Hertfordshire Employers' Skills Framework Survey (HESFs)

2017 - 18

Prepared by Hertfordshire Business School

Table of Contents

Executive summary

The Hertfordshire Employers' Skills Framework (HESF) survey is a research study commissioned jointly by the Hertfordshire Local Enterprise Partnership and Hertfordshire County Council to help understand the employers' perspective of young people skills. The survey set out to enlighten and provide a deeper understanding of what are the different sector employer skills needs for young people (16 – 24 year olds).

The findings highlight the different importance that sector employers put on the 12 specific skills identified in the framework, and their perceptions of the 'work readiness' of school, college and university leavers. The study also highlights the importance of the three specific Gatsby benchmarks[1] (4, 5 & 6) and the link to the ranking of the 'personal and people' and 'technical and practical' skills.

The outcome of this study is both the ranking of the 12 skills, and the production of a working rubric sheet, detailing the approach that schools, colleges or university learners take to collate this knowledge, skills and experience and use it to find their first job. This is only a start, and the intention is that a further study be commissioned to work with schools, colleges and universities to operationalize this rubric for all of the career pathways that a leaver may choose.

1. Introduction
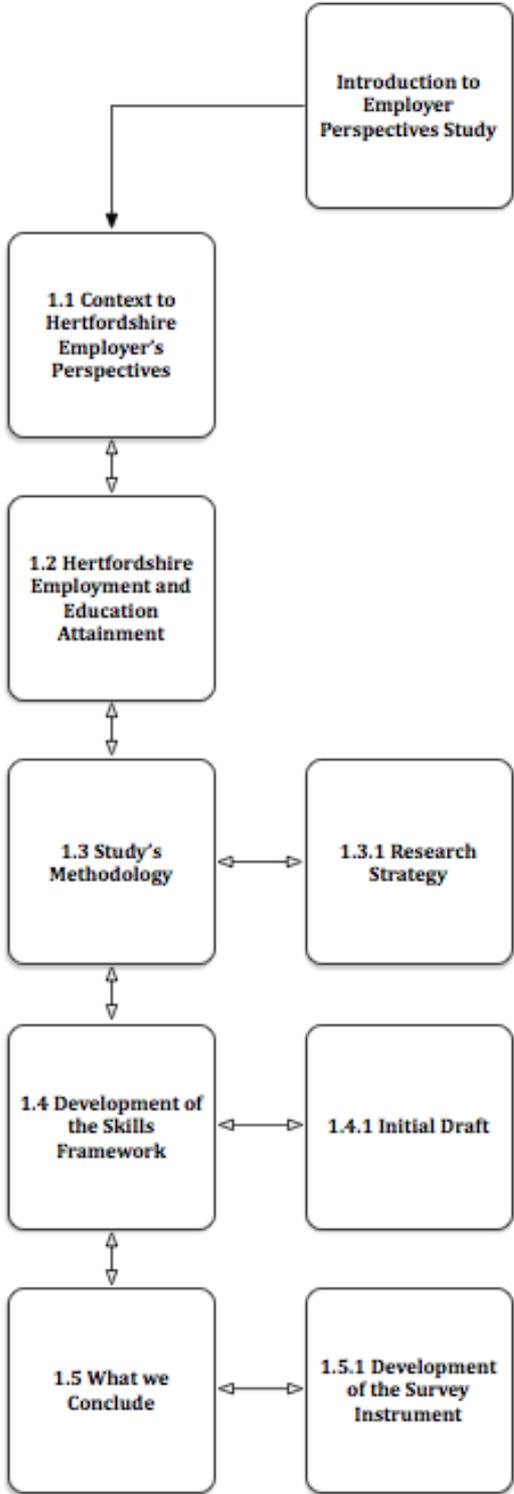
Figure 1.1: Flowchart of the Introduction Section

This report summarises the findings of a Hertfordshire Employer's Skills Framework (HESF) survey commissioned jointly by the Hertfordshire Local Enterprise Partnership (Hertfordshire LEP) and

Hertfordshire County Council (HCC). The principal aim of the study was to collect specific information from Hertfordshire employers on their perspective of the readiness of these schools, colleges and university leavers for work, specifically the evaluation of the twelve skills identified through desk research, pertaining to these leaver's 'people and personal', and 'technical and practical' skills.

