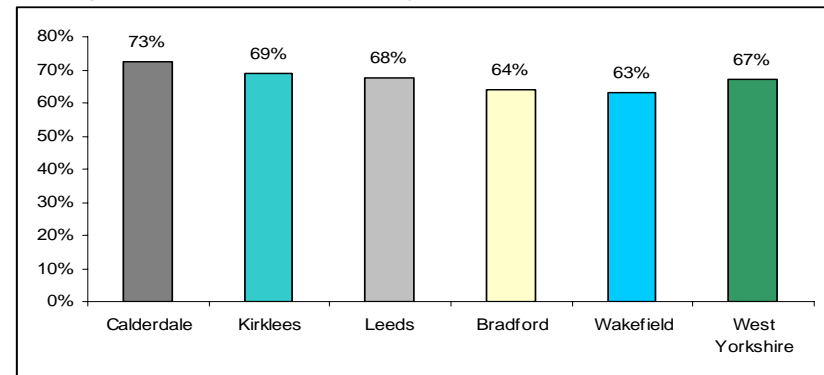
Percentage into Post-Compulsory Education, 2005 (16 year old school leavers)



Connexions: Moving On, 2004

The proportion of 16 year old school leavers remaining in full-time education in each district is summarised below. Calderdale has the highest proportion of school leavers staying in full-time education (73%), this is 6% points above the sub regional average of 67%. Wakefield and Bradford have the smallest proportion and are both below the sub regional average at 63% and 64% respectively.

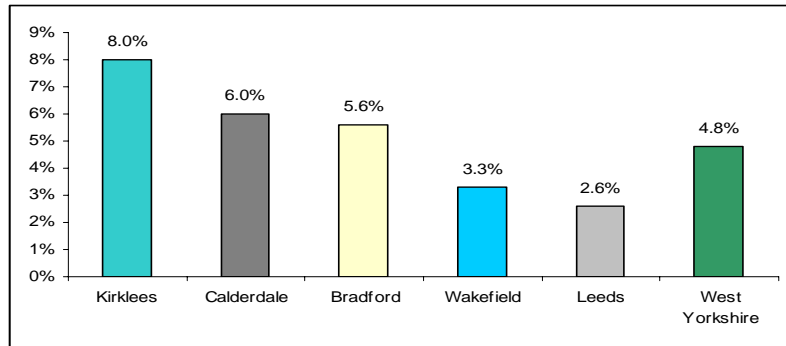
Percentage into Full-time Education 2005 (16 year old school leavers)



Source: Connexions 2005

The proportion of young people that progress into Work Based Learning (WBL) is most significant in Kirklees where 8% go into WBL. In Bradford and Calderdale 6% progress into WBL which is 1% point above the sub regional average. Wakefield and Leeds have a smaller proportion of young people in WBL at around 3%. This is below the sub regional average and suggests that opportunities for this type of learning are perhaps more limited in these districts.

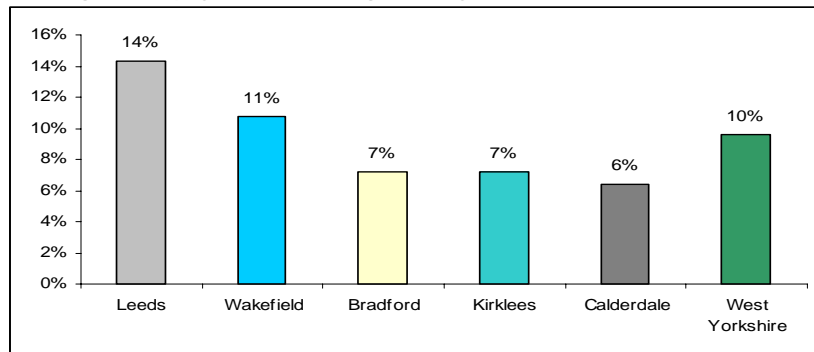
Percentage into Work Based Learning 2005 (16 year old school leavers)



Source: Connexions 2005

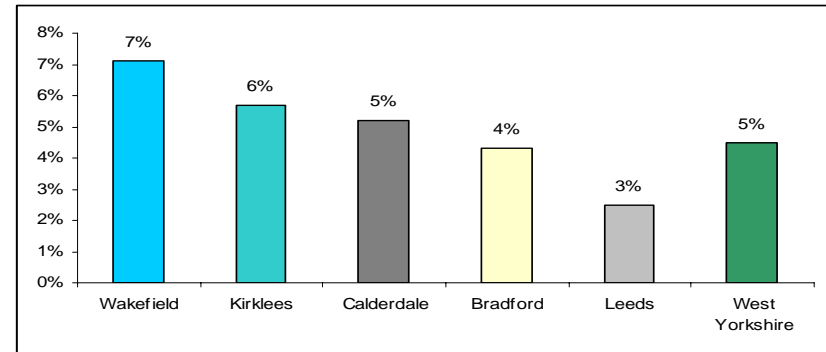
The proportion of young people progressing into employment with training is higher than for young people progressing into WBL. Leeds has the highest rate of participation at 14% which is 4% points above the rate at the sub regional level. Leeds also has the lowest proportion of young people progressing into employment without training. This suggests that training opportunities linked to employment are rich in Leeds. Calderdale has the lowest proportion of young people in employment with training at 6% and is on par with the sub regional level for those progressing into employment without training (5%).

Percentage into Employment with Training 2005 (16 year old school leavers)



Source: Connexions 2005

Percentage into Employment without Training 2005 (16 year old school leavers)



Source: Connexions 2005

There is a significant problem in West Yorkshire with 16 year olds leaving school and not entering further education or employment – in 2005, 9% of this age group were Not in Education or Employment (NEET) – 6,236 young people. This is above the Yorkshire and Humber and national average percentages into NEET.

Percentage into NEET, 2004 and 2005 (16-year old school leavers)

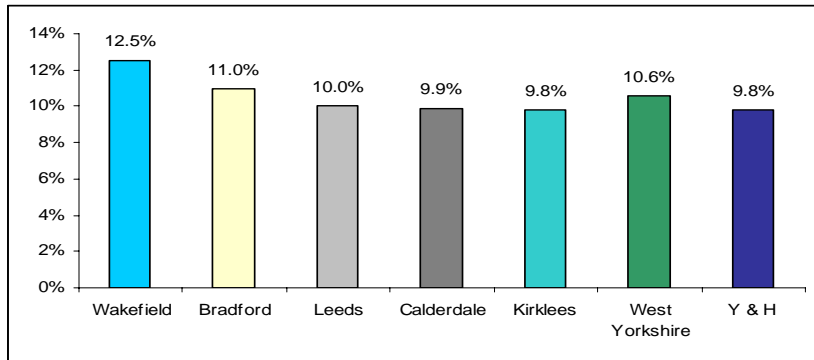
	No.2005	% NEET 2005	% NEET 2004
Humber	2,556	8.6%	7.9%
North Yorkshire	1,011	4.1%	4.5%
South Yorkshire	4,259	10.4%	9.1%
West Yorkshire	6,236	9%	9.2%
Y & H	14,062	8.5%	8.2%
National	112,648	7.1%	7.1%

Source: Connexions West Yorkshire, November 2005

Data from March 2006 suggests that the proportion of 16 year olds entering the NEET group is rising in West Yorkshire and the region overall. At the sub regional level this has risen by just over 1% point. At the district level the percentage into NEET figure for Wakefield is the highest at 12.5%. Wakefield is above the sub regional average, as is Bradford at 11%. Leeds, Calderdale and Kirklees

are all below the sub regional average at around 10% but it is only Kirklees which matches the regional figure at 9.8%.

Percentage into NEET March 2006 (16 year old school leavers)



Source: Connexions West Yorkshire 2006

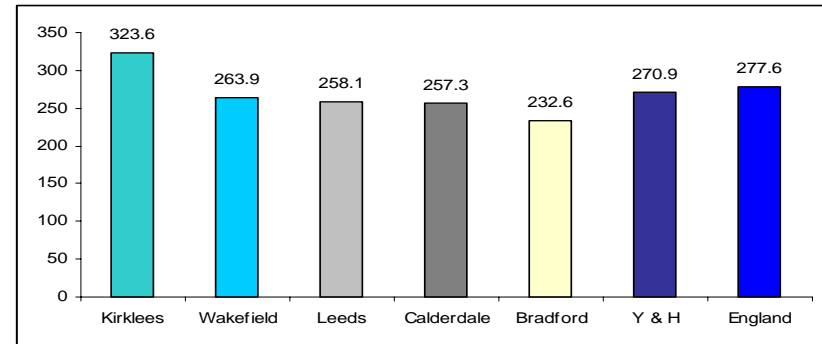
In 2005, over 6,000 16 year olds were Not in Education, Employment or Training. This is equivalent to 9% of the cohort and is higher than the national figure of 7.1%. More recent figures for March 2006 suggest that these levels are rising.

3.6 Performance of Young People in Post-Compulsory Education

3.6.1 Sixth Form: A-Level Results

The chart below shows average points scores for A-level candidates in 2004/05, based on the UCAS tariff (A=120; B=100; C=80; D=60; E=40 points). Only Kirklees is above the England and regional average figures. This is despite Kirklees having a relatively low proportion of pupils achieving 5 A*-C GCSE passes.

