sdg economic development

A Technical Education Vision for Lancashire

The Lancashire Skills & Employment Hub

Volume 1 – The Vision
Document – Final Report
31 January 2018

Our ref: 232-053-01
Client ref: 15176301

technical education

adjective: technical
noun: education

The development of technical knowledge, skills and competence, through a programme of learning which involves practical application in the workplace.

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Foreword

Edwin Booth, DL, Chair, Lancashire LEP

Lancashire's Technical Education System is in a prime position to respond, develop and grow to meet the current and future needs of our industries.

The industrial heritage of Lancashire has gifted a legacy of innovative, creative enterprise with employers increasingly keen to direct the skills market so that locally grown talent will be central to their success.

This Technical Education Vision for Lancashire has been formed in consultation with those with a primary interest in training, attracting and retaining talent into Lancashire businesses.

In realising this vision, by 2030 our Technical Education System will grow the productivity of Lancashire's businesses, anticipating and responding to the skills requirements of market and technology change.

Alongside the Lancashire Innovation Plan, this Technical Education Vision sets out a framework for nurturing the highly skilled and flexible workforce needed for Lancashire to be placed at the heart of opportunities from the Industrial Strategy and in particular the Northern Powerhouse.

Amanda Melton, Chair, Lancashire Skills & Employment Hub

The co-ordinated approach of Lancashire's Technical Education Vision starts with education and experiences from a young age and provides support right through our workers' lives, with education providers and employers collaborating on design and delivery of education and training to increase prosperity for all.

Significant investment in skills facilities by industry and academic institutions has gifted Lancashire with state of the art facilities, such as the Energy HQ at Blackpool and the Fylde College, the Food and Farming Innovation Technology Centre at Myerscough College, UCLAN's Engineering Innovation Centre and Lancaster University's Health Innovation Campus.

Lancashire's employers have a great tradition of investing in apprentices and with increasing opportunities to learn up to degree level as an apprentice, the benefits to our economy will continue to grow.

The interconnected skills infrastructure of Lancashire has been recognised by organisations such as the Gatsby Foundation and the Association of Colleges, both having awarded grants to support the development of Technical Education in the area.

Guided by the Lancashire Skills & Employment Strategic Framework and robust labour market information, I am certain that our network of high quality provision of vocational qualifications and apprenticeships will fulfil the Technical Education Vision and continue to respond to growing and emerging technical skills needs.

1 Introduction

The Context

1.1 This is an important moment in time for Technical Education. Positioned at the core of the UK Industrial Strategy, with political will and commitment to delivering a system which *'rivals the best in the world'*, the opportunity for substantive and effective change in the Technical Education system has never been greater.

1.2 Locally, Lancashire's Strategic Economic Plan (SEP) identifies its overarching purpose as being to re-establish Lancashire as an economic powerhouse, and a national centre of excellence in advanced manufacturing, engineering and science related sectors. The vital role of its education infrastructure is recognised as key to this, and is a valued asset. A high proportion of Lancashire's Further Education (FE) colleges and locally-based training providers are recognised as 'good' or 'outstanding', alongside its four strong Higher Education (HE) Institutions. As such, a core objective of the SEP is to ensure that its training providers continue to perform well and anticipate the skill demands of employers.

1.3 These strengths, aligned with the forthcoming reforms to technical education, offer the opportunity for Lancashire to be positioned in the vanguard of developments of a modern, Technical Education system. Looking to 2030, beyond the implementation of a series of key reforms to education in England, this document presents a Vision for a national-class Technical Education system in Lancashire.

Developing Lancashire's Technical Education Vision

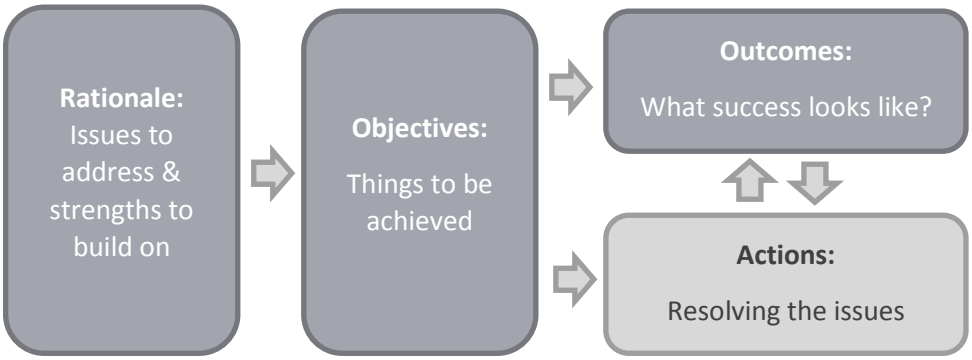
1.4 The work to develop Lancashire's Technical Education Vision was undertaken by SDG Economic Development (SDG-ED) between September and December 2017. It involved a detailed process of evidence review and consultation, engaging with more than 60 providers, employers and key stakeholders across the County, in workshops and one-to-one interviews, to build consensus around what the Vision should aim to achieve.

1.5 The Vision is an articulation of Lancashire's ambition for its Technical Education system. It has been built using a logic model process, summarised in Figure 1-1 below, to review the evidence base and consider what is working well in the current system, and where there are issues to address, to establish the rationale for change. From this, objectives have been identified and a set of outcomes defined, which reflect what future success will look like. This Vision document presents the long-term agenda flowing from the process, providing a consensus around the County's objectives in relation to Technical Education and the desired outcomes.

1.6 The work also involved consideration of the actions required to deliver the outcomes. However, reflecting the more temporal nature of these actions, priority activities to take the

Vision from 'concept to operating reality' are covered in a separate document (*Volume 2 – Delivering the Lancashire Technical Education Vision – Route Map*). This will be reviewed and updated more frequently, allowing insights and learning from the completion of activities to be fed-back into the process.

Figure 1-1: Vision logic model



Source: SDG Economic Development

This Document

1.7 This rest of this document is structured in sections as follows:

- **Defining Technical Education:** the definition of Technical Education the Vision adopts;
- **The Strategic and Policy Context:** the strategic context within which the Vision has been developed, and a summary of the Technical Education reforms that will take place over the coming years;
- **Labour market position:** key findings from the evidence review, describing the current position of Lancashire's economy, labour market demands and patterns of labour supply; and
- **A Vision for 2030:** the key rationale and corresponding Vision objectives which set out what needs to be achieved, and the associated outcomes.

1.8 Each section is accompanied by a case study of 'good practice' relating to Technical Education in Lancashire.

2 Defining Technical Education

Given the long-term nature of this document, it is important to ensure a definition of Technical Education that has longevity. It must be sufficiently descriptive to be meaningful, without being too prescriptive, and avoid the risk of being redundant in a few years.

2.1 How to define Technical Education was the subject of much discussion during the development of the Vision. At the time of writing, there does not exist a single listing of the qualifications that are considered to be Technical Education. In the future, maintaining such a list will be a responsibility of the new national Institute for Apprenticeships and Technical Education.

2.2 Over the course of the consultation, a number of features for a definition for Technical Education were discussed, to consider whether they could be used to signal that a course would be 'in or out' of Technical Education:

- The sector in which the learning is taking place;
- The age of participation;
- The level of study; and
- The specific types of learning and training programmes.

2.3 However, as reforms are delivered, Technical Education options will be developed for older learners and at higher levels of study, and the development of higher level and degree apprenticeships will continue, in line with demand for these routes from employers and learners. This reinforced the need for a flexible definition, which allows people to interpret what Technical Education means in their context.

2.4 The Independent Review of Technical Education[i], led by David Sainsbury provided a clear perspective on what constitutes Technical Education:

"… to be described as Technical Education, a programme must focus on progression into skilled employment and require the acquisition of both a substantial body of technical knowledge and a set of practical skills valued by industry."

2.5 This was operationalised in the Post-16 Skills Plan[ii] to identify two key modes of learning:

- **Employment-based:** Most commonly delivered via an apprenticeship and including a combination of on-the-job learning of skills (in the workplace) and at least 20% off-the-job learning of knowledge (in a college or private training provider); and
- **College-based:** Typically two-year, full-time study programmes, which include work placements appropriate to the Technical Education route and the individual student.

2.6 These approaches focus on describing the process of delivery, which allows flexibility to be applied to any level, sector, age group or specific qualification. However, in the context of Lancashire there is a need to recognise a broader landscape of providers, which includes a mix of colleges, sixth forms, school sixth-forms, private training providers, HE Institutions and employer-providers.

2.7 To this end, the Vision adopts a descriptive definition, which builds on the employment and college-based routes identified in the Review, but provides scope to be applied to any delivery context and be unrestricted by features such as level, sector and age. Accordingly, our definition is as follows:

> Technical education is the development of technical knowledge, skills and competence, through a programme of learning which involves practical application in the workplace.

