

Higher Level Skills in Yorkshire and the Humber Yorkshire Universities



Outline of the presentation

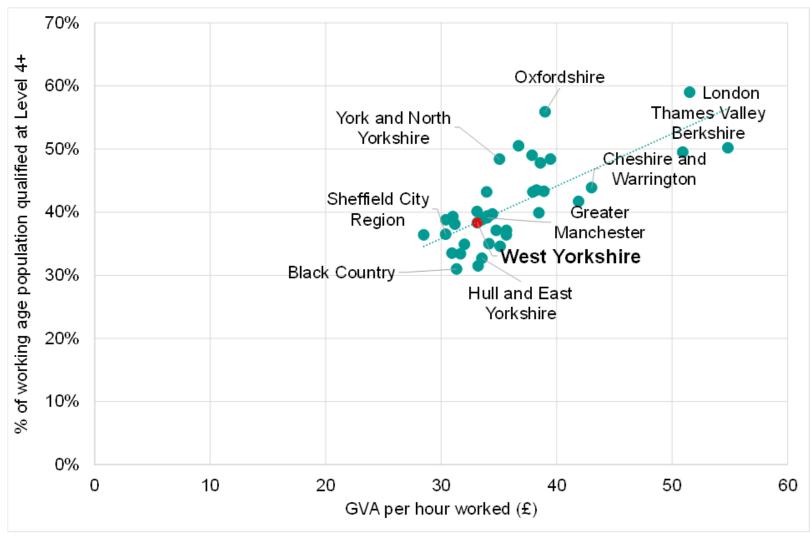
- Background to the labour market analysis
- Selected key messages around:
 - Demand for skills
 - Supply of skills
 - Mapping supply and demand
- Conclusions

Why do we analyse the labour market?

- Support strategy and policy development, address market failure; measure progress against our priorities
- Demonstrate to sponsors the evidence base for our interventions
- Influence local learning provision in line with labour market demand
- Inform careers choice by providing information on labour market opportunities
- Inform action by local employers to address the skill needs of business.
- Support Local Skills Improvement Plans

There is a strong correlation between higher level skills and productivity performance at local level

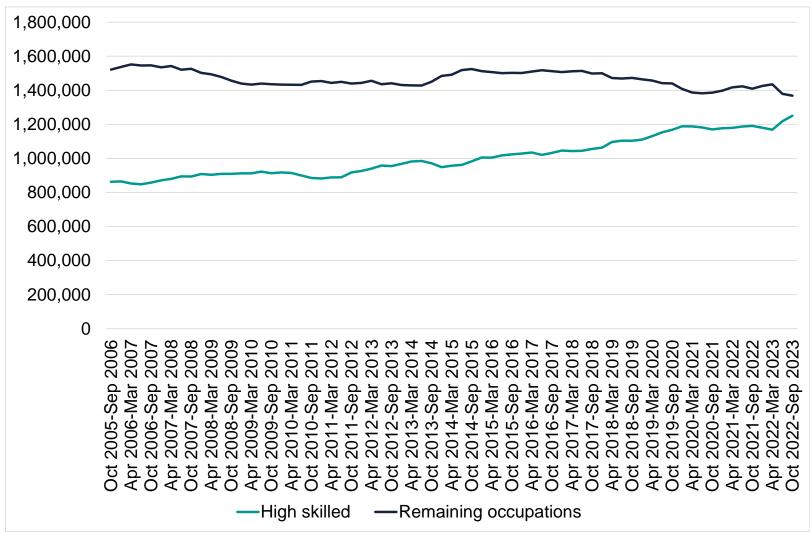
Figure: Skills and productivity performance by LEP area, 2021



Source: Annual Population Survey; Subregional productivity: labour productivity indices by economic enterprise region, Office for National Statistics

Higher skilled occupations have been the main driver of employment growth in the region in the last two decades

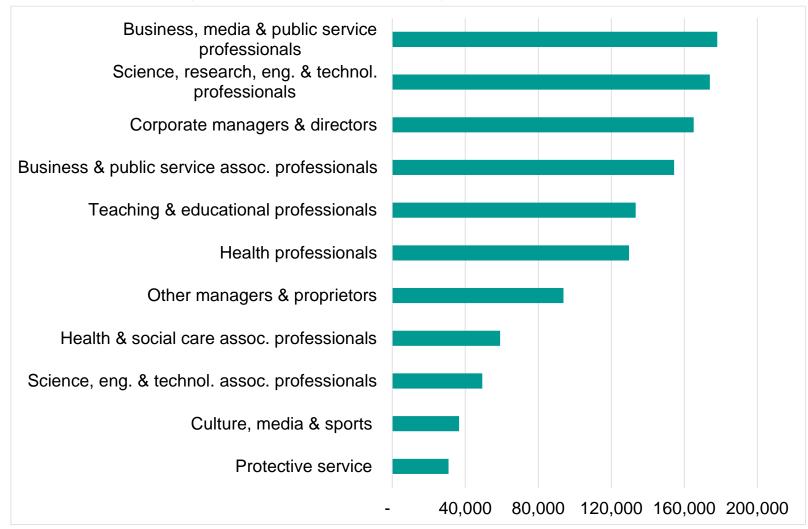
Figure: Trend in occupational employment – high skilled vs other occupations, Yorkshire and the Humber



Source: Annual Population Survey

Business / media professional and STEM Professional are largest higher skilled employment categories in region

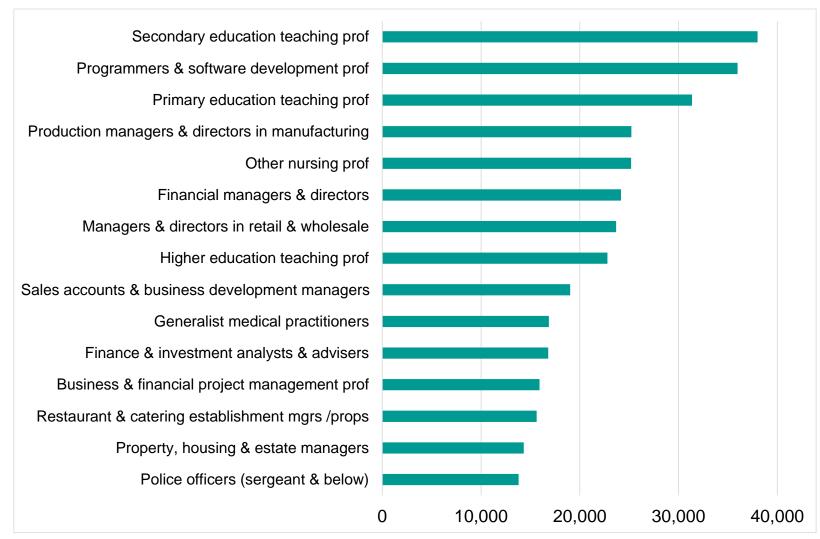
Figure: Employment by higher skilled SOC sub-major group, Yorkshire and the Humber