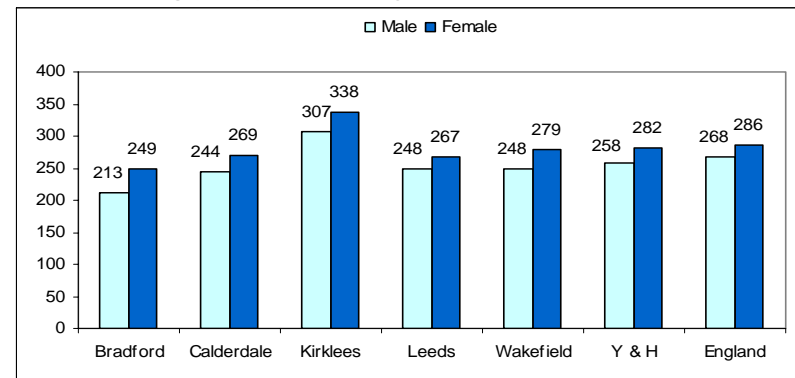
A / AS Level – Average Total Points Score per Candidate – 2004/05



Source: DFES in your area

Nationally, females perform better than males, and this pattern of performance is repeated in all five West Yorkshire districts. The results achieved by males in Bradford are well below average (213 compared to 266 nationally and 258 regionally) and the gap with females in Bradford is greater than would be expected from national and regional averages. Both females and males perform very well in Kirklees. Females, with an average total points score of 338, exceed the national average by over 50 points.

A / AS Level Average Score per Candidate by Gender



Source: DFES Statistical First Release January 2006

A-level results are also available by ethnic group, SEN status and deprivation (FSM). The relative performance of pupils with different characteristics in West Yorkshire tends to reflect performance in England overall. Numbers tend to be small across these groups however so any conclusions must be drawn with caution. With reference to ethnicity DfES data is limited to broad ethnic group making it difficult to identify subtle differences in performance. At the district level, Kirklees tends to outperform the other districts across each different characteristic.

The table below shows the percentage increase in average points scores at A level between 1997 and 2005. The improvement in Kirklees is very impressive, given its high starting position in 1997.

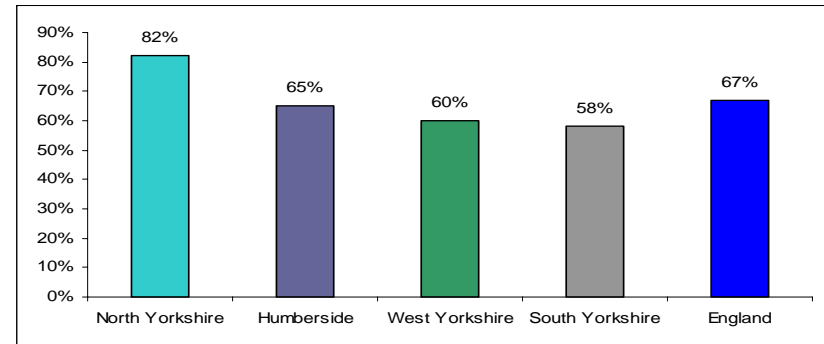
Improvement Rates between 1997 and 2005: A level points per candidate

	1997	2005	% Change
Kirklees	282.6	323.6	14.5
Leeds	225.4	258.1	14.5
Calderdale	227.4	257.3	13.1
Bradford	212.0	232.6	9.7
Wakefield	242.2	263.9	9.0
Y & H	245.6	270.9	10.3
England	254.7	277.6	9.0

Source: DfES in your area

Not all students continuing in compulsory education are studying A-level or equivalent qualifications at Level 3. Many will be studying at a lower level, often with the objective of achieving a Level 2 qualification (5 GCSE A*-C or equivalent). West Yorkshire performs poorly in terms of the proportion of young people who reach Level 2 or above by age 19 – only 60% do so, indicating that 40% of young people aged 19 lack the skills needed for employability.

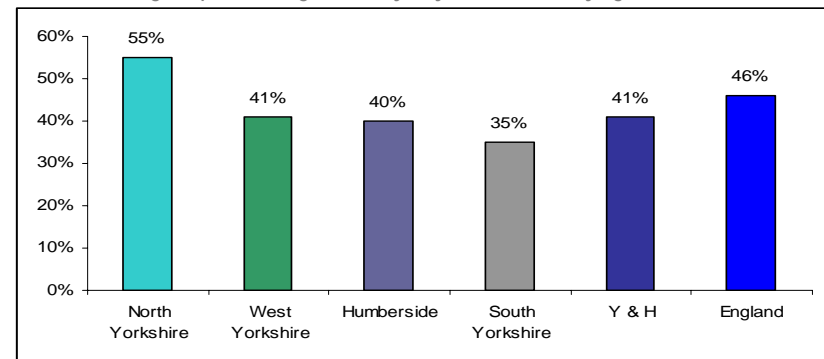
Percent of Learners reaching Level 2 by age 19 in 2004



Source: LSC Administrative Data

The sub region also performs poorly in terms of the proportion of young people who reach Level 3 (2 A-Level passes or equivalent) by age 19. Although in-line with the Yorkshire & Humber average, West Yorkshire is 5% points below the England average.

Percent of Young People reaching Level 3 by 19 years whilst studying in a local LSC

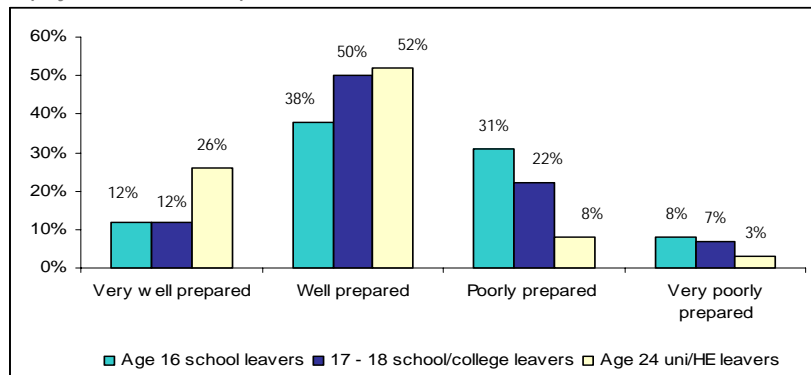


Source: LSC Matched Administrative Dataset 2004/05*

Job Readiness

Qualifications alone are not sufficient to equip young people for employment. The chart below demonstrates employer perceptions of preparedness for employment taken from the National Employer Skills Survey for West Yorkshire. Young people in the higher education leavers cohort are rated as the most job ready - 26% of young people in this group are considered to be very well prepared. Just 12% of age 16 school leavers and age 17 – 18 school / college leavers are perceived as very well prepared. A higher proportion of all cohorts are perceived as being well prepared. The age 24 higher education leavers cohort again has the highest proportion at 52%. Nevertheless half of the age 17 – 18 school / college leaving cohort are considered to be well prepared also. At the opposite end of the spectrum the highest proportion of young people who are considered to be very poorly prepared for employment is in the age 16 school leaving cohort (8%), the smallest proportion being of the HE leaving cohort (3%).

Employers' View of the Preparedness of First Job Entrants in West Yorkshire



Source: NESS West Yorkshire 2005

3.6.2 Progression to Higher Education

A relatively low proportion of young people in West Yorkshire are progressing to Higher Education – 25% versus 30% across England. These figures relate to the average rate of progression over 1996-2000 and are taken from a HEFCE research study. The proportion of young people progressing to HE has increased significantly in recent years. The main benefit of the study is that it reports figures by Parliamentary constituency, allowing an analysis of progression rates in different areas within districts. This reveals significant inequalities within districts. For example, constituencies in Leeds

range from 10% to 46%. Bradford has low progression rates across all constituencies, with a range of 17% - 23%.

Percent of Young People Progressing to Higher Education



Source: Higher Education Funding Council for England (HEFCE): Widening Participation, POLAR (1994 - 2000 average figures).

3.6.3 Graduate retention

Graduate retention is an important issue when considering some of the higher level skills requirements of the sub-region. With four significant universities located in West Yorkshire, there are a high number of people obtaining graduate and post graduate level skills in the sub-region whose skills could be used to develop the regional economy, if they can be captured and retained by local employers.

Research on the GraduatesYorkshire initiative⁶ suggests just under half of the region's graduates remain in the region for employment after graduation – mostly in the sub-region they studied in. While graduates perceptions of the region were reported as favourable, a limited number of graduate opportunities were also noted. This suggests a need to increase the demand for graduate level skills amongst employers in order to retain a greater proportion of graduates.

⁶ Three Years On ... A survey of the early career paths of the graduates of 2002 from the Yorkshire universities, Wilkinson, D.

West Yorkshire performs relatively poorly in terms of the proportion of young people who reach Level 2 or above by age 19 – only 60% reach this level (England = 67%), leaving 40% of young people aged 19 lacking the skills needed for employability. The proportion of 19 year olds who attain Level 3 is also well below the England average.

3.7 Adult Skills

This section considers the skills levels of the adult population in West Yorkshire. Qualifications are generally accepted as a reasonable proxy for skills levels, and our initial analysis focuses on the qualifications base of residents in the five districts.

3.7.1 Returns to Qualifications

The earnings return to qualifications has been the subject of considerable academic research, with the Centre for the Economics of Education at the London School of Economics leading the way. Studies show that, after correcting for other factors that impact on earnings (e.g. family background), there is a strong positive relationship between level of qualification and earnings. The table below shows estimates of the wage premium for different types of qualifications, for men and women.