2.8 This means a wholly 'classroom' based course would not meet the definition for Technical Education. Likewise, courses which only involved on the job training would not be considered Technical Education.

Case Study 1: Sharing experiences and insights – Lancashire Apprentice Ambassador Network (LAAN)

Lancashire Apprentice Ambassador Network

The Lancashire Apprentice Ambassador Network (LAAN) is part of a county-wide drive to increase training and employment opportunities for Lancashire residents and improve skills across the area. The network is a joint initiative set up by the Lancashire Skills and Employment Hub (LSEH), part of the Lancashire Enterprise Partnership (LEP), and the Lancashire Work Based Learning Executive Forum, a consortium of Lancashire apprenticeship providers. The network was created with the aim of inspiring individuals to become apprentices, and to encourage businesses to take on apprentices.

There are two types of ambassadors, Apprenticeship Ambassadors and Employer Ambassadors. The Apprenticeship Ambassadors are all either current apprentices or former apprentices who want to highlight the benefits of taking part in the Apprenticeship programme to employers and other young people. They will tell their apprenticeship story at schools, youth clubs and careers fairs and meet employers face to face to encourage them to take on Apprentices.

The Employer Ambassadors are employers who currently take on apprentices, either recruiting new staff or using apprenticeships to upskill current staff and highlight the benefits of taking part in the Apprenticeship programme to other employers and individuals. They are passionate about their experiences with apprentices, and are keen to promote the 'apprenticeship route'. In several cases, they have been apprentices themselves. The main aim of the Employer Ambassadors is to spearhead the drive to engage new employers to commit to apprenticeship delivery in England. They support and influence a wide range of key stakeholders including schools, colleges, local enterprise partnerships, employers and their supply chains, trade associations and employment bodies. They champion and support marketing, publicity and events to raise awareness of apprenticeships and also mentor other employers.

Both types of ambassadors have become a part of the LAAN and have committed their time on a voluntary basis. The Lancashire Apprentice Ambassador Network currently has in excess of 40 members.

The network is supported and works closely with the Lancashire Enterprise Advisor Network, which enables the ambassadors to add value to the school's careers strategy by bringing to life apprenticeships to young people, teachers and parents. The network is also linked with and supported by the national Young Apprenticeship Ambassador Network and therefore Lancashire's network benefits from a national presence and resources.

3 Strategic & Policy Context

In setting the Vision, it is important to recognise the broader strategic environment within which it will operate. This section of the report considers the key national and local strategy and policy contexts surrounding and informing the Vision.

The Strategic Environment

3.1 The 2016 *Northern Powerhouse* Strategy identified *Skills* as 'critical to economic growth and productivity'. The 2017 national Industrial Strategy *Building a Britain fit for the future* sets out the Government's plan to boost productivity and earning power throughout the UK. *People*, is a fundamental pillar in the strategy, with key policies to generate jobs, meet the skills challenges faces in the UK and improve labour market opportunities for all. Reforming Technical Education is central to the *People* strategy, with the clear ambition to bring parity with UK's world renowned Higher Education system.

3.2 Key features of the *People* strategy align fully with the core of this Vision. For example, in addition to re-emphasising commitment to Institutes of Technology and the National Colleges, the Industrial Strategy proposed:

- Further financial backing for the implementation of T-Levels, in order to increase the number of hours of training undertaken by 16-19 year olds and support staff development for T-Level delivery;
- Updating school and college performance measures to support informed choices between technical and academic study routes; and
- A review of higher level technical education.

Local Priorities

3.3 In response to the Industrial Strategy, Lancashire will soon be producing a Local Industrial Strategy, which reviews the objectives of the current Strategic Economic Plan (SEP) and Growth Deal. The existing SEP identifies *Skills for Growth* as a key priority for Lancashire, with the objective of refocussing Lancashire's approach to skills provision, to ensure it is responsive to business needs and demands. At the same time, the recently completed Innovation Plan for Lancashire places a premium on skills in the context of an enabling the economy to grow its existing sectoral base, and to develop new sectoral opportunities for the future.

3.4 Skills are also a key underpinning factor for a number of other priorities, for example; the position of the labour market is a key feature in ensuring that right conditions for sector

development, investment and growth. Investments through the Lancashire Growth Deal, in some instances combined with European Regional Development Funding (ERDF), have been targeted to ensure that Lancashire's hub and spoke network of skills and training centres of excellence have the facilities and equipment required to be responsive to economic and business demands. Example investments have included:

- Edge Hill University's Innovation Technology Hub: a high-quality space for teaching, learning, student employability, enterprise and knowledge exchange activities;
- Blackpool & the Fylde College's Lancashire Energy HQ: designed to meet the training needs of the North West energy sector, including renewables, nuclear, oil and gas;
- Lancaster University's Health Innovation Campus (combined Growth Deal and ERDF): providing R&D space and facilities for the development of new services and technologies for health-related care;
- Myerscough College's Farm and Innovation Technology Centre: a centre of excellence for industry training and research, facilities to support food research and development that both local businesses and students can use to investigate opportunities to process and add value to on-farm produce;
- Nelson & Colne College's Advanced Engineering and Manufacturing Innovation Centre: the expansion and remodelling of educational facilities and the creation of new advanced engineering, laboratory, workshop and classroom facilities;
- Runshaw College's Business Centre Science & Engineering Facility: a new c40,000 sq. ft. Engineering and Science teaching facility; and
- Training 2000's Additional Engineering Training Capability: facilities and the procurement of specialist equipment to support engineering and advanced manufacturing apprentices.

3.5 Lancashire's Enterprise Zones[iii] are also important assets for the skills infrastructure in the County. The *Academy for Skills & Knowledge* (ASK), a dedicated aerospace skills and training academy, opened on the Samlesbury site in 2016, alongside BAE Systems' military aircraft advanced manufacturing centre. The Blackpool Airport Enterprise Zone provides premises for businesses in target sectors include the energy industry, advanced manufacturing and engineering, food and drink manufacture and the digital and creative sector. The focus on the energy sector has also led to the Enterprise Zone being the home of the Lancashire Energy HQ, which acts as a training base for the energy sector.

3.6 The delivery of the SEP skills objectives is supported in Lancashire through the Skills and Employment Strategic Framework, which informs public investment in skills and employment activities in the County. The framework is structured into four themes: *Future Workforce, Skilled & Productive Workforce, Inclusive Workforce* and *An Informed Approach*. The framework is not intended to be static, rather it is a dynamic document reflecting progression against objectives through an annual process of review. The next update of the framework is due in early 2018.

3.7 The Vision will be a core component of the new Framework, which will retain the same four themes. Annex 1 (page 33) provides a cross-referencing of the Vision to the four framework themes. The Vision will also link to other concurrent strategic projects, such as the implementation of the Lancashire Innovation Strategy, in which the development and availability of high-level technical skill-sets and capabilities is cited as a key enabler for innovation.

Technical Education Reform

3.8 Recent years have seen a high degree of change in the policy environment surrounding Technical Education.

3.9 The 2016 Independent Review of Technical Education, led by David Sainsbury and with Lancashire representation on his Steering Group, considered the strengths and weaknesses of the current system in England. It identified the need for improvements to address a UK skills deficit that is increasingly evident on the international stage, and that is consistently challenging for employers, whilst driving improvements in productivity.

Strengths: Increasing educational attainment, learners generally successful in progressing to further stages of education or employment and increasing participation amongst 16-18 year olds.

Weaknesses: A complex and opaque system, which learners and employers struggle to navigate and the structure of which offers limited incentive for providers to diversify, falling participation amongst adults aged 19+, a lack of employer engagement and investment in Technical Education and training.

Source: Report of the Independent Panel on Technical Education (2016)

3.10 The recommendations of the Review were accepted by Government in the Post-16 Skills Plan following Royal Assent of the Technical and Further Education Act in April 2017[iv]. In the same period, the Apprenticeship Levy[v] was also introduced (see Box 1 below), driving greater engagement with Apprenticeships from employers seeking to spend levy funding, with private training providers, Further Education Colleges and Higher Education Institutions. Statistics to the end of 2017 suggest that whilst the introduction of the Levy seems to have led to an overall decrease in Apprenticeship starts compared to the previous academic year[vi], it has also led to a significant increase in interest and demand for higher level apprenticeships[vii].

Box 1: Explaining the Apprenticeship Levy

From 6 April 2017 the Apprenticeship Levy was applied to all employers with a pay bill over £3 million. The Apprenticeship Levy is charged at 0.5% of the employer's annual pay bill and is paid in addition to any other industry-wide training levy arrangement, for example the Construction Industry Training Board Levy. The levy is reported and paid monthly through the HMRC Pay as You Earn (PAYE) process and the government automatically adds 10% to the funds each month.

