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Economic Impact of Lancashire Training Providers

A Final Report by Regeneris Consulting

Lancashire County Council

Economic Impact of Lancashire Training Providers

February 2016

Regeneris Consulting Ltd
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Executive Summary

Introduction

i. Regeneris Consulting was commissioned by Lancashire County Council to assess the economic contribution of colleges and independent training providers (ITPs) to the Lancashire economy. The study has three main elements:

- an assessment of the economic impact of the colleges and training providers through their employment and expenditure in the local economy
- exploring the added value generated by improving the skills of the workforce
- a qualitative assessment of how the colleges are helping to address the skill shortages of priority sectors in the Lancashire economy.

ii. The study includes all sixth form and further education colleges in Lancashire and five ITPs (see Table 1). The list of ITPs was agreed with Lancashire County Council during the inception stage. These were selected on the grounds that they are large and well-established providers and/or they specialise in provision for one of the Lancashire LEP's priority sectors.

Table 1 Providers included in study

Colleges	Independent Training Providers
• Accrington & Rossendale College	• JTL
• Blackburn College	• North Lancs Training Group
• Blackpool and The Fylde College	• Springfield Fuels Ltd
• Blackpool Sixth Form College	• Training 2000
• Burnley College	• In Training
• Cardinal Newman Sixth Form College	
• Lancaster and Morecambe College	
• Myerscough College	
• Nelson and Colne College	
• Preston College	
• Runshaw College	
• St Mary's College, Blackburn	
• West Lancashire College	

iii. The study has also carried out a review of existing economic impact studies for higher education institutions (HEIs) in Lancashire, including Edge Hill University, the University of Lancaster, the University of Central Lancashire (UCLan) and the University of Cumbria (which has a campus in Lancaster). The report draws out the key findings related to the economic footprint of each of the HEIs, and their contribution to improving the skills of the workforce in Lancashire.

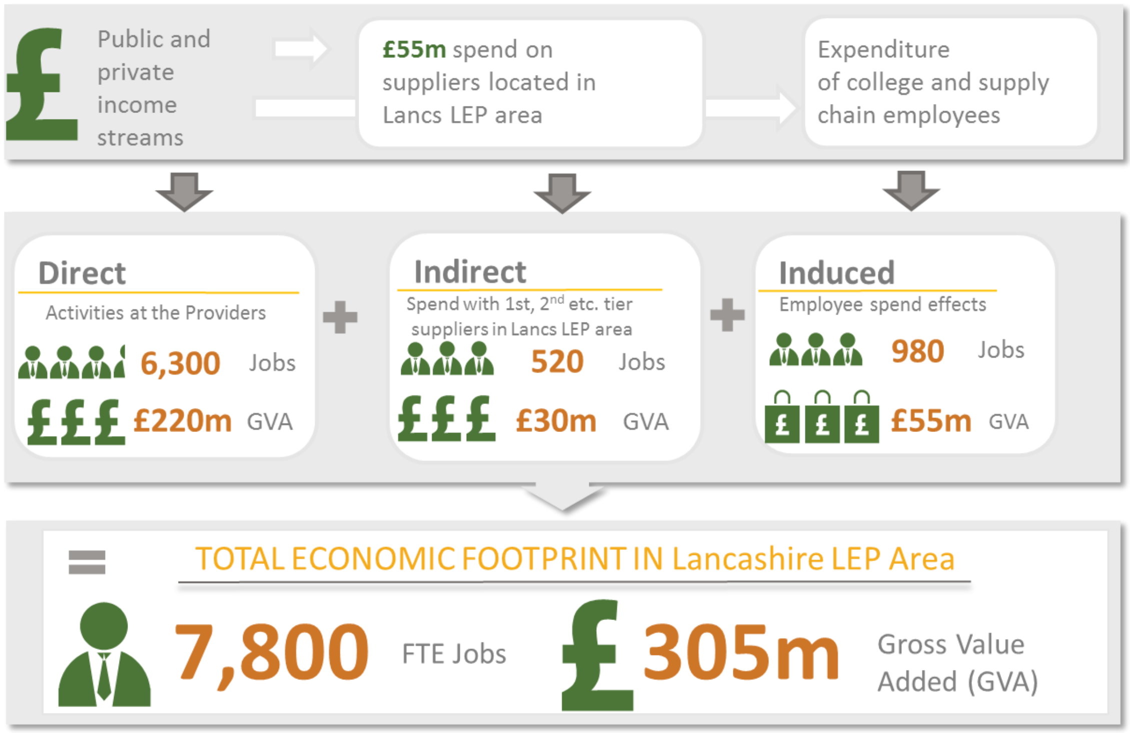
Economic Impact

The Lancashire training providers are a vital source of jobs for many communities

iv. In 2013/14 the Lancashire colleges and ITPs supported a total of 7,800 Full Time Equivalent (FTE) jobs and £305 million in Gross Value Added (GVA) in the Lancashire LEP area. Over 6,000 of these jobs were based at the colleges and ITPs themselves, with a further 520 jobs supported through their supply chain expenditure and 980 jobs through the expenditure of employees in the local economy.

v. Some of the largest colleges such as Blackburn and Blackpool and The Fylde College employ just under 1,000 employees each, which is comparable in size to small universities. Many of the colleges are located in deprived parts of Lancashire, experiencing very high rates of unemployment. They are therefore important economic drivers in their own right, and a vital source of employment in some communities.

Economic Footprint of Lancashire Training Providers to Lancashire LEP Area, 2013/14



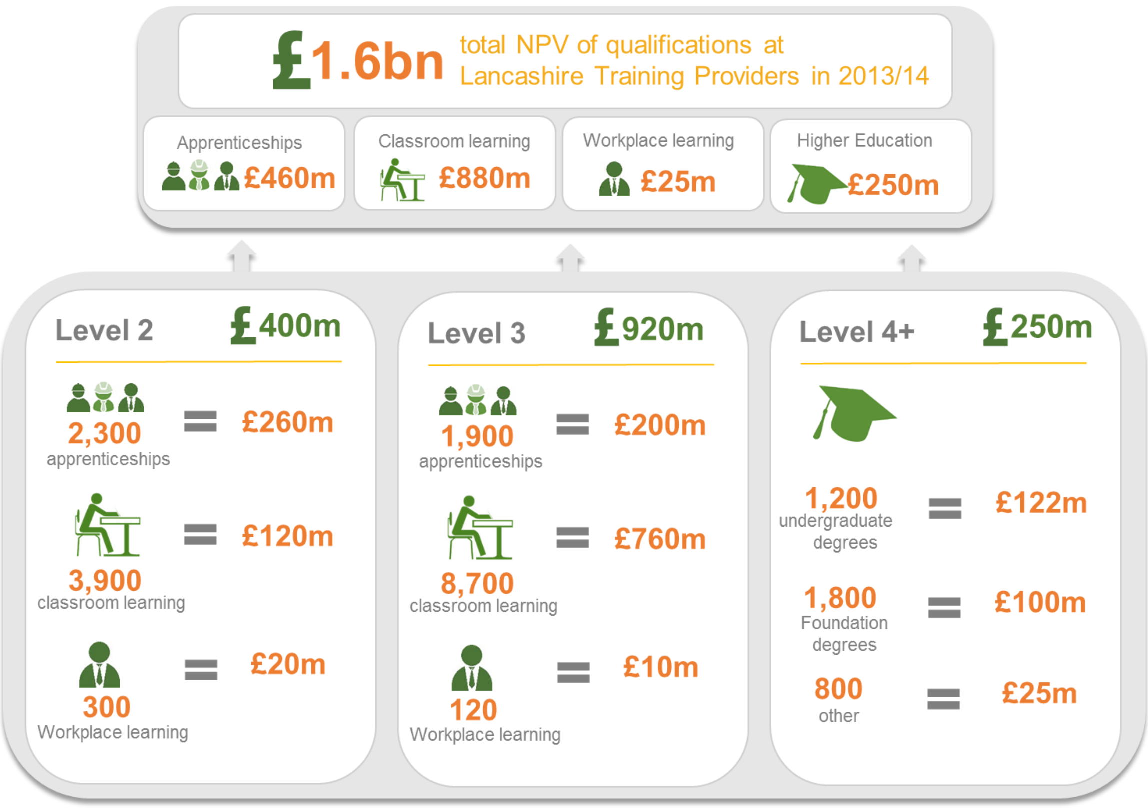
Source Calculations by Regeneris Consulting

..and are supplying the skills for future prosperity

vi. By improving the skills of the workforce, the colleges and ITPs are making a vital contribution to the economic prospects of their students, and the productivity and growth of the Lancashire economy. This study has estimated the lifetime benefits from qualifications gained in 2013/14 to have a Net Present Value (NPV[1]) of £1.6bn. For every pound of government funding invested, the training providers deliver over £16 in economic benefits over a student's lifetime. This is a substantial return which compares well against other major investments.

[1] The NPV is calculated by estimating the discounted benefits from achieving a qualification over the working life of the learner, and subtracting the costs associated with undertaking the qualification.

Net Present Value of Qualifications gained at Lancashire Training Providers in 2013/14



Source Calculations by Regeneris Consulting

Meeting the needs of the economy

vii. The evidence reviewed shows that colleges and ITPs are making a substantial contribution to the skill needs of Lancashire employers. In particular, the study has found that:

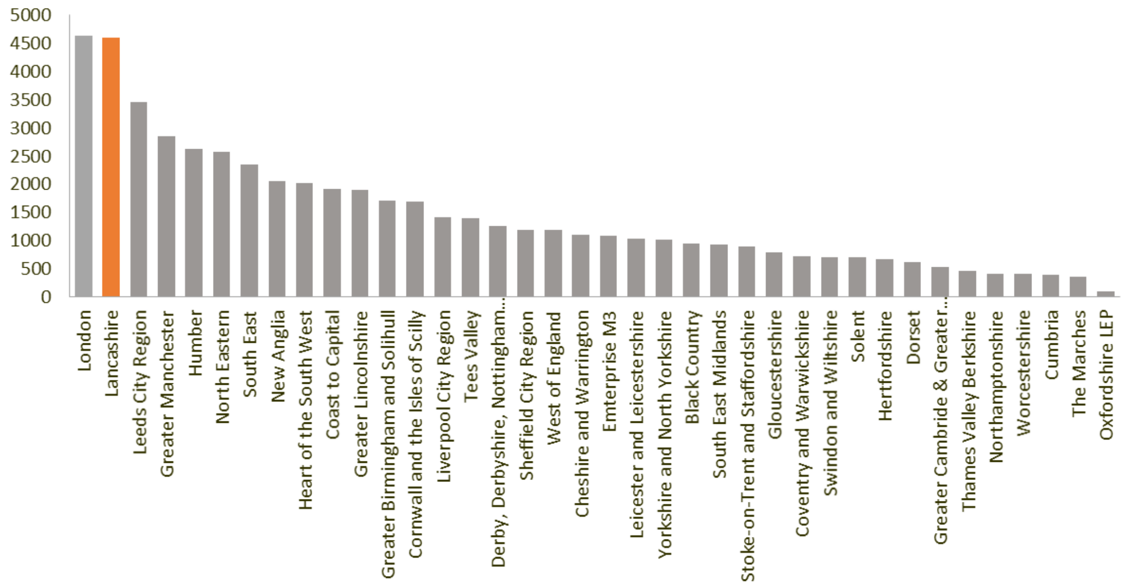
- **Learning providers are forming strong and successful relationships with local employers**: all of the colleges and ITPs have been praised by OFSTED and QAA inspectors for the high level of commitment they show to engaging employers and responding to their needs. There is also clear evidence that employers value the training the provided by colleges. Average satisfaction ratings stand at 8.7 out of 10 in the FE Choices survey of employers (based on nearly 1,900 employer responses)

- **The two largest independent training providers (Training 2000 and North Lancs Training Group) have outstanding links with employers**: these two providers are amongst the largest ITPs in the country and together account for more than a quarter of apprenticeship training delivered in Lancashire. The key strengths of these organisations is their strong sector focus, their long history in Lancashire and the fact that both are either owned or run by a board comprising local businesses. This gives them an in depth understanding of the needs of their sectors and has allowed them to develop a strong reputation among employers.

- **The training providers are providing the skills for an ageing population**: Lancashire's ageing population represents the key future challenge for the LEP area. The NHS in particular is faced with the challenge of an increase in demand for its services at the same time that a large proportion of its workforce will retire. Lancashire training providers are making a substantial contribution to the skill needs of this sector, which can help to address these challenges.

- **Some colleges are becoming key providers of higher education in Lancashire**: there was more HE provision delivered within FE colleges in Lancashire than in any other LEP area except London. Collectively the colleges account for nearly a quarter of all HE enrolments in Lancashire institutions. As well as widening participation in HE across Lancashire, the colleges are also developing reputations for being high quality providers of higher education in courses which reflect local industrial strengths, such as Blackpool and The Fylde College's reputation in the energy sector or Myerscough College's expertise in agriculture and the land based economy.

HE enrolments at FE Colleges by LEP area, 2012/13



Source HEFCE

Meeting the needs of Lancashire's key sectors

ix. The study has looked at the skill needs of those sectors identified by the LEP as being key to future growth and wealth creation in Lancashire, and assessed the degree to which Lancashire training providers are responding to the needs of employers. The research found that the training providers were making a vital contribution to the skill needs of a number of priority sectors, but have struggled to establish themselves in others.

Strong Performance Sectors

Advanced Engineering

x. There is good evidence that the advanced engineering sector is already experiencing skill shortages, which will intensify in future as a result of an ageing population. Lancashire is home to training providers with a long history of providing work based learning to employers in the sector. The largest provider is Training 2000 which accounts for more than a third of apprenticeship training for the sector in Lancashire (900 in 2013/14) and has a well-established reputation as a leading provider of engineering training, both inside and outside Lancashire.

xi. Lancashire's FE colleges have historically struggled to compete with Training 2000, but are increasingly focused on improving the quality and flexibility of training to ensure that they are better placed to attract employers and high quality students, and cater to the needs of SMEs. This is exemplified by Burnley College which has invested significantly in new facilities which ensure that the training provided at the college meets the standard of Lancashire employers, and is now the second largest provider of apprenticeship training to the sector. A further strength of the colleges in this sector is the growing number of HE courses available, which are geared toward those sectors which are well established or growing in Lancashire (Blackpool and The Fylde College's focus on the onshore oil and gas sector).

Health and Social Care

xii. The health and social care sector is likely to be the single largest source of demand for skills over the next ten to twenty years. It is therefore vitally important that a large proportion of training provision should be in this sector. The supply of skills for the health and social care sector is one area where Lancashire based providers excel. 22% of vocational qualifications achieved in 2013/14 were in health and social care courses which was more than any other SSA. There is good evidence that colleges and ITPs have formed strong and extensive networks with healthcare employers. Rates of recruitment from FE colleges are very high, and employers give very positive feedback about the quality of training provision provided by Lancashire training providers.

Visitor Economy

xiii. Overall this sector has low levels of skill shortage vacancies and there is limited evidence to suggest that access to skills is constraining the growth of existing businesses. There is however an ongoing shortage of good quality chefs and caterers, and longstanding deficiencies in the customer service skills of staff. The outstanding provider in this sector is NLTG which is a well-established and award-winning provider of catering and hospitality apprenticeships and has recently invested in a new, state of the art Catering and Hospitality Training Centre. NLTG accounted for just under half of the apprenticeship training delivered in Lancashire, however there are a number of other notable providers with high quality training restaurants and other facilities which have received awards for the quality of training, including Runshaw College and Nelson & Colne College. Accrington and

Rossendale College has also recently invested in a new Visitor Economy centre which will double its capacity and improve the quality pf provision.

Energy and Environment

xiv. The key challenges for this sector will be the need to replace a large volume of workers leaving the workforce through retirement, and to address the potentially large skill requirements of a number of planned energy projects and initiatives. The colleges and ITPs currently deliver limited training to employers in the sector, reflecting the current low level of demand. However a number of training providers have significant expertise across a range of EET sub-sectors and are well placed to respond to an increase in demand. Notable examples include JTL, Springfield Fuels and Blackpool and The Fylde College, which is developing a national reputation in the sector.

Poor Performance Sectors

Financial and Professional Services

xv. FPS is a highly skilled sector, and the majority of demand will continue to be for people with degree level qualifications. Law firms, R&D companies and consultancies are therefore less likely to see the value in engaging with a local training provider. As a result, the colleges and ITPs do not make a substantial contribution to addressing the skill needs of this sector. Lancashire based training providers do have a role in addressing the lower and intermediate skill requirements of the sector. The colleges and ITPs deliver a large number of business administration and customer service apprenticeships, although these are delivered to a wide range of employers and not just those in the FPS sector.

Creative and Digital

xvi. The creative and digital sector is a small and developing sector in Lancashire. However there is good evidence that employers already face significant challenges recruiting the skills they need, particularly computer science skills such as programming and web design. A number of the colleges are making an important contribution to skills shortages for high level IT skills, with over 250 enrolments on HE courses at the Lancashire colleges in 2012/13. Given the scale of demand for high level IT skills, there is clear value in some of the colleges looking to expand HE provision in this area and encourage more 16-18 year olds to consider a career in the sector.

xvii. Overall, however, there is less evidence that Lancashire training providers are developing strong links with employers in this sector. The large number of very small companies in this sector and the high dependence on very highly skilled workers also means that employers are less likely to engage with vocational providers or invest in training. When they do invest, they are more likely to use small, specialist private training providers with in depth knowledge of the needs of this fast changing sector.