Source: Annual Population Survey, Average of JD22 to OS22/23

At a detailed level the occupations with greatest employment are diverse

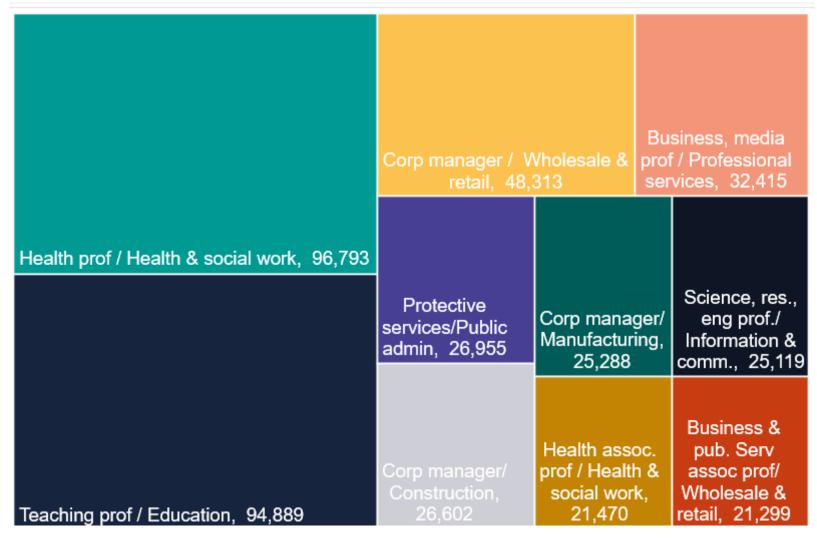
Figure: Employment by SOC unit group – top ranked categories, Yorkshire and the Humber



Source: Annual Population Survey, Average of JD22 to OS22/23

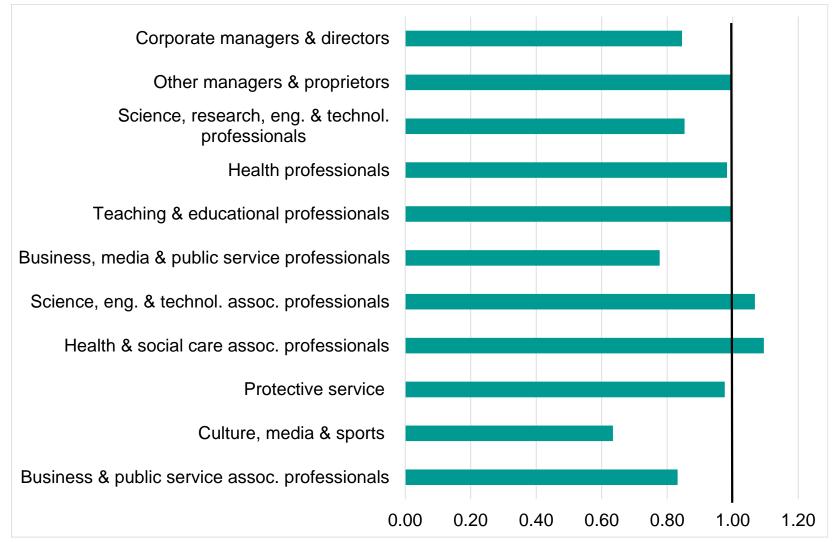
Biggest concentrations of higher skilled employment are Health Professionals and Teaching Professionals in relevant sectors

Figure: Top 10 occupational / industry employment segments, Yorkshire and the Humber



Key high skilled occupations remain under-represented in employment terms

Figure: Location quotient of occupational employment Yorkshire and the Humber; England average = 1.0



Source: Annual Population Survey

Strongly represented occupations include Welfare, Teaching and Health

Figure: Employment location quotients for higher skilled occupations, Yorkshire and Humber (benchmark=England)

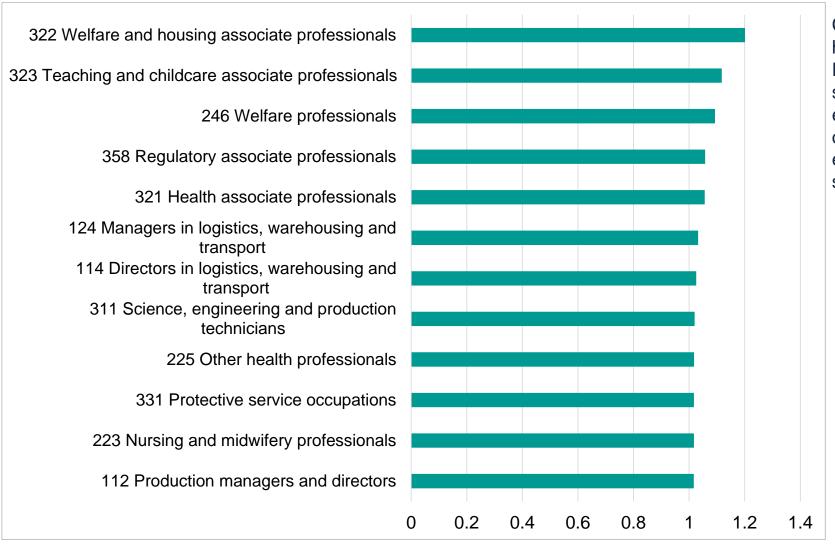


Chart shows occupations with highest LQ – Y&H relative to England i.e. those that are strongly represented in employment terms in Y&H. LQ of 1 means share of employment at Y&H level is same as nationally

Under-represented occupations include media, artistic/design and business/finance roles

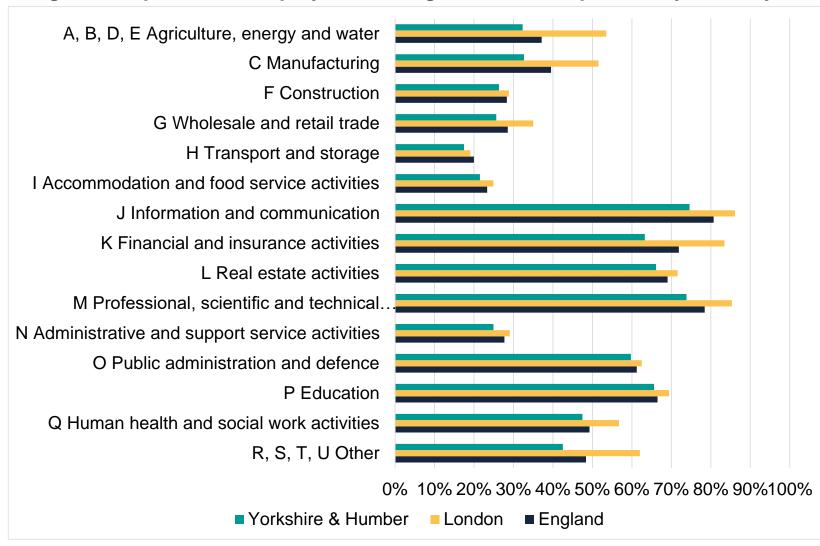
Figure: Employment location quotients for higher skilled occupations, Yorkshire and Humber (benchmark=England)



Chart shows occupations with lowest LQ –Y&H relative to England i.e. those that are under-represented in employment terms in Y&H. LQ of 1 means share of employment at Y&H level is same as nationally

Employment in higher skilled occupations is more strongly represented across all sectors at national level than in Yorkshire and the Humber