The introduction of the Levy did not affect the way employers fund training for apprentices who started an apprenticeship programme before 1 May 2017. These training arrangements continued under the terms and conditions that were in place at the time the apprenticeship started.

Levy funding is managed through an account with the Apprenticeship Service and can only be used to pay for apprenticeship training and assessment for apprentices that work at least 50% of the time in England. Funds cannot be used to pay for other costs associated with apprentices, such as wages, statutory licences to practise, travel and subsidiary costs, work placement programmes or the setting up of an apprenticeship programme. In order to use funds in the account, employers must evidence that the apprentice spends 20 per cent of their time on off-the-job training, defined as learning which is undertaken outside of the normal day-today working environment, is separate to their normal duties and leads towards the achievement of an apprenticeship.

From April 2018, levy-paying employers will be allowed to transfer funds to other employers, through the Apprenticeship Service. They can transfer funds to any employer, including smaller employers in their supply chain, and apprenticeship training agencies. Levy-paying employers will initially be able to transfer up to 10% of the annual value of their Levy funds.

Non-levy paying employers will share the cost of training and assessing their apprentices with government, in a process called 'co-investment'. From May 2017, they will pay 10% towards to the cost of apprenticeship training and government will pay the remaining 90%, up to the funding band maximum that is set for each framework and standard.

Source: www.gov.uk, Apprenticeship Funding pages

3.15 At the core of the Post-16 Skills Plan is the development of a national system of Technical Education with a single, common framework of employer-designed standards, which deliver the knowledge, skills and behaviours required across a set of occupational areas. Important in this is greater clarity and coherence on the training available and the pathways and progression routes through the system; the need for which was consistently noted by consultees during this process. The requirement for improved guidance through the system is also recognised by Government, which launched a new Careers Strategy, *Making the Most of Everyone's Skills and Talents*, in December 2017. The strategy strengthens the statutory requirement of schools and colleges to provide impartial careers advice and guidance, and to ensure that young people gain insight into the broad range of post-16 providers and offers.

3.16 Key in the reforms is the development 'T-Levels', new technical study programmes that will sit alongside Apprenticeships as an alternative option to undertaking an academic routeway (A-Levels) at the age of 16; ultimately replacing a significant proportion of the current wide-array of technical and vocational qualifications which is the cause of confusion for so many employers and learners.

3.17 An action plan for the implementation of T-Levels was published in October 2017[viii], providing further detail on the nature of the programmes (see Box 2 below) and a timetable for implementation of the first programmes. T-Levels will be phased in and other qualifications phased out over-time, with the incentives and support currently available changing accordingly. The Government's ambition is that the majority of providers will be offering T-Levels by 2024.

Box 2: Explaining T-Levels

A T-Level will generally be studied over 2 years and will include a new technical qualification, which may be taught in a classroom, workshop or simulated work environment.

They are designed to train young people with the knowledge, skills and behaviours they need to enter skilled employment in a particular occupational area, for example software development, or to continue to study that technical subject at a higher level. The content of the T-Level will be based on the same occupational standards as apprenticeships, with content defined by employers and others.

The T-Level programme for 16 to 19 year olds will generally be taught full-time in a college or other provider, with time spent on a work placement. Individuals will be assessed at the end of the programme to test and certify their skills. Students who pass all parts of the programme will be awarded a T-Level certificate.

T-Levels will generally be taken by 16 to 19 year olds, but the needs of adult learners will be taken in account when considering the design of the programme.

T-Levels are for students who want to develop work-related knowledge and skills, but are not yet clear about the specific occupation they want to work in. They are for students who want to get the specialist knowledge to progress to employment in a highly skilled occupation (including higher degree apprenticeships) and/or higher levels of technical study, including degree courses with substantial technical content.

Source: Department for Education (2017) Post 16 Technical Education Reforms: T-Level Action Plan

3.22 In the first wave of reform, the focus is on developing T-Level programmes at Levels 2 and 3 for 16 to 19 year olds, with a small number of providers delivering some in September 2020, and the remaining routes being launched in September 2021 and 2022. In the future, there is a commitment to reviewing Technical Education for adults and technical provision at Levels 4 and 5, which was reinforced in the recent Industrial Strategy[ix]. This is crucial for employers in Lancashire, for whom Technical Education is a key means of training and, increasingly, re-training their current workforces.

3.23 The expectation is that a wide range of institutions will deliver T-Levels, and those institutions will need to ensure they have strong employer links and suitable teaching facilities in order to deliver the work-based elements of the programme.

Key implications for the Vision

The Government is giving an unprecedented focus to Technical Education. Lancashire's industrial structure and training infrastructure means it is at the foreground in terms of thinking through how these national level reforms will be implemented at a local level. Converting that thinking into action must be a key priority.

The Technical Education reforms pose significant change to the existing structures in the education sector; some of which is transactional. E.g. the removal and introduction of different types of qualifications, and stabilising apprenticeship demand and supply in the wake of Levy. However, it also seeks to drive deeper, cultural change and shift the balance of the employer-provider-learner relationship. Changes such as these require time and consistent, persistent adherence to common goals, as well as a shared understanding of the benefits to be achieved.

Whilst the current emphasis on reform is for young people, the commitment over the long-term is to ensure that the Technical Education offer is also available and accessible to adults. For Lancashire, Technical Education must become increasingly a whole working life experience.

Case Study 2: Engaging employers in curriculum design – Technical Advisory Boards

Myerscough College

Myerscough introduced Technical Advisory Boards for each curriculum area several years ago, this to enable open discussion between employers, professional bodies, membership organisations and curriculum staff on the shape and content of the College's curriculum. The original objective was to maximise curriculum relevance to employers, be this academic content or the practical skills taught, and the wider process of ensuring students and potential employees were 'work ready'. The employers' advice has led to curriculum content changes and additional practical skills taught across all areas of the College, with employers valuing future employees with bring both academic knowledge and practical ability from the outset of their work experience.

The benefits to the employers have been the opportunity to recruit staff who are both knowledgeable in the theory but also competent in the practical skills required for their business, and so can contribute to business activity at the earliest opportunity, boosting productivity. Industry representatives have valued the opportunity to influence the skills set of future staff, but also contribute to 'making a difference' by opening the student's eyes to career opportunities that they may not be aware of and sharing their life experiences.

Additional benefits for students have been the strengthened links with the members of the Technical Advisory Boards; providing employment, careers advice, work experience, knowledge of the opportunities available and enhanced work prospects. The College has utilised these industry specific groups to advise on college developments and plans, including the recently-opened Food/Farming Innovation and Technology Centre (FFIT). The members of the Agriculture Technical Advisory Group, with expertise across the livestock, dairy and technological sectors, all input into the design of the Livestock Innovation Centre and the technology to be employed. Some members have already utilised it as a hub for industry demonstrations, staff CPD, and research trials work, strengthening the connections between the school and employers.

There is no set programme for the Technical Advisory Boards, they meet when appropriate for the academic area, some like animal care, countryside and agriculture combine with a careers event, others such as motorsports at an external event. The important aspect is the availability and willingness of the key stakeholders to be engaged.

4 Labour Market Position

A key aim of the Vision is to provide consensus around Lancashire's ambitions for its Technical Education system. Essential in this is an understanding of the labour market demands that the education sector is seeking to meet, and the patterns of labour supply. This section of the report considers key quantitative indicators of the current and future position.

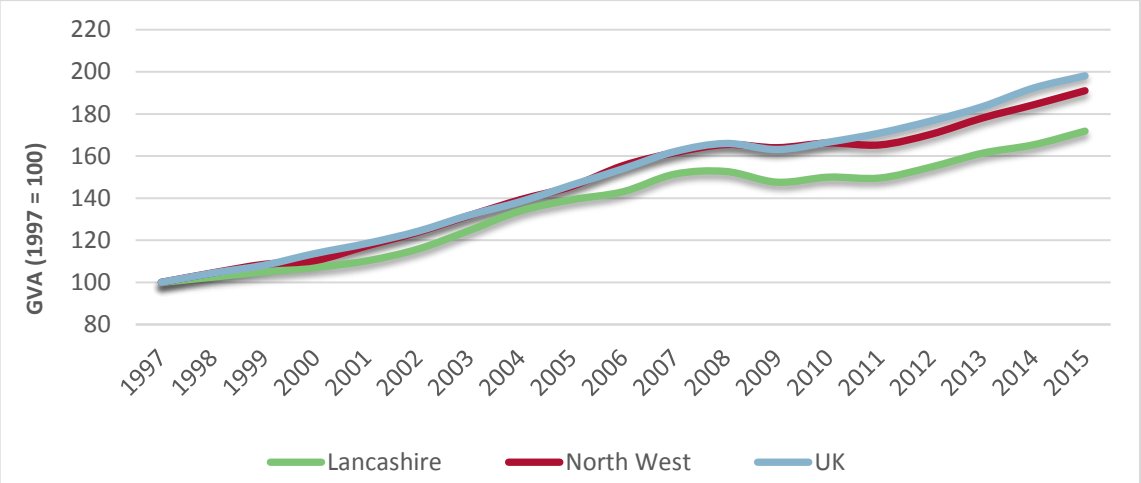
4.1 Lancashire has a resident population of just under 1.5m people, supporting approximately 630,000 jobs, and employed by around 50,000 businesses.[x] The County experienced a decline in employment between 2007 and 2012, but has since reversed that trend, with employment levels now above pre-2007 levels. Whilst is a similar trend to the North West and UK, Lancashire's employment growth has been slower than both.