Wage premium (%) from obtaining qualifications

	NQF Level	Men	Women
		% more on salary compared to level below	
Academic Qualifications			
O level/higher GCSEs	2	21	19
A level	3	17	19
First Degree	4	28	25
Vocational Qualification			
Level 1-2 NVQs	1-2	ns	ns
Level 3-5 NVQs	3-5	6	5
ONC/OND or TEC/BEC national	3	10	8
HNC/HND or TEC/BEC higher	4	15	9
Professional qualifications	5	35	41

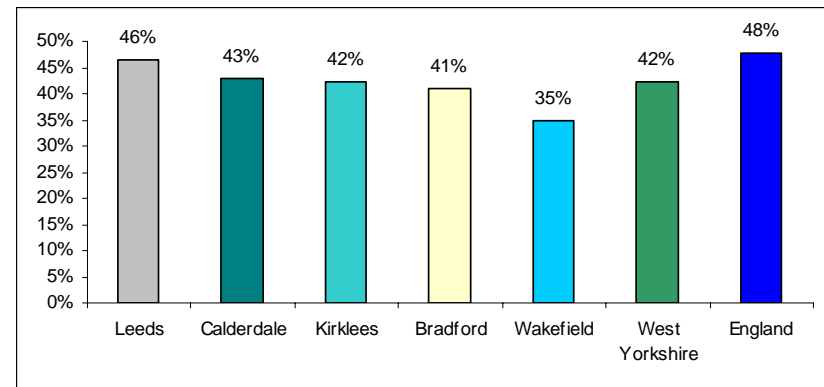
Source: The Returns to Academic and Vocational Qualifications in Britain
 Lorraine Dearden, Steven McIntosh, Michal Myck, Anna Vignoles, November 2000
ns = not statistically significant
 NQF = National Qualification Framework

The benefits of education go beyond higher earnings and productivity. There is a considerable body of research into the wider benefits of learning, which finds evidence of positive external impacts – for example, healthier lifestyles and increased civic participation.

3.7.2 Qualifications Held by Adults

Data on the qualifications of the entire adult population is available from the 2001 Census, although this is now some five years old. The age classification used (16-74) means that it is not possible to look at the qualifications of all adults of working age. Information on the qualifications of working age adults who are economically active is available from the Labour Force Survey (LFS). The chart below shows the proportion of adults qualified to Level 2 or above. Level 2 is equivalent to 5 GCSE passes at Grade A* - C. Achievement of Level 2 or above is lowest in Wakefield. This is significantly below the England average, by 13 percentage points. Leeds performs well at 46% which is above the sub regional average and almost on par with the England average.

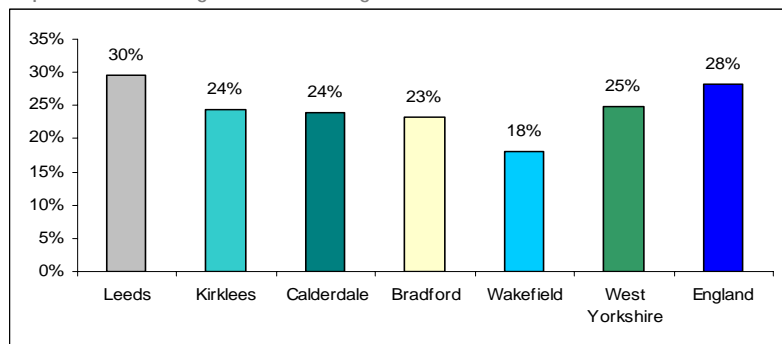
Proportion of Adults aged 16 – 74 Holding Qualifications at Level 2 or above



Source: Census 2001

The productivity of an area will be highly dependent on the skills of its workforce, particularly the extent to which they are qualified to Level 3 and above. Level 3 is the equivalent of two A level passes and is the level needed for the development of intermediate level technical skills. The chart below demonstrates that Leeds has the highest proportion of adults achieving NVQ Level 3 or above. This is above both the sub regional average at 25% and the England average at 28%.

Proportion of Adults aged 16 – 74 Holding Qualifications at Level 3 or above



Source: Census 2001

The figure below summarises the proportion of economically active adults qualified to NVQ Level 3 or above. Calderdale and Leeds are above the England average in terms of economically active adults at Level 3 or above, indicating a relatively well qualified workforce. Growth in Leeds has however been relatively moderate between 2000/01 and 2004/05. Wakefield and Bradford are both well below the England average, indicating that these districts are likely to find it harder to increase productivity. In Wakefield the proportion of economically adults qualified to Level 3 or above actually decreased between 2000/01 and 2004/05..

Percentage of economically Active Adults Qualified to Level 3 or above

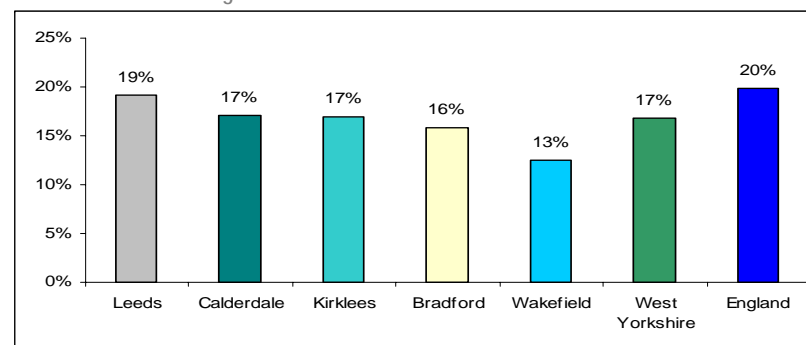
	2000/01	2004/05	% change
Calderdale	44.0	51.7	17.5
Kirklees	45.8	51.2	11.8
Bradford	40.8	43.3	6.1
Leeds	47.6	49.2	3.4
Wakefield	39.4	38.1	-3.3
West Yorkshire	44.3	46.9	5.9
Y&H	43.2	46.2	6.9
England	45.4	48.7	7.3

Source: LFS Quarter Averages

At the highest end of the qualifications scale Leeds has the highest proportion of adults qualified to NVQ 4 or above (19%). NVQ 4 is equivalent to the achievement of a first degree (e.g. BA/BSc), NVQ

5 is equivalent to a further degree such as an MSc. Wakefield has the lowest proportion at 13%, which is considerably lower than sub regional and national levels.

Percent of Adults Holding Qualifications at Level 4 or above



Source: Census 2001

With regard to the economically active population holding higher level qualifications, Leeds and Kirklees perform well against the other three districts. Change between 2000/01 and 2004/05 in Leeds has however been less significant. Calderdale, Wakefield and Kirklees experienced the greatest increase over this period. Wakefield and Bradford have the lowest proportions of the economically active population qualified to the highest levels at 22.1% and 23.5% respectively. Both these districts are below sub regional, regional and national levels.

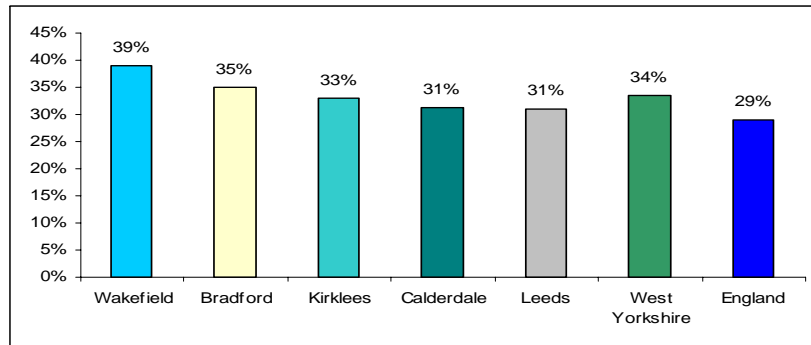
Percent of economically Active Adults Qualified to Level 4 or above

	2000/01	2004/05	% change
Calderdale	23.3	27.8	19.3
Wakefield	19.4	22.1	13.9
Kirklees	25.6	28.7	12.1
Bradford	21.4	23.5	9.8
Leeds	27	28.1	4.1
West Yorkshire	24.1	26.3	9.1
Y&H	23.3	25.5	9.4
England	26.5	29.3	10.6

Source: LFS Quarter Averages

At the opposite end of the scale, many adults do not have any qualifications and as a result, often face difficulties in the labour market. The chart below shows the proportion of adults (aged 16-74) in each district with no qualifications⁷.

16-74 year olds with no qualifications



Source: Census 2001

In all districts, the proportion of 16-74 year olds with no qualifications is above the England average, with very high rates in Wakefield and Bradford. Many people without qualifications will also have basic skills needs in literacy and numeracy. The table below shows the estimated proportion of adults aged 16 – 70 with basic skills needs in literacy and numeracy in the West Yorkshire districts taken from the West Yorkshire and Districts Household Surveys.

Across all the measures for literacy and numeracy Bradford has the highest levels of basic skills needs. Leeds and Wakefield have a significant number of adults with basic skills needs, particularly in written English – for this measure the two districts are almost on a par with the sub regional average. Wakefield has the highest proportion of adults with basic skills needs in Maths, which is 1.5% points above the figure for the sub region.

Proportion of Adults aged 16 – 70 with Basic Skills Needs

% District	Literacy			Numeracy
	Reading in English	Written English	Spoken English	Maths
Bradford	4.5	8.2	2.1	6.8
Calderdale	2.4	5.2	1.8	5.6
Kirklees	3.5	5.5	1.3	4.9
Leeds	3.4	6.4	1.5	4.2
Wakefield	2.6	6.5	1.8	6.9
West Yorkshire	3.4	6.5	1.7	5.4

Source: WY Household Survey 2005

The next table shows the number of achievements of basic skills qualifications which count towards Skills for Life targets. West Yorkshire LSC exceeded its July 2004 target and is making good progress towards its July 2007 target.