Summary of Lancashire Training Providers' Contribution to Priority Sectors

	Existing Skill Shortages	Future Skill Shortages	Key SSV Occupations	Key Skills	Contribution of training Providers
Advanced Engineering and Manufacturing	🔴	🔴	• Engineers • Technicians • Assemblers • Welders	• CNC Machining • CAD • 3D Printing • Composites	✓
Health and Social Care	🟡	🔴	• Nurses • Care Workers • Medical Practitioners	• Rehabilitation • Mental health • Day care • Caregiving	✓
Financial and Professional Services	🔴	🔴	• Sales/marketing execs • Customer service • Software professionals	• Sales • Management • Accounting	✗
Visitor Economy	🟢	🟢	• Chefs/Catering • Customer facing roles	• Cooking • Customer service	✓
Energy and the Environment	🟢	🟡	• Control Instrument Engineers • Welders • Cable Jointers	• Engineering skills • Health & Safety • Project Management	✓
Creative, Digital and Media	🔴	🔴	• Software professionals • Web designers • Telecoms Engineers	• Programming • Web design	✗

Source Regeneris Consulting

Conclusions

xviii. Lancashire's training providers are all high performing organisations, recognised for the quality of provision by independent inspectors such as OFSTED and the QAA. None of the organisations included in the research scored less than 'Good' in their latest OFSTED inspection, with a large number judged to be 'Outstanding'. Taken as a whole, Lancashire's colleges far out perform those in other LEP areas within the North West. This high standard of further education is being delivered to some communities which are among the most deprived in England. They are therefore vital providers of public services and can act as effective vehicles for regeneration by widening participation in learning.

xix. However the contribution of the training providers goes beyond widening participation in challenged communities. There is a growing number of areas where the training providers are recognised for their expertise and outstanding quality in their local employment sectors, and in some cases are recognised as national leaders. For some of the largest ITPs, such as Training 2000 and NLTG, this expertise has been built up through decades of working closely with employers in specific sectors. Their reputation not only helps to attract employers and potential apprentices, but also allows them to recruit highly skilled staff from industry, which enhances the quality and relevance of training. However colleges are also increasingly developing reputations for quality and expertise in sectors which are likely to be key drivers of future growth in their area (with Blackpool and The Fylde College's reputation in the energy sector being just one example).

xx. What these experiences show is that, where colleges and training providers are able to demonstrate in depth expertise in a sector, they enhance their credibility in the eyes of employers and this results in higher demand for training. However, developing this expertise and building credibility takes time and resources. At a time of constrained budgets, this may require providers to make difficult choices about what they provide, and could mean stopping some subject areas altogether so they can invest more in their key strengths. By spreading resources too thinly, training providers risk providing a wide choice of courses but at lower quality, which in turn will affect their credibility and employer demand.

xxi. This research has focused on the performance of the training providers as a whole. It was not intended to evaluate the performance of individual providers and has only been able to identify areas of good practice where they stood out or were brought to our attention. However there are examples of colleges offering a wide range of apprenticeships relative to their size, where there may be potential for the offer to be more focused, with those low-demand apprenticeships being delivered through other providers with more capacity and expertise or in areas where there is much greater demand for this training. The role of the Skills Hub should be to identify these areas of strength and expertise and local need, and work with the providers to help rationalise the number of providers offering the same courses and apprenticeships. This will be challenging but ultimately should:

- present a much clearer picture to employers about which providers specialise in different types of training and prevent a situation whereby employers feel bombarded and confused by multiple providers offering the same provision
- help to identify and address demand for specialised provision in different parts of the LEP area (including higher skilled provision), which can be aggregated and addressed through a specialist provider
- build long term relationships between employers and providers, which will help to ensure that training provision evolves over time in line with industry requirements.

xxii. It should be noted that training providers can only do so much to engage employers, and there is also a responsibility on employers themselves to take responsibility for their training needs. Our research found training providers going to great lengths to engage employers and to let them influence provision, but encountering significant challenges in some sectors and particularly with SMEs who face a number of barriers. We found great examples of colleges trying to overcome these obstacles by engaging with local businesses on their own terms (eg Business Leagues in Accrington and Rossendale), which is helping to build trust and lay the foundations for forming strong local networks. These approaches work best through a partnership approach, and there may be a potential role for the LEP to make greater use of its own employer networks and to act as a bridge between providers and employers.

Higher Education Institutions

xxiii. Each of the HEIs in Lancashire are major employers in their own right. Taken together, the universities directly employ just under 7,000 people[2], which means one in a hundred jobs in Lancashire are based at one of the universities. The overall contribution of the HEIs is even greater than this because of the number of jobs supported through the expenditure on bought in goods and services and the expenditure of employees in the local economy. Although the data is not

[2] This excludes the Lancaster campus of the University of Cumbria for which staff data was not available

available for Lancashire, the three largest universities spend over £50m with North West suppliers each year, supporting around 800 FTES. A substantial proportion of these jobs are likely to be located in Lancashire

xxiv. The universities are key drivers of the local economies where they are based. The vast majority of the 7,000 direct jobs are located at the main campuses at Preston, Lancaster and Ormskirk. Each HEI can claim to be the largest employer in their area, and each recruits a large percentage of their staff from the local area, which means the expenditure of salaries in the local area supports further job creation.

xxv. Although the methodologies for calculating impacts vary, the studies clearly show the important role played by each of the HEIs in attracting people to visit Lancashire and spend money in the local economy. UCLan alone had nearly 400,000 attendees at events hosted at the University, and the substantial student populations at each of the HEIs are likely to attract hundreds of thousands of visitors to Lancashire each year.

xxvi. The universities play a key role in raising the skills of Lancashire residents, particularly at UCLan where one in every 100 Lancashire residents are enrolled on a course at the University. A large proportion of their graduates are retained within Lancashire, meaning Lancashire employers benefit from the productivity benefits associated with access to graduate level skills.

xxvii. A substantial proportion of graduates at each of the universities go on to work in the health or education sector. Whilst these are of vital importance to ensuring Lancashire residents have access to high quality public services, the low numbers of graduates going on to employment in the private sector gives some grounds for concern. A number of the priority sectors identified by the LEP have a high demand for high level skills, including financial and professional services, creative and digital and advanced manufacturing, yet very low numbers of graduates go on to work in these sectors.

1. Introduction

1.1 Regeneris Consulting was commissioned by Lancashire County Council to assess the economic contribution of colleges and independent training providers (ITPs) to the Lancashire economy. The study has three main elements:

- an assessment of the economic impact of the colleges and training providers through their expenditure in the local economy
- exploring the added value generated by improving the skills of the workforce
- a qualitative assessment of how the colleges are helping to address the skill shortages of priority sectors in the Lancashire economy.

1.2 The study provides an independent assessment of how colleges and ITPs are performing and where they are making the greatest contribution to the growth of Lancashire's key sectors. The sectors are all either large employers in Lancashire or have been identified as priority sectors by the Lancashire Local Enterprise Partnership (LEP). The sectors are:

- Health and social care
- Advanced manufacturing and engineering (including aerospace)
- Financial and professional services
- Visitor economy
- Energy and the environment
- Creative, digital and media

1.3 The study includes all sixth form and further education colleges in Lancashire and five ITPs (see Table 1-1). The list of ITPs was agreed with Lancashire County Council during the inception stage. These were selected on the grounds that they are large and well-established providers and/or they specialise in provision for one of the Lancashire LEP's priority sectors.

Table 1-1 Training providers included in study

Colleges	Independent Training Providers
• Accrington & Rossendale College	• JTL
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• Cardinal Newman Sixth Form College	
• Lancaster and Morecambe College	
• Myerscough College	
• Nelson and Colne College	
• Preston College	
• Runshaw College	
• St Mary's College, Blackburn	
• West Lancashire College	

1.4 In addition to the above, the study has also carried out a review of existing economic impact studies for higher education institutions (HEIs) in Lancashire, including Edge Hill University, the University of Lancaster, the University of Central Lancashire (UCLan) and the University of Cumbria which has a campus in Lancaster. The report draws out the key findings related to the economic footprint of each of the HEIs, and their contribution to improving the skills of the workforce in Lancashire (where this is available).

1.5 The structure of the report is as follows:

- Chapter 2 provides a quantitative assessment of the economic impact of the FE colleges and ITPs, including their role as employers and as providers of education and training which raises the skills of the current and future workforce of Lancashire.
- Chapter 3 reviews the evidence on how Lancashire training providers are building relationships with employers in their local area and meeting the skill needs of Lancashire LEP's seven priority sectors.
- Chapter 4 reviews the key findings from economic impact studies for the three largest HEIs in the region.

2. Economic Impact of FE Colleges and Training Providers

2.1 The economic impact assessment of the Lancashire colleges is divided in to two parts:

- Demand-side assessment: assesses the economic impact associated with the colleges' expenditure and the secondary impacts of that expenditure across Lancashire's economy.
- Supply-side assessment: assesses the benefits and costs to the economy of the service that is provided by the Lancashire colleges i.e. the added value that comes from improving the skills of the workforce.

Demand Side Impacts

2.2 The analysis of colleges and training providers' economic impact draws together three sources of economic impact:

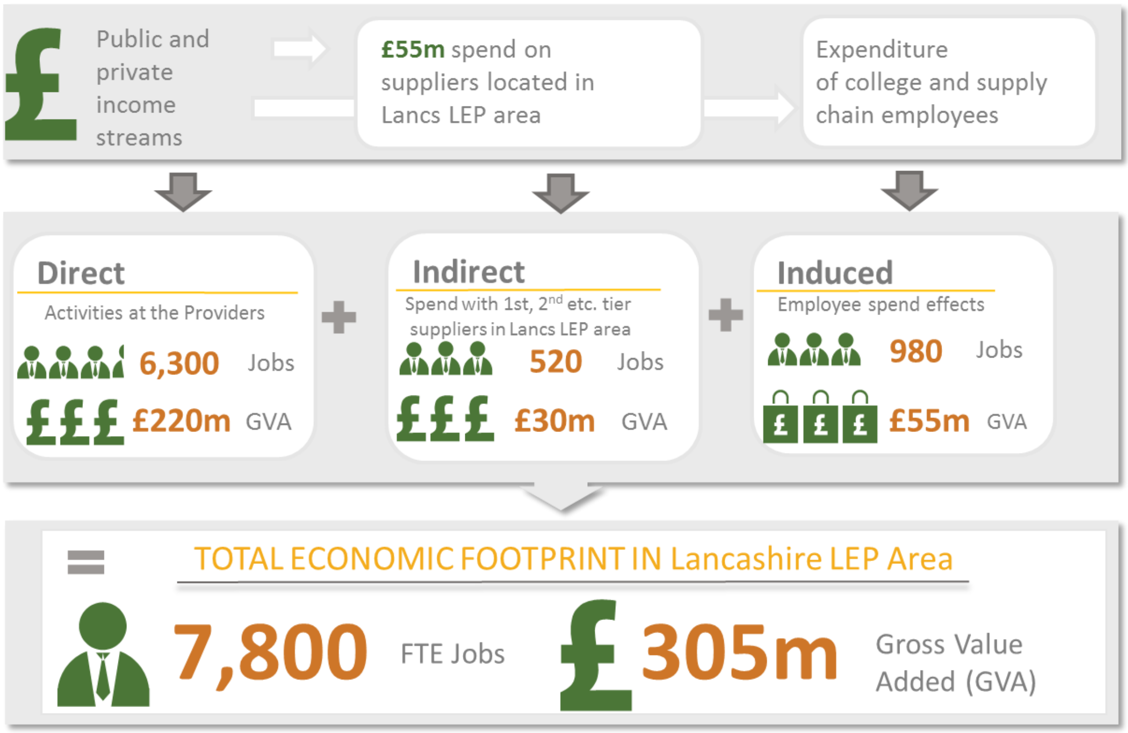
1) **Direct**: direct impacts are based on employment within the colleges and training providers themselves, and the associated value that is created within Lancashire.

2) **Indirect**: indirect impacts refer to the employment and GVA supported by the colleges' external expenditure (capital and revenue) on suppliers based in the LEP area. This expenditure creates employment and value added within the colleges' immediate suppliers and within all subsequent tiers of the supply chain, as these suppliers make purchases from their own suppliers, and so on.

3) **Induced**: induced effects refer to the effects of spending by employees whose jobs are supported directly within the colleges and indirectly within their local supply chains

2.3 In 2013/14 Lancashire colleges and training providers supported a total of 7,900 Full Time Equivalent (FTE) jobs and £310 million in Gross Value Added (GVA) in the Lancashire LEP area through direct, supply chain (indirect) and personal expenditure (induced) effects. Figure 2.1 presents a summary of how these impacts are generated.

Figure 2.1 Economic Contribution of Colleges and Independent Training Providers to Lancashire LEP Area, 2013/14 - Summary



Source Regeneris Consulting calculations and data provided by colleges and ITPs

Note: Modelled figures are rounded. Please see appendix for methodology

Direct

2.4 Lancashire colleges and ITPs employ a large number of staff, equating to 6,400 FTEs. In 2013/14, they generated a total direct Gross Value Added (GVA) of £224 million. Some of the largest colleges such as Blackburn and Blackpool and The Fylde College each employ just under 1,000 employees, which is comparable in size to small universities. The largest independent training provider is Training 2000 with over 250 employees.

Supply chain

2.5 The colleges spent a total of £56 million on suppliers based in the Lancashire LEP area, which was split between ongoing operations and capital expenditure. Generally, this was spent in the construction sector and the education services sector but there was also large amounts spent on food and catering and on transport. It is estimated that this expenditure supports a total of 530 FTEs and £30 million in GVA in the colleges and ITPs' direct suppliers and through subsequent supply chain multiplier effects.

Induced

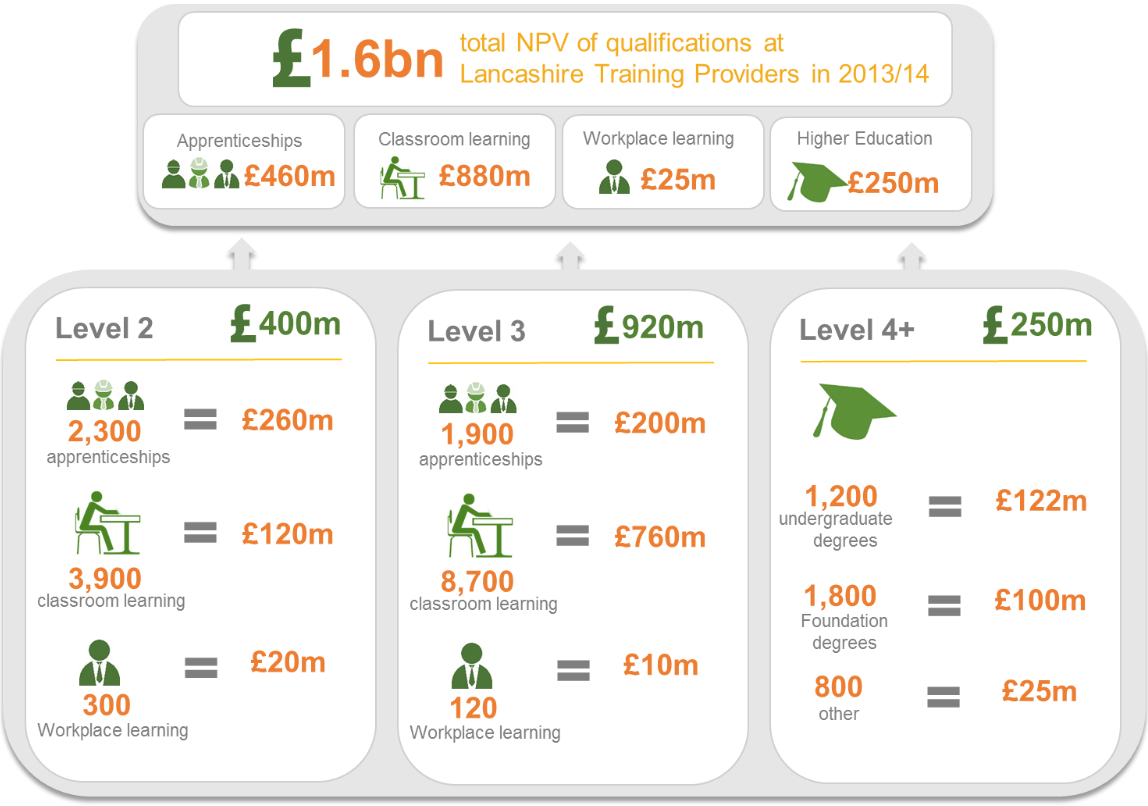
2.6 A large proportion of employees live in the Lancashire LEP area and as these employees spend a portion of their income locally on a range of goods and services, this supports economic activity in the LEP area. Further economic activity is also supported by the expenditure of those employees in the supply chain noted above. In total, it is estimated that these personal expenditure effects support a total of 990 FTEs and £55 million in GVA.

Supply Side Impacts

2.7 The supply side impacts are the economic benefits generated by the colleges and ITPs improving the skills of the workforce in Lancashire. Gaining qualifications increases both the learner's chances of finding employment and their potential earnings over the course of their working life. This study has drawn upon two recent studies on behalf of BIS to estimate the Net Present Value (NPV) of the qualifications gained in 2013/14. The NPV is calculated by estimating the discounted benefits from achieving a qualification over the working life of the learner, and subtracting the costs associated with undertaking the qualification.

2.8 Figure 2.2 shows that the NPV of qualifications achieved at the Lancashire colleges and ITPs amounts to £1.6bn. Of this, around £1.4bn is from FE provision and £250m is from HE. For the FE provision, this represents a return on investment of at least £16 for every pound of government funding invested.

Figure 2.2 Net Present Value of qualifications gained at Lancashire colleges in 2013/14



Source Calculations by Regeneris Consulting based on data from ILR and HEFCE

*Level 4 data based on HEFCE data for academic year 2012/13.

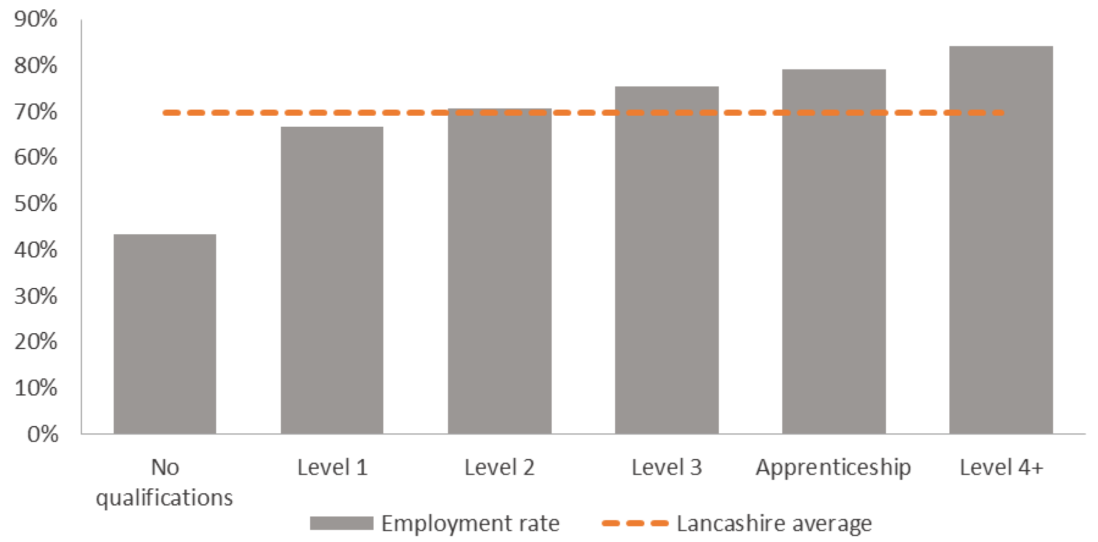
Employability

2.9 Figure 2.3 shows the employability benefits to Lancashire residents from gaining qualifications. A person's chances of finding employment increase for each higher qualification level. Nearly 85% of working age residents with a Level 4+ qualification were in employment at the time of the 2011

Census, compared to a Lancashire average of 70%. Gaining an apprenticeship is also likely to significantly increase the chances that a person will be employed at any point in their working life.

2.10 The chart also shows the significant increase in employment that comes from gaining basic qualifications at Level 1. This increases the chances of a Lancashire resident being in employment by over 20 percentage points. Although these effects are not included in the NPV calculation, the data suggests that the colleges and ITPs are making a vital contribution to improving access to employment for those people who left school without any qualifications[3].

Figure 2.3 Employment rate by highest qualification held in Lancashire, 2011



Source Census 2011

Note: Employment rate calculated as a percentage of total working age population.