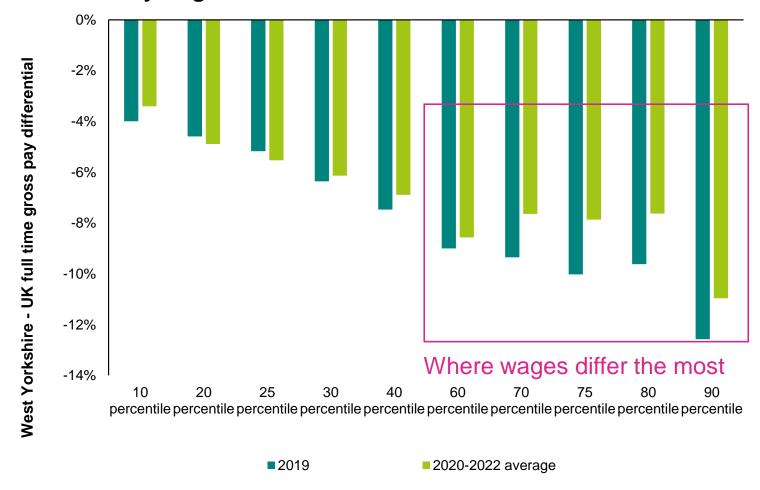
Figure: Proportion of employment in higher level occupations by industry sector



West Yorkshire's pay gap is widest at top of pay distribution

Figure: Workplace median pay, full time workers 2019-2022

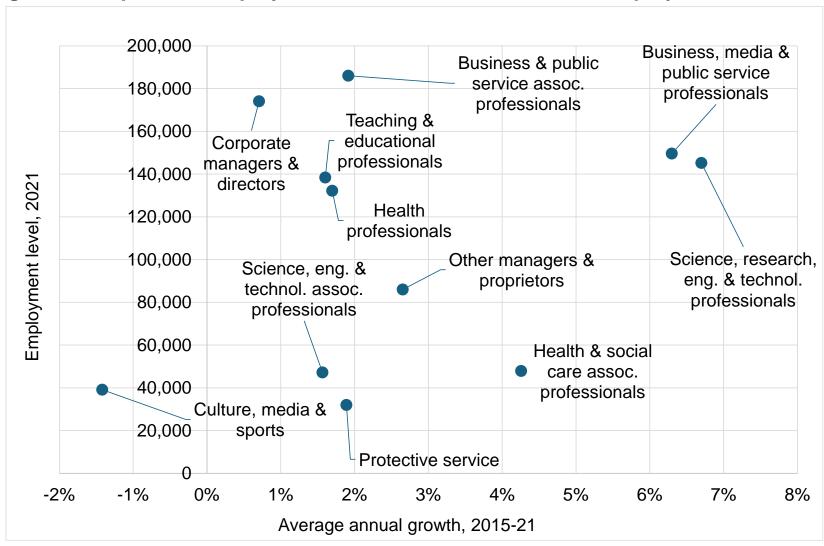
Differences by wage distribution



Source: ONS, annual survey of hours and earnings - workplace analysis.

STEM Professional and Business / media professional have seen fastest growth

Figure: Occupational employment in Yorkshire and Humber, employment level and growth performance



Source: Annual Population Survey

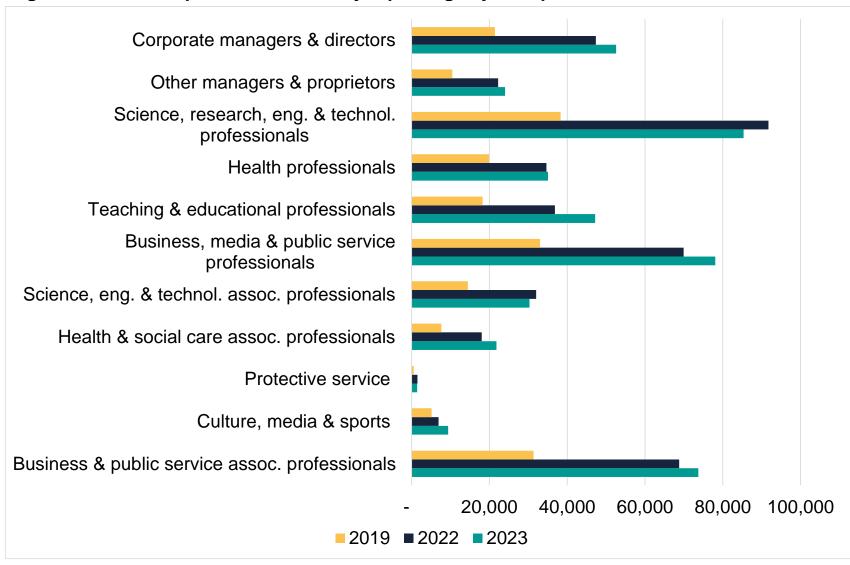
Recruitment activity in decline following post-pandemic recovery

Figure: Trend in monthly count of online job postings for high skilled jobs, 3 month moving average; index: 2012=100



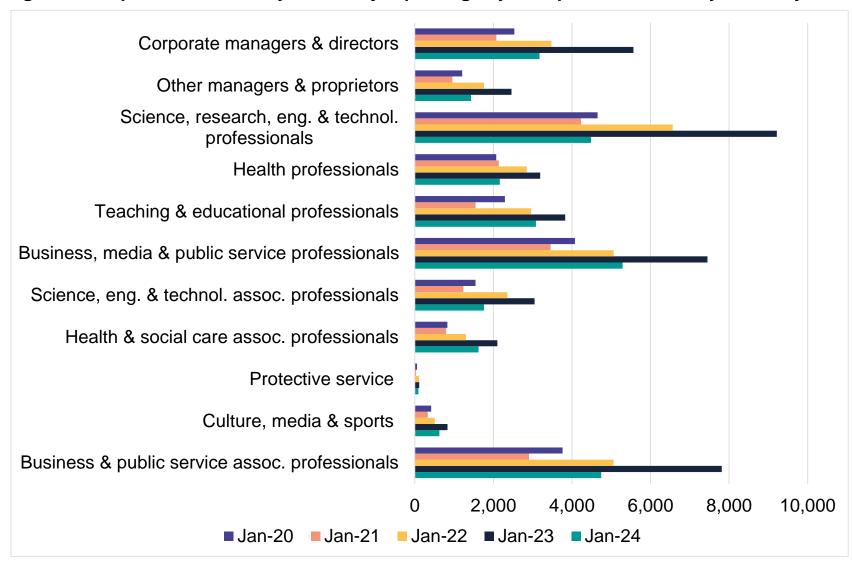
Year on year growth for some occupational categories in 2023...