Skills for Life Achievements and Progress Towards Targets

	H'Side	Y&NY	SY	WY	Y&H	Eng
Target to July 2004	14000	8530	25010	30910	78450	763306
Total achievements	16917	8634	17875	34009	77435	745988
% of July 2004 Target Achieved	121%	101%	71%	110%	99%	98%
Planned Achievements 2007	15000	16123	17500	30074	78697	763306
Achievements beyond 2007	9796	4588	11464	15315	41163	382179
Progress to July 2007 Target	65%	28%	66%	51%	52%	50%

Source: LSC South Yorkshire Management Information Report, June 2006

3.7.3 Adult Skills – variations by characteristics

The West Yorkshire household survey reports the proportion of respondents (aged 16-70) with no qualifications. For West Yorkshire, according to this survey, 21% of the population have no qualifications. There is some variation by district, with a range of 16% in Calderdale to 24% in Wakefield. These figures are well below those from the Census.

There are some significant differences according to peoples' characteristics and circumstances. We note the following:

⁷ These figures are residence based, where as LFS figures are workplace based.

- In West Yorkshire, the proportion of males with no qualifications is 19% and for females is 23%. In each district, a higher proportion of females than males have no qualifications.
- A high proportion of people with a disability have no qualifications – 39% across West Yorkshire. In Bradford, almost half of people with a disability have no qualifications. The lowest figure is Calderdale at 29%.
- The survey reports the incidence of no qualifications for White and non-White people. The proportion with no qualifications is similar – 21% and 19% respectively. However, by grouping all BAME groups into a single category, significant differences between people of different ethnic origins might be missed;
- Only 15% of people in work have no qualifications. This increases to 27% of the unemployed and 28% of the economically inactive. This indicates a link between a lack of qualifications and economic disadvantage;
- The self employed are more likely to have no qualifications than full-time employees (20% versus 14%). Employees in small companies are more likely to have no qualifications than those in large companies (21% versus 11%). This indicates the potential importance of skills brokerage programmes that aim to engage smaller employers to train their workforce;
- People with low income are much more likely than those with a high income to have no qualifications (26% versus 5%) – again indicating a link between a lack of qualifications and economic disadvantage.

The survey also asks people about basic skills needs in reading, writing and speaking English, and in Maths. The proportion of people in West Yorkshire with basic skills needs in these four categories is 3%, 7%, 2%, and 5%. People with disabilities and the unemployed have a much higher incidence of basic skills needs across all four categories. This is particularly true in Bradford – for example, 22% of people with disabilities who live in Bradford have basic skills needs in Maths. The survey also asks people whether they have undertaken any training in the past twelve months. At 32%, the Bradford figure for people with a disability is 26% points below the figure for all people in Bradford (58%).

There is a clear desire within the West Yorkshire population to increase their educational attainment, with 41% saying that they are not happy with their qualifications. This proportion increases to: 50% for people from non-white ethnic groups; 60% for young people (16-24); and 64% for unemployed people.

The survey asked respondents who identified a future learning need and stated a high likelihood of commencing learning in the next two years, about the barriers that might prevent them from undertaking learning. Across West Yorkshire, time was mentioned by 54%, cost by 20% and caring responsibilities by 14%. It is interesting to note that 32% of disabled people in Bradford cited caring

responsibilities as a barrier. We need to be wary of small sample sizes at this level of analysis, but this does appear to warrant further investigation, particularly since a far higher proportion of all people in Bradford cite caring responsibilities as a barrier (23% in Bradford – next highest figure is 14% in Calderdale).

At the high end of the educational spectrum, the survey finds that 27% of people aged 16-70 in West Yorkshire are qualified to NVQ4 (first degree level) or higher. This varies from 23% in Wakefield to 31% in Leeds. There is a clear link between education and earnings – 63% of high earners are qualified to NVQ4 or higher, compared to 20% of low earners.

Calderdale and Leeds are above the England average in terms of economically active adults at Level 3 or above, indicating a relatively well qualified workforce. Wakefield and Bradford are both well below the England average, indicating that these districts are likely to find it harder to increase productivity.

The West Yorkshire Household Survey reveals a number of groups of people who are significantly more likely than the population as a whole to have no qualifications. Across the entire West Yorkshire population, 21% of people have no qualifications – the figure for people with a disability is 39%. Only 15% of people in work have no qualifications. This increases to 27% of the unemployed and 28% of the economically inactive.

3.8 Workforce Skills⁸

3.8.1 Skills gaps

The 12th Regional Economic Trends Survey for Yorkshire & the Humber⁹ (November 2005) considers the skills needs of employers in Yorkshire and Humber in some detail. The high level of skills in the workforce is the most commonly cited factor as contributing to business competitiveness – 61% of businesses in the region believe that this contributes to their competitiveness. Businesses in West Yorkshire are the most likely to cite the high level of workforce skills as contributing most to their competitiveness – 64% do so.

⁸ The following sections use data from a number of sources including the National Employer Skills Survey (NESS), commissioned by the LSC, Department for Education and Skills and Sector Skills Development Agency. The most recent survey was undertaken in 2005.

⁹ Survey of Regional Economic Trends, Experian for Yorkshire Forward / CBI, November 2005

Although high levels of workforce skills are cited as the most significant contributor to business success in the region, businesses are not complacent. Four fifths of businesses surveyed in the November 2005 Regional Trends Survey identify some skills gaps within their workforce.

The table below lists the most common skills gaps cited by Yorkshire and Humber employers. Marketing and management skills are the most frequently mentioned as in need of improvement. It is interesting to note the low priority assigned to basic skills (literacy and numeracy) and to basic ICT skills.

Skills needing improvement in the next 12 months to meet business needs (Y & H)

Top 10 Skill to Improve	% of time	Bottom 10 Skills to Improve	% of firms
Marketing	31%	Clerical/secretarial	13%
Management	31%	Manual	12%
Selling	27%	Business/Financial planning	12%
Team working	21%	ICT competence	10%
Customer care	21%	Basic ICT	9%
IT - technical support	20%	Problem solving	8%
None	19%	Numeracy	4%
Technical	17%	Literacy	4%
Professional	15%	Exporting skills	4%
Communications	13%	Foreign languages	4%

Source: YF/CBI survey September 2005

There is variation by cluster in the incidence of reported skills gaps. For example:

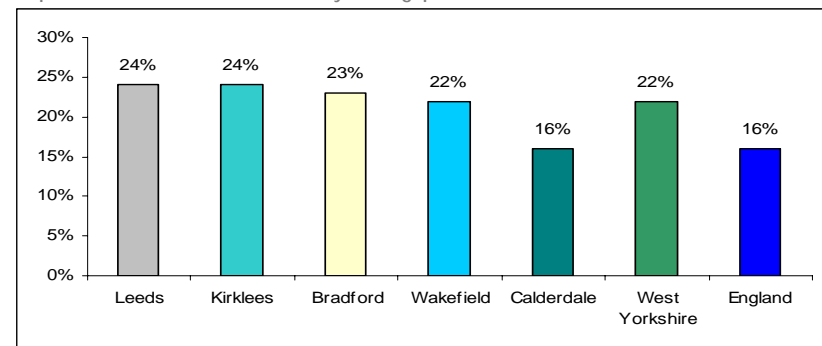
- A very high proportion of food industry companies cite Selling (55%), Marketing (49%), and Management (40%) skills as in need of improvement.
- In Digital industries, Marketing (49%) and IT Technical Support (32%) are the skills identified as most in need of improvement.

Although the large majority of firms in Yorkshire & Humber recognise the existence of some skills gaps in their workforce, only 19% of employers cite skills gaps as a factor inhibiting growth – this has increased in recent surveys and is the fifth most significant growth constraint factor (after regulation/red tape, access to finance, transport costs, and inadequate business support from government). The proportion of businesses citing skills gaps as a growth constraint varies by cluster: AEM – 25%; Digital – 21%; Bioscience and Chemical 16%; and Food and Drink – 12%.

The National Employer Skills Survey (NESS) also asks employers about skills gaps in the workforce. The incidence of skills gaps is much lower than in the Regional Trends survey, probably a result of a very different wording of the question. In the Regional Economic Trends survey, the question is framed in terms of skills that need improving to meet business needs, whereas NESS frames the question in terms of a lack of proficiency amongst staff.

The proportion of establishments reporting skills gaps by district is shown below – employers in Leeds are most likely to report skills gaps in their workforce – 24% do so. For West Yorkshire as a whole, 22% of employers report some staff with skills gaps - well above the England average of 16%.

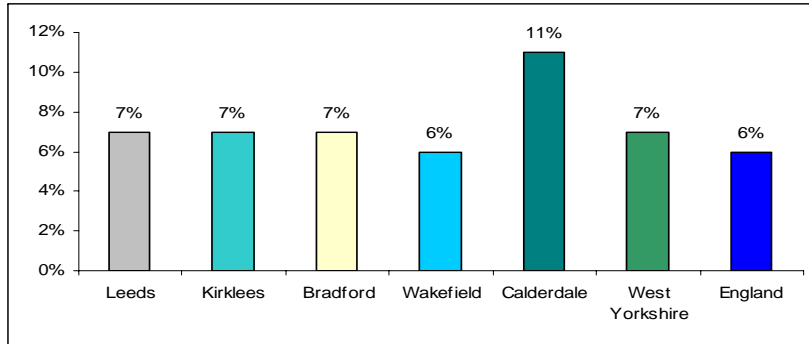
Proportion of establishments with any skills gaps



Source: NESS 2005

Across West Yorkshire, 67,000 employees are reported as having skills gaps – 7% of the workforce – compared to the England average of 6%. This varies by district, with 11% of employees in Calderdale being described as having skills gaps by their employers.