The primary indicator to measure an economy's overall performance is Gross Value Added (GVA). Lancashire generated GVA of £29bn in 2015 and although there has been consistent growth in GVA in the County, it has been at a slower rate than the North West and UK, with the gap widening in recent years.

4.2 GVA per employee in Lancashire was 83% of the UK average at £42,100 in 2015, against a figure of £50,800 for the UK. This productivity gap matters. If GVA per employee in 2015 was at the UK level, the Lancashire economy would have generated an extra £3.1bn. The gap is also widening; in 2002, Lancashire's GVA per employee was 86% of the UK average. The closing of this increasing productivity deficit is a key challenge for the County.

4.3 Economic forecasts from the Greater Manchester Forecasting Model (GMFM) show that under a 'do nothing' scenario, by 2036, GVA in Lancashire is due to increase by 31.7% to £38.5bn. However, over the same period, UK GVA is forecasted to increase by 40.3%. If Lancashire's GVA grew at the same rate as the UK, this would result in an additional £2.5bn in GVA.

Figure 4-1: Indexed growth in GVA in Lancashire, North West and UK (1997-2015)



Source: GMFM Oxford Economics (2017)

4.4 Employment growth is also forecast to remain slower than that of the UK. By 2036, employment in Lancashire is forecasted to grow by 2.7% (an additional 19,000 jobs). Over the same period the UK is forecasted to increase by 7.3%. If Lancashire's employment rate matched UK levels, this would result in an extra 53,000 jobs in the local economy.

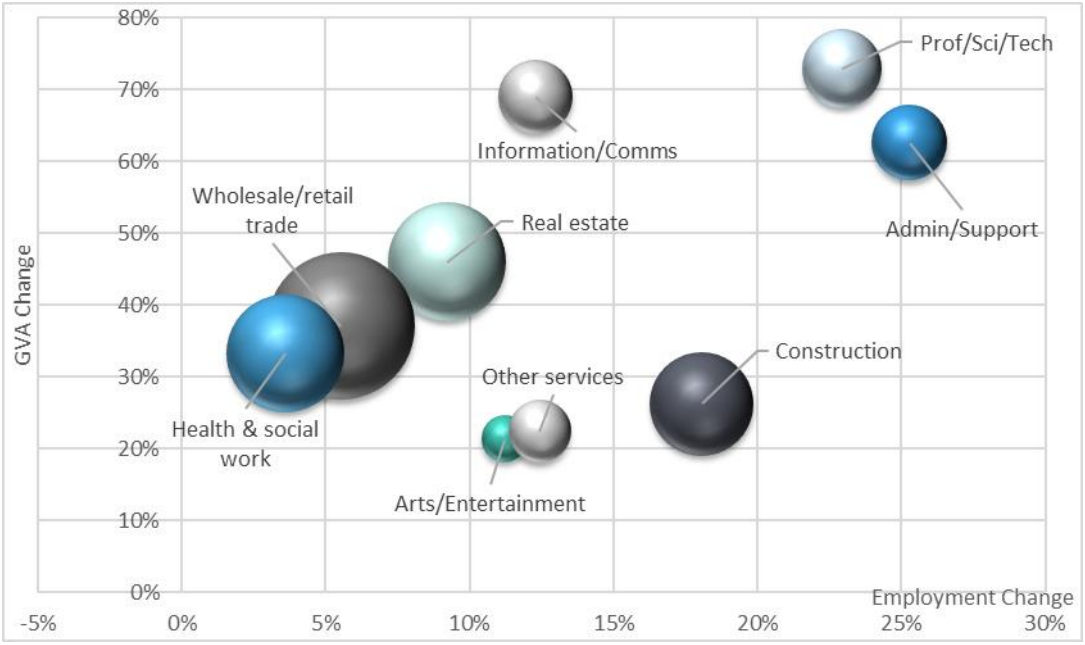
Creating the right enabling conditions for businesses to scale-up operations and expand their employment footprint is a key objective for the County, for which availability of skilled labour is crucial.

4.5 The forecast changes in GVA and employment levels point to a continued productivity gap, with GVA per employee of £55,100 in Lancashire in 2036, compared to £67,900 across the UK. GMFM data anticipates that Lancashire's productivity will be at 81% of the UK average in 2036, this is primarily a result of structural changes in the economy. Understanding where these changes will occur, and the implications for skills demand, is essential to ensuring Lancashire is able to capitalise on the opportunities presented. For employers in Lancashire this is not necessarily solely about how the system can produce skilled candidates, fresh from school or college. Also pressing for them is how the system can support re-skilling their existing workforce.

4.6 Figure 4-2 below shows the sectors which are anticipated to *expand* in Lancashire, growing in both GVA and employment. These are mainly service sectors, such as Professional, Scientific, and Technical, Administration & Support, and Information & Communications.

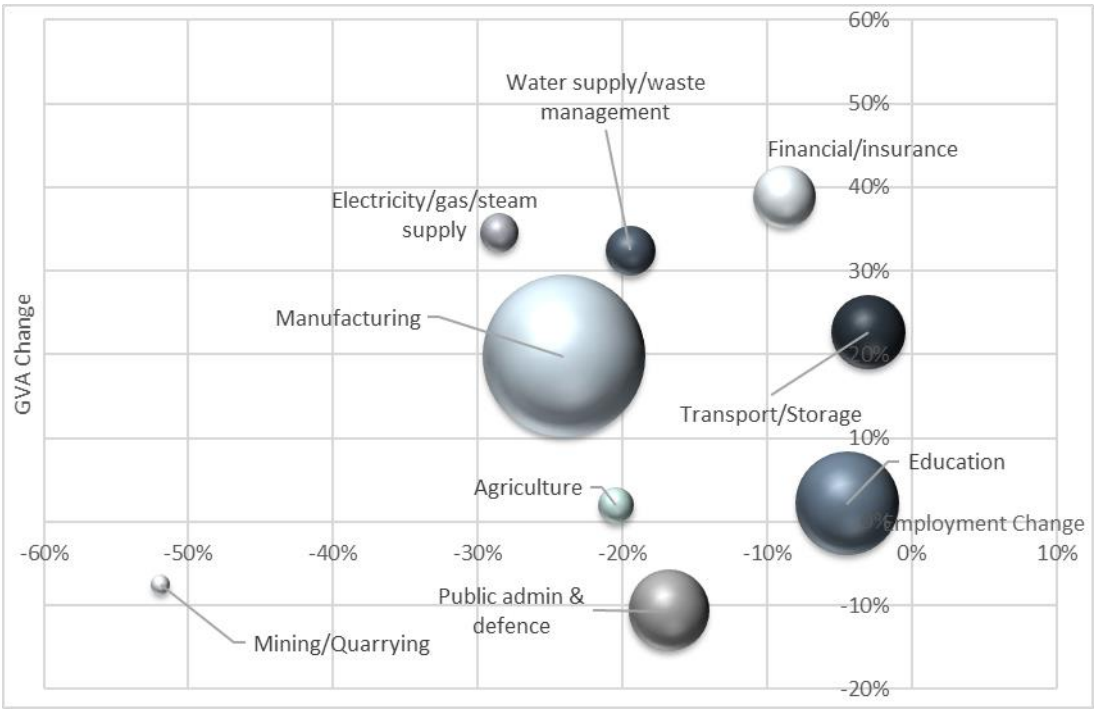
4.7 Figure 4-3 shows sectors which are likely to *adjust* their position in the Lancashire economy; GVA will increase but employment will decrease. Jobs in manufacturing, traditionally a key employment sector in the County, are forecast to decline by 24% (c.20,000).

Figure 4-2: Expanding sectors, showing growth in employment and GVA between 2015 and 2036



Source: Source: GMFM Oxford Economics (2017) Note: Size of bubble relates to the size of the sector's current (2015) GVA contribution

Figure 4-3: Adjusting sectors, growth in GVA and decrease in employment between 2015 and 2036



Source: GMFM Oxford Economics (2017) Note: Size of bubble relates to the size of the sector's current (2015) GVA contribution

4.8 The Expanders and Adjusters in the figures above highlight the productivity opportunities and employment challenges driven by ongoing, and increasingly rapid, technological change, and the new business models and workforce structures flowing from this. A number of the Expanding and Adjusting sectors feature prominently in wider discourse around Industry 4.0 and the progress of digitization: Manufacturing, Finance, Professional, Scientific and Technical Activities, Information and Communication Services, and Administration and Support all face major changes as part of the 'fourth industrial revolution'.