A previous skills gap study conducted by the Hertfordshire Business School Market Research Unit (HBSMRU) on behalf of the Hertfordshire LEP shed light on the importance of young people entering the job market with the relevant essential and valuable employability skills they would need (HBSGS, 2015). We especially would like to thank the many colleagues of the HBS, Hertfordshire LEP and the wider business community who were invaluable in their contribution to this particular research data analysis and reporting. For the purposes of this HESF study, and report, the definition of employability skills used for the survey, interviews and any other discussion forums was:

> *'A set of attributes, skills and knowledge that enables individuals to be effective in today's changing work contexts.'* [2]

The report concludes with the ranking of the most essential, valuable and desirable skills across seven key sectors in Hertfordshire, determined by the latest Hertfordshire LEP strategy (see www.hertfordshirelep.com). These are then compared back to the original 12 employability knowledge, skills and experience factors, and a rubric employability knowledge, skills and experience matrix created.

1.1 Context to Hertfordshire employers' perspectives on young peoples' employability skills

With more than 50% of young people progressing straight on from school/college to university, and a growing number taking the alternative higher apprenticeship pathway (20,000 in 2014/15 almost doubling to 36,000 in 2016-17)[3], the expectation is that young people with have the relevant 'people & personal' and 'technical & practical' skills on which employers are dependent[4]. However, there is a rising proportion of Hertfordshire employers(69%) that are not confident there will be enough young people available in the future with these appropriate skills to fill their high-skilled roles, many being their older workforce employees retiring.

The latest Office of National Statistics (ONS) state that the number of young people employed, or otherwise, from July – September 2017:

- 3.82 million young people in work (including 852,000 full-time students with part-time jobs)
- 517,000 unemployed people (including 177,000 full-time students looking for part-time work)

- 2.75 million economically inactive people of whom (2.11 million) were full-time students.

The challenge for Hertfordshire education and business community is where to focus their efforts. The Hertfordshire LEP priorities are:

- To enhance the competitiveness of SMEs;
- To improve the skills of the existing workforce by offering additional support to SMEs and larger employers within key growth sectors, ensuring that skills training is encouraged to ensure future business growth;
- To drive business employers in the medium- to long-term to engage with learning, skills training and increasing employment overall;
- To re-focus on the Hertfordshire working age population who have below NVQ level two qualifications, most prevalent in Stevenage, Broxbourne, Hertsmere and Dacorum areas.

Hertfordshire is fortunate in being close to London and having an abundance of highly qualified professionals living and working inside its boundaries. A recent Department of Education (DoE) report, with a particular focus on Hertfordshire, highlighted the significance of the retail and wholesale (104,600), administrative and support services (81,300), and professional scientific and technical services (72,100) sectors to the county's overall employment[5]. In the last fifteen years the following five sectors have exhibited the highest employment growth in Hertfordshire:

- Professional, scientific and technical services (+21,400)
- Administrative and support services (+20,500)
- Information and communication technologies (+9,800)
- Construction (+9,500)
- Accommodation and food services (+4,900)

Hertfordshire ranked fourth in the LEP Network Report, assessing economic output growth over the period 1998 – 2008, just behind London, Thames Valley Berkshire, Enterprise M3[6]. The analysis from this report highlighted that those highest performing and significantly improving LEP areas had the following characteristics:

- Growing workforces and higher levels of employment;
- A more skilled workforce than the national average;
- Higher levels of innovation, knowledge and technology-based employment;
- And are more entrepreneurial.