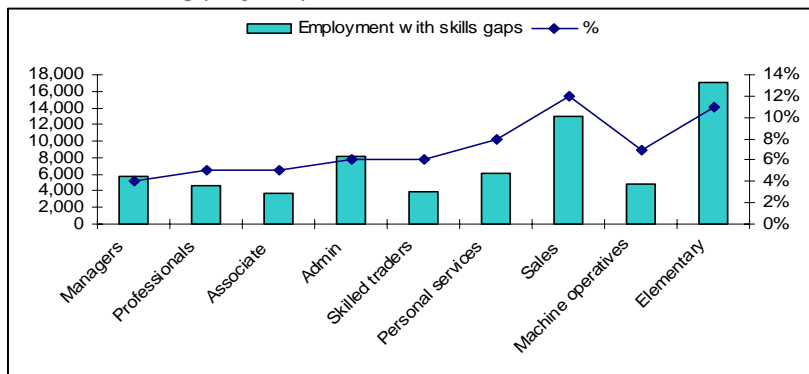
Proportion of employees with skills gaps



Source: NESS 2005

The figure below shows the number of West Yorkshire employees with skills gaps in occupational categories and as a percent of all employees in that occupation. Skills gaps are more prevalent in low and medium skilled occupations – Elementary Occupations, Sales, and Admin.

Distribution of skills gaps by occupation (West Yorkshire)



Source: NESS 2005

The NESS also asks about the type of skills lacking in employees with skills gaps. Soft skills are mentioned most frequently, with team working skills being cited by 58% of employers, customer

handling by 50%, and oral communication by 46%. Technical skills are also a problem, being cited by 58% of employers as a cause of skills gaps in the workforce.

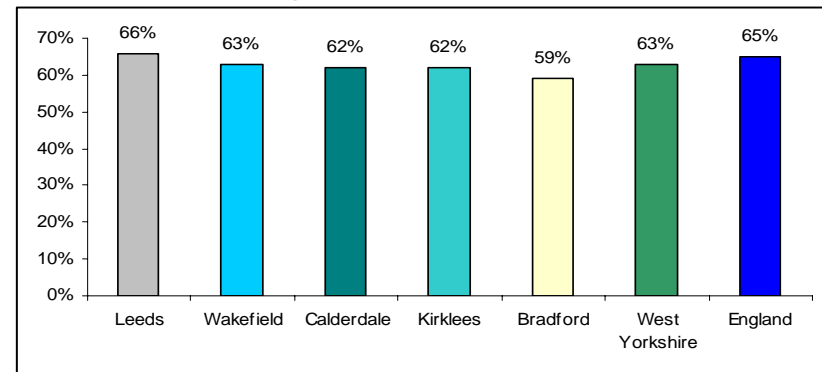
Skills gaps in West Yorkshire are most prevalent in the following sectors (by sector skills council):

- People 1st¹⁰ – 14% of workforce;
- Cogent¹¹ – 12% of workforce; and
- Skills for Care and Development – 10% of workforce.

3.8.2 Training behaviour

Given the high incidence of skills gaps, one would expect a high proportion of West Yorkshire employers to train their workforce. However, this is not the case, except in Leeds. The figure below shows the proportion of establishments that provided training during the previous 12 months. Only Leeds is above the England average of 65% of employers providing training.

Establishments provided training to staff in the last 12 months



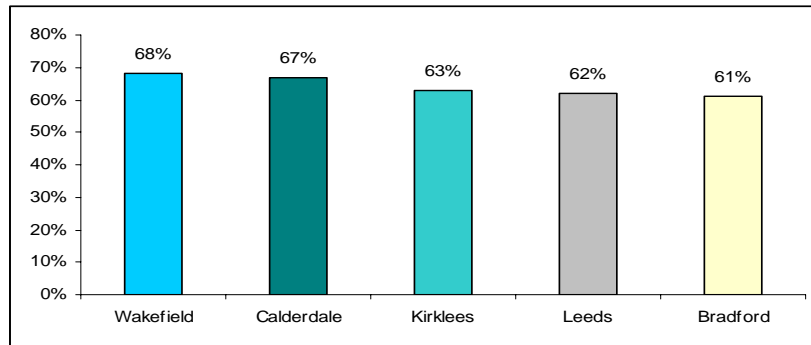
Source: NESS West Yorkshire 2005

¹⁰ The Sector Skills Council for the Hospitality, Leisure, Travel and Tourism industries

¹¹ The Sector Skills Council for Chemicals, Nuclear, Oil and Gas, Petroleum and Polymers

The figure below shows for employers that did provide training, the proportion of the workforce that was trained. Bradford employers train fewer of their employees than in the other districts. Bradford also has the lowest incidence of employers providing training and a relatively low skilled workforce.

Employers providing training: trainees as a proportion of workforce



Source: NESS West Yorkshire 2005

3.8.3 Propensity to train by characteristics

The West Yorkshire household survey found that 61% of people had undertaken some training during the past year – either at or outside work. There is limited variation across the districts, but substantial variation by people’s characteristics and circumstances. Most notably:

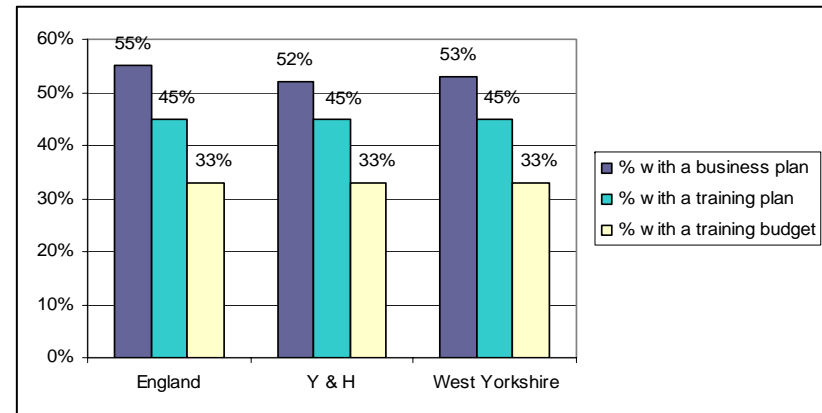
- Young people (16-24) are significantly more likely to have participated in training than the over 50s – 77% versus 45%.
- A far lower proportion of people with disabilities undertook training than average – 37% versus 61%.
- People working in small businesses are less likely than those in large businesses to have participated in training (50% versus 80%).

Focusing just on training outside work, there are some interesting differences according to people’s characteristics and circumstances. Across all respondents, 46% had participated in training outside work in the past year. The proportion participating is significantly above average for young people (67%) and people from non-white ethnic groups (60%); it is significantly below average for people aged over 50 (34%) and people with a disability (31%).

Focusing just on training at work, 36% of people had undertaken training in the past year. For people in small businesses, only 27% had participated in training at work, compared to 70% of those in large businesses. The NESS 2005 national employer survey also found that nationally, smaller employers are significantly less likely to train their staff.

Not surprisingly there is a clear link between propensity to train and existence of training and business plans. The figure below, based on the NESS, shows that 53% of employers in West Yorkshire have a business plan. This is below the England average of 55%, but exceeds the regional average by 1 percentage point. West Yorkshire is on par with both national and regional figures for the proportion of establishments with training plans and budgets - 45% of establishments in the sub region have a training plan and 33% have a training budget.

Establishments with a Business Plan / Training Plan / Training Budget, 2005



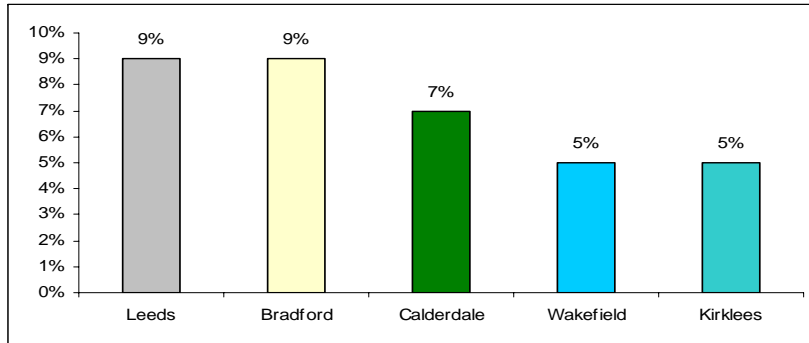
Source: NESS 2005

3.8.4 Skills shortages

The NESS asks employers with vacancies if they have vacancies that are hard-to-fill, and if they do, whether some of these vacancies are skills-shortage vacancies. Hard-to-fill vacancies are vacancies that employers say are difficult to fill – this can be for a number of reasons, such as lack of skills, low pay etc. Skills-shortage vacancies are hard-to-fill vacancies which result from either: a low number of applicants with the required skills; a lack of candidates with the required work experience; or a lack of candidates with the required qualifications. The incidence of skills shortage vacancies gives some

insight into skills shortages in the economy. The chart below shows the incidence of skills-shortage vacancies in each district. The incidence of skills-shortage vacancies is above the England average (5%) in Leeds, Bradford and Calderdale.