4.9 Translating these sectoral changes into roles and functions, Table 4-1 (below) shows the anticipated change in the Lancashire's occupational structure. In absolute terms, Professional and Skilled Trade occupations remain dominant. However, the percentage changes in employment over the coming years show that levels of demand will be most acute in Management, Customer Service, Technical and Elementary occupations. This is consistent with current literature, which anticipates that roles which demand high levels of cognitive thinking, problem solving and social intelligence, will be increasingly in demand.

4.10 In line with this, the data also highlight reduced demand for routine administrative and process roles, which are most prone to automation.

Table 4-1: Occupational structure in Lancashire at 2015 and 2034

Employment by occupation in Lancashire	2015	2034	Percentage change (%)
1 Managers, directors and senior officials	72.2	76.9	6.4
2 Professional occupations	106.1	109.3	2.9
3 Associate professional and technical occupations	71.1	75.0	5.5
4 Administrative and secretarial occupations	74.1	73.3	-1.2
5 Skilled trades occupations	87.5	87.7	0.2
6 Caring, leisure and other service occupations	76.0	78.9	3.9
7 Sales and customer service occupations	54.8	58.4	6.6
8 Process, plant and machine operatives	58.3	54.8	-6.1
9 Elementary occupations	80.8	84.9	5.1

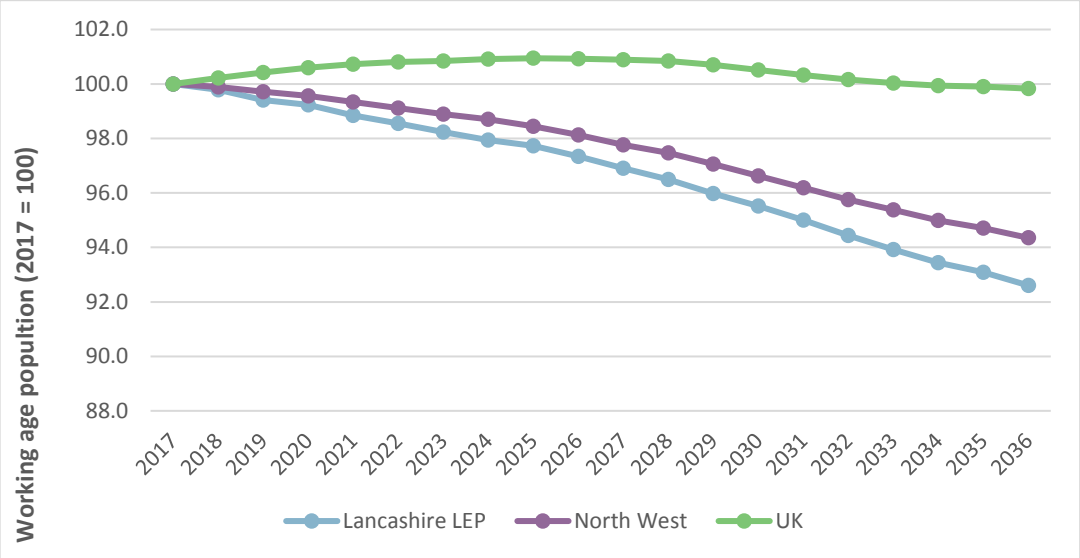
Source: GMFM Oxford Economics (2017)

4.11 Capitalising on these changes will be vital to accelerating growth in Lancashire and narrowing (and ultimately closing) the productivity gap. An appropriate and adequate supply of skilled labour is a crucial component in the addressing of the productivity challenge, and as such remains a consistent challenge.

Employers across key sectors note a shortage of technical skills, difficulties recruiting to specialist roles and a requirement for higher level skills which they struggle to find in the local labour market.

4.12 Alongside economic restructuring, significant social changes are anticipated in the next two decades, not least of which is the impact of an ageing population. The UK's working age population (aged 16-64) is forecast to shrink by -0.2% by 2036. This decline is anticipated at a much greater rate in Lancashire, -7%, or 68,000 fewer working age people in 2036.

Figure 4-4: Indexed change in the working age population (2017-2036)



Source: GMFM Oxford Economic (2017)

4.13 In the current scenario, Lancashire's worker density (the ratio of working age population to total population) will change from 0.61 in 2017 to 0.55 in 2036. However, it is important to consider that extended working lives are increasingly recognised as a by-product of living longer, and that many people who would traditionally have finished work at 65 will be working beyond this point, though with different work expectations and requirements.

It will be vital to ensure that workers are able to maintain and update, as well as re-skill, in response both to technological developments and their own changing personal demands and capabilities.

4.14 It is anticipated the demand for labour will increasingly be for those with higher levels skills (level 4+) and skilled workers (level 3). This necessitates a shift in the Lancashire skills profile, which currently has a lower proportion of people qualified to levels 3 and 4 compared to North West and UK averages (as shown in Table 4-2 below). Employers presently fill gaps at these levels by training existing staff; a much higher proportion of job-related training in Lancashire is provided to already senior staff and highly skilled workers compared to the national average[xi]. Going forward, it will be essential to ensure that demand can be met both by recruiting skilled staff and by providing training to up-skill, and re-skill, existing employees.

Table 4-2: Population qualification profile in Lancashire, North West and Great Britain (2016)

	Lancashire (numbers)	Lancashire (%)	North West (%)	Great Britain (%)
NVQ4 and above	292,700	32.6	34	38.2
NVQ3 and above	482,900	53.7	53.7	56.9
NVQ2 and above	666,600	74.1	73	74.3
NVQ1 and above	777,700	86.5	84.8	85.3
Other Qualifications	46,600	5.2	5.7	6.6
No Qualifications	74,800	8.3	9.5	8

Source: GMFM Oxford Economic (2017)

4.15 There are positive indications of improvement in the skills pipeline; GCSE attainment in Lancashire has improved and in 2015/16 was slightly higher than the national average, and the County also has a higher proportion of students achieving at least two A Levels at AAB (or better) and three A*-A grades.

Students taking the current Tech Level qualifications in Lancashire also have a significantly above national average point score and apprenticeship achievement rates are above the national average.

4.16 However, patterns of progression from study for 16, 17 and 18-year olds are mixed across the County, and whilst averages for progression into any form of sustained education or employment do not generally differ by more than +/- 3 or 4 percentage points from the national average, there are instances of greater difference in some locations.

4.17 The profile of the provider landscape in Lancashire, particularly the high number of tertiary providers compared to other areas, is also evident in the routes taken. For example:

- At age 16, a far higher proportion move on to study with a Further Education (FE) provider than nationally, and far fewer into School Sixth Forms, particularly the case in the Blackburn with Darwen Local Education Area (LEA);
- At 17/18, young people in the Blackpool LEA, are far less likely to progress into study at a Higher Education Institution (HEI), but more likely to study HE with an FE provider; and
- Across the Lancashire LEA, 17/18-year olds are much more likely to progress into study at an HEI.

4.18 Such patterns are also reflective of the nature of participation in education and training, with learners tending to access what is available to them within their locality. Whilst the supply landscape will always naturally bear influence on patterns of study, in the future it will be essential to ensure that demand is the key driver of these trends, rather than accessibility.

Key implications for the vision

Addressing the productivity challenge faced by the County must be a key objective within the Vision. Whilst Lancashire's businesses are on a growth trajectory, this is neither as steep, nor as strong (in output terms) as the UK average.

Employers report consistent challenges obtaining the skills they need, both from new recruits and in identifying suitable re-training for their existing workforce. This is compounded by the pace of market and technology change, a perennial challenge in the business environment, but one which is likely to intensify in the face of ongoing technological developments and market shifts. Education and training suppliers must be in a position to support and enable businesses in these contexts.

Whilst changes can be anticipated, it is impossible to predict with accuracy exactly what will be needed, and when. The structures created in the system must be sufficiently flexible to be 'future-proof', and must focus on creating processes that will work over the long-term, rather solutions to meet short-term needs.

Case Study 3: Approaches to the Apprenticeship Levy – North Lancs Training Group

North Lancs Training Group's (NLTG) works with a range of employers, small and large, who are using Apprenticeships to train new staff and/or upskill their existing workforce. Their dedicated Apprenticeship Service Engagement Team provides support for employers who are getting to grips with changes following the introduction of the Apprenticeship Levy. This includes:

- Helping employers to understand how their Apprenticeship Service online account facilitates payment;
- Telephone/email and site visit support when setting up their online account, and ongoing support;
- Support to navigate the online account.