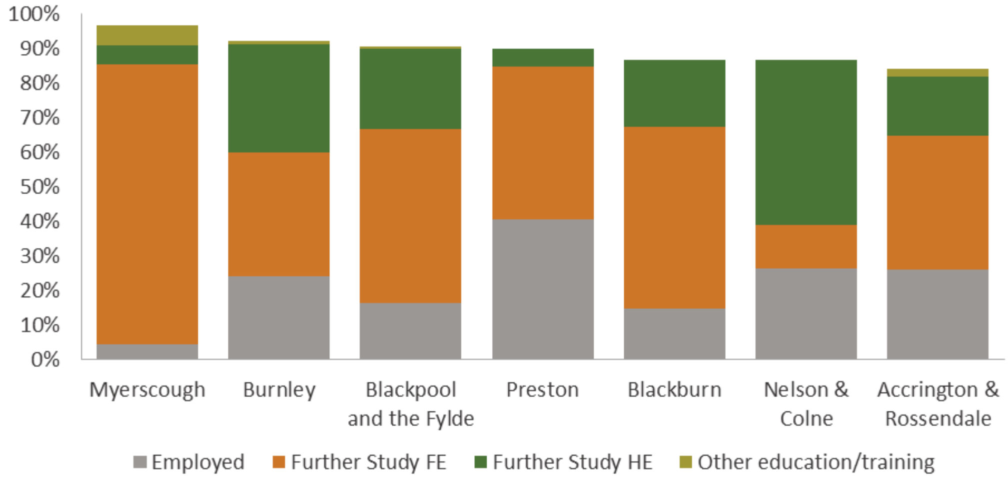
Note: the data is for all Lancashire residents at the time of the 2011 Census, not just those receiving education or training at the Lancashire colleges. The qualification levels are for all types of qualifications, including academic and vocational qualifications

Destinations of Students

2.11 A large proportion of students at the Lancashire colleges do not immediately enter the workforce upon gaining a qualification, but do go on to further develop their skills within further or higher education. Figure 2.4Figure 2.4 shows data from the destinations survey for full time students for each of the colleges where the information was available. It shows that all of the colleges achieved a positive destination rate of at least 85%.

[3] The Lancashire colleges delivered over 33,000 achievements at Level 1 in 2012/13. A number of these will be short courses and modules and would not result in a full Level 1 qualifications. It is also not known how many of these were for people with no prior qualifications.

Figure 2.4 Positive destination rate of full time students in 2013/14



Source Lancashire college learner destination surveys

Data is not shown for certain FE colleges such as Runshaw and Lancaster & Morecambe College. The data for these colleges was not in a consistent format with the other colleges and did not distinguish between progression to HE/FE and employment. Data was not available for ITPs

3. Working with Employers

3.1 A key focus of this study was how colleges and ITPs are helping to meet the skill needs of Lancashire's employers. The relationships that training providers build with employers in their area is of vital importance in the new skills policy and funding environment. The Government's skills strategy, Skills for Sustainable Growth, goes further than any previous measures in terms of transferring power away from Government and putting employers at the heart of the decision making process. Before focusing on specific sectors, this chapter briefly reviews the evidence on how FE colleges and ITPs are building and sustaining the relationships with employers in their local area, and reviews the evidence on the feedback received from employers about the quality of training provided and how effectively it meets their needs.

Quantity of Employer Engagement and Training

3.2 The employer engagement activities of colleges and ITPs varies from one-off contacts to long term relationships, and from arranging work placements to designing bespoke training courses on behalf of employers. This makes it difficult to quantify the level of employer engagement which takes place. Based on FE colleges' self-reported figures, they collectively have relationships with over 15,000 employers, a large proportion of whom have been engaged in the past year[4].

3.3 The FE Choices Survey for 2013/2014 shows there are around 7,200 employers who have received publicly funded training via one of the Lancashire colleges or ITPs[5]. It is not known how many of these employers are based in Lancashire, however it suggests that cumulatively a large proportion of employers in Lancashire receive some form of training via one of the colleges or ITPs[6].

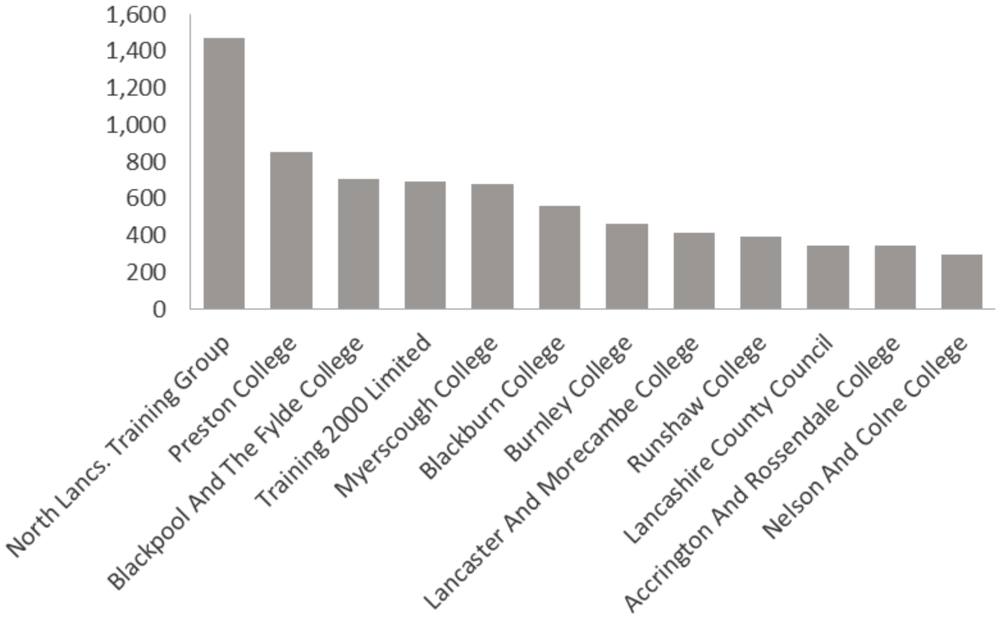
3.4 Figure 3.1 shows that North Lancashire Training Group (NLTG) has provided training to the greatest number of employers (over 1,400 according to the FE Choices Survey). Among the colleges, the data suggests that Preston College and Blackpool and The Fylde College both worked with over 700 employers during 2013/14, reflecting the size of these colleges and their location close to some of the largest employment centres in Lancashire.

[4] This is likely to include some double counting of employers as a number of colleges will have relationships with the same employers. It is also unknown how many of these are based in Lancashire

[5] This does not include those employers receiving training via In Training, JTL and Springfield Fuels (see notes in Figure 3.1)

[6] UK Business Counts data (ONS) show there are around 46,000 workplaces in Lancashire.

Figure 3.1 Number of Employers Receiving Publicly Funded Training via Lancashire Training Providers, 2013/14



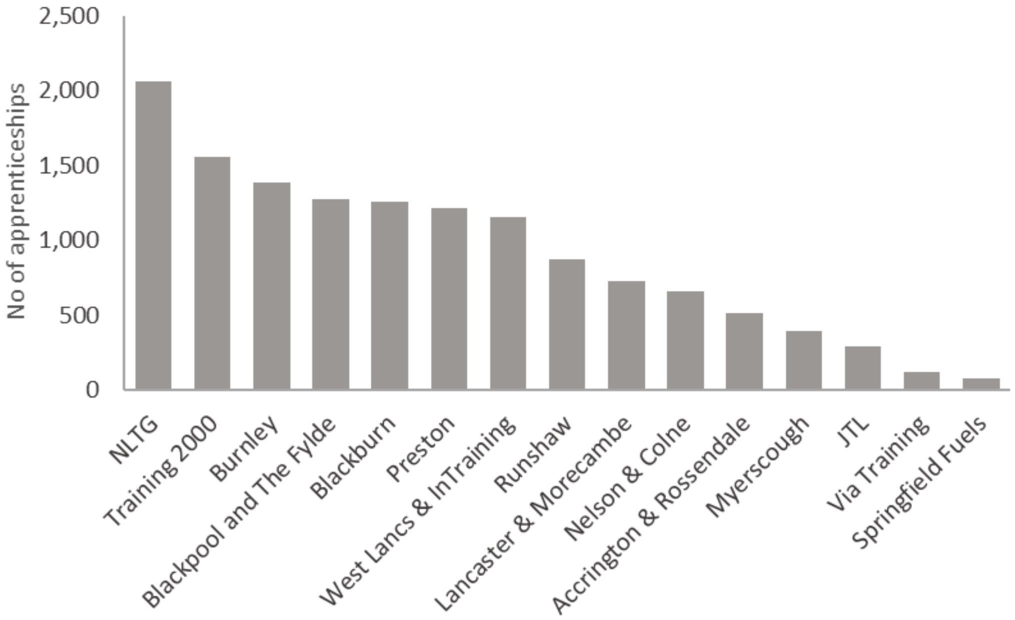
Source FE Choices

Note: Data is only shown for those providers where the majority of provision is likely to be in Lancashire. Data is not shown for In Training (part of Newcastle College) or JTL, which has branches across the country. Data was not published for Springfield Fuels due to the low numbers of employers that these organisations work with.

3.5 The vast majority of publicly funded training delivered to employers is through apprenticeships. ILR returns show there were 20,600 apprenticeships delivered by Lancashire training providers in 2013/14, of which 13,600 were delivered to Lancashire employers. This means that roughly 2% of employees in Lancashire in 2014 were enrolled on an apprenticeship with one of the providers.

3.6 The largest apprenticeship providers were two of the ITPs (NLTG and Training 2000). These organisations are the longest established work based learning providers in Lancashire, having been trading for approximately 50 years. Both organisations were founded by consortiums of businesses, acting together in the interests of specific sectors (engineering in the case of Training 2000, and furniture manufacturing in the case of NLTG). Although both organisations have grown and diversified over time, both have retained a key focus on these sectors, and continue to be owned by companies in the sector. This history, ownership structure and expertise in specific sectors means that they are recognised as the leading providers of training to employers in the county among both employers and potential apprentices, and explains why these outperform colleges.

Figure 3.2 Number of Apprenticeships for Lancashire Employers, 2013/14



Source ILR returns

Quality of Employer Engagement and Training

Independent Assessments

> Of the 11 FE colleges in the North West with a current OFSTED score of 'outstanding', six are based in Lancashire.

3.7 The commitment to employer engagement in Lancashire colleges is demonstrated through the most recent OFSTED reports. The FE colleges perform extremely well, with six of the nine colleges achieving a score of 'outstanding' and the remaining three receiving a score of 'good'. The colleges consistently score highly for their work with local employers. The reports highlight the successful strategic relationships that many of the colleges have developed with local employers, their commitment to responding to employer feedback and shaping the curriculum around the needs of business.

Table 3.1 OFSTED findings about Employer Engagement in Lancashire Colleges

	Date of report	Overall assessment	Comments about employer engagement
Accrington and Rossendale College	2009	Outstanding	The college is **exceptionally responsive** to the needs of employers and local and national priorities in developing its curriculum. It has excellent relationships with a wide range of regional and local partners.
Blackburn College	2008	Outstanding	Employer engagement is **outstanding**. The college works successfully with a wide range of employers. There is a proactive approach to meeting the needs of employers including bespoke courses well supported by the four CoVEs.
Blackpool and The Fylde	2013	Outstanding	The college works **extensively and very successfully** with a wide range of employers and agencies to identify current

			and future local skills needs. Managers plan courses that meet local needs and enable learners to gain skills and knowledge to progress into local employment.
Burnley	2009	Outstanding	Employer engagement is **very effective** and the college has successfully developed provision to reflect employment needs.
Lancaster & Morecambe	2012	Good	The college works **very effectively** with a range of employers, who are positive about the service provided and the skills their employees gain on programmes organised by the college.
Myerscough	2013	Good	The college's links with subcontractors and the wide range of employers are **good**… Employers are supportive of the college. Communications between the college and employers are good and the college works well with employers to accommodate their business needs.
Nelson and Colne College	2009	Outstanding	The volume of work undertaken for employers is **highly regarded** and is growing, but is currently relatively small. The apprenticeship programme is highly successful.
Preston's College	2013	Good	The college responds **very well** to the needs of employers and the local community… Work with key strategic partners is effectively strengthening the emphasis on employability skills and supporting the development of employer-driven qualifications.
Runshaw College	2008	Outstanding	The college works **very well** with employers and is expanding its work-based learning… Work-based learning is well managed. Communication across the college and with employers is **excellent**.

3.8 OFSTED reports are not available for a number of the ITPs. Where reports are available, all of the providers are judged to be good overall and receive positive comments about their approach to employer engagement, partnership working and improving the employability of learners.

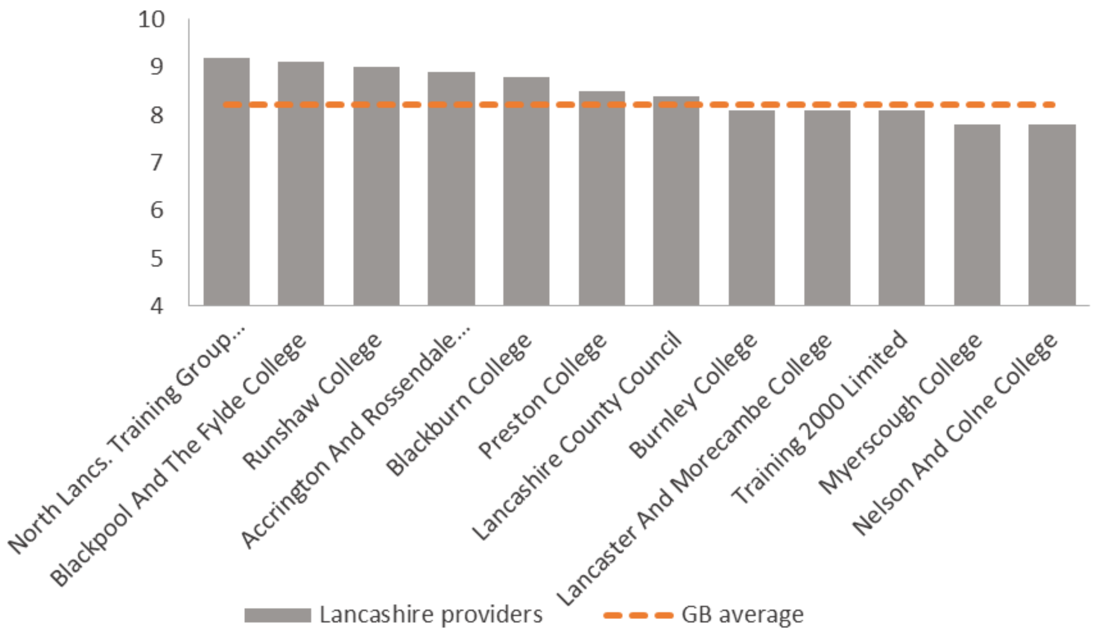
Table 3.2 OFSTED findings about Employer Engagement in Independent Training Providers

	Date of report	Overall assessment	Comments about employer engagement
JTL (report only available for organisation as a whole)	2012	Good	JTL works **very successfully with over 2,500 employers** throughout England, providing a broad range of work experience and learning locally. Communications with employers are mostly good… Staff work closely with employers to research and establish new programmes and support their development.
North Lancs Training Group	2015	Good	**Excellent partnership working with employers** and the community ensures that training programmes are designed to meet local and national needs.
Springfield Fuels	2012	Good	SFL works **very effectively** with employers to ensure that the provision meets their needs. Apprentices **significantly increase their employability** through their training
Training 2000	2015	Good	**outstanding partnerships** with employers and stakeholders ensure that courses are designed well to meet local and national skills shortages

Employer Perceptions

3.9 The FE choices survey, which surveys businesses that have received publicly funded training, found that the average overall satisfaction of employers with Lancashire based colleges and ITPs was 8.7. This was above the England median of 8.2 (for all training providers). There were also examples of colleges and ITPs receiving very positive feedback, including the North Lancs Training Group, Blackpool and The Fylde College and Runshaw College, which each received a score of 9 or above.

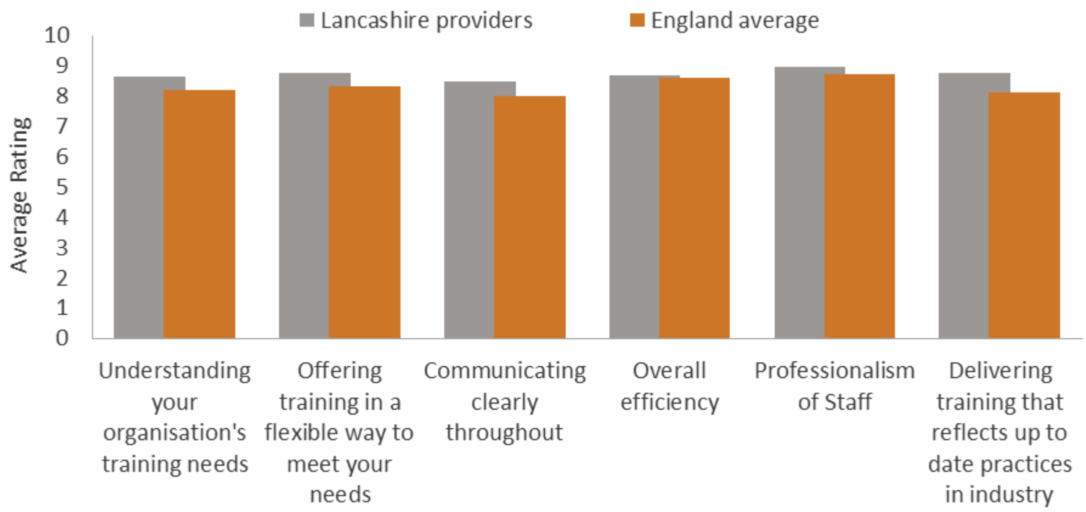
Figure 3.3 Average Overall Satisfaction Ratings of Training Providers in Lancashire, 2013/14



Source FE Choices, 2012/13. Data not available for Springfield Fuels, JTL and In Training

3.10 The FE choices data shows that Lancashire's colleges and ITPs collectively perform well across a range of indicators, outperforming the national average in each case. The Lancashire providers perform particularly well in terms of the professionalism of staff, the flexibility of provision and delivering training which reflects up to date industry practices.

Figure 3.4 Employer Satisfaction Ratings for Different Criteria



Source FE Choices 2013/14

3.11 OFSTED has also recently started surveying employers on the quality of training received by training providers. So far data is only available for NLTG and Training 2000, however both score very highly in each of the criteria assessed:

- Communication with employers: satisfaction rating of over 90%
- Reviewing individual employee's progress and tailoring provision to meet the needs of the employer: satisfaction rating of over 94%
- Ensuring training is up to date and relevant to the needs of the sector: satisfaction rating of over 94%
- Providing feedback and support: satisfaction rating of over 92%
- Whether they would recommend the provider to other employers: over 92%

4. Meeting Sector Skill Needs

4.1 This chapter identifies some of the key skills issues experienced by employers in a number of priority and high employment sectors in Lancashire, and assesses the contribution of Lancashire colleges and ITPs in helping to address those needs. Specifically, the chapter aims to :

- Provide the context for each sector, in terms of the total level of employment and key sub-sectors.
- Provide a short summary of the key skills issues and challenges being experienced by employers, both now and in the future.
- Provide a quantitative assessment of the qualifications and apprenticeships which have been delivered by Lancashire training providers in 2013/14, and identify any key mismatches between demand and supply.
- Provide a qualitative assessment of Lancashire training providers links with the sector, and whether there is evidence of high levels of engagement which is a key aim of Government skills policy.

Health and Social Care

Context

4.2 The health and social care sector is the largest sector in Lancashire, accounting for 15.9% of total employment and 10.8% of GVA. Employment in the sector is dominated by the NHS, however recently there has been substantial growth in the number of private health care providers, such as Ramsay Healthcare and BMI Healthcare which operate three hospitals within the region.

4.3 The importance of this sector lies not just in its contribution to the economy or as a source of jobs, but as a provider of vital public services upon which Lancashire communities depend. Skill shortages in this sector, more than any other, would have a direct impact on Lancashire residents' quality of life.