The characteristics noted above have significantly contributed to the success of these local economies. This 'Top 4' ranking has allowed Hertfordshire to maintain a higher levels of business performance,

and with it higher levels of employment for the county and the East of England. A significant driving factor in this achievement is the 58.8% who are employed in highly skilled jobs, typically requiring Level 3 and 4 qualifications[5]. Hertfordshire is in a strong position to carry forward this growth into the future, UKCES jobs growth forecast predicts that from 2012 – 2022, suggested there would be 51,000 additional jobs generated in Hertfordshire, this represents an annual average growth rate of 0.8% compared to the UK forecast annual rate of 0.6%. The predictions suggest these new jobs will be in the areas of [7]:

- Financial and professional services (+13,000)
- Construction (+12,000)
- Information and communication technology (+7,000)
- Retail and wholesale (+7,000)

The projection of jobs growth is focused around an additional 56,000 high level jobs (for managers, professionals and associate professionals), at a cost of 12,000 fewer jobs in middle-level administrative, secretarial and skilled trade occupations, and an additional 12,000 jobs in the caring and leisure services. With the annual growth rate of jobs in Hertfordshire reaching 2.4% from 2010 – 2015, the prediction is that there will be over 800,000 jobs by 2024. Overall, Hertfordshire continues to predict strong economic growth in:

- Life sciences
- Advanced engineering and manufacturing
- Digital technologies
- Film and media
- High end logistics
- Professional services

And secondary growth in health, care and welfare, and construction [5, 7].

1.2 Hertfordshire resident education attainment

Hertfordshire is one of the top three Local Enterprise Partnership areas with the highest qualified resident population, with nearly 43% of Hertfordshire residents attaining HND, Degree or Higher Degree level qualifications, see table 1.1 below.

Table 1.1 Qualification attainments of Hertfordshire residents, Jan 2016 to Dec 2016 (source: Nomis)

Hertfordshire business sample	Qualifications (Jan 2016 - December 2017)			
IndividualLevels	Hertfordshire level	Hertfordshire (%)	East of England (%)	Great Britain (%)
NVQ4 and above	313,100	42.6%	34.9%	38.2%
NVQ3 and above	432,400	58.8%	53.5%	56.9%
NVQ2 and above	572,800	77.9%	72.4%	74.3%
NVQ1 and above	652,300	88.8%	85.9%	85.3%
Other qualifications	39,000	5.4%	6.5%	6.6%
No qualifications	43,300	5.9%	7.6%	8.0%

Of course, with this high-level of qualified resident workers comes the challenge to maintain the pipeline from schools, colleges and universities to consistently top-up this talent pool. This is another reason for conducting this study, and the section 1.3 details the overall methodology and strategy for the research.

1.3 Study's methodology

The principle aim of the Hertfordshire Employer's Skills Framework Survey (HESF's) was to research, develop and pilot the development of an employability skills framework, see annex A.1. The creation of the skills framework originated from the work of the Hertfordshire County Council with consultation and collaboration with various borough authorities, schools and school partners, and work informed by the National Careers Service. The follow-on work provided in this study has augmented that of the HCC and is intended to address the gap associated with capturing the Hertfordshire employer's perspective. The research objectives were therefore focused around these employer perspectives on young people employability skills to:

- Better understand Hertfordshire employers' skills need, and the perceived skills gap that currently exist in young people leaving our schools, colleges and universities;

The study therefore evaluates existing employability skills studies, conducted both by national and regional bodies, focusing on employers' skills perceptions of current young people knowledge, skills and experience and their readiness to transition into work.

1.3.1 Research strategy

The research was split into two phases:

Phase 1: Involved creating an online questionnaire using existing studies on employability skills of young people. Particularly focusing on young people knowledge, skills and experiences deemed

essential, by employers, to succeed in the world of commerce. The researchers conducted an initial pilot study with students here at the university, testing the language used to describe this knowledge, skills and experiences, and then this was rolled out to Hertfordshire employers. Over 120 employers completed the survey over a six-week period during the summer of 2017.