NLTG are themselves a Levy payer and have found their own experience of engaging with the system, as a user, extremely valuable for the employers they work with.

"Being a Levy company helps, as we see both sides of the system. This allows us to provide practical support, which employers tell us has been invaluable as they get to grips with the new funding regime. There hasn't been a 'script' or guidance notes for employers to follow as they dip in and out of their account, and they often call asking for our support, so, our own understanding of how to use the system is crucial."

Gareth Lindsay, Operations Director, NLTG

Examples of the Levy in action:

NLTG

- Using the Levy to train new and existing staff. Total Levy pot exhausted, as such Apprenticeships are also paid for via co-investment funding with the government each month.
- Learners undertaking: Business Improvement Techniques Level 3, Business Administration levels 2,3,4, Customer Service Practitioner Level 2, Furniture Level 3, IT Application Specialist Level 3, Professional Cookery Level 3, Team Leader/Supervisor Level 3
- Mix of new and existing staff aged 16-18 and 19+

Dr Oetker

- Using the Levy to upskill their existing workforce.
- Learners referred to NLTG undertaking: Team Leader/Supervisor Level 3 and Food and Drink Process Operator Level 2
- All are existing staff, aged 19+

Progress Housing Group

- Using the Levy to train new staff, employed on an Apprenticeship Contract. However, Progress Housing is reviewing wider workforce training needs and how they can best utilise Levy funds to contribute to development of existing workforce.
- Learners referred to NLTG undertaking: Business Administration Level 2, Business Administrator Level 3 and Customer Service Practitioner Level 2. Progress Housing also uses other providers to deliver qualifications not offered by NLTG.
- Apprenticeships offered to all existing staff. Also, some Apprentices are school/college leavers.

5 A Vision for 2030

Taking into account the forthcoming changes to the education infrastructure, and the current and future demands of Lancashire's economy, the consultation explored both the needs and ambitions of stakeholders with respect to what a high performing Technical Education system should look like in 2030.

5.1 The previous sections have considered the strategic and policy contexts within which the Vision has been developed and the key features of the economic landscape that inform its shape. The key themes of the Vision are outlined below, summarised as five main 'ambitions'. These are described in more detail in the following sections, which present the key rationale, drawn from the quantitative evidence base or identified during consultation, the corresponding objectives which set out what needs to be achieved, and the associated outcomes.

5.2 Against this background, the Vision is as follows:

In 2030 Lancashire's Technical Education system will:

- Grow the productivity of Lancashire's workers and businesses;
- Anticipate and respond to market and technology change, with provision that is driven by employer demand;
- Start with careers education and experiences at primary level and support individuals at all points in their working lives;
- Work to ensure providers and employers collaborate on the design and delivery of education and training; and
- Provide a co-ordinated and joined-up offer to learners and employers, through collective planning and management.

The vision will be underpinned by:

- Excellent labour market information and intelligence;
- Strong monitoring and evaluation, providing real-time understanding of how the technical Education Systems is performing and where it is adding value; and
- A culture of constant and relentless learning, with a real commitment to learning from best practice occurring outside of Lancashire.

In 2030, our Technical Education system will:

Grow the productivity of Lancashire's workers and businesses

Rationale

5.3 Whilst forecasts anticipate growth in GVA and employment in Lancashire, the rates are behind national averages, and as such it is essential to take action to respond to lower levels of productivity in Lancashire.

5.4 Key growth areas for jobs and GVA are in Service Industries, which will require higher level Managerial, Technical and Professional skills, along with customer-facing staff with the social skills and emotional intelligence to deliver increasingly personalised services. Skilled technical staff are likely to be in demand across economy, but particularly in sectors that are restructuring due to the digitisation and automation of labour-intensive processes. In these sectors, which will increase the value of economic output whilst reducing their employment, there will be increasing need for support to re-skill and re-deploy existing staff.

5.5 To a certain extent, some of this re-skilling will be a short-term demand, smoothing out as occupations stabilise. However, an ageing workforce and longer working lives suggest an ongoing demand for training, to update, expand and develop new skills, and ensure that workers, (and therefore businesses) remain productive.

5.6 At the same time, development of the existing workforce is necessitated by consistent difficulties in recruiting faced by employers, who are drawing from a limited pool of candidates with the right skillset. This challenge is compounded for many employers who find that whilst candidates have the technical skills required, they lack the soft skills necessary to operate effectively in the workplace. Reforms to the education system are crucial to ensure that courses are demand led, and therefore the labour pool offers job ready candidates.

Objectives

5.7 To meet the needs of businesses in Lancashire, and ensure workers have the skills to join the workforce, develop and maintain a productive career for themselves and their employers, the Technical Education system needs to:

- Develop a range of demand-led, high-quality technical routeways, leading to a stronger technical skills base to enable business performance;
- Develop accessible training pathways for adults seeking to re-skill during their career; and
- Improve the work readiness of those completing education and training, providing soft/life skills alongside technical skills to optimise the productivity and value of new recruits.

Outcomes

5.8 The benefits of delivering this ambition will be:

- More productive businesses, in a thriving economy, leading to greater wealth creation and improved economic well-being for Lancashire residents; and
- Learners and workers will be better equipped to sustain and progress careers in an increasingly complex world of work.

In 2030, our Technical Education system will:

Anticipate and respond to market and technology change, with provision that is driven by employer demand

Rationale

5.9 The disruptive impacts of new technologies on business models and working practices are widely reported. Advanced technologies and automation will continue to re-shape both manufacturing processes and service delivery. The 'Essential Eight'[xii] technologies anticipated to have the most significant impact across industries in the coming decades are: Artificial Intelligence, Internet of Things (IoT), Robots, Augmented Reality, Virtual Reality, 3D Printing, Blockchain, and Drones. In the workforce, it is anticipated that change will mainly be driven by increasing the use of technology and data analytics to inform process efficiency, service optimisation, and marketing insight. New business models and ways of working are already reshaping, and will continue to reshape, businesses and the types of skills needed. Existing roles are being re-designed, new occupations are emerging, and some may cease to exist.

5.10 Alongside technology, market change is also a major force shaping business models and working practices, and often much harder to predict and plan for. For the UK, key uncertainties include the impact on trade of exiting the European Union, and its future international trading position. Operating in a global market, it is essential for businesses to be able to respond to changes in consumer demand, particularly when the UK market is increasingly squeezed. At the time of writing, interest rates in the UK had recently increased for the first time since 2007 and inflation had risen to its highest level since 2012. Seeking new markets is an important mitigation for businesses in this scenario, and can be a key driver of product and service diversification, which can subsequently alter demand for skills.

Objectives

5.11 To deliver training that meets the evolving needs of businesses in Lancashire the Technical Education system needs to:

- Develop a proactive system to track market and technology change and anticipate where it may happen in the future;
- Embed a clear process to translate changes in business needs into skills needs and Technical Education requirements; and
- Enable employers to more effectively self-diagnose training needs as their businesses evolve.

Outcomes

5.12 The benefits of delivering this ambition will be as follows:

- Providers will have an improved understanding of the market and technology changes that are shaping the world of work, and the implications for skills that flow from this;
- Lancashire's businesses will be increasingly sophisticated consumers of Technical Education, able to identify how it can meet their current and future skills needs; and
- Business growth as businesses are able to access the skills needed to diversify into new/emerging sectors/activities.

In 2030, our Technical Education system will:

Start with careers education and experiences at primary level and support individuals at all points in their working lives

Rationale

5.13 Children form views about careers at an early age, influenced by a range of factors within their home and educational environments. The experiences and information available to them through primary and secondary school, and both within and out-with the classroom, are crucial in influencing their understanding of the world of work, tackling stereotypes and, shaping their expectations and ambitions for their future. At secondary level, encounters with employers can have extremely positive impacts on education and employment outcomes; four to five good quality employer encounters can reduce the probability of a young person being Not in Employment Education or Training (NEET) by 86%, and increase earning potential 18%[xiii]. It is also vital to recognise the value of experiences, and influence of perspectives, outside of the educational context.

5.14 Continual technological growth and development means that demand for candidates with technological mindsets is only likely to increase. However, there is a risk that insufficient understanding of the range of options available, alongside negative perceptions of technical routes, limits the number of young people who select them and so restricts the future pipeline of workers. This is anticipated in the Government's new Careers Strategy[xiv], which aims to ensure access to high-quality information and advice about **all** study routes in **all** schools.

5.15 Taking account of the changes in careers and working patterns previously discussed, it is also essential to ensure careers advice and support is available to adults throughout their working lives. Whilst for many, learning and development will be supported (and often led) by employers, enabling individuals to self-determine further learning and training, regardless of which stage they are at in their lives, will be key to moving toward a culture of constant learning and adaptive careers.