Key Skills Issues and Challenges

4.4 The health and social care sector faces considerable challenges over the next ten to twenty years. Lancashire's ageing population means that demand for health care services will grow, while a significant proportion of the workforce will retire. Forecasts of replacement demand produced by Working Futures suggest that the sector will need to recruit as many as 43,000 new workers, just to replace those leaving the workforce. NHS managers will need to address this skills challenge at a time when budgets are likely to be constrained, which could mean significant changes in the way that healthcare is delivered and the skills that are required. There will be greater use of assistive technologies which will increase demand for workers with these skills. However it may also result in changes in the roles and responsibilities of certain occupations, and may require new types of healthcare workers that can take on greater responsibilities from doctors and nurses.

4.5 Data from the 2013 Employers Skills Survey (UKESS) shows that 4% of workplaces in the health and social care sector have a skills shortage vacancy, which is slightly higher than the all sector average for Lancashire (3%). National data for the sector shows that 57% of skill shortage vacancies were in caring and personal service occupations and a further 31% in professional occupations. The skills which employers found hardest to find included job specific or technical skills, communication skills, team working and problem solving. The Sector Skills Assessments for the health and care sectors notes that organisation skills, problem solving and team working will be of increasing importance for healthcare workers because of the way these roles are expected to change over the next ten to twenty years.

4.6 Vacancies data for the health care sector in Lancashire shows a particularly high demand for nurses, with just under 3,000 vacancies posted in 2015 (to date), more than any other occupation[7]. There was also high demand for care givers who specialise in rehabilitation and mental health. This was consistent with the views of consultees who highlighted significant challenges with mental health and addiction, especially in some of Lancashire's most deprived communities.

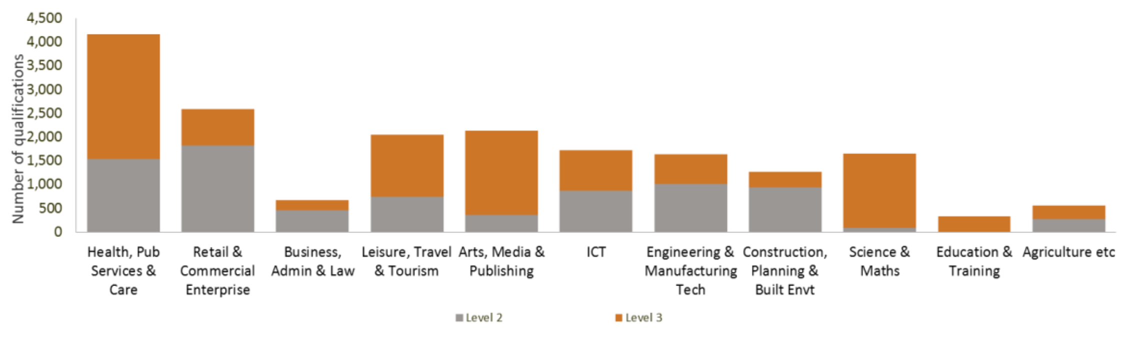
Supply of Skills from Lancashire Training Providers

4.7 Collectively the colleges and ITPs deliver significantly more vocational qualifications in health and social care than any other Sector Subject Area. ILR returns show that students achieved over 1,500 full Level 2 qualifications and over 2,600 Level 3 qualifications on health and social care related courses in 2013/14, representing 20% of all vocational qualifications achieved in that year.

4.8 Given that the health and social care sector accounts for around 16% of employment and will be the greatest source of demand over the next ten years, this high level analysis would suggest that, proportionally, Lancashire based training providers are broadly aligned with the scale of demand from this sector.

4.9 The majority of vocational qualifications were achieved in general health and social care courses (1,950), with over 1,000 specialising in children and young people and smaller numbers on courses focused specifically on counselling and mental health. These qualifications can provide a route in to higher education or employment as a senior healthcare assistant or support worker. The ageing population in Lancashire means that demand for these roles is likely to increase more than any other occupation over the next ten years.

Figure 4.1 Full Level 2 and Level 3 qualifications achieved at Lancashire colleges 2013/14

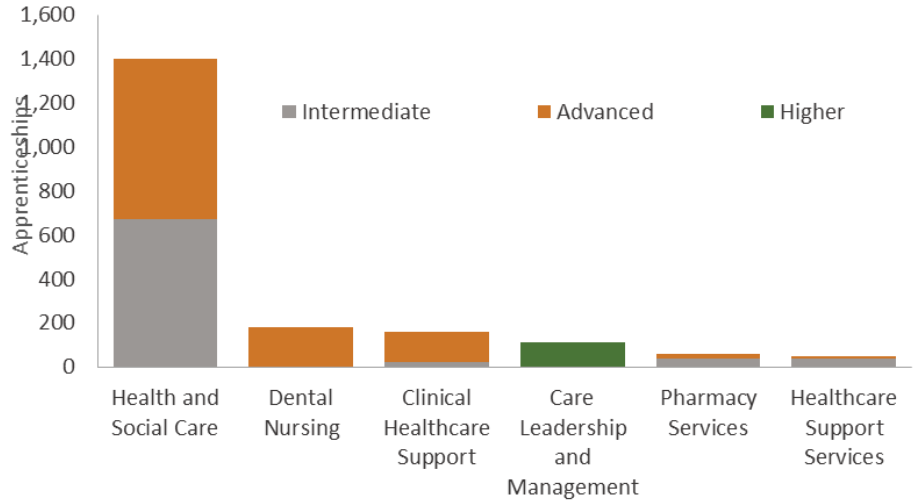


Source ILD returns

4.10 Training providers delivered training to nearly 2,000 apprentices in healthcare related frameworks in 2013/14, representing 15% of all apprenticeships delivered on behalf of Lancashire based employers. 1,400 of these apprentices were on the Health and Social care framework, which provides apprentices with the skills to work in a range of different health or care roles, such as healthcare support worker, community worker or social services officer. Completion of the advanced apprenticeship provides a progression onto Higher Education in subjects like nursing or midwifery or management roles in a care home.

[7] The data may be misleading as it also includes all postings for temporary staff, which in some cases could be for very brief periods of time

Figure 4.2 Number of Apprenticeships delivered for Lancashire based Employers, 2013/14



Source ILR

4.11 There is no data source which records the total number of full Level 4 qualifications in 2013/14. The ILR data shows that there were around 640 achievements on Level 4 courses in health and social care, however a number of these were modules or other courses which do not represent full Level 4 qualifications.

4.12 HEFCE data from 2012/13 showed that there were 580 enrolments on HE level courses at the Lancashire FE colleges in healthcare subjects[8]. The enrolments on these courses represented around 10% of the total HE enrolments on health and social care courses delivered in Lancashire institutions. This increases to 36% for social work and 44% for other subjects allied to medicine. The FE colleges are therefore making a substantial contribution to the skill needs of this sector in certain subject areas.

4.13 There are also several examples of where the colleges work closely with employers to design and deliver HE qualifications in specialised fields. An examples of this is Accrington and Rossendale College, which plays a vital role in training rehabilitation workers in East Lancashire through the Alcohol and Drugs Education Publications and Training programme (ADEPT)

Working with Employers

4.14 The scale of provision in the healthcare sector means that the Lancashire training providers have extensive links with employers and workplaces throughout Lancashire, including care homes, hospitals, foundation trusts and primary healthcare providers. Although the colleges account for the majority of provision in the sector, a number of ITPs also offer apprenticeship training on behalf of Lancashire based employers, including Training 2000. The extensive links with employers also mean that students benefit from work placements, which form a core part of vocational qualifications delivered at the colleges and ITPs.

4.15 There is good evidence that healthcare employers value the quality and responsiveness of training delivered through Lancashire training providers. The 2013/14 FE choices survey shows that healthcare employers gave an average satisfaction score of 8.6 out of 10, with several providers scoring nine or above. UKESS data also shows that FE college students are an important source of new recruits for employers in Lancashire's health and social care sector. 23% of employers in

[8] HEFCE data is not available for ITPs

Lancashire have recruited a 17-18 year old from an FE college in the past 2-3 years. This is nearly double the all-sector average (12%) and above the average for England (17%). It is also higher than the percentage who have recruited school leavers (16%) and university leavers (18%).

Key Findings

- The supply of skills for the health and social care sector is one area where Lancashire based providers excel. 22% of vocational qualifications achieved in 2013/14 were in health and social care courses which was more than any other SSA.
- The health and social care sector is likely to be the single largest source of demand for skills over the next ten to twenty years. This is caused by the ageing population in Lancashire which will increase demand for skills at a time when a large number of workers are retiring and when budgets are constrained. It is therefore vitally important that a large proportion of training provision should be in this sector.
- There is good evidence that colleges and ITPs have formed strong and extensive networks with healthcare employers. Rates of recruitment from FE colleges are very high, and employers give very positive feedback about the quality of training provision provided by Lancashire training providers.
- There are a growing number of providers who are working closely with employers in the design and delivery of HE courses, with some becoming nationally recognised specialists in the training and education in certain healthcare fields (eg Accrington and Rossendale College in alcohol and substance misuse).

Advanced Engineering and Manufacturing

Context

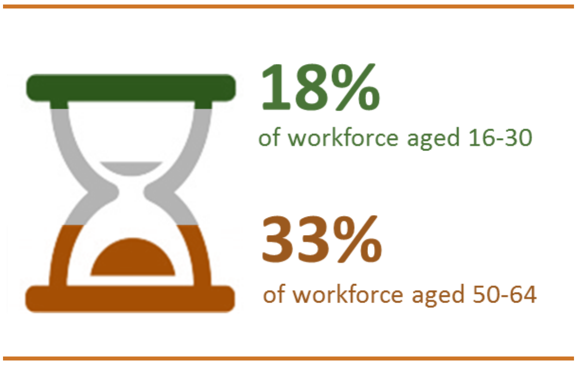
4.16 Lancashire's advanced manufacturing sector employs around 42,000 people, accounting for 7% of employment compared to a national average of 4%. The sector is also a significant source of wealth creation for Lancashire. The manufacturing sector as a whole accounted for 11% of employment but around 20% of Lancashire's GVA in 2012 . The sector therefore achieves much higher rates of productivity than other sectors in Lancashire.

4.17 The key sub-sector in Lancashire is the aerospace industry. There are around 12,500 people employed directly in the sector[9] (30% of all jobs in advanced manufacturing), with major employers including BAE, Rolls Royce and Aircelle, the largest private sector employer in Burnley. Lancashire's aerospace cluster is nationally significant; the LEP area accounts for 12.5% of aerospace employment in Great Britain. Outside aerospace, other key sectors include rubber and plastics (6,400 jobs), automotive manufacturing (4,000 jobs) and chemicals and chemical products (3,900 jobs).

[9] These jobs estimates are likely to understate the importance of the sector in employment terms. There are many other companies that form part of the aerospace supply chain but are included in other SIC codes because aerospace only forms part of their total workload (eg machining, plastics).

Key Skills Issues and Challenges

4.18 Lancashire's manufacturing sector[10] is highly dependent on an ageing workforce. Only 18% of the workforce are below the age of 25, compared to 33% who are over the age of 50. The largest source of demand for advanced manufacturing employers will therefore be the replacement of older workers leaving the workforce through retirement.



4.19 The potential for jobs growth in advanced manufacturing may be more limited than other sectors in Lancashire because of the capital intensive nature of the sector. Nevertheless, the growth prospects of the sector in Lancashire are very much tied to the performance of BAE Systems (particularly in the defence sector) and the size of the contracts that it wins, so is difficult to forecast with accuracy.

4.20 The North West Aerospace Alliance have estimated that the sector will face major recruitment challenges even if employment was to fall over the next twenty years, with the largest challenges arising from replacing technical positions requiring level 2 and level 3 qualifications, including assemblers, maintenance technicians, CMM inspectors and process operators. Technological change also has a big influence on the demand for skills in this sector, and employers will increasingly look for recruits who have experience of working with industry standard technologies, including CNC machining, additive manufacturing (3D printing), composites and computer aided design (CAD). This is reflected in the latest vacancies data which shows a large demand for engineering technicians, with skills in CNC machines and CAD.

4.21 The UKESS suggests that employers are already struggling to recruit the skills they need. 37% of vacancies were reported as difficult to fill because of a lack of skills among candidates, compared to an all sector average of 23%.

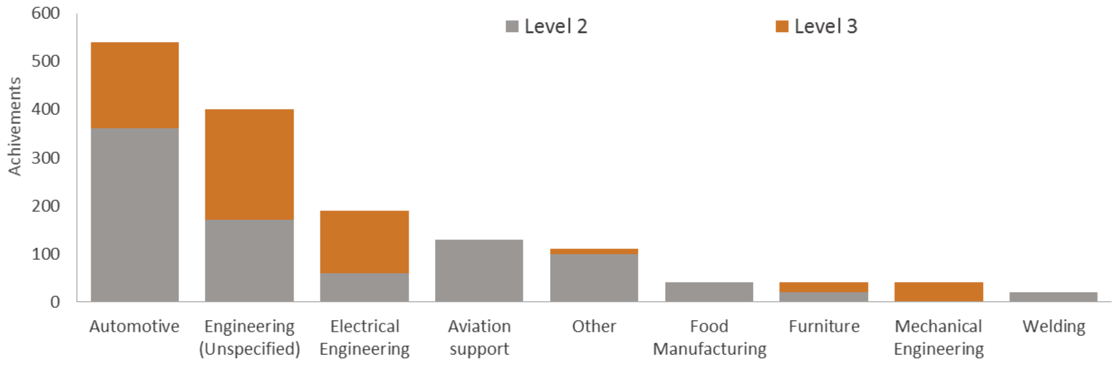
Supply of Skills from Lancashire Based Training Providers

4.22 Lancashire training providers delivered over 1,600 engineering qualifications at Level 2 or Level 3 in 2013/14, meaning there is a large supply of learners gaining the skills required to build a career in the sector. However a large number of these are in courses related to the automotive sector, including a large number of 16-18 year olds on courses related to vehicle repair and maintenance. Consultees reported that demand from employers is strong in this sector, however the supply of learners on these courses appears to be disproportionate to demand in Lancashire. The data suggests that more needs to be done to promote careers in other engineering disciplines (such as mechanical and electrical engineering) to satisfy the level and nature of demand from employers.

4.23 It should be noted that a number of consultees from FE colleges reported a significant increase in applications for engineering courses over the past year. However this is not borne out by the data, which shows that the number of people enrolled on full Level 2 or Level 3 courses actually declined between the 2012/13 and 2013/14 academic years.

[10] The data here is for the manufacturing sector as a whole. Census 2011 data on the characteristics of workers is not available for detailed SIC codes in Lancashire.

Figure 4.3 Vocational Qualifications n Engineering Subjects 2013/14



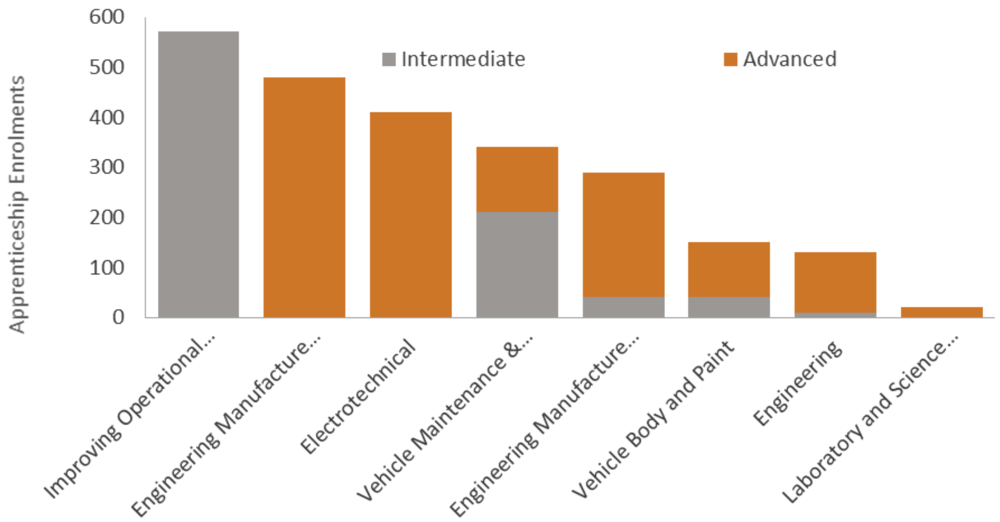
Source ILR Returns

4.24 Lancashire training providers delivered training to just under 2,500 apprenticeships relevant to advanced manufacturing in 2013/14. These accounted for 19% of all apprenticeship frameworks delivered in Lancashire, which is above the national average of 15%. This is what we would expect given the high share of employment in manufacturing in Lancashire.

4.25 Given that Lancashire's manufacturing sector as a whole accounts for 80,600 jobs, the data suggests that colleges or ITPs are providing apprenticeship training to one in every 32 employees in the sector. This is high given that a large number of businesses in the sector are SMEs which are less likely to take on apprentices.

4.26 Figure 4.4 shows that there are also a greater number of apprenticeships being delivered in subjects which are more relevant to the skill needs of the sector, including a large number of apprenticeships delivered on the Engineering Manufacture (craft and technician), Electrotechnical and Improving Operational Performance frameworks.

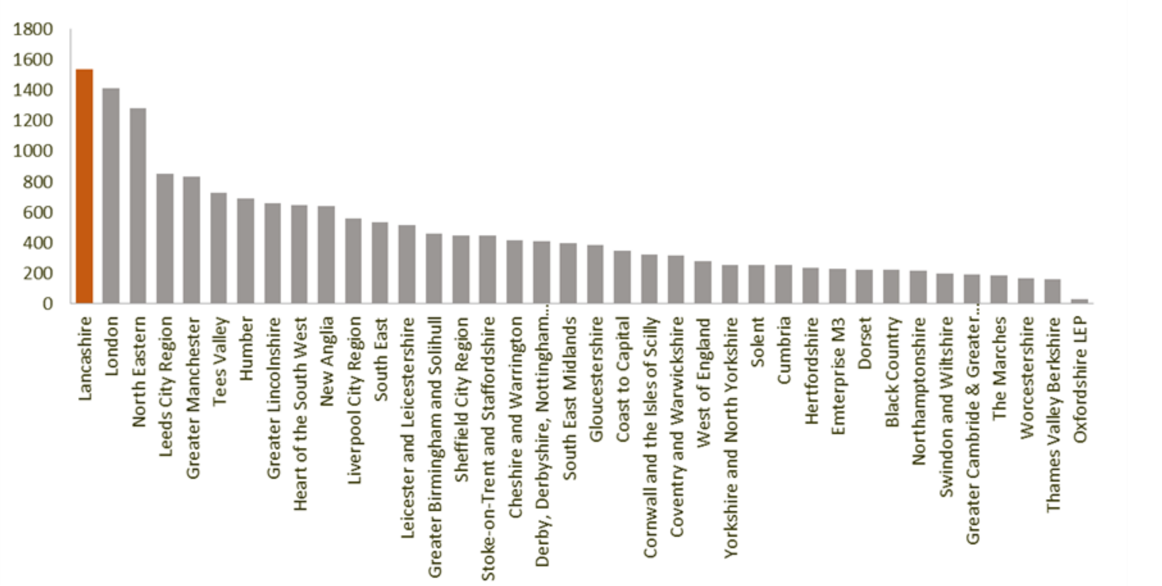
Figure 4.4 Apprenticeships delivered at Lancashire Training Providers for Lancashire Employers



Source ILR returns

4.27 As stated above, there is no definitive data source for the number of full Level 4 achievements at Lancashire training providers. However HEFCE data for 2012/13 shows that there were over 1,500 students enrolled on HE courses in STEM subjects at Lancashire colleges[11], with roughly 60% of these in engineering and technology courses. This is higher than any other LEP area in the country including London. A large proportion of these were delivered at Blackburn and Blackpool and The Fylde College, which have carved out national reputations for the delivery of high quality engineering courses related to local industrial strengths such as wind energy and marine engineering. A key benefit of the delivery of engineering qualifications in FE colleges in Lancashire is the high level of employer input in to the design of courses and the high level of work placements and work based learning which form a key part of all courses. This means that learners gain high level qualifications but also possess the work readiness skills sought by employers in the local area.