Figure: Annual unique count of online job postings by occupation, Yorkshire and the Humber



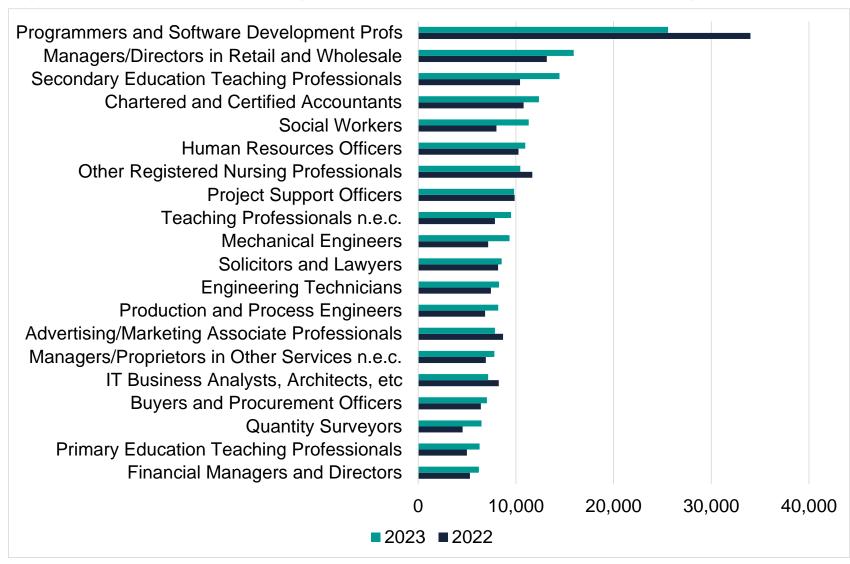
But clear signs of cooling of recruitment activity across all occupational categories in recent months

Figure: Comparison of monthly count of job postings by occupation for January of each year



Most in-demand occupations at detailed level include a diverse range of disciplines

Figure: Detailed occupations in greatest demand based on online job postings, Yorkshire and the Humber



Yorkshire and the Humber is well below the national average on higher qualifications

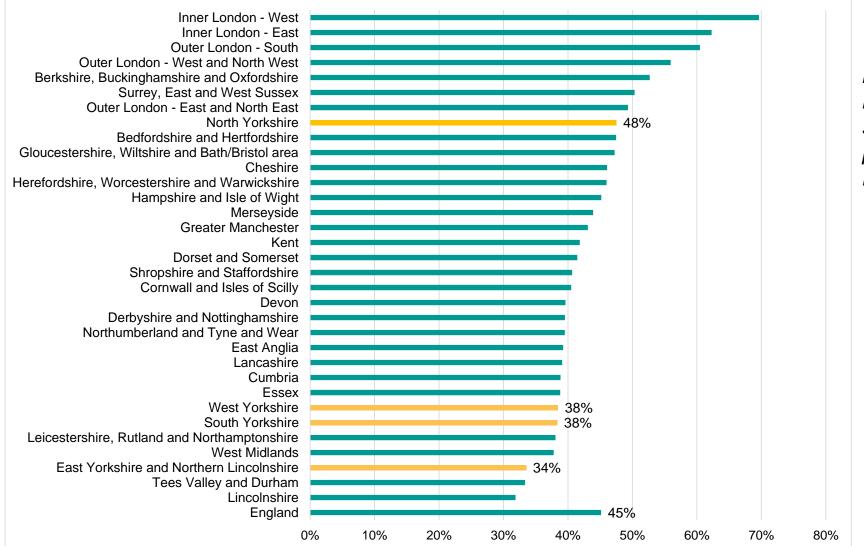
Figure: Proportion of working age population qualified to Level 4 by region (people aged 16-64)



Source: Annual Population Survey, ONS

North Yorkshire is the only part of Y&H with strong performance on higher qualifications

Figure: Proportion of working age population qualified to Level 4 by NUTS2 area (people aged 16-64)

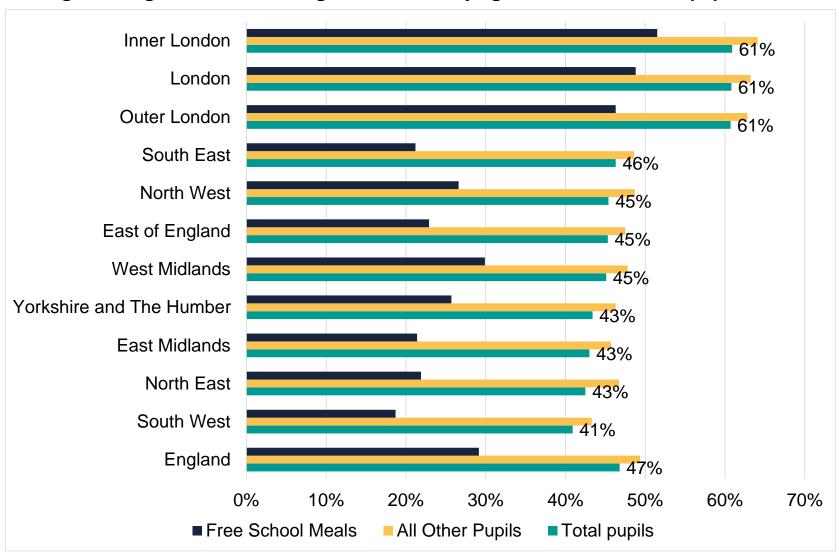


West Yorkshire would need 60,000 additional higher qualified residents simply to match the performance of Greater Manchester

Source: Annual Population Survey, ONS

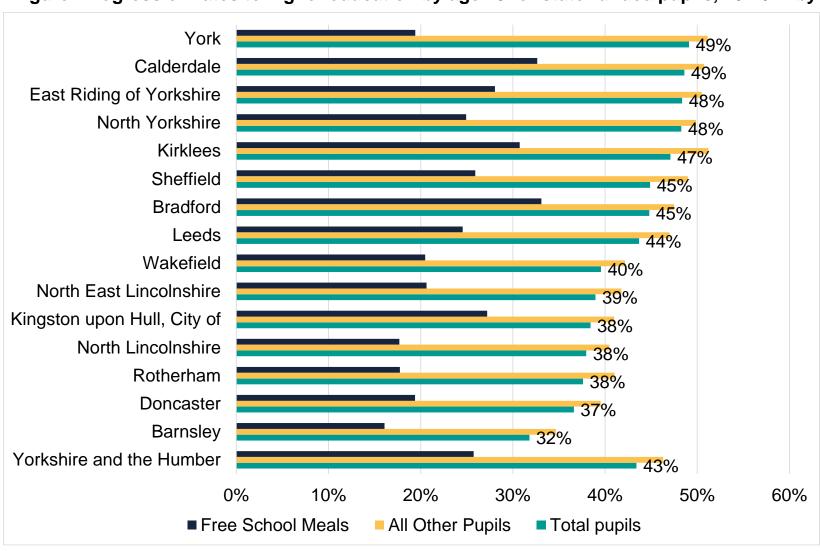
Entry rates into higher education are below the national average in Yorkshire and the Humber

Figure: Progression rates to higher education by age 19 for state-funded pupils, 2021/22 by free school meal status



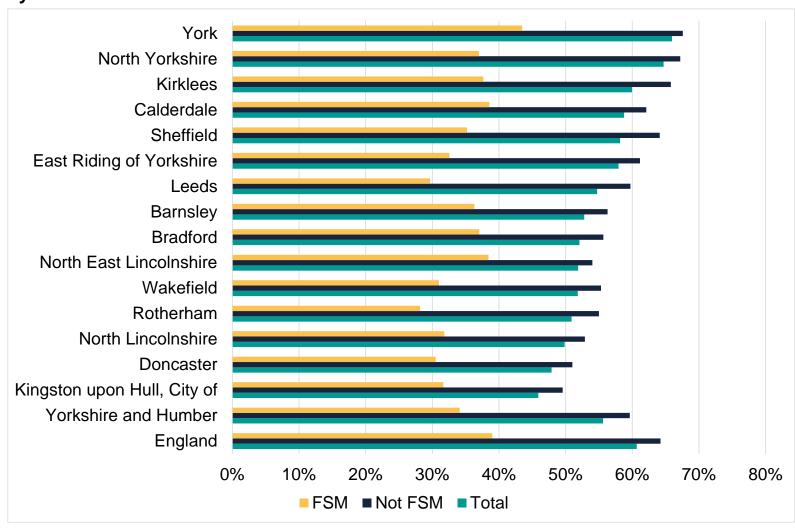
Entry rates into higher education are highly variable at local authority level within the region