Percent of Employers Reporting Skills Shortage Vacancies



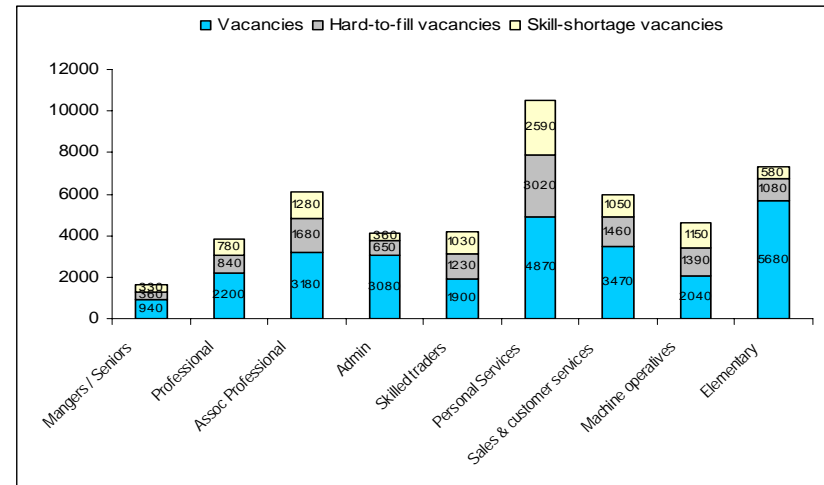
Source: NESS 2005

The survey found that there were 28,103 vacancies in West Yorkshire, of which 33% were skills shortage vacancies. This is a higher rate than in England as a whole, where 25% of all vacancies are skills shortage vacancies. The highest rate of skills shortage vacancies is in Calderdale, where 58% of vacancies are skills shortage vacancies.

The figure below shows vacancies, hard to fill vacancies and skills shortage vacancies by occupation. Occupations in which skills shortage vacancies are most acute are: Personal Services (50% of vacancies); Associate Professionals (22% of vacancies); and Skilled Trades (17% of vacancies).¹²

¹² Personal Services includes caring occupations in healthcare, childcare and animal care related services, and leisure occupations in leisure and travel, hairdressing and housekeeping related services (http://www.statistics.gov.uk/methods_quality/ns_sec/downloads/SOC2000.doc).

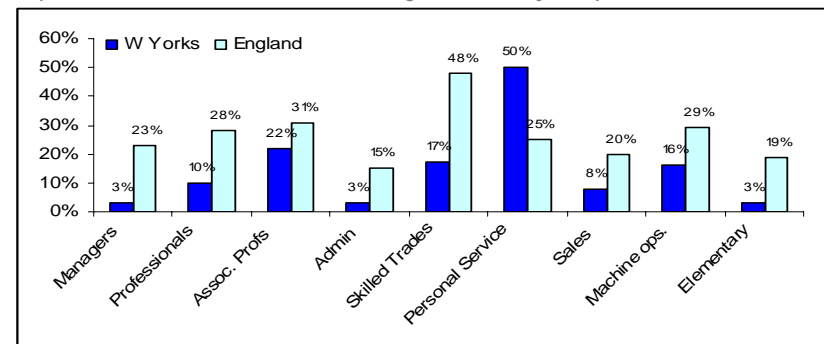
Establishments Reporting Vacancies by Occupation



Source: NESS 2005

In England, the extent of skills shortage vacancies by occupation is quite different to West Yorkshire:

Proportion of vacancies that are skills shortage vacancies by occupation



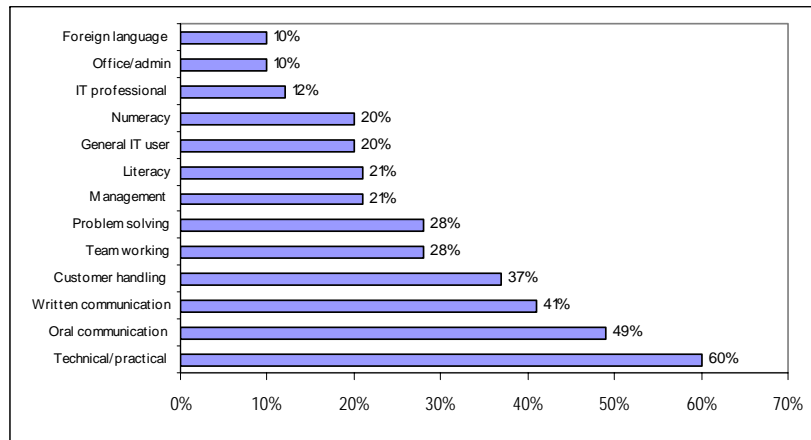
Source: NESS2005

Points to note are:

- A high proportion of vacancies in Personal Service occupations in West Yorkshire are skills shortage vacancies – far higher than in England. This suggests a need for level 2 training for staff in Personal Services occupations;
- Relative to England, a low proportion of low-skilled (Machine Operatives and Elementary Occupations) vacancies in West Yorkshire are skills shortage vacancies;
- Relative to England, a low proportion of high-skilled (Managers, Professionals, Associate Professionals and Skilled Trades) vacancies in West Yorkshire are skills shortage vacancies.

NESS 2005 obtained information about the particular types of skills that employers found difficult to obtain. This is shown in the figure below. Technical and practical skills (excluding IT) were the most frequently mentioned problem – lacking in six out of ten skills shortage vacancies. Communication (oral and written) were also ranked highly.

Skills lacking in connection with skill-shortage vacancies (West Yorkshire)



Source: NESS 2005

The NESS also allows us to analyse the proportion of vacancies that are skills shortage vacancies by sector (Sector Skills Council). For West Yorkshire, the highest incidence of skills shortage vacancies falls within the following Sector Skills Councils:

- Skills for Health – 70%;
- Construction Skills – 49%; and
- Energy and Utility Skills – 41%.

Businesses in West Yorkshire are the most likely within the region to cite the high level of workforce skills as contributing most to their competitiveness – 64% do so.

The two main sources of information on skills gaps in the workforce are the Regional Trends Survey and the National Employer Skills Survey. In the NESS, an employee with a skills gap is one who lacks proficiency in their current role because one or more skills is not sufficiently developed. For West Yorkshire as a whole, 22% of employers report some staff with skills gaps - well above the England average of 16%. In Leeds, the figure is 24%. Soft skills (e.g. oral communication) and technical skills are those most frequently cited as lacking.

Bradford employers train fewer of their employees than in the other districts. Bradford also has the lowest incidence of employers providing training and a relatively low skilled workforce.

The West Yorkshire household survey allows us to analyse training behaviour by individual characteristics. Young people (16-24) are significantly more likely to have participated in training than the over 50s – 77% versus 45%. A far lower proportion of people with disabilities undertook training than average – 37% versus 61%. People working in small businesses are less likely than those in large businesses to have participated in training (50% versus 80%). This latter finding is mirrored nationally (NESS).

Employers in West Yorkshire find it most difficult to recruit people in Personal Service occupations. This may indicate a need for more Level 2 provision in areas within this broad occupational category.

NESS 2005 obtained information about the particular types of skills that employers found difficult to obtain. Technical and practical skills (excluding IT) were the most frequently mentioned problem – lacking in six out of ten skills shortage vacancies. Communication (oral and written) was also ranked highly. This mirrors employers assessment of skills gaps within their current workforce.

There is a high incidence of skills shortage vacancies within some sector skills councils: Skills for Health – 70% of vacancies; Construction Skills – 49% of vacancies; and Energy and Utility Skills - 41% of vacancies.

3.9 Future Skills Needs

3.9.1 Forecast change in occupational structure

The table below shows the historical and projected employment structure of West Yorkshire, in terms of the occupations in which people are employed. Between 1996 and 2005, there were some changes in the structure of employment in the sub region. The proportion of the workforce in lower skilled occupations declined, as did the proportion in Skilled Trades. Medium skilled occupations and Professionals increased their share of employment.

The employment structure is forecast to change very little over the next ten years, with some reduction in the share of low skilled occupations in total employment, and an increase in the share of medium skilled occupations. In terms of the qualification levels needed, there is likely to be a need for more people qualified to Level 2 – the minimum requirement for medium skilled occupations – and also for Level 3 - reflecting a need for intermediate skills in medium skilled occupations as companies look to move up the value chain.

Occupational structure of the West Yorkshire workforce

		1996	2000	2005	2010	2016
High Skill	Managers	3.0%	3.3%	3.0%	3.0%	2.9%
	Professionals	9.0%	10.0%	9.9%	9.9%	9.9%
	Associate Professionals	9.5%	10.6%	9.4%	9.5%	9.7%
	Skilled Trades	12.6%	11.2%	11.2%	10.9%	10.7%
Medium Skill	Administrative	23.8%	24.6%	25.0%	25.2%	25.2%
	Personal Services	9.1%	9.4%	9.4%	9.9%	10.5%
	Sales	7.8%	7.6%	8.9%	9.1%	9.2%
Low Skill	Operatives	12.0%	10.4%	10.3%	9.8%	9.1%
	Elementary	13.3%	12.9%	12.9%	12.8%	12.8%
Total Occupations		100.0%	100.0%	100.0%	100.0%	100.0%

Source: Yorkshire Forward Econometric Model (Experian)

Within these categories, there are some projected changes in sector mix. For example, the LSC note that employment of health professionals is expected to increase by 31% to 2012. In some areas, very specific skills shortages have been identified in this category – for example, radiographers in Leeds. It is also likely that within categories, there will be an element of up-skilling in many sectors.

3.9.2 Skills needs by cluster and sector

In 2003, the Learning and Skills Council (LSC) commissioned some research¹³ into the skills needs of the Yorkshire Forward clusters in West Yorkshire. The report covered four of the clusters: Advanced Engineering and Manufacturing (AEM); Bioscience; Chemical; and Digital Industries (DI). It also considered a number of other sectors, where employment levels are high: health services and social care; manufacturing (including print); transport and distribution; travel and tourism; and voluntary and community. Further research that has investigated issues relating to this section is included in the West Yorkshire Economic Partnership Research into the Business Needs of West Yorkshire 2005. This study looks specifically at the key clusters. Evidence is based on a survey of West Yorkshire businesses.