Figure 4.5 Students enrolled on HE courses in STEM subjects, 2012/13



Source HEFCE

Working with Employers

4.28 There is good evidence that manufacturing employers value the quality and responsiveness of training delivered through Lancashire training providers. The 2013/14 FE choices survey shows that manufacturing employers gave an average satisfaction score of 8.6 out of 10 (based on 185 responses). The most positive feedback was for the North Lancashire Training Group (average of 9.3), Blackpool and The Fylde College (9) and Blackburn College (9.2).

4.29 A number of Lancashire's training providers have well-established and successful partnerships with the major employers in the advanced manufacturing sector, and have established a prestigious reputation in the sector. Most notably, Training 2000, which is one of the largest Group Training Associations in England, has been providing training to the manufacturing sector for over 50 years and is recognised as a leading provider both within and outside Lancashire. Training 2000 accounted for over 40% of apprenticeship training for the sector in Lancashire and has long standing relationships with large companies including Rolls Royce, Aircelle, Fort Vale and Westons. A large number of manufacturing businesses are partners in Training 2000 and therefore donate their equipment to the GTA to ensure that trainees are learning on the most up to date technology and to the standard required in industry.

[11] HEFCE do not publish the data for ITPs

4.30 The high volume of training delivered by Training 2000 means that a key role for FE colleges is delivering courses and training which meets the needs of SMEs in Lancashire. The take-up of apprenticeships and investment in training is much lower for SMEs than larger businesses because of the staff resources required to manage apprentices, and the cost of high quality training which gives learners access to the latest industry technology. These concerns have been raised extensively with Lancashire colleges through their engagement with SMEs, emphasising the need for more flexible models of apprenticeships and investment in new state of the art facilities to rival that provided by private training providers. The colleges have responded by designing apprenticeships which are more flexible to the needs of small businesses, such as Nelson and Colne College, which has adopted a model where the first year of training is delivered in the classroom (with some work placements) and the apprenticeship beginning in year two when the learner has developed a certain level of work readiness skills.

4.31 There has also been significant investment in new facilities and industry standard technology at a number of colleges, which ensures that students have experience of the latest technologies and learn in environments which are as close as possible to real engineering facilities. These investments include the £5.5m engineering and science facility at Runshaw College, the advanced engineering and manufacturing innovation centre at Nelson & Colne and the STEM and Innovation Centre at Preston's College. Most notably, Burnley College and Themis (the college's apprenticeship training division) have invested in the Centre of Engineering Excellence which is now recognised as one of the leading engineering training facilities in the country. The investment has resulted in the college developing strong links with Aircelle, which uses Themis for a large proportion of their apprentice training, and a number of smaller companies in the Burnley area.

Key Findings

- Lancashire's ageing population is causing a major challenge for the advanced engineering sector, with evidence that Lancashire employers are already struggling to recruit people with the skills they need to replace retiring workers. The key priorities are technicians with experience of using latest technologies, including CNC machines, 3D printing, composites and CAD.
- Science and engineering is a key area for colleges and ITPs, particularly for apprenticeship training where engineering frameworks account for 19% of total provision. Roughly one in 32 employees in Lancashire's manufacturing sector are enrolled on apprenticeships with one of the Lancashire training providers.
- Lancashire is home to some of England's largest Group Training Associations, which specialise in engineering skills, and have well established reputations for delivering high quality training using state of the art technology. Training 2000 has relationships with some of the key players in Lancashire's manufacturing sector and play a key role in addressing skill needs in the sector.
- Lancashire's FE colleges have historically struggled to compete with GTAs, but are increasingly focused on improving the quality and flexibility of training to ensure that they are better placed to attract employers and high quality students, and cater to the needs of SMEs. This is exemplified by Burnley College which has invested significantly in new facilities which ensure that the training provided at the college meets the standard of Lancashire employers.
- A key strength of the colleges is the amount of HE provision delivered in engineering subjects. The key focus of these courses is on employability and employer involvement in the design of curriculums. This ensures that students gain the high level academic skills, but also the practical skills they will need to find a job in engineering. Much of the HE

provision in Lancashire colleges is focused on those sectors which are established or growing in Lancashire (eg Blackpool and The Fylde College's focus on the onshore oil and gas sector).

Professional and Financial Services

Context

4.32 Lancashire's Financial and Professional Services (FPS) sector employs around 82,000 people in over 10,200 businesses. There is a very wide range of activities in this sector, including legal and accounting activities, financial services, R&D and highly specialised consultancy activities. Major employers include National Savings and Investments (NS&I), the Co-operative Bank, Guardian Financial Group, and Chesnara Plc. Spatially, there are key employment concentrations in Preston, Blackburn and Fylde.

Key Skills Issues and Challenges

4.33 FPS is one of the fastest growing sectors in Lancashire over the past ten years, and is likely to continue to be a major source of demand for skills in the LEP area. The Skills Action Plan for the sector identifies the need to recruit 16,000 people to support jobs growth over the next ten years, in addition to the 46,000 required to address replacement demand.

4.34 FPS is a highly skilled sector. 55% of the workforce have a Level 4+ qualification, compared to a Lancashire average of 31%. The two most highly skilled occupations, managers and professionals, account for 42% of employment which is considerably higher than the Lancashire average of 28%. The key priority for Lancashire employers is therefore likely to be sourcing these high level skills, including accountants, solicitors, financial advisers and consultants. The demand for lower and intermediate skilled positions is likely to be lower, although there will still be a need for customer service roles, administrative assistants and bookkeepers.

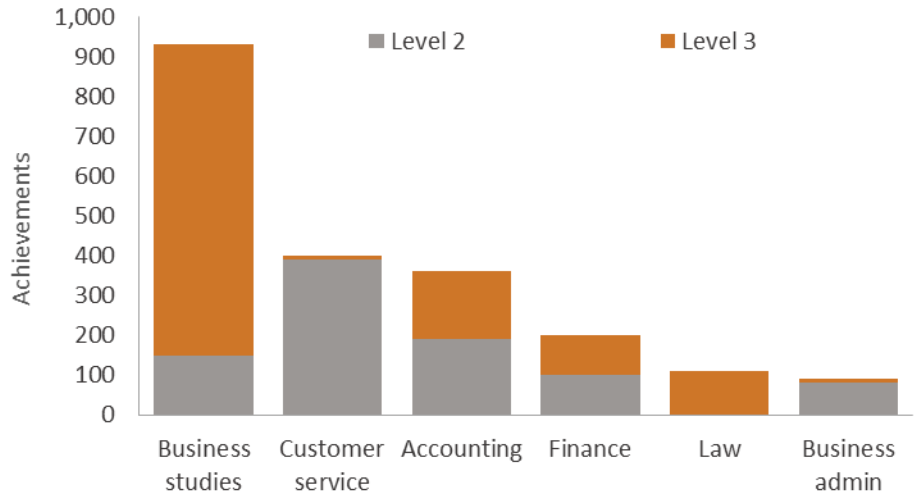
4.35 Data from the UK Employers Skills Survey shows that the sector has a high number of establishments reporting skills shortage vacancies in the Lancashire LEP (10% for financial services and 5% for business services). This is higher than the Lancashire average of 3% and suggests that employers do experience some difficulties finding candidates with the required skills. Vacancies data suggest that the key positions employers have been aiming to fill are business development, sales and customer service roles. The data also highlights a demand for financial advisers and IT skills, which was consistent with the sector consultations.

Supply of Skills from Lancashire Based Training Providers

4.36 Lancashire training providers delivered just under 2,300 full Level 2 or Level 3 achievements in subjects related to FPS in 2013/14. A large proportion of these were on general business studies courses (930), but a significant proportion were in accounting courses and customer service which are both likely to be key skills in demand by employers. There were just under 400 qualifications gained in accounting courses which should equip students with the skills to become an accounting technician or an entry route to employment as a chartered accountant.

4.37 Overall, however, it is unlikely that these qualifications in themselves are likely to address the needs of employers in Lancashire, since the greatest demand is likely to be for higher level skills. The ILR returns and HEFCE data suggest there are a low number of achievements on HE level courses which are likely to be in demand from employers.

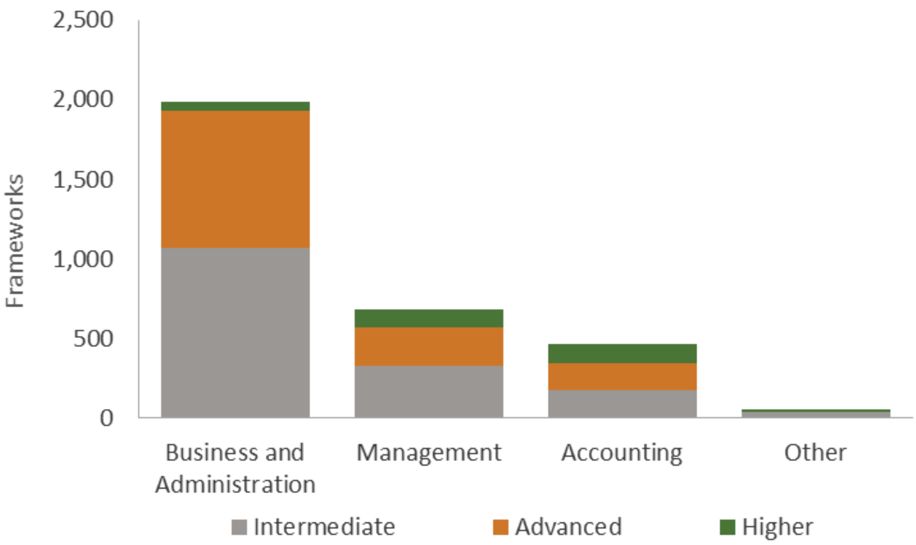
Figure 4.6 Level 2 and Level 3 Achievements in Courses Relevant to Financial and Professional Services



Source ILR returns

4.38 Lancashire training providers delivered training for over 2,000 apprenticeships relevant to FPS in Lancashire in 2013/14. Around 2,700 of these were in management and business and administration apprenticeships so could have been delivered to employers in a wide range of sectors beyond professional and financial services. The colleges also delivered 460 apprenticeships in accounting, including 150 higher level apprenticeships which provides the learner with a route to becoming a chartered accountant.

Figure 4.7 Apprenticeships relevant to Financial and Professional Services at Lancashire Training Providers, 2013/14



Source ILR

Working with Employers

4.39 There is less evidence of colleges and ITPs developing strong working relationships with employers in FPS than other sectors. This reflects the fact that most employers look to recruit people with graduate level skills and therefore see little value in engaging with vocational training providers. This is borne out by national data from the UK Employers Perspectives Survey which shows the level of engagement between employers and colleges is much lower in this sector than many others.

4.40 A further challenge for colleges and ITPs is that, outside the main sub-sectors of accountancy and law, this sector is complex and diverse. Consultancy alone can include a very wide range of specialisms and require different skill sets. The fragmented nature of the sector and the high concentration of very small companies means it is very difficult for colleges to engage with employers and provide channels for them to influence mainstream provision. This was reflected in consultations with providers which identified very few examples of successful working relationships with FPS employers.

4.41 The exception to this was in the accounting sector, where there are established vocational qualifications (AAT) and apprenticeships offered at a number of the colleges and ITPs including Training 2000. A number of accounting firms reported that this is a popular and growing route for recruitment and training in the sector, which is mutually beneficial to the employer and the learner. It enables an employer to recruit locally and have a direct influence on the development of their employees. They also stated that it can also improve staff retention as the employer and the learner develop a strong relationship. For the learner, the benefits are that they have a route to gain high level qualifications and become a chartered accountant without incurring tuition fees. Accounting apprenticeships have grown in popularity; the number of starts in England has increased by nearly 3,000 (44%) since 2009/10, however the numbers are still low overall. There may be opportunities to increase the level of provision by raising awareness of this route among both employers and young people.

Key Points

- FPS is a highly skilled sector, and the majority of demand will continue to be for people with degree level qualifications. Law firms, R&D companies and consultancies are therefore less likely to see the value in engaging with a local training provider. As a result, the colleges and ITPs do not make a substantial contribution to addressing the skill needs of this sector.
- Lancashire based training providers do have a role in addressing the lower and intermediate skill requirements of the sector. The colleges and ITPs deliver a large number of business administration and customer service apprenticeships, although these are delivered to a wide range of employers and not just those in the FPS sector.
- There may be opportunities for colleges and ITPs to increase provision in accounting, where AAT qualifications and apprenticeships are an increasingly attractive route for many employers, which means young people can avoid incurring tuition fees. The introduction of a Trailblazer Apprenticeships in law may also mean that increasing numbers of legal firms consider this as an alternative to graduate recruitment.

Visitor Economy

Context

4.42 The visitor economy in Lancashire employs an estimated 50,500 people[12] (8% of total employment in the county). In addition to the hotspot in Blackpool, above average concentrations also exist in Wyre, Lancaster and the Ribble Valley.

4.43 Lancashire's tourism offer has traditionally centred around the countryside and particularly its coastal resorts, including its major attractions such as Blackpool Pleasure Beach, the illuminations and Blackpool Tower. These will continue to be central to the Lancashire brand, however the county is also increasingly recognised for its food and drink offer, including a number of high profile restaurants, farmers markets, food producers and food and drink trails. These include Northcotes, The Inn at Whitewell and Heathcotes. Visit Lancashire is keen to build upon its food and drink assets, which will form a key part of the emerging Visitor Economy Strategy.

Key Skills Issues and Challenges

4.44 Lancashire's visitor economy is highly dependent on a young and transient workforce, characterised by high levels of part time work. Although the sector does not have an ageing workforce, the high rate of labour turnover raises different challenges, as employers need to replace the high volume of employees who work in the sector for a short periods of time before moving on. The sector is highly reliant on low level skills, with a large share of employment in low paid elementary occupations (20%) including kitchen and catering assistants, bar and waiting staff and cleaners.

4.45 UKESS data shows that just 1% of employers in Lancashire's hotels and restaurants sector reported having a skill shortage vacancy in 2013, compared to an all-sector average of 3% and a national average for the sector of 5%. Employers in the tourism sector in Lancashire therefore generally find it easier to recruit than they do in other parts of the country and in other sectors. However there remain challenges in certain locations and in certain occupations. Analysis of vacancies data shows that chefs, cooks and catering assistants account for over 20% of jobs posted by employers in Lancashire's tourism sector in the past year. A further, ongoing challenge for employers in the sector is finding people with good customer service skills, which is the most common skill gap reported by Lancashire based employers. Consultees were keen to stress that people skills and having the right attitude to work are of much greater importance to employers than vocational qualifications for the majority of positions.

4.46 The key issue for this sector, reported by a number of consultees, was that bright and hard working young people are deterred from developing a career in tourism because they perceive it to be low skilled and low paid work, and have little understanding of the opportunities for career progression or to own their own business.

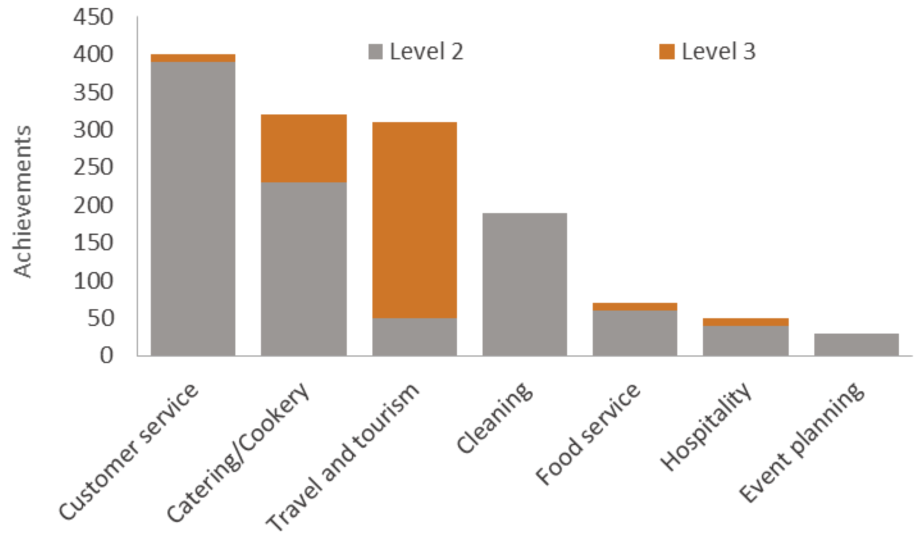
Supply of Skills from Lancashire Training Providers

4.47 Lancashire training providers delivered around 1,400 full Level 2 or 3 qualifications in subjects relevant to the Visitor Economy in 2013/14. The most popular course was customer service (400 achievements), although these skills are likely to be in demand from a broad spectrum of sectors and not just tourism businesses.

[12] Skills in Lancashire: Visitor Economy Skills Action Plan, Ekosgen 2015

4.48 There were just over 300 qualifications gained in catering/cookery courses, however the majority of these were at Level 2, and there is likely to be insufficient numbers to satisfy the level of demand for Lancashire employers, particularly for those high end restaurants looking for chefs of a high calibre. There were also very low numbers achieving qualifications on hospitality courses. This is likely to be a reflection of the point made above, that very few young people choose to pursue a career in hospitality and catering.

Figure 4.8 Full Level 2 and Level 3 Qualifications gained at Lancashire Training Providers, 2013/14

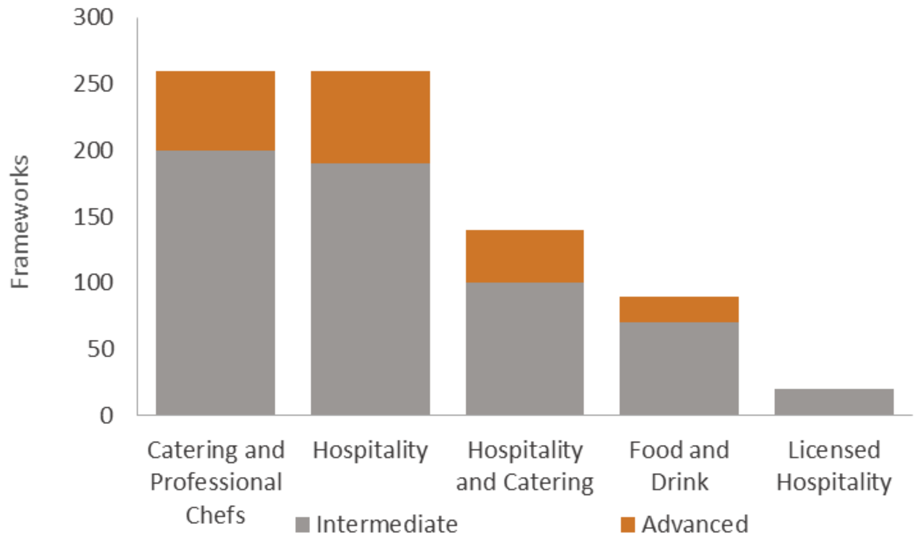


Source ILR returns

4.49 Figure 4.9 shows there were around 770 people enrolled on tourism related apprenticeships in 2013/14. Based on a total employment level of 50,500, this means only one in 65 employees are enrolled on an apprenticeship. Although this is a low number of apprenticeships, a large proportion were catering frameworks, which is identified as a key skill priority for the sector.