Objectives

5.16 To ensure children, young people, and adults have the information, advice, guidance and experiences to support education and career pathways, the Lancashire's Technical Education system needs to:

- Provide consistent and positive information for learners and influencers to ensure equal status for Technical Education with academic routes, enabling informed choices at key decision points;
- Deliver engagement with industry in education at all ages and stages, with work-related learning and activities embedded in all schools (primary & secondary), colleges and universities; and
- Recognise and validate the development of skills, knowledge, and competencies that takes place outside of the classroom.

Outcomes

5.17 The benefits of delivering this ambition will be as follows:

- Young people and their parents/carers have a better understanding of different educational routes, and careers they lead to, resulting in Higher levels of participation in Technical Education;
- At all ages, people can access advice to make informed choices, changing between academic and technical routeways and identifying the right training options for them; and
- A future workforce that can capitalise on education, work and life experience and is therefore more resilient to change.

In 2030, our Technical Education system will:

Work to ensure providers and employers collaborate on the design and delivery of education and training

Rationale

5.18 Employer investment and engagement in education and training is crucial to ensuring that supply meets the requirements of businesses. Good working relationships exist between many employers and providers across Lancashire, and as such there is a lot of good practice to build on in providing training solutions that have been co-designed. However, it is acknowledged that engagement is often with the larger employers, or with a sub-set of highly engaged SMEs, which means that many businesses in Lancashire have no direct influence on supply.

5.19 Employers have noted a requirement for greater flexibility from providers and an improved understanding of their business needs. This is particularly important in sectors where an increasingly fast pace of change necessitates rapid response to training needs. However, in all cases, it is crucial for providers to have an up-to-date understanding of current trends, practice and requirements in the industries they serve. This relates not only to course content, but the skills, knowledge, experience and expertise of teachers, tutors and staff.

5.20 Maintaining the industrial relevance of course content and delivery, alongside the requirement for work experience embedded in the new T-Level courses, and the greater involvement of employers integrated in the Careers Strategy, will require both broader and deeper collaborations between employers and providers going forward. Key to this will be recognising the different capabilities and capacities of employers and providers and ensuring their respective strengths are effectively leveraged.

Objectives

5.21 To deliver training that meets the needs of businesses in Lancashire, the Technical Education system must:

- Be sufficiently agile and flexible to respond to change and maintain fitness for purpose;
- Establish a virtuous cycle of collaborative work and engagement between employers and providers; and
- Work to common models for employer engagement to review the effectiveness and industry relevance of education and training.

Outcomes

5.22 The benefits of delivering this ambition will be:

- High levels of work readiness amongst leavers, resulting from the design, development and delivery of Technical Education in response to evidenced industry demand;
- Employers experiencing fewer skills gaps, as issues are resolved by more and better co-designed training provision; and
- Teaching staff have up-to-date understanding of industry trends, practice and skills requirements.

In 2030, our Technical Education system will:

Provide a co-ordinated and joined-up offer to learners and employers, through collective planning and management.

Rationale

5.23 Lancashire has a system of high performing and good quality education and training providers, with a strong mix of public and private provision, and a number of large employers with high quality training programmes. There are distinct strengths in the current provision and recent improvements in attainment levels. In addition, education and training facilities in the area are generally sophisticated, and many have received significant investment through the Local Growth Fund, aligned to sector priorities.

5.24 However, some of these strengths have a double edge. The range of training providers and the routes and options available are often confusing for employers, who can find 'the system' overwhelming and difficult to navigate, and are therefore unclear how to get the best from it. The Vision's consultation has highlighted that employers are keen for providers to work more collaboratively to share best practice and manage and co-ordinate provision. Whilst there is recognition that some duplication in training across providers and areas is unavoidable for certain types and levels of courses, particularly at lower levels, there is a desire to reduce unnecessary replication in the training offer and concentrate specialisms, particularly for higher-level training.

5.25 Lancashire's geography is a crucial consideration in any planning and co-ordination of provision. It is important to recognise that the County does not have 'one' centre, rather it operates with several Travel to Work and Learn areas, which often connect more logically with areas outside the County's border. As such, it should be anticipated that the Vision will be deployed differentially according to local circumstances. Whilst this operational flexibility is pragmatic, the Vision must nonetheless cohere to a set of common objectives, enabling activity to be aligned and integrated. In an economy that is increasingly borderless, it is also important that pro-active steps are taken to think 'outside the County' and ensure that whilst working locally, it thinks globally in terms of its ambitions and influences.

Objectives

5.26 To ensure the Technical Education system maximises its assets there is a need to:

- Co-ordinate specialisms across providers and create centres of excellence for higher level learning to leverage the best provision;
- Streamline contact with, and access to, education and training for employers and learners, enabling them to make more informed choices; and
- Invest in, and utilise, digital technologies to support collaborative working, and the sharing of curriculum materials.

Outcomes

5.27 The benefits of delivering this ambition will be:

- An accessible offer of education and training that is networked within and across the County to optimise available resources; and
- A stronger and more sustainable market for Technical Education, as employers are increasingly capable and expert identifying and sourcing the training they need.

Figure 5-1: Vision Summary

In 2030, Our Technical Education system will:

	Grow the productivity of Lancashire's worker & businesses	Anticipate & respond to market & technology change, with provision driven by employer demand	Start with education & experiences at primary level & support individuals through working lives	Work to ensure providers & employers collaborate on the design & delivery of education & training	Provide a co-ordinated & joined-up offer, through collective planning & management
Rationale	• Lancs productivity levels lower than North West & National averages. • Requirement for higher level skills & difficulties recruiting; increased need to develop current workforce, but challenges engaging with education system. • Reducing workforce size; working age population forecast to decline at a greater rate than nationally. At same time, people working longer & 'jobs for life' less common.	• Requirement to understand the implications of new technologies & markets. • New business models & ways of working will reshape businesses, and types of skills needed. • Existing roles are being re-designed, new occupations will emerge, some may cease to exist.	• Continual technological growth & development means technological mindsets likely to be increasingly in demand. • Risk that insufficient understanding of the options available, alongside negative perceptions of technical routes, limits young people's choices & future pipeline of workers. • Engagement with careers & industry required from a younger age to 'start the conversation' about Tech Ed.	• Good existing relationships between employers and providers, lots of good practice to build on in providing work based learning. • Where businesses are currently engaged tends to be large employers; concern that SME voice is insufficiently heard. • Increasingly fast pace of change necessitates rapid response to training needs. Requires broader and deeper collaborations between employers and providers to maintain industrial relevance.	• Lancs strong system of high quality providers. However, employers find it difficult to navigate & are unclear how to get what is best for them. • Challenging geography, no 'one' centre, several Travel to Work & Learn areas, often connecting with areas outside Lancs. • Need to work more collaboratively to manage & co-ordinate specialisms, avoid unnecessary replication & share best practice.
Objectives	• Develop range of demand led high-quality technical routeways, leading to stronger technical skills base to enable business performance. • Develop accessible training pathways for adults seeking to re-skill during their career. • Improve work readiness upon completing training, providing soft/life skills alongside technical skills to optimise productivity & value of new recruits.	• Develop a proactive system to track & anticipate future market & tech change. • Embed a clear process to translate changes in business needs, into skills needs and Tech Ed requirements. • Enable employers to more effectively self-diagnose training needs as their businesses evolve.	• Provide consistent & positive information for learners & influencers to ensure equal status for Tech Ed with academic routes, so enabing informed choices. • Engagement with industry in education at all ages & stages, with work-related learning & activities embedded in all schools (primary & secondary), colleges & universities. • Validate skills, knowledge & competency developed outside of classroom.	• Be sufficiently agile & flexible to respond to change & maintain fitness for purpose. • Establish a virtuous cycle of collaborative work between employers & providers, sharing information in both directions. • Work to common models for employer engagement to review the effectiveness & industry relevance of education & training.	• Co-ordinate provider specialisms & create centres of excellence for higher level learning to leverage the best provision. • Streamline contact with, & access to, education & training for employers & learners, enabling them to make more informed choices. • Invest in, & utilise, digital technologies to support collaborative working & sharing of curriculum materials.
Outcomes	• More productive businesses, in a thriving economy, leading to greater wealth creation and improved well-being for Lancashire residents. • Learners & workers will be better equipped to sustain & progress careers in an increasingly complex world of work.	• Providers will have an improved understanding of market & technology changes shaping world of work & skills implications. • Lancashire's businesses will be increasingly sophisticated consumers of Tech Ed, able to identify how it can meet their skills needs. • Business growth via accessing the skills needed to diversify into new/emerging sectors/activities.	• Greater understanding of routes & careers, resulting in higher levels of participation in Tech Ed. • At all ages, people can access advice to make informed choices, changing between academic & technical routeways & identifying the right training options for them. • A future workforce can capitalise on education, work & life experience & is more resilient to change.	• High levels of work readiness, resulting from design, development & delivery of Tech Ed in response to evidence industry demand. • Employers experiencing fewer skills gaps as issues are resolved by more and better co-designed training provision. • Teaching staff have up-to-date understanding of industry trends, practice & skills requirements.	• An accessible offer of education & training that is networked within & across the County to optimise available resources. • A stronger & more sustainable market for Tech Ed, as employers are increasingly capable and expert in identifying & sourcing the training they need.