Advanced Engineering and Manufacturing (AEM)

West Yorkshire accounts for 45% of the region's AEM companies. The cluster is centred on Leeds, with a number of important sub-sectors: automotive and aerospace; special applications; defence; scientific equipment; chemicals; and ferrous and non-ferrous metals.

There is a need to develop training to support adoption of leading edge manufacturing technologies. Other sources such as Working Futures¹⁴ indicate a need for more level 3 technical skills if companies are to move up the value chain. Improvements in organisational and business management skills are also required. The Research into the Business Needs of West Yorkshire Report highlights difficulties in recruitment due to perceptions held at the national and sub regional level that AEM is a declining sector. Further recruitment related difficulties were reported which included the volume of numbers required and also the demand for niche skills.

¹³ http://www.yorkshirefutures.com/assets_new/West%20Yorkshire1.pdf

¹⁴ <http://www.sdda.org.uk/ssda/pdf/wf-national.pdf>

Bioscience

The Bioscience cluster is concentrated in York, Leeds and Sheffield. There are relatively few companies at present, but rapid growth is predicted. The region has a mix of companies with particular strengths in therapeutics, contract research and analytical testing.

There is a need for higher level skills in the cluster, which requires clearer pathways from NVQ level 2 through to NVQ level 4. More specifically, for lab technicians, the development of an NVQ level 3 qualification is needed. Greater knowledge of regulatory processes is required, especially amongst new graduates.

In more general terms, a number of business skills require development – for example, venture and supply chain management, marketing, partnership development, and business development. There is also a need for development of soft skills, such as communication and team work.

Chemicals

The chemicals industry is focused on Humber and West Yorkshire. West Yorkshire has strengths in chemistry and chemical engineering within its universities and the University of Leeds is generally recognised as having the world leading department in colour chemistry.

There is a recognised need to retain more graduates within the cluster and the region, particularly chemical engineers, and there is also a shortage of highly skilled technicians and professionals (level 3 and level 4). There is an ageing workforce and a need to upskill existing workers (especially process operators) and recruit more young people to the cluster. Softer skills such as communication and team working are becoming increasingly important in the industry.

Digital Industries

About 45% of all Digital Industry cluster businesses are located in West Yorkshire. Leeds has a specialism in media and is also host to a number of high profile HQs. The Aire Valley has expertise in advanced electronics, and Huddersfield has a niche in new media.

There are significant skills gaps and shortages towards the top end of the skills spectrum, for example, at technical engineer level. There is likely to be an under-supply of post-graduates and graduates – based on the assumption that less than 10% of ICT graduates stay within the sub-region. More people in the industry need to progress up to level 3.

Construction

The construction industry, both nationally and regionally, is defined by its large number of micro businesses. This presents challenges for workforce development in the sector. There are a number of specific skills shortages in the region including carpenters and joiners, and bricklayers.

Health Services and Social Care

This is a major employment sector nationally and in the region. A number of skills shortages are identified, including: occupational therapists; child care and mental health staff qualified to NVQ level 3; and approved social workers.

In the Healthcare Technologies cluster businesses in West Yorkshire have reported issues relating to the specialist skills required. Reliance on a small pool of highly skilled people can present difficulties in the growth of businesses in this cluster.

Environmental Technologies

Despite good prospects for growth in this sector West Yorkshire Businesses feel that there is a need to increase recruitment and grow in order to be globally competitive and survive in the longer term. Synonymous to this is the need to retain staff through competitive pay and specialist skill related development of staff for example through external training.

Manufacturing (including Print)

The manufacturing industry in West Yorkshire primarily produces textiles, metal fabricated products and machinery, timber and paper products, and food and drink. The sector has declined in recent years but remains a major employer.

There are a number of skills shortage areas, including: elementary process plant occupations; engineering professionals; process operators; and plant and machine operatives.

Transport and Distribution

Nationally and regionally, there is a shortage of LGV drivers. Management skills in the industry also need development. The Leitch Review also reports a national skills shortages in the transport industry. Metro qualifies this at the regional level by reporting an increase in demand for bus drivers.

Travel and Tourism

The Yorkshire Forward Strategic Framework for the Visitor Economy (SFVE) identifies the following skills as being key to the development of the tourism sector: marketing; management and supervisory skills; selling; customer care; and communication skills. In addition, short courses on legislative changes, craft skills (particularly heritage crafts), and language courses are required.

Voluntary and Community

It is estimated that there are between 18,000 and 23,000 Voluntary and Community organisations in West Yorkshire alone, with a workforce, (including volunteers) in excess of 100,000 people. Specific skills needs are in management, partnership working, bid writing, and quality standards.

The occupational structure is forecast to change very little over the next ten years. In terms of the qualification levels needed, there is likely to be a need for more people qualified to Level 2 – the minimum requirement for medium skilled occupations – and also for Level 3 - reflecting a need for higher level skills in medium skilled occupations as companies look to move up the value chain. The need for more Level 3 qualified employees is confirmed by LSC analysis of skills needs in key sectors.

In many sectors, there is a need for softer skills such as team working and better management skills.

3.10 Further Education Provision

West Yorkshire benefits from an extensive FE college sector, as shown below. Greenhead sixth form college in Huddersfield is a DfES Beacon college and is nationally recognised for its work on value added methodologies. Bradford college is one of the largest colleges in England and has a significant higher education offering, working in collaboration with Leeds Metropolitan University.

FE Colleges in West Yorkshire

	District / Town
Bowling Community College	Bradford
Bradford College	Bradford
The Calderdale Colleges Corporation	Calderdale
Dewsbury College	Kirklees
Greenhead College	Huddersfield
Huddersfield New College	Huddersfield
Joseph Priestley College	Leeds
Keighley College	Bradford
Leeds College of Art and Design	Leeds
Leeds College of Music	Leeds
Leeds College of Technology	Leeds
Leeds Thomas Danby	Leeds
New College (Pontefract)	Wakefield
Northern School of Contemporary Dance	Leeds
Notre Dame Catholic Sixth Form College	Leeds
Park Lane College	Leeds
Shipley College	Bradford
Swarthmore Education Centre	Leeds
Wakefield College	Wakefield
Wakefield Community Based Centre	Wakefield

Source: LSC

Centres of Vocational Excellence (CoVEs) are based in colleges or WBL providers and are recognised centres of excellence for specialist areas of vocational provision. Fourteen CoVEs have been recognised in West Yorkshire and play a major role in providing the vocational skills required in the sub region. The CoVEs include both FE colleges and work based learning providers, as shown below.

CoVE Providers

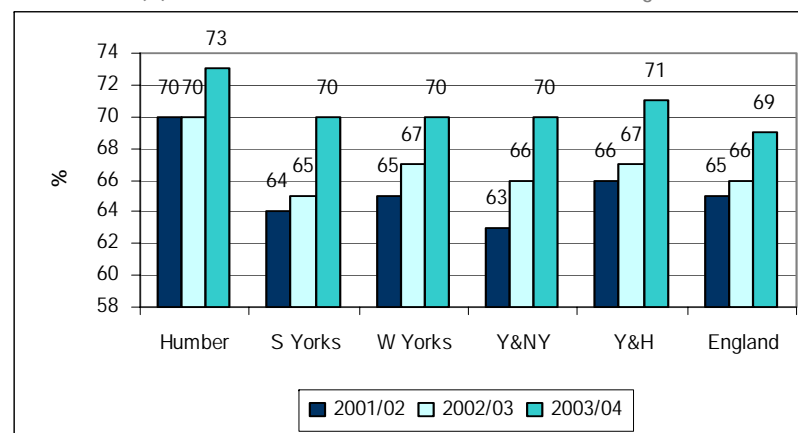
Colleges	Vocational Specialism	CoVE Status
Bradford College	Applied Sciences	Full
Leeds College of Technology	Print Media	Full
Bradford College	Beauty and Complementary Therapies	Full
Leeds College of Building	Construction	Full
Dewsbury College	Digital Design	Full
Huddersfield Technical College	Computer Aided Design and Manufacture	Full
Wakefield College	Excellence in Management through Enterprise and Innovation	Full
Keighley College in collaboration with Bradford and Huddersfield Technical College	Gas Innovation Learning and Professional Development Centres	Interim
Leeds College of Technology in collaboration with Wakefield College	Computer Technology	Interim
Shipley College	Elderly Persons Health & Care Saltaire	Interim
Thomas Danby College	Catering & Hospitality	Interim
Keighley College in collaboration with College of NW London, People's College Nottingham (& Castle Engineering Ltd) and the Welding Institute	Fabrication and Welding	Interim
Training Providers	Vocational Specialism	CoVE Status
N.G.Bailey	Electrical and Mechanical Installation	Full
British Gas	Gas Installation and Maintenance	Interim

Source: LSC West Yorkshire in Focus 2005-2006

3.11 Quality of FE Provision

West Yorkshire has seen a significant improvement in success rates in the Further Education sector in the past three years, with 70% now achieving their learning aim, compared to 65% in 2001/02. Whilst this is slightly below the regional average, it is one percentage point higher than the national average.