4.50 The outstanding provider in this sector is NLTG which is a well-established and award-winning provider of catering and hospitality apprenticeships and has recently invested in a new, state of the art Catering and Hospitality Training Centre. NLTG accounted for just under half of the apprenticeship training delivered in Lancashire in 2013/14.

Figure 4.9 Apprenticeship Frameworks in Subject Areas related to Visitor Economy, 2013/14



Source ILR returns

Working with Employers

4.51 The low penetration of apprenticeships in this sector largely reflects a reluctance on behalf of Visitor Economy employers to invest in training due to the high staff turnover rate in the sector, as they are afraid that trained apprentices will move on or will not complete the training. Consultees also reported being deterred by the cost and administrative burden associated with apprenticeships. As a result a large number of employers look to provide training in-house.

4.52 Although there is less training delivered through the Lancashire training providers on behalf of employers in this sector, the overall satisfaction with the quality of training delivered was very high, with an average score of 9.3. The most positive feedback was for North Lancashire Training Group (average score of 9.5 based on 36 responses) and Blackpool and The Fylde College which also achieved a score of 9.5 based on 25 responses.

4.53 A number of colleges reported that they had seen significant growth in the number of hospitality and catering apprenticeships being delivered in recent years and reported strong working relationships with a number of local employers in the sector. Several of the colleges have received recognition for the quality of their hospitality and catering courses, and have invested in training kitchens and restaurants which are open to the public and give students hands-on experience of working in a fast paced restaurant using equipment used in high end restaurants. Notable examples include Accrington and Rossendale's Visitor Economy Centre, Farringtons restaurant at Nelson & Colne and Foxholes restaurant at Runshaw College. Each of these colleges has formed strong relationships with high profile hotels and restaurants including Northcotes, Mercure Hotels, Leyland Hotel and L'Enclume in Cumbria.

Key Points

- Overall this sector has low levels of skill shortage vacancies and there is limited evidence to suggest that access to skills is constraining the growth of existing businesses. There is however an ongoing shortage of good quality chefs and caterers, and longstanding deficiencies in the customer service skills of staff.

- The outstanding provider in this sector is NLTG which is a well-established and award-winning provider of catering and hospitality apprenticeships. NLTG accounted for just under half of the apprenticeship training delivered in Lancashire
- The key issues experienced by employers are that many young people are deterred from developing a career in the sector, and only stay in jobs for short periods of time. This deprives employers of the brightest young people and deters employers from investing in training.
- The low level of interest in the sector is reflected in the low number of people who choose to study relevant courses at Lancashire colleges, despite a large number of opportunities being available locally. This suggests there is a need for the careers guidance provided in schools to better reflect the local opportunities in this sector, and for local schools to build stronger links with employers which raise awareness of the varied career options and benefits of working in tourism.
- Despite the relatively low levels of training delivered on behalf of employers, the colleges and ITPs receive excellent feedback about the quality of training which is delivered. There is good evidence of a strong working relationships with many of the high profile employers in the sector, including Blackpool's tourist attractions and the high end restaurants that are expected to play a key role in promoting food tourism in Lancashire.

Energy and Environmental Technologies

Context

4.54 The Energy and Environmental Technologies sector (EET) includes a number of large firms including Springfield Fuels, EDF, AMEC, SITA and Westinghouse Toshiba. The Skills Action Plan for the sector[13] states that it employs around 40,000 people in over 5,200 businesses. In practice a large number of these businesses and employees are likely to be in supply chain sectors such as manufacturing and construction, rather than core activities such as power generation.

Key Skills Issues and Challenges

4.55 The EET sector is particularly exposed to the challenge caused by an ageing population, with around half of the workforce aged over 45. The Skills Action Plan for the sector notes that replacement demand is likely to significantly out number any demand for skills as a result of net growth in the sector.

4.56 The potential for future jobs growth is highly uncertain as it depends on whether a number of planned major energy projects are approved, and at what scale. These include the decommissioning of the nuclear reactors at Heysham, the possible development of a new nuclear power station, offshore wind, underground gas storage and shale gas exploration and extraction. There is uncertainty about the timing and scale of each of these projects, many of which could generate a significant demand for skills.

4.57 Research carried out by UCLan in to the energy sector in Fylde (where a large proportion of the jobs will be located) found that the majority of demand would be for lower and intermediate skilled roles (Level 2 and Level 3), mainly in the civil engineering and construction industry. These would include general labourers and operatives, welders, engineering and electrical technicians and drilling specialists.

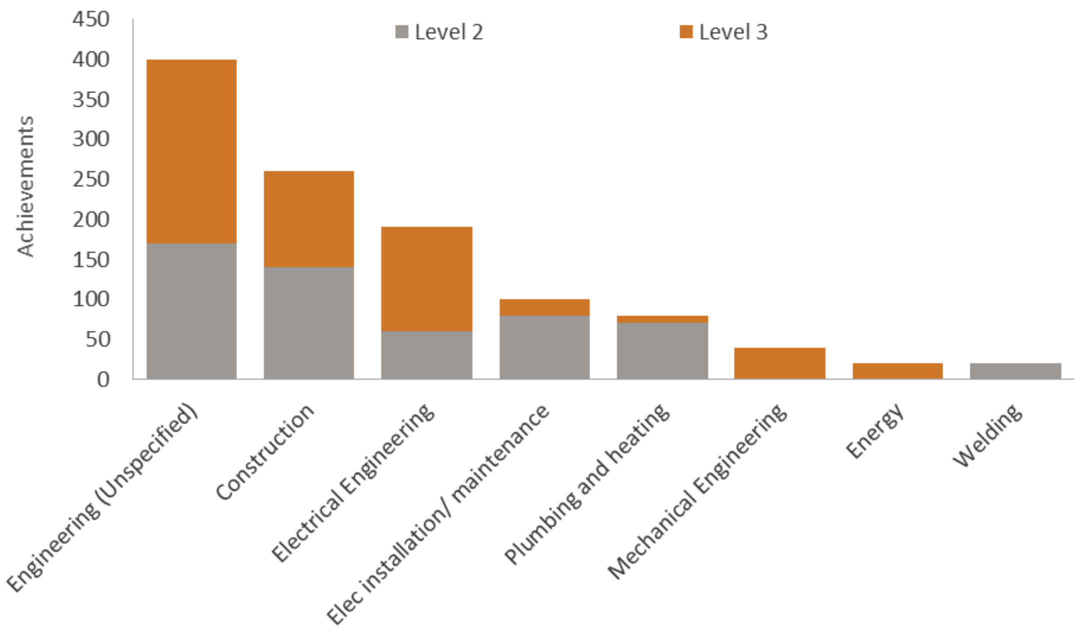
[13] A Skills Action Plan for Lancashire's Energy and Environmental Technologies Sector

4.58 While there is limited evidence of skill shortages and skill gaps in the sector at present, the potential scale of demand from these projects means that there may be a shortage of engineering and construction skills in the future.

Supply of Skills from Lancashire Training Providers

4.59 Figure 4.10 shows the number of qualifications achieved through Lancashire providers in subjects relevant to EET. The number of people choosing to study these courses is relatively small, given that these skills will be in demand from a cross-section of sectors including construction, manufacturing and EET. However the fact that there are currently very few skill shortages suggest that this is not yet impacting upon employers in the EET sector (unlike manufacturing).

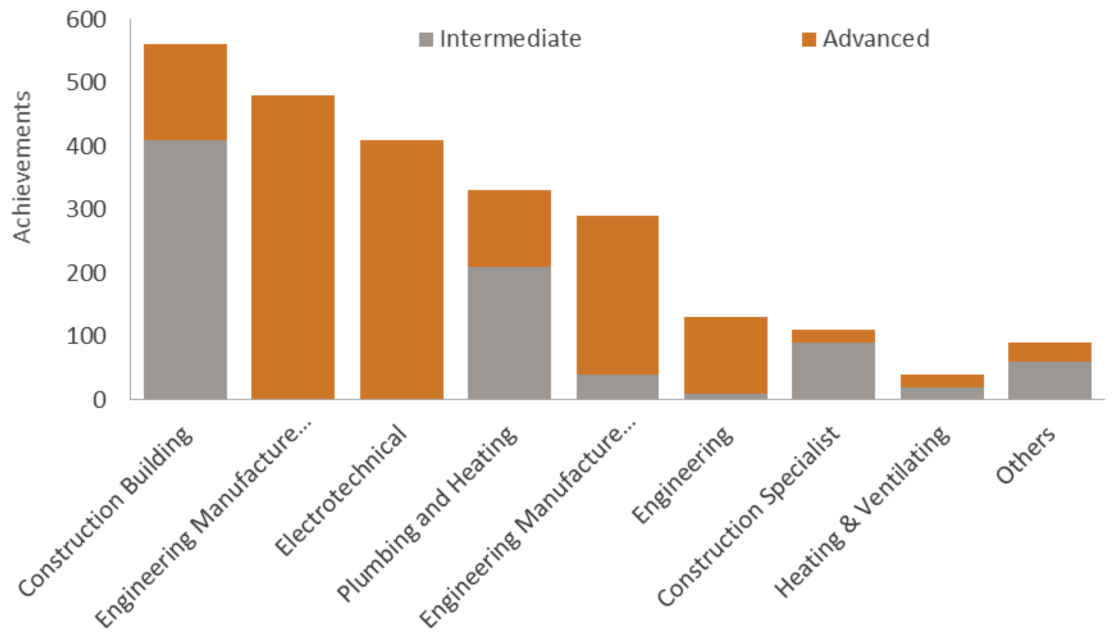
Figure 4.10 Level 2-3 Qualifications Achieved at Lancashire Providers in EET Subjects, 2013/14



Source ILR returns

4.60 There were around 2,500 apprenticeships delivered in frameworks relevant to the EETS sector, however it is not known how many of these were actually delivered on behalf of employers in the energy sector. UKESS evidence suggests that employers are less likely to invest in apprenticeships or training for their staff than other sectors such as manufacturing and construction. It is therefore likely that the majority of these apprenticeships were for employers in these supply chain sectors rather than core energy sectors. There were, however, over 300 apprenticeships in plumbing and heating and a small number in heating and ventilating, which are a core part of this sector.

Figure 4.11 Apprenticeship Frameworks Delivered in Relevant Sector Subject Areas, 2013/14



Source ILR

Working with Employers

4.61 The evidence suggests that very little publicly funded training is currently delivered on behalf of employers in the core EET sectors of power generation, water and sewage, and treatment of waste. The number of apprenticeships delivered in these specific sectors was very low, and very few employers from these sectors gave feedback as part of the FE Choices survey. This does not necessarily reflect low levels of engagement between providers and employers, and may just reflect the low level of demand at the current time.

4.62 One notable exception to this is Springfields Fuels Limited (SFL) which is one of the major employers in the EET sector in Lancashire, but also one of the training providers covered by this study. SPL manufactures oxide fuel products for the nuclear reactor fleet and other nuclear intermediaries. The company currently employs 1,300 people on a site near Preston where it has its own purpose-built training centre. SFL contracts with the Skills Funding Agency to provide engineering training for apprentices. SFL then employs a number of the apprentices and provides their on-the-job training. The remainder are employed by other local businesses and are given on-the-job training by them. The overall number of apprenticeships delivered by SFL is low (around 80) but this reflects the current level of demand from this sub-sector.

4.63 JTL is another established training provider, which specialises in this sector. JTL is a national registered charity, borne out of the Electrical Contractors Association and the Union Unite. The organisation works with approximately 3,000 businesses nationwide and is the single largest provider of apprenticeships to the building services engineering sector, which includes plumbing, electrical, heating and ventilation and engineering maintenance. However the numbers of these apprenticeships delivered in Lancashire in 2013/14 was low.

4.64 The key challenge for providers in this sector is how they respond to a large increase in demand anticipated over the next ten years, as a large proportion of the workforce retires and major projects come on stream. The location of the projects on the Fylde coast mean that demand will be concentrated in the west of Lancashire, and will require providers in this area to have developed a good understanding of the specific skill needs of the sector, and be able to respond flexibly to meet the level of demand.

4.65 One example of a college which is laying the foundations for this is Blackpool and The Fylde College. The college is a nationally recognised training provider in a number of energy fields. It is the leading FE college provider of nuclear related training in the North West and is one of the few FE colleges in the country to be a Quality Assured Provider for the nuclear National Skills Academy. The college has also built longstanding relationships with oil and gas exploration companies (eg Cuadrilla), and has recently been named the National College Hub for Onshore Oil and Gas, which has been set up by UK Onshore Oil and Gas (UKOOG) to meet the industry's future skills needs and help the UK to become an international centre of excellence for onshore operations. The college will deliver a comprehensive range of qualifications, up to and including honours degree programmes. Since the announcement, the college has experienced an unprecedented surge in demand for engineering courses.

Key Points

- The key challenges for this sector will be the need to replace a large volume of workers leaving the workforce through retirement, and to address the potentially large skill requirements of a number of planned projects and initiatives.
- There is currently limited evidence of skill shortages, but this could change if the demand for skills increased as a result of these projects. Key skill shortages are likely to be engineering technicians and control and instrument engineers, which requires electrical engineering qualifications.
- The colleges and ITPs currently deliver limited training to employers in the sector, reflecting the current low level of demand. However a number of training providers have significant expertise across a range of EET sub-sectors and are well placed to respond to an increase in demand. Notable examples include JTL, Springfield Fuels and Blackpool and The Fylde College which is developing a national reputation in the sector.

Creative and Digital

Context

4.66 The creative and digital industries is a small and developing sector in Lancashire. It accounted for around 18,000 jobs in 2013, representing 3% of employment and contributed around 5% of Lancashire's GVA[14]. These figures may understate the size of the creative and digital sector in Lancashire, as many creative sectors are characterised by high levels of self-employment and very small companies which are not captured by the most commonly used datasets[15].

4.67 The three largest sub-sectors are all digital industries, including telecommunications, IT programming and consultancies and information service activities (eg data storage). These three sub-sectors make up 70% of employment in the sector (13,000 jobs). The remaining creative sectors, which all rely on the production or distribution of creative and artistic content, account for

[14] Based on the two closest matching broad sic categories - ICT and arts, entertainment and recreation

[15] BRES captures all those businesses which are registered for VAT or PAYE. This means that it does not capture those businesses which have an annual turnover of less than £70,000 per annum or which have a registered employee. This may miss many of the freelance

only 5,000 jobs in Lancashire (less than 1% of total employment). These jobs are spread over a large number of very small employers.

Key Skills Issues and Challenges

4.68 This is another highly skilled sector which relies principally on graduate level qualifications, which remains the established recruitment route in the sector. The demand for skills will continue to be focused on degree level qualifications, particularly for computer science degrees, and will be greatest for the professional ICT roles which currently account for a large share of employment (programmers, software developers, telecoms engineers, IT consultants and web designers). The sector is characterised by continuous technological advances so the sector is likely to become more highly skilled over time.

4.69 UKESS data for Lancashire is not available for the creative and digital sector, however other sources suggest that employers are already experiencing difficulties recruiting the skills they need. Vacancies data shows employers are trying to recruit large numbers of web design professionals, and programmers. An employer survey carried out by Manchester Digital[16], which represents businesses across the North West, also drew similar conclusions about the skill priorities of the sector. The vast majority of respondents identified technical development roles such as programmers as being the most difficult to fill. The report noted a growing mismatch between the skill needs of the sector and the talent pipeline, with the number of computer science graduates falling and the number of creative arts and design students increasing in recent years.

Supply of Skills from Lancashire Providers

4.70 The evidence presented above suggests that the main demand from employers in the creative and digital sector will be for level 4+ qualifications in computer science related subjects. Employers in this sector will also be competing for these skills with employers from a number of other sectors due to the growing importance of digital technologies in a wide range of industries.

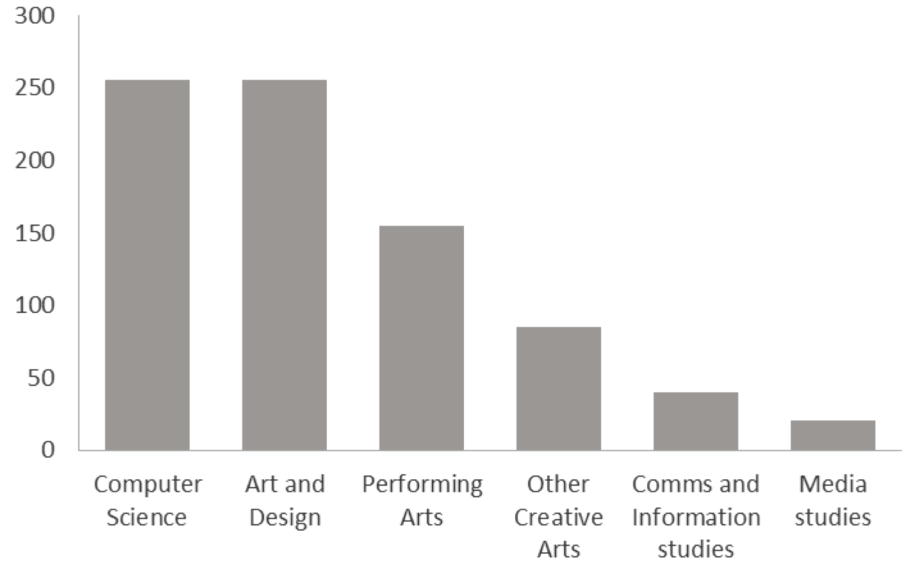
4.71 HEFCE data shows there were 255 enrolments on HE courses at Lancashire FE colleges in 2012/13[17]. While this is only likely to make a small contribution to the skill needs of employers in Lancashire, it represents a significant proportion of the total supply of skills from all institutions in the LEP area (38%), including the three universities. 125 of the enrolments on computer science related courses were at Blackpool and The Fylde College, which was comparable with each of the Lancashire universities including Lancaster University (135), Edge Hill (130) and UCLAN (150).

4.72 In addition to these HE courses, students gained over 1,300 qualifications on courses which contribute toward a Full Level 3 qualification, including 400 A Levels in IT related subjects. While these qualifications are unlikely to be of direct benefit to Lancashire based employers, they do provide a progression route for learners to go on to Level 4+ qualifications and to build a career in the sector. There may therefore be scope for FE colleges to increase the scale of provision in computer science subjects by providing a progression route for some of these students to go on to an HE course.

[16] Manchester Digital 2013: Skills Survey

[17] Data is not available for ITPs or for the academic year 2013/14

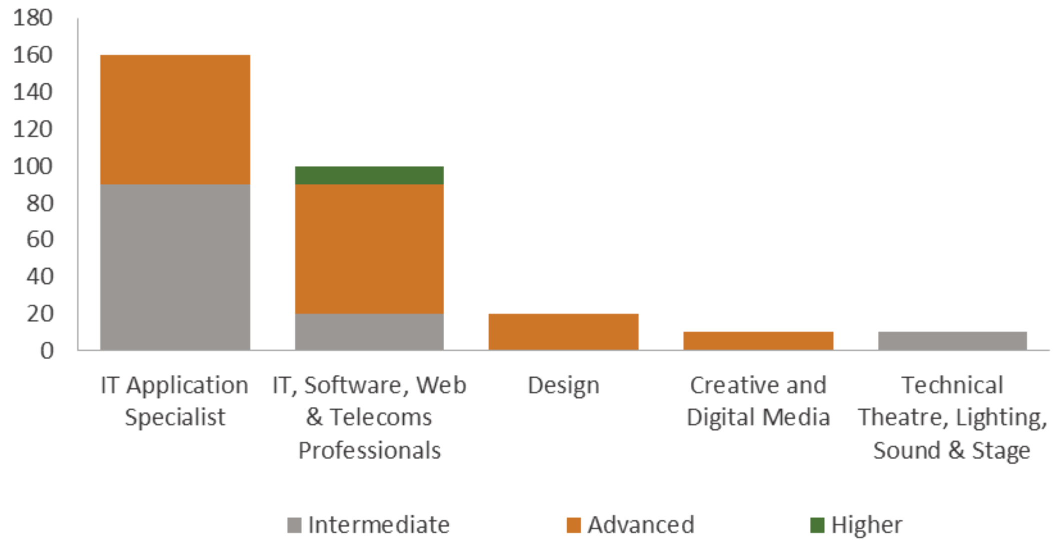
Figure 4.12 Enrolments on Relevant HE courses at Lancashire FE Colleges, 2012/13



Source HEFCE

4.73 Lancashire providers delivered training for 300 apprenticeships related to the creative and digital sector in 2013/14. This is much lower than many other sectors which may be a reflection of both the size of the sector and the current low level of take-up of apprenticeships by employers in this sector. 260 of the apprenticeships were in the digital sector, with only 40 in creative.