Figure: Progression rates to higher education by age 19 for state-funded pupils, 2021/22 by free school meal status



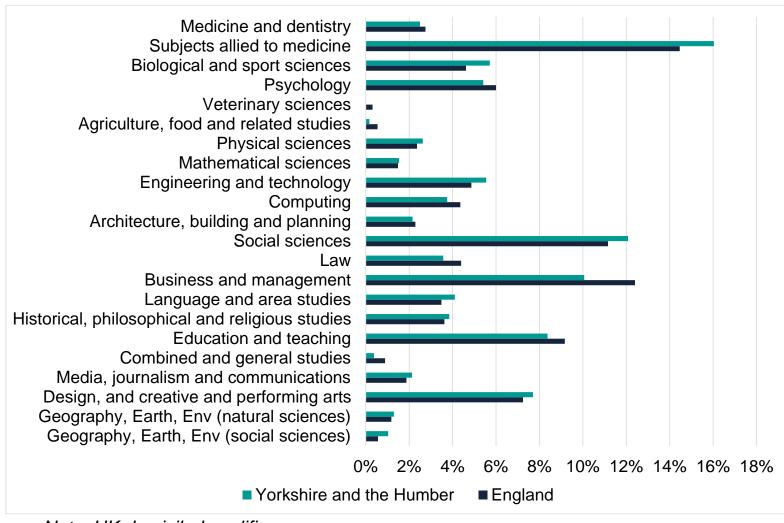
Partly reflecting patterns of attainment at Level 3 by age 19

Figure: Figure: Proportion of young people achieving qualifications at level 3 equivalent by age 19 in 2022 (State sector) by free school meal status



Yorkshire and Humber has large HE sector with broadbased provision

Figure: Higher education qualifiers (UK domicile) from Yorkshire and the Humber institutions by subject area, 2021/22 academic year



Note: UK domiciled qualifiers

Source: JISC

Just over half of employed qualifiers from Y&H institutions are working in the region after 15 months – higher than most other regions

Figure: Proportion of graduates in employment retained in region of study at 15 months by location of institution

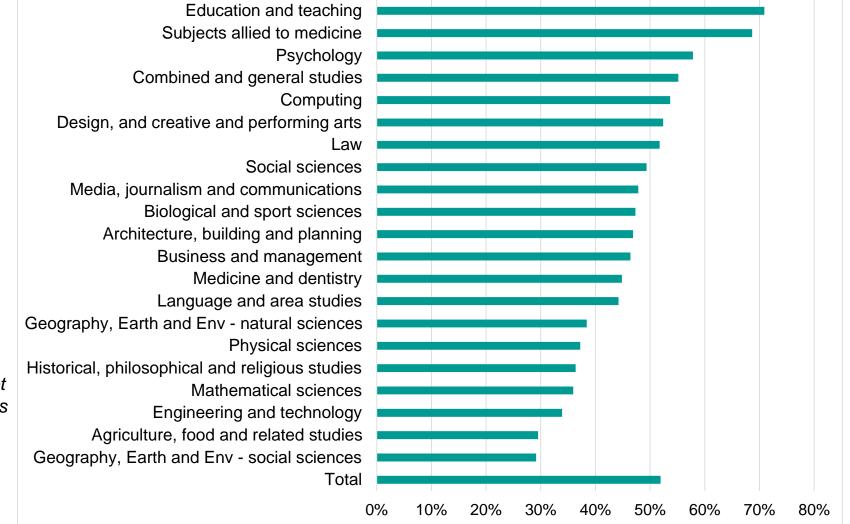


Note: UK domiciled leavers from Y&H institutions in employment after 15 months. Excludes not knowns and overseas destinations.

Source: Graduate Outcomes Survey, 2020/21

Retention in the region varies by subject of study

Figure: Proportion of qualifiers from Y&H institutions in employment retained in Yorkshire at 15 months by subject of study

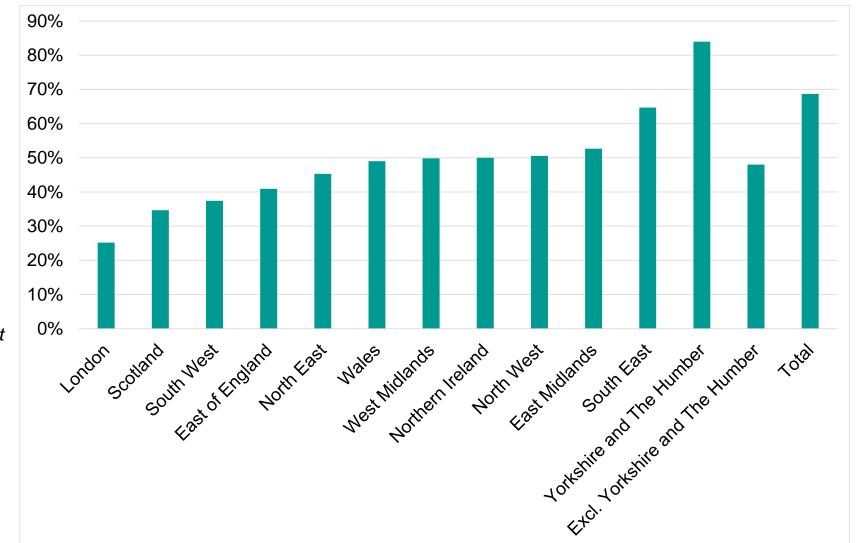


Note: UK domiciled leavers from Y&H institutions in employment after 15 months. Excludes not knowns and overseas destinations.

Source: Graduate Outcomes Survey, 2020/21

Around 7 out of 10 Y&H domiciled qualifiers are employed in the region after 15 months

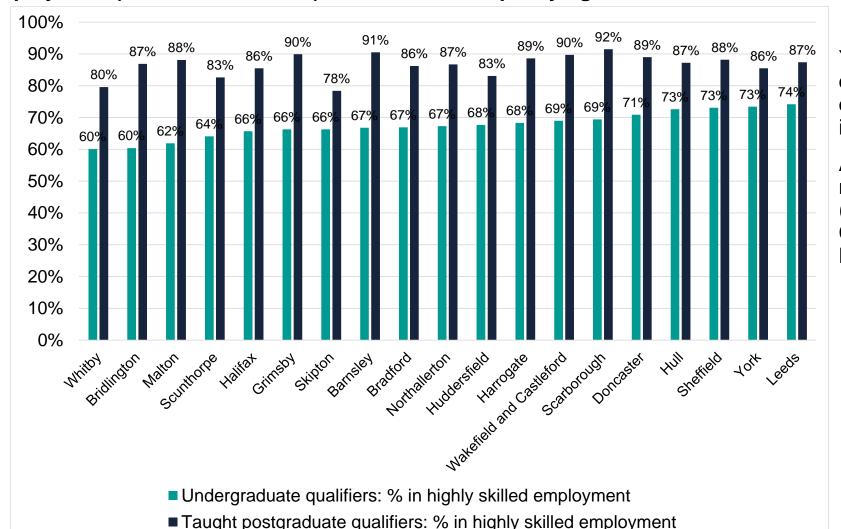
Figure: Proportion of Yorkshire and Humber domiciled qualifiers with employment location in Yorkshire and the Humber at 15 months by region of institution studied at