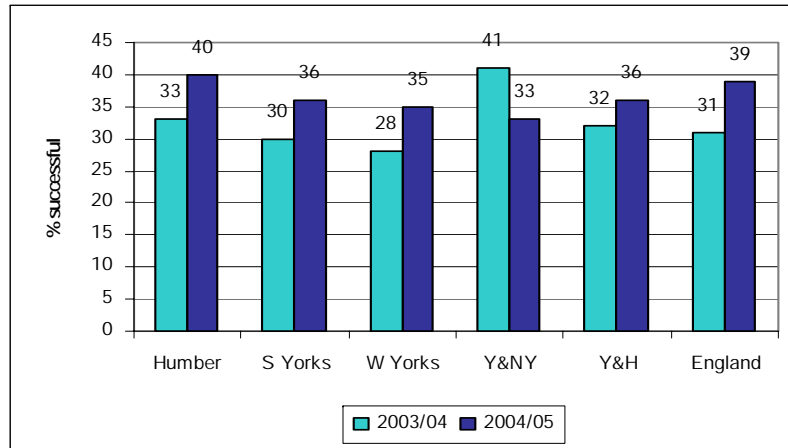
Success Rates (%) in Further Education – Yorkshire and Humber Sub Regions



Source: Key Learning and Skills Facts Yorkshire and the Humber 2006/07, 2006, LSC

Success rates for learners in work based learning providers improved by 7% points between 2004/05 and 2003/04, mirroring the significant improvement in England. The success rate for learners in WBL providers in West Yorkshire is 4% points below the England average.

Success Rates in Work Based Learning (%) – Yorkshire and Humber Sub Regions



Source: Key Learning and Skills Facts Yorkshire and the Humber 2006/07, 2006, LSC

3.12 Higher Education Provision

There are four universities and three higher education colleges in West Yorkshire, as shown below.

HE Providers in West Yorkshire

Universities	District
University of Leeds	Leeds
Leeds Metropolitan University	Leeds
Bradford University	Bradford
Huddersfield University	Kirklees
HE Colleges	
Trinity and All Saints College of Higher Education	Leeds
The Northern School of Contemporary Dance	Leeds
Leeds University, Bretton Hall Campus	Wakefield

Source: LSC West Yorkshire in Focus 2005-2006

The Centres of Industrial Collaboration programme (CIC) is an £11 million initiative established by Yorkshire Forward to help businesses access the innovation and expertise within Yorkshire and

Humber universities. There are 13 CICs in Y&H, based within single universities or across two or more. Each CIC is charged with developing links with companies and has a dedicated Commercial Manager, who has hands on experience of their industry sector.

The West Yorkshire universities are involved in nine of the CICs, as shown below.

CIC	Location	Project description
Biomaterials & Tissue Engineering (BITE)	Thorpe Park, Leeds	Combines the expertise of over 100 researchers at Leeds, Sheffield and York Universities, as well as the active involvement of clinical collaborators at the University hospitals.
Engineering Design	Thorpe Park Leeds	The Centre is a collaboration between the Department of Manufacturing Engineering at the University of Hull and the Keyworth Institute at the University of Leeds. The focus is on formal design analysis and optimisation to help companies get products to market fast and more cost effectively.
Food Chain	University of Leeds	Combines expertise of the University of Leeds and York and the Central Science Laboratory to enable food sector companies to formulate new products, increase quality, improve processing techniques and take advantage of emerging technologies.
Particle Science & Engineering	University of Leeds	Specialising in particle research for businesses in chemicals, food, personal and household products, pharmaceuticals and healthcare, water, mining and quarrying sectors, through expertise at Leeds and Sheffield University.
Pharmaceutical Innovation	University of Bradford	Offering the pharmaceutical industry revolutionary new approaches to drug delivery and increasing the rate at which promising new drugs reach the market.
Polymer	University of Bradford	Exploiting the potential of polymer research for a range of sectors from electrical to pharmaceutical.
Digital Printing	University of Leeds	Targeting print and printing related industries to assist the implementation of efficient printing processes, quality management, and troubleshooting technical difficulties.
Precision Technologies	University of Huddersfield	A state of the art nanolab with the UK's only metrology facility specialist instruments which enables test and measure precision geometry before assembly for the automotive, aerospace, defence, optoelectronics, biotechnology, medical and healthcare industries.
Wireless Technologies	University of Leeds	Implementation of wireless technologies aimed at reducing costs, increasing productivity and global competitiveness.

3.13 Investment mapping

Under RES 3, the mapping exercise identified a significant number of investments¹⁵ which account for almost £647.5m of committed expenditure in West Yorkshire, much of which is mainstream expenditure. This will most likely span RES 3 and RES 4 in some instances and includes:

- Mainstream DfES funding (£274m) in 2003/04:
 - £91.1m into schools;
 - £16.9m into funding for young people;
 - £166m into further education.
- £29.9m into higher education in 2003/04, the top investments were:
 - £7.9m into Research Council initiatives;
 - £3.6m into charity based programmes;
 - £9.9m into HEFCE programmes.
- £335.8m in mainstream funding across the LEAs in each of the five districts in 2003/04 (this includes capital expenditure, Standards Fund, School Standards Grant and Specialist School / CTC Funding):
 - £72.5m expenditure in Bradford;
 - £22.8m in Calderdale;
 - £58.6m in Kirklees;
 - £146.5m in Leeds;
 - £36.1m in Wakefield.¹⁶
- Further mainstream investment in training and education infrastructure in Wakefield between 2005 and 2009 – £15.5m investment in 2006/07.
- Other major schemes and discretionary projects in Calderdale totalling £7.4m in 2006/07. This includes:
 - £3.8m into New Deal for Schools;
 - Almost £1m for Siddal Junior School.
- The Sub Regional Investment Plan includes a total of £14.6m investment between 2005/06 – 2009/10 under three key STEM and skills based projects which span RES 3 and 4 and primarily includes £14m into West Yorkshire Skills Package (£12.2m of which is revenue).

¹⁵ These include mainstream, discretionary and major investments which were identified from a range of sources including articles, reports and submissions from stakeholders. They are not intended to provide a picture of every funding source and programme but paint a picture of some key relevant RDA complementary funding and investment. Some of the data is already out of date but still gives a sense of scale for some relevant areas.

¹⁶ Figures have been included to provide an indicative figure of the level of annual funding.

3.14 Policy Implications

Young People

As the workforce ages, it is vitally important that young people leave education equipped with the qualifications and skills needed for productive participation in the workforce. In today's rapidly changing economy, a Level 2 qualification (5 good GCSE passes) is seen as the minimum level required, and ideally young people should be reaching Level 3 (equivalent to two A level passes). In West Yorkshire, performance at GCSE (% obtaining 5 good passes) is below the England average and the consequence is that a relatively low proportion of young people remain in formal education after compulsory education. Only 60% of young people in West Yorkshire have achieved Level 2 by age 19 – 7% points below the England average.

Increasing the number of young people reaching Level 2 by age 19 (and preferably by age 16) is vital if the sub-region is to close the productivity gap with England. Wakefield has improved its performance at GCSE significantly since 1997 and there may be lessons for other districts.

Adult Skills

Calderdale and Leeds are above the England average in terms of economically active adults at Level 3 or above, indicating a relatively well qualified workforce. Wakefield and Bradford are both well below the England average, indicating that these districts are likely to find it harder to increase productivity, which is currently well below the England average. In Bradford in particular, low skills levels in the workforce could act as a constraint on the economy and prevent Bradford from taking advantage of its comparative advantages with neighbouring areas, especially low land and office rental values.

The West Yorkshire Household Survey reveals a number of groups of people who are significantly more likely than the population as a whole to have no qualifications. Only 15% of people in work have no qualifications. This increases to 27% of the unemployed and 28% of the economically inactive. This indicates a link between low levels of qualifications and worklessness/deprivation and a need to focus effort on engaging adults outside the workforce back into education.

Across the entire West Yorkshire population, 21% of people have no qualifications – the figure for people with a disability is 39%. As a result, many people with disabilities are likely to be excluded from the labour force. A challenge for the sub-region is engaging people with disabilities back into formal learning.

Workforce Skills

The problem of low skills in the workforce is particularly acute in Bradford. Bradford employers train fewer of their employees than in the other districts and Bradford also has the lowest incidence of employers providing training. Moreover, performance at GCSE is the lowest of the five West Yorkshire districts. There is a need to focus effort on engaging Bradford employers to upskill their workforce.

A challenge across all sectors in West Yorkshire is how to improve soft skills (e.g. communication, team working) in those employed – these skills are frequently cited by employers as lacking in their workforce and in job applicants. It is possible that these types of skills are not well addressed by mainstream provision.

There are also links between RES 3 and RES 6, although these take the form of City and town focussed actions addressing locally specific weaknesses and opportunities.

3.15 Links to Other RES Objectives

The main linkages for RES 3 to other RES objectives are with RES 2, competitive businesses, and RES 4, connecting people to quality employment. The linkages can be summarised as:

- RES 2 will support actions in support of increased competitiveness, of which skills is a key component. Opportunities will exist to promote the importance of skills with employers and to access people with low skills levels at the workplace. Within a number of clusters, there is an identified need to improve technical and soft skills;
- There are some strong higher education institutions in West Yorkshire – the sub region's universities are involved in nine of the region's thirteen Centres of Industrial Collaboration. Yet levels of innovation in West Yorkshire (RES 2) are below regional averages;
- Workforce skills are a key driver of an area's productivity. Calderdale and Leeds are above the England average in terms of economically active adults at Level 3 or above, indicating a relatively well qualified workforce. Wakefield and Bradford are both well below the England average, indicating that these districts are likely to find it harder to increase productivity – which is currently well below the England average;
- With regard to RES 4, we have seen above the high incidence of people outside the workforce lacking formal qualifications. People excluded from the workforce are likely to find it more difficult to access learning opportunities, due to factors such as financial constraints and caring responsibilities.