Figure 4.13 Apprenticeships delivered by Lancashire Providers, 2012/13



Source ILR returns

Working with Employers

4.74 A number of data sources suggest that levels of engagement between employers and Lancashire training providers is much lower in this sector than many others. The 2014 Employers Perspectives Survey shows that employers are less likely to invest in training or take on apprenticeships, and when they do invest, it is less intensive. National data from UKEPS also shows that employers in the sector were more likely to use a private training provider than an FE college to meet their training needs. However, none of the ITPs included in this study really specialise in computer science or other digital subjects, and there is little evidence that they have penetrated the sector. The FE Choices survey only received 15 responses from employers in this sector (out of a total of 1,900) which suggests very low levels of engagement overall.

4.75 When businesses do invest in training it is likely to be through organisations that can display a high level of knowledge about this fast changing sector. FE Colleges may be perceived to be less in-touch than specialist providers that are in regular contact with small businesses and less able to provide the cutting edge training that these businesses require. Trade associations and business networks such as Manchester Digital and Creative Lancashire may be the first port of call for these businesses. Both of these organisations advertise business training and apprenticeships on their website, and also provide links for businesses to 'quality approved' training providers. None of the colleges or ITPs are identified on either website, which suggests many providers may simply be off the radar for many creative and digital businesses.

Key Points

- The creative and digital sector is a small and developing sector in Lancashire. However there is good evidence that employers already face significant challenges recruiting the skills they need, particularly computer science skills such as programming and web design.
- A number of the colleges are making an important contribution to skills shortages for high level IT skills. There were 255 enrolments on computer science HE courses at the Lancashire colleges in 2012/13, making up over a third of all enrolments in Lancashire. The colleges also deliver a high volume of Level 3 qualifications in IT subjects, which provide a progression route to higher study and a career in the sector. Given the scale of demand for high level IT skills, there is clear value in some of the colleges looking to expand HE provision in this area and encourage more 16-18 year olds to consider a career in the sector.
- There is less evidence that Lancashire training providers are developing strong links with employers in this sector. The large number of very small companies in this sector and the high dependence on very highly skilled workers also means that employers are less likely to engage with vocational providers or invest in training. When they do invest, they are more likely to use small, specialist private training providers with in depth knowledge of the needs of this fast changing sector.

5. Higher Education Institutions

Introduction

5.1 A further aim of the study was to understand the economic impact of the Higher Education Institutions in Lancashire, including Edge Hill University, the University of Central Lancashire (UCLan) and the University of Lancaster. This part of the study was based on a review of the key findings from existing economic impact studies, and did not involve any primary research. The existing studies are varied in their scope, based on different time periods and study areas, and employ different methodologies. These inconsistencies should be borne in mind when reviewing the key findings of each study.

Summary of Key Findings

5.2 Each of the universities are major employers in their own right. Taken together, the universities directly employ just under 7,000 people, which means one in a hundred jobs in Lancashire are based at one of the universities.

5.3 The overall contribution of the HEIs is even greater than this because of the number of jobs supported through the expenditure on bought in goods and services and the expenditure of employees in the local economy. Although the data is not available for Lancashire, the three universities spend over £50m with North West suppliers each year, supporting around 800 FTES. A substantial proportion of these jobs are likely to be located in Lancashire

5.4 The universities are key drivers of the local economies where they are based. The vast majority of the 7,000 direct jobs are located at the main campuses at Preston, Lancaster and Ormskirk. Each HEI can claim to be the largest employer in their area, and each recruits a large percentage of their staff from the local area, which means the expenditure of salaries in the local area supports further job creation.

5.5 Although the methodologies for calculating impacts vary, the studies clearly show the important role played by each of the HEIs in attracting people to visit Lancashire and spend money in the local economy. UCLan alone had nearly 400,000 attendees at events hosted at the University, and the substantial student populations at each of the HEIs are likely to attract hundreds of thousands of visitors each year.

5.6 The universities play a key role in raising the skills of Lancashire residents, particularly at UCLan where one in every 100 Lancashire residents are enrolled on a course at the University. A large proportion of their graduates are retained within Lancashire, meaning Lancashire employers benefit from the productivity benefits associated with access to graduate level skills.

5.7 A substantial proportion of graduates at each of the universities go on to work in the health or education sector. Whilst these are of vital importance to ensuring Lancashire residents have access to high quality public services, the low numbers of graduates going on to employment in the private sector gives some grounds for concern. A number of the priority sectors identified by the LEP have a high demand for high level skills, including financial and professional services, creative and digital and advanced manufacturing, yet very low numbers of graduates go on to work in these sectors.

UCLan

Overview

5.8 UCLan was originally founded in 1828 and became a university in 1992. With over 36,000 students, the University is the 18th largest in the UK and has the 9th largest undergraduate population of all UK Universities. UCLAN has recently announced details of a £200m investment which will expand its campus within Preston City Centre and will include a £30m Engineering Innovation Centre, as well as new facilities for students and an extension of the current library.

5.9 UCLan appointed Regeneris Consulting to undertake an assessment of the socio-economic contribution of the University to the Lancashire and North West economies. This drew upon data provided by the university for the academic year 2013/14, and included an assessment of the following sources of impact:

- **Core economic impacts** associated with the University's role as employers, and through their supply chain expenditure in Lancashire and the North West.
- **Student impacts** as a result of UCLan students' expenditure in the local economy.
- **Visitor impacts** arising as result of the expenditure of visitors to Lancashire as a result of UCLan (including the friends and family of students and visits associated with the day to day operations of the University).
- **Skills and productivity impacts** through UCLan's role as a major provider of graduate level skills, which improves the productivity of Lancashire employers who recruit those graduates.
- **Wider impacts** associated with the activities of the University including ERDF projects, graduate start-ups and spin outs, as well as the social and environmental impacts of the University.

Key Findings

Core Economic Impacts

- UCLan employs **3,290 staff (2,800 FTEs)**, making it the largest employer in Preston. 76% of employees live in Lancashire and 35% live within Preston. The University therefore plays a key role as a provider of high quality employment opportunities in Preston and the wider area. This employment supports further economic benefits for the local area as University staff spend their salaries in the local economy.
- The number of staff increased by 10% between 2011 and 2014 and is likely to increase further as a result of the programme of investment planned by UCLan.
- The University spent a total of £27m on bought in goods and services, with £15m of this spent in Lancashire. The key sectors which benefit from this expenditure include construction, education services, retail and employment agencies.
- The study estimates that the total, core economic impacts of UCLan (including direct, indirect and induced effects) support **3,160 FTEs** and **£140m in GVA**.

Student Impacts

- UCLan's total student population is 36,500, with 33,000 studying at its UK campus. This means the University is educating one in every two students enrolled at HEIs in Lancashire.
- 22,230 students reside in Lancashire, of whom 8,650 are originally from outside the County. The study estimates that these students spend in the region of **£74m in Lancashire** in 2013/14 which supported **840 FTEs** and **£45m in GVA**.

Visitor impacts

- Visits from students' friends and family brought around £1.8m of additional expenditure to Lancashire in 2013/14, supporting a further **£1m in GVA** and **30 FTEs**.
- In 2013/14 there were over 376,000 attendees to events hosted at UCLan, although the study does not quantify the economic impact of these since it is not known how many of the attendees were from outside Lancashire.

Contribution to Skills and Productivity

- UCLan plays a key role as provider of high level skills for Lancashire residents. Around 38% of its students are from Lancashire, and in any given year one in a hundred of all Lancashire residents are enrolled on courses at the University.
- Over 2,200 graduates from 2013/14 had found employment in Lancashire six months after graduation (43% of all employed graduates), while UCLan's alumni database suggests that UCLan graduates tend to stay in Lancashire for a long period after graduation.
- This single cohort of 2,200 graduates represents 1.1% of all workers with a degree in Lancashire, and 8% of all people aged 25 to 29 with a degree. UCLan therefore represents a significant source of high level skills for the sub-region.
- UCLan graduates enter a wide range of professions and sectors, but make an especially important contribution to the skill needs of the health sector, one of the LEP's priority sectors. Over 800 graduates found work in this sector, which faces a number of challenges over the next ten to twenty years due to Lancashire's ageing population. However much smaller numbers of UCLan graduates found employment in other key sectors, including advanced engineering, energy and environment and financial and professional services.
- The study estimates that the cohort of 2013/14 graduates will generate GVA with a Net Present Value of **£640m in Lancashire** over the course of their working lives. This is equivalent to an annual contribution to GVA of **£14.5m in Lancashire**.

Lancaster University

Overview

5.10 Lancaster University was established in 1964 and is situated on a purpose built campus three miles from Lancaster's city centre. It is a prestigious university, ranked in the top 1% of universities in the world and in the top ten for the UK[18]. In 2012/13 there were over 12,500 students studying at Lancaster.

[18] Times Higher Education World University Rankings, 2013-2014

5.11 Biggar Economics was appointed to carry out an economic impact assessment of the University, drawing upon data for the academic year 2012/13. The primary focus of the study was the impact on Lancaster and the North West, although the report does make some reference to impacts in Lancashire. The study includes the following sources of impact:

- **Core economic impacts**, which it defines as those impacts associated with turnover, employment, supply chain expenditure and the expenditure of staff in the local economy.
- **Student impacts** associated with the expenditure of students, as well as less measurable impacts such as volunteering and course related placements.
- **Visitor impacts** generated by attracting people to visit and spend money in Lancaster.
- **Productivity impacts** associated with up-skilling students who go on to find employment in Lancaster
- **A wider set of impacts** which are not quantified, but demonstrate the contribution of the University to regional and national growth through its research activities.

Key Findings

Core Impacts

- Lancaster University directly employed 2,750 people (2,425 FTEs) in 2012/13, who were all based at the Lancaster campus. This is equivalent to 5% of employment in Lancaster making it the largest employer in the district. 65% of employees live in Lancaster, meaning the University generates a significant economic impact on the local economy.
- The University spent £34m on bought in goods and services, of which an estimated 10% was sourced from within Lancaster (£2.6m), and 50% was from North West suppliers.
- Once indirect and induced effects have been taken in to account, it is estimated that Lancaster University supports 2,700 FTEs in Lancaster (3,800 in the North West) and £145m in GVA (£192m in the North West).

Student Impacts

- There were over 12,500 students studying at Lancaster University in 2012/13, in addition to 700 distance learners and almost 4,000 students who study with the University's Partnership Institutions overseas.
- The study estimates that student activities support additional employment of 1,900 FTES and £71.8m in GVA in Lancaster (2,500 FTEs and £100m in GVA in the North West). These figures are substantially higher than the equivalent for UCLan despite having a smaller student population.

Visitor Impacts

- Over 20,000 applicants visit the University for open days each year, and just under 10,000 guests attend graduation days. Although not quantified, visiting friends and family and business conferences hosted at the university attract further visits to Lancaster.
- It is estimated that these visits create and additional £2.3m in GVA in Lancaster and support 108 FTEs. The equivalent figures for the North West are £3.1m in GVA and 136 FTEs.

Contribution to Skills and Productivity

- The study estimates the total productivity benefits from student's gaining qualifications at Lancaster University to be worth around £118m to the UK. Although not stated clearly, these refer to the Net Present Value of economic benefits over the working life of graduates and do not measure the total productivity benefits in 2012/13.
- The study estimates that £10.6m of these productivity benefits are captured within Lancaster, which is based on the location of graduates six months after graduation. Only 6% of graduates remain in Lancaster after graduation, and 28% stay within the North West. This is significantly lower than the equivalent figure for UCLan (74%). While data is not available for Lancashire, this suggests that UCLan plays a far greater role than Lancaster in improving the skills of the workforce in the county.
- The study does not provide any analysis of the types of occupations or sectors that Lancaster University graduates go on to study in. However data provided by the University shows that 17% went on to work in the education sector, 17% in professional, scientific and technical activities and 12% found employment in the health sector. However a large proportion of these jobs are likely to be located outside Lancashire.

Wider Impacts

- Lancaster University works extensively with SMEs in the North West, through collaborative and contract research, and by providing consultancy services. The study estimates that the University has worked with over 5,000 SMEs in the past ten years. Evaluation evidence of this engagement work has found that the support provided by the University is highly rated by SMEs.
- The LEAD programme (Leading Enterprise and Development) has supported skills development in over 1,600 SMEs and contributed toward the creation of 2,200 jobs (although the location of these is not clear).
- Lancaster University provides access to a range of facilities for businesses, which means research focused and hi-tech companies have access to state of the art technology. Examples include high resolution mass spectometry facilities for environmental chemists, 3d Printing, a biophotonics laboratory and a wave tank, tidal flume and low head hydro test rig which can be used by employers in the marine energy sector.
- The University has delivered 46 ERDF projects with a total value of £53 million. The4se have created 2,465 new jobs and safeguarded an additional 5,800.
- The study estimates that, cumulatively, these activities have created over £135m in GVA for the North West economy and supported 1,840 new jobs.

Edge Hill University

5.12 Edge Hill University's main campus is located in Ormskirk in West Lancashire, although the University also delivers courses from Study Centres and Outreach Centres across the North West. It has been providing higher education for 125 years and now offers over 200 degree routes and has over 24,000 students enrolled.

5.13 Regeneris Consulting was appointed to carry out an economic impact assessment of the University and its activities. This was based on data for the 2009/10 academic year, so is now several years out of date, and focused on impacts in West Lancashire and the North West (but not Lancashire).

The scope of the study was not as wide as the studies for UCLan and Lancaster University, and focused on the following areas:

- Core economic impacts (including the employment at the University and its supply chain expenditure)
- Student expenditure impacts
- Potential construction impacts of new campus development which was planned for the period 2007/8 and 2012/13
- Social and community impacts, which include widening participation in HE, improving sports and fitness, supporting the arts and community work.

5.14 The study did not make any estimate of the potential value of visitors to the university or its students. It also did not focus on the skills and productivity benefits generated by Edge Hill or look at how the University is addressing the skill needs of employers. However, like the other two universities, the two sectors which are likely to benefit most from Edge Hill's HE provision are the health and education sector. The University's largest faculties are education and health and these courses accounted for over 60% of enrolments in 2012/13. Other popular subject areas included sports science (420 enrolments), media studies (210) and performing arts (195).

Key Findings

Core Economic Impacts

- Edge Hill employs an estimated 1,100 FTE staff, with 82% of these jobs located in West Lancashire. This makes it the largest non-public sector employer in West Lancashire. 23% of staff live within West Lancs, which supports a further 40 FTE jobs as a result of local expenditure.
- The University spends £18.8m on bought in goods and services in the North West, of which £1.7m goes to suppliers based in West Lancs.
- Total student expenditure in the North West was estimated to be c. £142m which supports approximately 2,400 jobs.
- In total it was estimated that Edge Hill University supports 4,500 FTE jobs across the North West and £214m in GVA each year. This includes student expenditure impacts as well as impacts generated through the University's employment and expenditure.

Social and Community Impacts

- Edge Hill runs a number of initiatives to widen participation in higher education, including in many of the low participation neighbourhoods in West Lancashire. Over 20% of its undergraduate entrants were from low participation neighbourhoods compared to a national average of 9.7%. It also had a much higher percentage of students from lower skilled socio-economic households and from state schools.
- The University has invested significantly in new sports facilities which are open to the community and generate improved levels of participation in sport and general fitness. The University works extensively with local sports clubs and organises sports events for the local community.
- Edge Hill University makes an important contribution to the cultural life of Ormskirk and West Lancashire, providing opportunities for both participation in and consumption of a

wide range of cultural activities. The University has invested in new arts facilities such as the Rose Theatre which is used to stage productions.

University of Cumbria

5.15 The University of Cumbria has three campuses, one of which is located in Lancaster in Lancashire. The first intake of students was in 1964. It currently offers 84 undergraduate courses and 89 postgraduate courses, as well as CPD and other short courses. The Strategic Planning department within the university produced its own economic impact assessment based on data from the 2013/14 academic year to inform the Annual Report. The full report has yet to be published, but emerging findings have been shared for inclusion in this study. It found that the University of Cumbria generated £52m of expenditure in Lancashire's economy[19]. This was made up of the following:

- The 'primary' economic impact of the university (payroll and supply chain) is worth around £12.3m per annum to the economy of Lancashire, the majority of which is through payroll expenditure (£10.9m).
- The multiplier benefits of this expenditure were estimated to be worth an additional £16m to Lancashire.
- Student related impacts, including student expenditure and visits, were estimated to be worth around £16m, while commercial training and education generated an additional £6m in Lancashire.

[19] The data for jobs and GVA was not available

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6. Conclusions

Colleges and ITPs

6.1 This report has provided a high level quantification of the total contribution of Lancashire’s colleges and training providers to the Lancashire economy, and the communities in which they are located. Collectively, these organisations employ 6,400 people and support a further 1,400 through supply chains and the expenditure of employees in the local economy. They therefore therefore represent a vital source of jobs in many areas of Lancashire.

6.2 The colleges make an even greater contribution to the economy by improving the skills of the workforce in Lancashire. There is now a substantial body of evidence showing the benefits of gaining qualifications, including enhanced employability and earnings for students, and increased levels of productivity for the economy as a whole. This report has estimated that the economic benefits over the working life of students have a NPV of £1.6bn, representing a return of over £16 for every £1 invested.

6.3 The report has not quantified some of the other benefits from the qualifications delivered at the Lancashire training providers. These include the exchequer benefits that come from higher tax receipts and lower benefits payments, and the health benefits that derive from improving skills and make an important contribution to improving residents’ quality of life. There are other benefits which are difficult to quantify, such as the importance of the relationships that colleges have built with their local communities, and the value that local residents place on having these institutions in their communities. In many cases, this is likely to be substantial.

6.4 Lancashire's training providers are all high performing organisations, recognised for the quality of provision by independent inspectors such as OFSTED and the QAA. None of the organisations included in the research scored less than 'Good' in their latest OFSTED inspection, with a large number judged to be 'Outstanding'. Taken as a whole, Lancashire's colleges far out perform those in other LEP areas within the North West. This high standard of further education is being delivered to some communities which are among the most deprived in England. They are therefore vital providers of public services and can act as effective vehicles for regeneration by widening participation in learning.