Note: Y&H domiciled leavers in employment after 15 months. Excludes not knowns and overseas destinations. Source: Graduate Outcomes Survey, 2020/21

Undergraduate qualifiers have relatively low entry rates into highly skilled jobs across much of the region

Figure: Proportion of graduates and postgraduate qualifiers in highly skilled employment by location of employment (travel-to-work-area) 15 months after qualifying



Y&H TTWAs in lowest quintile for undergraduate qualifiers up to Doncaster in ranking

Among top ranked TTWAs nationally are: Oxford (79%), Reading (78%), Cambridge (77%) and Bristol (77%)

Source: Office for Students, A Geography of Employment, 2022

Prevalence of higher apprenticeships in Y&H is moderate

Figure: Higher apprenticeship starts per 100,000 employees, 2022/23 academic year

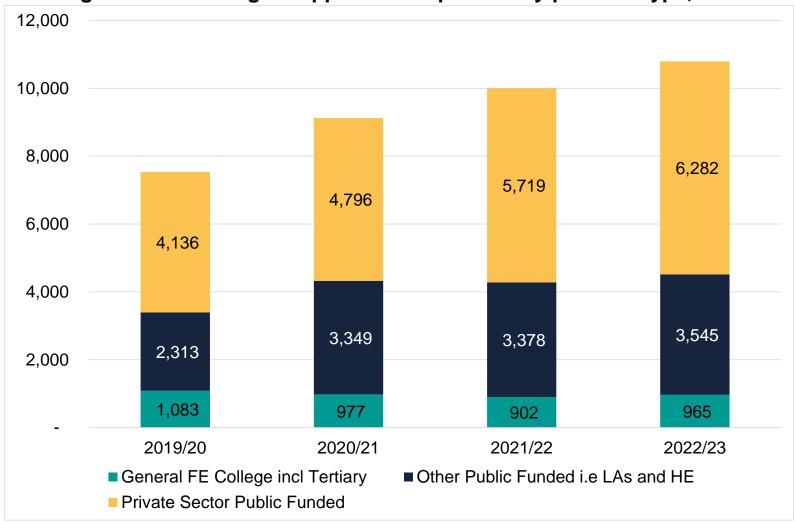


There were 10,800 apprenticeship starts in Y&H in 2022/23, 11% of all starts in England during that year

Note: Count of starts relates to residents of Y&H

Higher apprenticeship starts growing strongly

Figure: Trend in higher apprenticeship starts by provider type, Yorkshire and the Humber



Note: Count of starts relates to residents of Y&H

Subject profile of higher apprenticeships in Y&H is similar to the national average

Figure: Profile of higher apprenticeship starts by subject area, 2022/23



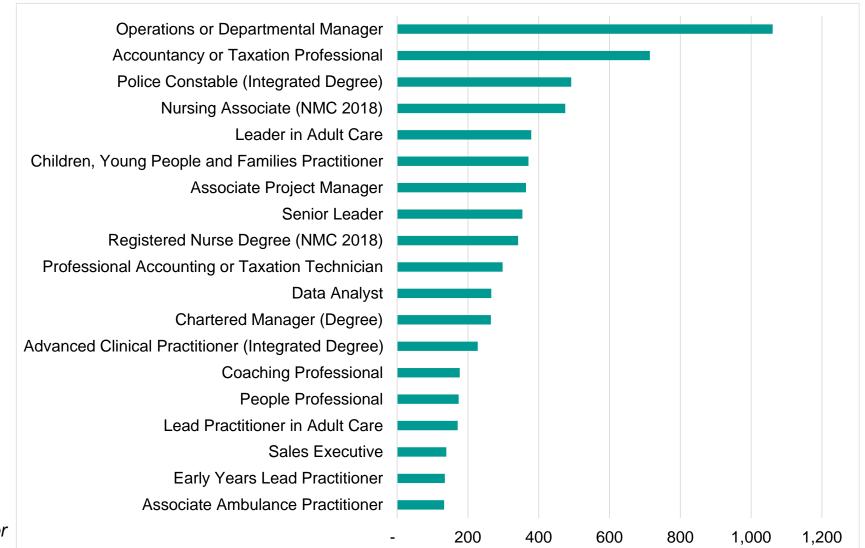
Note: Count of starts relates to residents of

Y&H

Source: Department for

Management, health / care and finance apprenticeships dominate top of the rankings

Figure: Profile of higher apprenticeship starts by most popular standards, 2022/23, Yorkshire and Humber



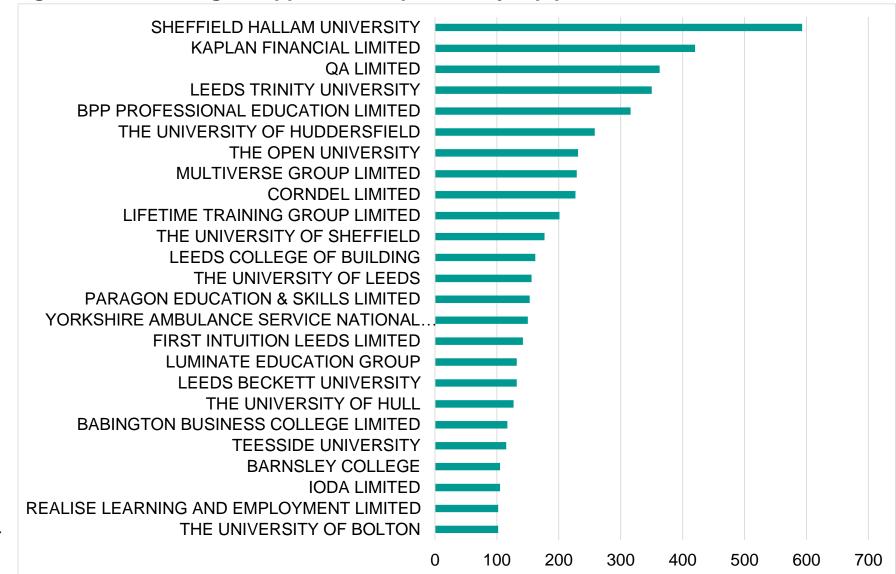
Note: Count of starts relates to residents of

Y&H

Source: Department for

HEIs among the leading providers of higher apprenticeships to Y&H residents

Figure: Profile of higher apprenticeship starts by top providers, 2022/23, Yorkshire and the Humber