Underpinned by... **Excellent labour market information and intelligence**

Strong monitoring and evaluation and a culture of constant learning (from the UK and international peers)

Case Study 4: Maintaining up-to-date industry understanding – Dual-professional teaching staff

Blackpool and the Fylde College (B&FC) take a strategic approach to ensuring that all staff are 'dual professionals', who combine deep knowledge, conceptual understanding and expertise in learning and teaching processes and contexts for diverse students, with expert subject knowledge and skills. Staff may continue to be current practitioners in their fields, in addition to teaching, or as part of their continuous development, spend up to five days annually in their industry or sector. This allows staff to:

- Enhance their skills and update their knowledge of relevant industry/sectoral activities;
- Provide situational context to changes in the external environment, such as policy and procedural changes, generating understanding of their impact on organisations;
- Identify enhancements to learning, teaching and assessment strategies; and
- Facilitate and support enhancements to employability skills development for students.

This approach benefits students in terms of their subject knowledge, skill development, and their ability to consider theoretical approaches within situational practice. Recent examples include:

- Contemporary HR practice with Hilton hotels;
- Design work with high profile international fashion designer Romeo Gigli;
- Multimedia updating with 2am Media;
- Shipping industry updating via Maersk, Sea Truck vessels and Caledonian MacBrayne;
- Industrial updating with DePuy Synthes UK; and
- Clinical updating on the dermatology ward at Blackpool Victoria Hospital.

The investment in the dual professionalism of staff has been formalised through B&FC's wider People Strategy, and incorporated within a Professional Development framework that supports and encourages the personal and professional development of all employees, to achieve the College's strategic goals and objectives. The identification of opportunities for industry/sector updating form part of the professional development dialogue within performance review. The scope, breadth and impact of the activity are monitored and evaluated as part of ongoing organisational development, with effective practice shared widely.

B&FC's approach to the workforce planning and recruitment is continuously maturing to ensure that they develop, attract and retain the best talent. Their focus is on developing broad skilled professionals, with a view that added value can be gained from rich experiences, which results in maintaining high standards of performance for their customers and stakeholders.

6 Next Steps

6.1 The coming together of policy and legislation, with Lancashire's passion and enthusiasm to deliver change, presents a once-in-a-generation opportunity to implement the Technical Education reforms and achieve a step-change for learners, workers and businesses a-like. The process of developing the Vision has galvanized interest across Lancashire, and we need now to drive forward this momentum into action.

6.2 The approach to solving Lancashire's productivity position and creating the conditions for the economy to kick-on requires collaborative action and commitment to a core set of objectives. Providers and employers in the County are no strangers to collaborative working, but it is essential in achieving success across Lancashire that good practice becomes standard practice and that the best standard in education and training is available and accessible for all who seek it. Technical Education is about working to Highest Common Factors, not Lowest Common Multiples.

6.3 This Vision is accompanied by a Route Map outlining priority actions, which will be facilitated by the LEP's Skills and Employment Hub, but owned and managed by the stakeholders who have shaped its development. As a first step to implementation, the Route Map describes a series of short term priorities for action, which are key establishing activities between now and 2020 (the first year in which the new T-Levels will be ready for delivery). Looking further forward, the Route Map then outlines medium and longer-term priorities, looking to review points in 2025 and 2030.

6.4 This is an important moment in time for Lancashire. Let's seize the opportunity together.

Case Study 5: Building relationships between employers and providers – The Lancashire Enterprise Advisor Network

The Lancashire Enterprise Adviser Network (LEAN), piloted in January 2016 and since 'mainstreamed' across Lancashire, aims to drive up engagement between schools and businesses. It was initiated to address the inconsistent and fragmented careers education, information, advice, and guidance offer in schools and colleges across the area and improve the offer to young people.

The network (co-funded by Lancashire County Council/LEP, and the Careers and Enterprise Company and locally delivered by Inspira) comprises funded Enterprise Coordinators, who each work with around 20-25 schools and colleges each across the County. Each school and college is matched one-to-one with a volunteer strategic business leader, who supports the development of a Careers and Enterprise Plan at the school/college. Currently 119 schools and colleges in total are engaged across Lancashire.

The aim is to increase the number of employer encounters that young people receive during their educational journey. The coordinators also support schools and colleges to improve their broader education, information, advice and guidance offer against the Gatsby Benchmarks for excellent careers provision.

Key to the coordinator roles is working with providers of activities and embedding activities in the Careers and Enterprise Plans, to enable the schools and colleges to take a strategic approach to improving their offer to young people - for example, working with local businesses, STEMfirst, JCP Support into Schools, National Careers Service, and private providers etc.

Early evaluation includes a step-change in the number of good quality employer encounters, improved teacher and tutor knowledge of the local labour market, excellent feedback from students, improved aspirations and awareness of different pathways including apprenticeship opportunities, and improved outcomes in Ofsted inspections. In the longer term, it is anticipated that the network will have a positive impact on employment and education by facilitating wider engagement in apprenticeships and technical education routes, and improving retention rates in post-16 options due to more informed decision making.

"We have found our work with LEAN to be incredibly beneficial for our students. It has given them access to a whole range of employer visits, talks and careers fairs. The range and quality of activities we have been able to provide through this network has been transformational for our careers education."

Ruth England, Headteacher, Shuttleworth College

7 Annex 1: Cross-referencing to the Skills and Employment Strategic Framework

Figure 7-1: The Vision Objectives and Outcomes cross-referenced to the four themes of the Lancashire Skills and Employment Strategic Framework

	Future workforce	Skilled and Productive Workforce
Objectives	• Improve work readiness upon completing training, providing soft/life skills alongside technical skills to optimise productivity & value of new recruits. • Embed a clear process to translate changes in business needs, into skills needs and Tech Ed requirements. • Provide consistent & positive information for learners & influencers to ensure equal status for Tech Ed with academic routes, so enabing informed choices. • Engagement with industry in education at all ages & stages, with work-related learning & activities embedded in all schools (primary & secondary), colleges & universities. • Validate skills, knowledge & competency developed outside of classroom. • Be sufficiently agile & flexible to respond to change & maintain fitness for purpose. • Invest in, & utilise, digital technology to support collaborative working & share curriculum materials.	• Develop accessible training pathways for adults seeking to re-skill during their career. • Develop range of high-quality technical routeways, leading to stronger technical skills base to enable business performance. • Enable employers to more effectively self-diagnose training needs as their businesses evolve. • Invest in, & utilise, digital technologies to support collaborative working & sharing of curriculum materials.
Outcomes	• Greater understanding of routes & careers, resulting in higher levels of participation in Tech Ed. • At all ages, people can access advice to make informed choices, changing between academic & technical routeways & identifying the right training options for them. • A future workforce can capitalise on education, work & life experience & is more resilient to change. • High levels of work readiness, resulting from design, development & delivery of Tech Ed in response to evidence industry demand. • An accessible offer of education & training that is networked within & across the County to optimise available resources	• More productive businesses, in a thriving economy, leading to greater wealth creation and improved well-being for Lancashire residents. • Business growth via accessing the skills needed to diversify into new/emerging sectors/activities. • Lancashire's businesses will be increasingly sophisticated consumers of Tech Ed, able to identify how it can meet their skills needs. • Employers experiencing fewer skills gaps as issues are resolved by more and better co-designed training provision. • A stronger & more sustainable market for Tech Ed, as employers are increasingly capable and expert in identifying & sourcing the training they need.
	Inclusive workforce	**An informed approach**
Objectives	• Streamline contact with, & access to, education & training for employers & learners, enabling them to make more informed choices.	• Develop a proactive system to track & anticipate future market & tech change. • Establish a virtuous cycle of collaborative work between employers & providers, sharing information in both directions. • Work to common models for employer engagement to review the effectiveness & industry relevance of education & training. • Co-ordinate provider specialisms & create centres of excellence for higher level learning to leverage the best provision.
Outcomes	• Learners & workers will be better equipped to sustain & progress careers in an increasingly complex world of work.	• Providers will have an improved understanding of market & technology changes shaping world of work & skills implications. • Teaching staff have up-to-date understanding of industry trends, practice & skills requirements.

Framework

8 Annex 2: Acknowledgements

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Endnotes:

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