6.5 However the contribution of the training providers goes beyond widening participation in challenged communities. There is a growing number of areas where the training providers are recognised for their expertise and outstanding quality in their local employment sectors, and in some cases are recognised as national leaders. For some of the largest ITPs, such as Training 2000 and NLTG, this expertise has been built up through decades of working closely with employers in specific sectors. Their reputation not only helps to attract employers and potential apprentices, but also allows them to recruit highly skilled staff from industry, which enhances the quality and relevance of training. However colleges are also increasingly developing reputations for quality and expertise in sectors which are likely to be key drivers of future growth in their area (with Blackpool and The Fylde College's reputation in the energy sector being just one example).

6.6 What these experiences show is that, where colleges and training providers are able to demonstrate in depth expertise in a sector, they enhance their credibility in the eyes of employers and this results in higher demand for training. However, developing this expertise and building credibility takes time and resources. At a time of constrained budgets, this may require providers to make difficult choices about what they provide, stopping some subject areas altogether so they can invest more in their key strengths. By spreading resources too thinly, training providers risk providing a wide choice of courses but at lower quality, which in turn will affect their credibility and employer demand.

6.7 This research has focused on the performance of the training providers as a whole. It was not intended to evaluate the performance of individual providers and has only been able to identify areas of good practice where they stood out or were brought to our attention. However there are examples of colleges offering a wide range of apprenticeships relative to their size, where there may be potential for the offer to be more focused, with those low-demand apprenticeships being delivered through other providers with more capacity and expertise or in areas where there is much greater demand for this training. The role of the Skills Hub should be to identify these areas of strength and expertise and local need, and work with the providers to help rationalise the number of providers offering the same courses and apprenticeships. This will be challenging but ultimately should:

- present a much clearer picture to employers about which providers specialise in different types of training and prevent the situation where employers feel bombarded and confused by multiple providers offering the same provision
- help to identify and address demand for specialised provision in different parts of the LEP area (including higher skilled provision), which can be aggregated and addressed through a specialist provider
- build long term relationships between employers and providers, which will help to ensure that training provision evolves over time in line with industry requirements.

6.8 It should be noted that training providers can only do so much to engage employers, and there is also a responsibility on employers themselves to take responsibility for their training needs. Our research found training providers going to great lengths to engage employers and to let them influence provision but encountering significant challenges in some sectors and particularly with SMEs who face a number of barriers. We found great examples of colleges trying to overcome these obstacles by engaging with local businesses on their own terms (eg Business Leagues in Accrington and Rossendale), which is helping to build trust and lay the foundations for forming strong local networks. These approaches work best through a partnership approach, and there may be a potential role for the LEP to make greater use of its own employer networks and to act as a bridge between providers and employers.

Higher Education Institutions

6.9 Like the colleges, the HEIs in Lancashire are major employers in their own right. Taken together, the universities directly employ just under 7,000 people[20], which means one in a hundred jobs in Lancashire are based at one of the universities. Once we include supply chain and induced effects, and consider the number of visitors attracted to Lancashire as a result of the HEIs, the economic impact is much greater. The HEIs are therefore key drivers of Lancashire's economy.

6.10 The universities play a key role in raising the skills of Lancashire residents, particularly at UCLan where one in every 100 Lancashire residents are enrolled on a course at the University. However, in the case of UCLan and Lancaster, a large proportion of their graduates do not stay in Lancashire after graduation, meaning their skills and productivity benefits are lost to the LEP area. Those that do stay are far more likely to work in the public sector than in one of the wealth creating sectors which have been prioritised by the LEP.

6.11 UCLan is taking steps to address this by improving their employer engagement, particularly in those areas where it is investing heavily in new training facilities. The Engineering Innovation Centre is the largest single investment in Lancashire's learning infrastructure, and is identified as a signature project within the Lancashire Strategic Economic Plan. The £30m state of the art facility aims to

[20] This excludes the Lancaster campus of the University of Cumbria, for which data was not available.

exploit the location of the University at the centre of one of the main manufacturing clusters in the UK and establish UCLan as a Centre of Excellence for industry engagement. The investment will double the capacity of UCLan's engineering provision and enable the University to introduce new courses which are directly relevant to specialist sectors within Lancashire. The new facility will provide the University with a platform to engage and collaborate with businesses, focusing on a number of specialist areas, including intelligent machines, computer vision and machine learning, robotic and electronic engineering and mechanical engineering. By focusing on provision which is relevant to local concentrations of employment, and using this as a platform to engage employers, it is hoped that this will help to build links between the university and local employers and a growing number of UCLan graduates will go on to find work in the sector.

6.12 Outside engineering, the other key source of demand for high level skills in Lancashire is professional and financial services, which includes banking, legal services, accounting and consultancy. Just under 900 graduates from UCLan and Lancaster went on to find employment in this sector, however only a small proportion of these found employment in Lancashire (25% in the case of UCLan). There are limited steps that the universities themselves can take to ensure that a greater proportion of these graduates stay in Lancashire. Recent graduates from high performing universities are among the most geographically mobile groups, and employers in Lancashire will be competing for these skills with companies in major urban centres including Greater Manchester and London. The density of job opportunities in these areas and the higher salaries on offer mean that it may be a significant challenge for Lancashire to retain these graduates.

Appendix A - Methodology

Economic Impact Assessment

A.1 The economic impact assessment of the Lancashire training providers is divided in to two parts:

- Demand-side assessment: assesses the economic impact associated with the training providers' expenditure and the secondary impacts of that expenditure across Lancashire's economy. This includes direct economic activity supported by the training providers, the indirect economic activity supported through supply chain benefits and induced effects caused by employees spending wages in the local economy.
- Supply-side assessment: assesses the benefits and costs to the economy of the service that is provided by the training providers i.e. the added value that comes from improving the skills of the workforce.

A.2 This section provides an explanation of the methodology for each part of the assessment.

Demand-side assessment

A.3 The analysis of the Training providers' economic impact draws together three sources of economic impact:

1) Direct
2) Indirect
3) Induced

A.4 The method used to arrive at these estimates is provided below. The underlying data for each of these has been sourced from a standard pro-forma issued to each of the training providers designed to capture in a consistent format the key data needed for the assessment, including data on the number of employees and their expenditure in the local economy. Where training providers were unable or unwilling to provide the level of detail required (eg the percentage of staff who live in Lancashire or expenditure by category), benchmarks were used based on the returns of other providers or data from the 2011 Census.

Direct

A.5 The direct contribution of the training providers comes from the employment within the training providers themselves and the associated value that is created.

- **Employment** numbers have been sourced from the data proforma. This captures the number of direct employees (permanent and temporary), split by type of staff position (management, tutors, administration, other), expressed both as headcount and as Full Time Equivalent (FTEs). Where data was not provided, jobs were taken from the Experian business database.
- **Gross Value Added (GVA)** is the key measure of economic output at the level of a firm, sector or region. It can be measured in a number of ways and typically for a firm this is done using the income approach, as the sum of gross operating surplus and compensation of employees. Our approach to estimating the training providers' direct GVA is consistent with that used by the Office for National Statistics (ONS) in the national accounts, using the sum

of compensation of employees and consumption of fixed capital. These figures have been sourced from the data proformas. Where the data was not provided, benchmarks were used based on the returns of other providers.

Indirect

A.6 Indirect impacts refer to the employment and GVA supported by the training providers' external expenditure (capital and revenue) on suppliers based in the LEP area. This expenditure creates employment and value added within the training providers' immediate suppliers and within all subsequent tiers of the supply chain, as these suppliers make purchases from their own suppliers, and so on.

A.7 The data proforma captures data on the value of the training providers' external expenditure, the location of suppliers and their sector. These sectoral classifications have been mapped onto the Standard Industrial Classification (SIC) contained in Regeneris Consulting's input-output model for the UK and the regions. The model is based on data from the UK National Accounts and allows us to estimate the supply chain multiplier effects from an initial injection of expenditure on a particular sector.

A.8 The full economic impacts of this expenditure have then been estimated using North West regional module of the input-output model and apportioning to the Lancashire LEP area.

Induced

A.9 Induced effects refer to the effects of spending by employees whose jobs are supported directly within the training providers and indirectly within their local supply chains:

- Impacts from expenditure by the training providers' employees have been estimated using data sourced from the proforma on the employees who live in the Lancashire LEP area and their wages and salaries. Where this was not known or not provided, estimates were derived based on travel to work data from the 2011 Census. Our input-output model has been used to estimate the consequent economic impacts from their expenditure.
- Impacts from expenditure by employees in the training providers' supply chain have been estimated using the Type 2 (indirect and induced) multipliers within our input-output model.

Supply-side assessment

A.10 There is now a substantial body of evidence showing the economic benefits associated with gaining vocational qualifications. By improving the skills of the workforce, FE provision increases both earnings and a learner's chances of finding employment over the course of their working life. Both of these effects contribute to increased levels of economic output and productivity (as measured by GVA and GVA per capita).

A.11 This study has drawn upon research in a 2011 study carried out on behalf of BIS by Cambridge Econometrics and the University of Warwick (Research Report No 38)[21]. This is one of many studies to measure the Net Present Value (NPV) of learners attaining vocational qualifications (capturing both the earnings and employment benefits). The NPV is calculated by estimating the discounted

[21] BIS 2011a: Cambridge Econometrics and the Warwick Institute for Employment Research: Measuring the Economic Impact of Further Education, BIS Research Paper Number 38, March 2011,

benefits from achieving a qualification over the working life of the learner, and subtracting the costs associated with undertaking the qualification.

A.12 Unlike many other studies in the literature, this is the only recent study to quantify the benefits of vocational qualifications to the whole economy and not just the benefits that accrue to the learners themselves. The benefits included in the model (and the sources of the authors assumptions) were as follows:

- **Wage returns**: these are the benefits to individuals in terms of increased wages over the course of their working lives, but also act as a proxy for the future labour productivity increase associated with gaining qualifications. The authors drew upon research by McIntosh (2010)[22] which reviewed the evidence on wage returns associated with different levels of qualifications.
- **Employment returns**: qualifications can also increase the probability of a learner being in employment over the course of their working life. The authors drew upon analysis of the Labour Force Survey (LFS) to compare the employment rate of individuals at different qualification levels.
- **Spill-overs:** these are the benefits to the wider economy which are not captured by the learners themselves. The benefits of enhanced productivity may be captured by employers in the form of higher profits or increased competitiveness, and by co-workers or other employers due to the transfer of knowledge. The authors drew upon research by Dearden, Reed and Van Reenen (2005)[23] which suggests that the increase in productivity from training is double the increase in wages.

A.13 The last source of benefits (spill-overs) is the one which is not included in many of the other recent studies concerned with the economic benefits of qualifications, which tend to focus on the benefits to the individual and overlook wider spill over effects (eg BIS, 2011b[24]).

A.14 As these benefits will accrue over the rest of an individual's working life, they must be discounted to account for the fact that benefits realised in the future are less valuable than those realised now. The authors applied a discount rate of 3.5% for the first thirty years and 3% thereafter which is in line with Green Book guidance.

A.15 Against these benefits, the model then deducted the costs associated with gaining qualifications. These included:

- **Government funding**: the model used information on the proportion of qualifications within each learning stream which are co-funded or fully funded by the government.
- **Fees**: this includes fees paid by individuals or their employers. The model assumed that, for co-funded qualification aims, the expected fee is collected.
- **Foregone output**: whilst individuals are undertaking learning, on average they will be less productive than if they are working. This output foregone was calculated by multiplying the guided learning hours associated with each qualification by the average wage at their previous highest qualification.

[22] McIntosh 2010: The Value of Skills: An evidence review submitted to the UK Commission for Employment and Skills

[23] Dearden, L, Reed, H, & Van Reenen, J, 2005: Estimated effect of training on earnings and productivity, 1983-99

[24] BIS 2011b: London Economics, 2011: Returns to Intermediate and Low Level Vocational Qualifications, BIS Research Paper Number 53

A.16 These costs and benefits were modelled to arrive at an NPV per qualification attainment, as shown in Table A-1. These are the assumptions used in the modelling and applied to the qualifications data for each of the Lancashire training providers from the academic year 2012/13. The NPV per attainment was only applied to full NVQ or diploma qualifications at level 2 or 3, and full basic skills qualifications. It was not possible to obtain a list of those courses which count as developmental learning so these were excluded from the analysis.

Table A-1 NPV per qualification assumptions used in report

	NPV per attainment	NPV per start
Apprenticeship Level 2	£112,000	£82,000
Classroom Learning Level 2	£31,000	£22,000
Workplace Learning Level 2	£59,000	£43,000
Apprenticeship Level 3	£106,000	£75,000
Classroom Learning Level 3	£87,000	£61,000
Workplace Learning Level 3	£72,000	£52,000
Basic Skills	£27,000	£20,000
Developmental Learning	£25,000	£19,000

Source: BIS 2011, Measuring the Economic Impact of Further Education

A.17 The economic impact figures for the supply-side assessment represent the best available estimate of the economic value of qualifications using existing research. There are however a number of limitations and caveats with the research, which should be borne in mind when interpreting the economic impact figures reported in Chapter 3. These are explained in more detail below.

Age differences

A.18 The NPV figures in Table A-1 were calculated for adult learners in post-19 Further Education and did not include learners aged 16-18. The authors state that the same model could be used to calculate the economic value of qualifications for learners in this age group, however the analysis has never been published. There are no other studies which have calculated the NPV of vocational qualifications for 16-18 year olds learners.

A.19 The modelling for the report has assumed that the same NPV per attainment figures apply for 16-18 learners as adult learners. BIS has advised that this is a reasonable approach in the absence of any further research, although this may result in an underestimate of total economic benefits.

Level 1 Qualifications

A.20 BIS Research Report Number 38 did not calculate an NPV per attainment figure for Level 1 qualifications (except for those which count as basic skills or developmental learning). The authors do not provide an explanation for why this is the case, however a number of studies have found that vocational Level 1 qualifications provide negligible labour market returns and in some cases result in negative labour market returns[25]. Data from the 2011 Census shows that people with a level 1 qualification have a higher probability of being in employment than people with no qualifications at all. This suggests that there are some labour market returns, however a large number of these are likely to be people with GCSEs graded D-G which also count as a level 1

[25] See the Wolf Report: Review of Vocational Qualifications for a literature review of relevant studies. It should also be noted that this found the labour market returns to NVQ2 qualifications were also negligible.

qualification. Vocational qualifications at Level 1 have therefore been excluded from the modelling.

Level 4 Qualifications

A.21 The BIS research also did not calculate an NPV figure for Level 4 qualifications. The Lancashire training providers deliver a large number of HE courses, which are likely to deliver particularly high labour market returns. It was therefore necessary to draw upon another study commissioned by BIS (BIS 2011c), undertaken by London Economics[26]. This study estimated the NPV of labour market returns to individuals taking different HE qualifications. This study did not attempt to model the wider spill over benefits associated with HE qualifications and is therefore likely to underestimate the total economic benefits. However, in the absence of any other studies which have modelled these impacts, these NPV figures were used in the impact modelling and applied to data for 2012/13. It was only possible to obtain HEFCE data on enrolments rather than qualifications in 2012/13. The modelling has therefore assumed a 80% completion rate which is consistent with the assumptions made by London Economics.

Date of costs data

A.22 The BIS research was published in 2011 but drew upon data that is now several years out of date. The costs data was based on funding and fees in the academic year 2008/9. It has not been possible to update the analysis with more up to date data on funding and fees as this level of detail was not available for the qualifications included in the analysis for Lancashire.

Meeting Sector Skill Needs

A.23 The objective of this stage of the research was to carry out a detailed analysis of the key skill needs of a number of key sectors in Lancashire and assess how the Lancashire training providers are helping to meet these skill needs. The research focused on the following sectors:

- Advanced engineering and manufacturing (including aerospace and automotive manufacturing)
- Creative, digital and media
- Financial and professional services
- Health and social care
- Visitor economy
- Energy and the environment

A.24 These sectors were selected because they have been identified as priority sectors by the Lancashire LEP.

Demand Analysis

A.25 The analysis of the skill needs of sectors was based on a combination of data analysis, reviews of existing research and consultations. A wide range of data sources were used in the study (set out

[26] BIS 2011c: London Economics, 2011: The Returns to Higher Education Qualifications, BIS Research Paper Number 45

in Table A-2) to build up a picture of the nature of demand for skills in each sector and identify those skills which employers find particularly hard to find.

A.26 While much of the analysis focuses on current skills issues faced by each of the sectors, the sector profiles are future facing and consider the potential demand for skills over the period 2012-2022. Two different sets of forecasts were used to estimate the total demand for skills over this period, including through net growth in employment (expansion demand) and replacement of workers leaving the sector through retirement or a change in jobs (replacement demand). There is clearly a degree of uncertainty with forecasting future skill demands. The forecasts were therefore used to provide an indication of the potential scale of demand by sector, and to flag up those occupations and skills which might be in greatest demand, without quantifying precise numbers.

Table A-2 Data sources used for analysis of sector skills issues

Type	Example Sources	Purpose
Economic and labour market datasets	Business Register and Employment Survey UK Business Counts Claimant Count	Establish total size of sector and understand recent performance of key sub sectors.
Employment Forecasts	Working Futures Oxford Economics	Estimate the indicative scale of demand for skills in each sector over the next ten years, including both expansion demand and replacement demand
Population Surveys	Census 2011 Annual Population Survey/Labour Force Survey	Establish characteristics of the existing workforce in Lancashire, including the age and occupational profile of employees.
Employer Surveys	UK Employers Skills Survey Local sector specific surveys	Identify the level of skill shortages and skill gaps faced by different sectors in Lancashire, as well as the training and recruitment practices of employers by sector.
Vacancies data	Burning Glass – Labour Market Insights	Establish the skills which employers have been seeking in Lancashire over the past 12 months through analysis of vacancies posted by sector, including analysis by occupation, qualifications and specific skills.
Other local research	Investment plans Economic development strategies Economic impact assessments	Identify specific projects or investments in Lancashire which could influence the demand for skills in next ten years but are not captured by forecasts.
National Research	Sector Skills Council Research UKCES research National Skills Academies Industry Training Boards	Understand key technological and policy drivers affecting the demand for skills Identify specific skill shortages which are not identified in local surveys.

A.27 The conclusions from the data analysis task were then tested through a series of consultations with local stakeholders and employer representatives. Consultees were asked to comment on the key drivers of demand for skills in each sector over the next ten years and identify those areas where there are likely to be skill shortages or skill gaps. Their views were also sought on the training and recruitment practices of employers in the sector and their experiences of working with FE training providers in Lancashire and their students. Consultees were drawn from the following organisations:

- East Lancashire and West Lancashire Chamber of Commerce (sector leads were identified in each case)

- Trade associations (eg NWAA, Stay Blackpool)
- Sector Skills Councils
- Industry Training Boards
- Sector leads at the Lancashire LEP
- Economic development bodies
- Economic development officers at local authorities

Supply Analysis

A.28 Qualifications data for each of the Lancashire training providers was provided for the academic year 2013/14. This provided a detailed breakdown by course, qualification level and age of student. The courses were categorised and mapped against the skill requirements of each sector.

A.29 While the data provides a high level indication of the supply of relevant skills in Lancashire, there are a number of limitations to the analysis:

- The data does not provide detail on the content of courses or the specific technical skills which students learn, which would allow a comparison with the technical skills demanded by employers.
- Similarly, the data does not provide information on the softer skills frequently highlighted by employers as being a key skills priority.
- The data does not show the employment destinations of learners by sector, which would allow an analysis of the utilisation of vocational skills by employers in Lancashire.

A.30 The research aimed to fill these gaps through analysis of other data sources, including learner destination surveys and UKESS, which shows the percentage of employers who have recruited training provider leavers in the last two to three years.

Appendix B - <Insert title here>

B.1 <Use Appendix Heading 5>

B.2 <Use Appendix Heading 5>

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