Note: Count of starts relates to residents of

Y&H

Source: Department for

Starts grew fastest in Y&H between 2019/20 and 2022/23

Figure: Net percentage change in higher apprenticeship starts between 2019/20 and 2022/23



residents of Y&H Source: Department

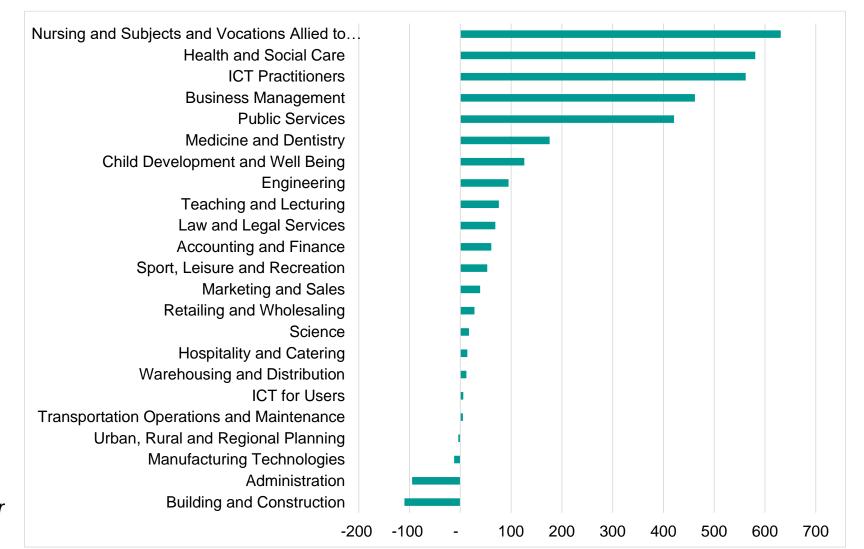
for Education

Note: Count of

starts relates to

Growth in starts strongly concentrated in certain subjects

Figure: Net percentage change in higher apprenticeship starts by selected subject between 2019/20 and 2022/23



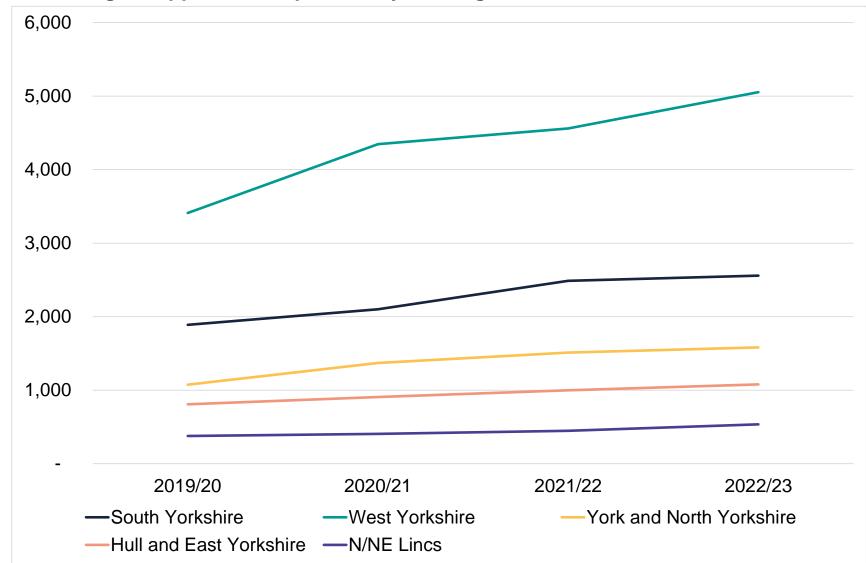
Note: Count of starts relates to residents of

Y&H

Source: Department for

West Yorkshire accounts for nearly half of higher apprenticeship starts in the region and has seen the fastest growth in starts in recent years

Figure: Trend in higher apprenticeship starts by sub-region

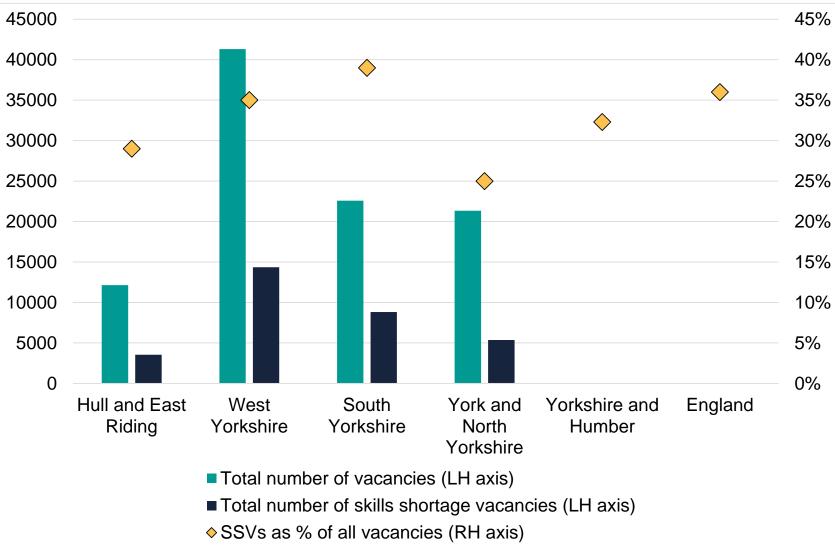


Note: Count of starts relates to residents of each area

Source: Department for

Employers find it difficult to get the skilled people they need





Skills shortage vacancies happen when employers face a shortage of candidates with the right skills for the job - they have a significant impact on firms' productivity performance.

Source: Employer Skills Survey, 2022

Prevalence of shortages highest for skilled trades, associate professionals and professionals

Figure: Skill shortage vacancies as % of all vacancies by occupation major group



Source: Employer Skills Survey 2022

Note: Density measure shows skill-shortage vacancies as a proportion of all vacancies

Shortages particularly high among STEM professionals, STEM technicians and Health professionals

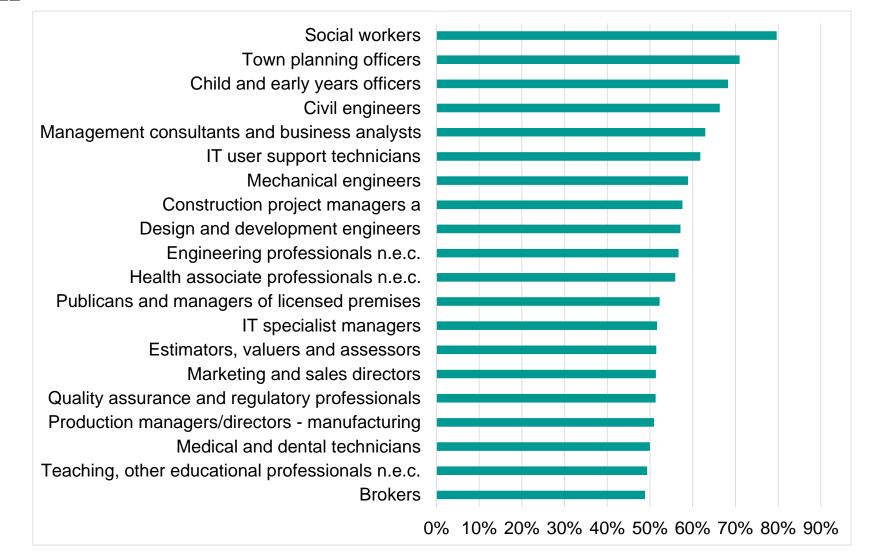
Figure: Skill shortage vacancies as a percentage of all vacancies by occupational sub-major group, Yorkshire and the Humber, 2022



Source: Employer Skills Survey, 2022

Detailed national data also exposes specific shortages e.g. in social work

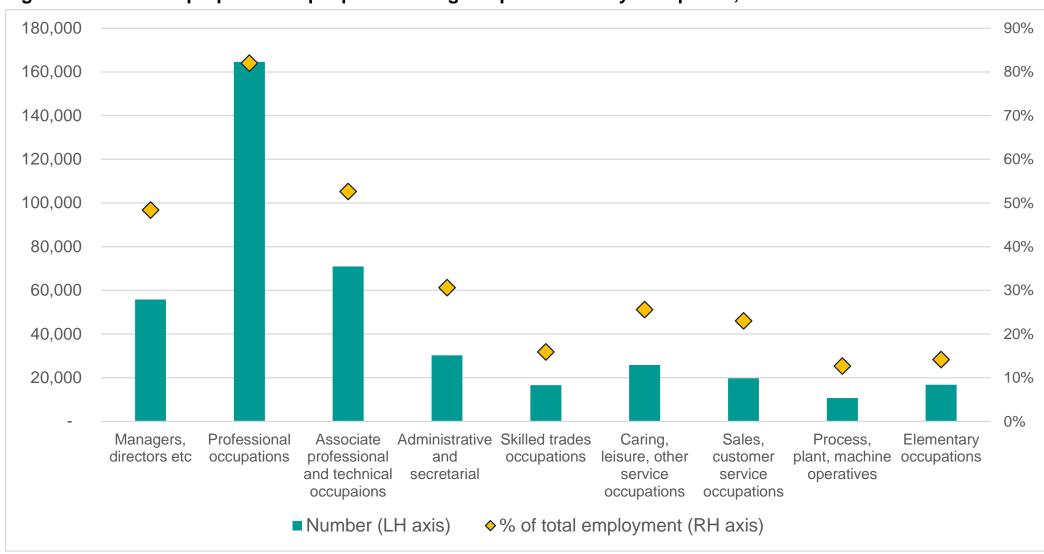
Figure: Skill shortage vacancies as a percentage of all vacancies by occupational unit group, England, 2022



Note: Analysis limited to occupations with more than 1,000 vacancies Source: Employer Skills Survey, 2022

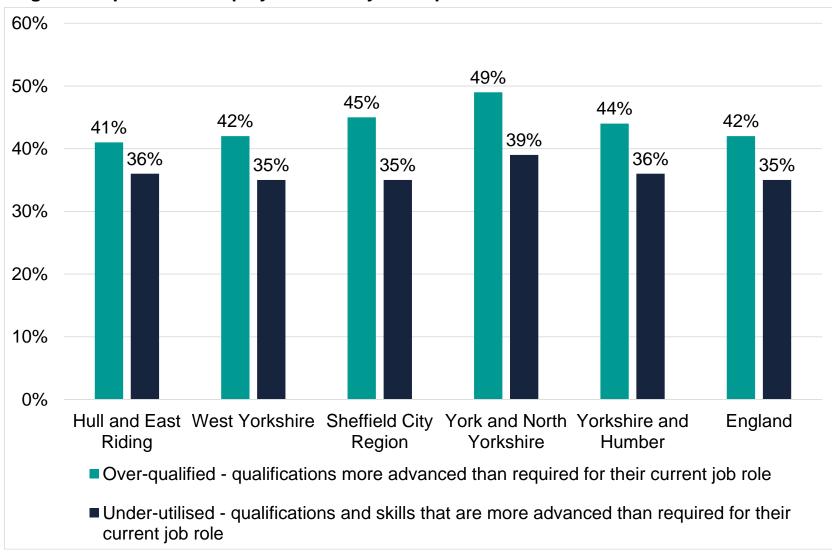
Significant numbers of people with higher qualifications are employed in roles that do not require them





More than a third of employers say they have under-utilised staff

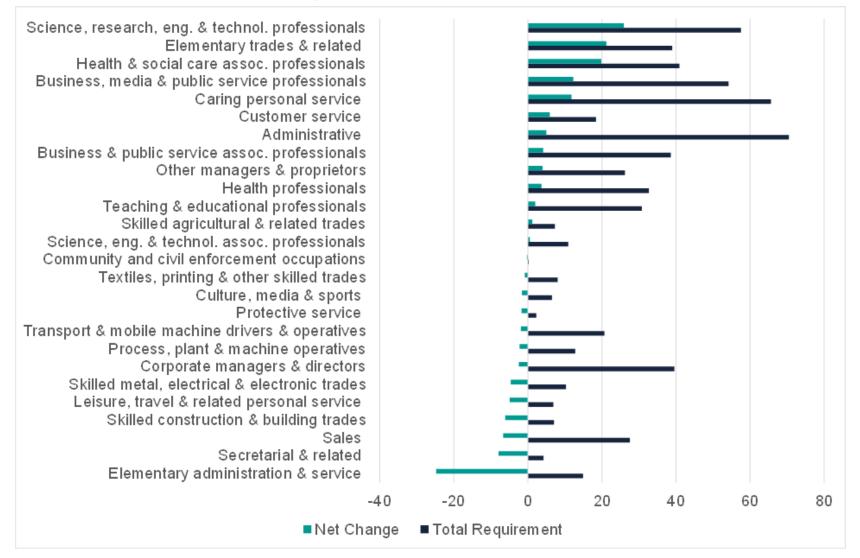
Figure: Proportion of employers with any over-qualified and under-utilised staff



Source: Employer Skills Survey, 2022

High skilled occupations have significant projected recruitment requirements

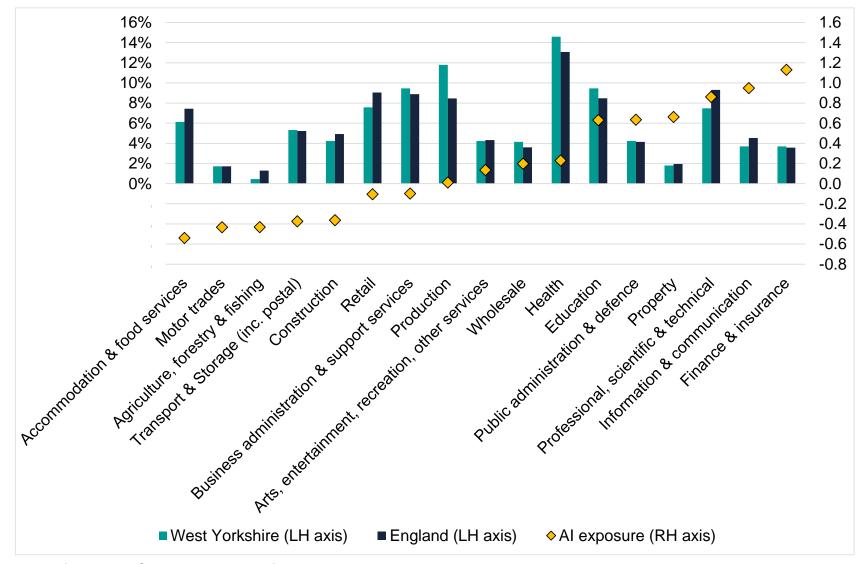
Figure: Projected trends in job openings by occupation, 2020-2035, West Yorkshire



Source: Working Futures, 2020-2035

But high skilled sectors are exposed to disruptive impact of artificial intelligence





Source: Unit for Future Skills, Department for Education

Conclusions

- Higher skilled occupations are the main driver of employment growth in Yorkshire and the Humber
- But the region's higher skilled employment base is under-developed relative to national average
- Job posting data suggests that demand for higher skilled and other workers is cooling but still remains strong compared with before the pandemic
- Yorkshire's supply of higher skilled people is restricted by its qualifications pipeline to age 18 and its graduate retention rate
- There are acute skill shortages for some higher skilled roles
- Under-utilisation of skills is fairly widespread across employers
- Projections suggest that employment prospects are positive for higher skilled roles but there is potential for disruption