The questionnaires were posted on an on-line survey tool(Qualtrics), and after the initial pilot the researchers commissioned an outside tele-market research company to contact Hertfordshire employers across a representative sample of sectors and business types (Small, medium and large businesses).

Phase 2: The HESF study analysis and findings were in the form of conventional cross-tabulations exploring the relationships between sector/business size and employability skills, and these are reported on in the remainder of this report. The combination of the HESF study, and other nationally derived findings, helped provide some opportunity to compare and contrast data and findings.

1.4 Development of the young peoples' skills framework

Repeatedly national and regional employer skills survey's identify the critical importance of young people's skills in enabling the successful transition into work (73%)[8]. But with this also comes a plea from these same employers to get schools and colleges to prioritize on developing those essential employability skills that are so valuable to future employers (71%).

Key to any young person making a successful transition from their school, college or university to work is the importance of gaining appropriate level qualifications, and most importantly developing appropriate character traits, or as the employers like to call it 'ready-to-work capabilities'. Significant research has been undertaken to quantify the range of young people skills and qualities that would make them more 'employable'. Most research suggests these fall loosely into the three areas of Leadership, Teamwork and Communication skills[9]. Initial analysis of these surveys point to a general agreement on the essential employability skills, two such are shown in table 1.2 below.

Table 1.2. Recent surveys on employability skills

Research study	Key employability skills	Comments
CBI education and skills survey, 2012	Literacy and numeracy (35% & 30%) Self-management (61%) Business and customer awareness (69%) Attitude to work (37%) Use of IT (13%) Technical skills (33%) Business knowledge (44%) Team-working (25%)	The first seven are associated with school and colleges leavers. The second three are directly associated with graduates.

	Problem-solving (23%)	
	Inadequate work experience (37%)	
UKCES Commission for Employment and Skills, 2010	**Positive approach** Using numbers effectively Using language effectively Using IT effectively Self-management Thinking and solving problems Working together and communicating Understanding the business	The bottom four skills and attributes focus on the personal skills requires of the individual.

In the next sub-section the researchers provide some background to the development and justification of the selected 12 employability knowledge, skills and experience themes.

1.4.1 Initial development of the skills framework

Based on an initial overview of the last ten - twenty years of employer surveys it is easy to identify common themes around employability skills for young people. What is changing, over time, is that employer skills needs are increasing, both in part to the increasing role workers play in delivering business value and the increasing complexity in the workplace[8]. Educational providers are responsible for ensuring the reduction in the number of young people who leave without gaining these essential and valuable skills and attributes that employers are increasingly looking for[2]. Those that are most common are referred to as the core skills:

Core skills

-   Communications and literacy

-   Numeracy skills

-   IT understanding and broad digital skills

Increasingly, employers are concerned that young people are entering their employment without these basic core skills. Worrying, some sectors perceive more of a problem than others:

-   Retail, Hospitality and other services (73%)

-   Manufacturing (69%)

-   Construction (76%)

-   Professional services (47%)

-   Engineering, Hi-tech, IT & Sciences (48%)

-   Public Sector (84%)

Attitudes and behaviour

After young people's core skills, employers are demanding these leavers should show the right attitudes and attributes, evidencing a general move away from just academic ability and qualifications [4]:

- Attitudes toward work
- Aptitudes for work
- Qualification obtained
- Relevant work experience
- Business awareness
- Team-working
- Complex Problem solving
- Skills of analysis
- Business and customer awareness

The core skills and these attitudes and behavior traits, noted above, highlight the importance and value, these now have for employers. In table 1.3, the researchers have re-grouped these skills and attributes into more general core skills. These were re-presented to the employers in this HESF survey. The findings of this are shown in sections 2.0 to 4.0.

Table 1.3. Initial draft of skills framework (source: HCC, 2017)

Knowledge, skills and experience	Hertfordshire understanding
Motivation and ambition	Actively participate
	Show enthusiasm
	Knowledge of the sector
	Pursue aspirations and goals
Confidence	Willing to meet new people
	Able to hold conversations with peers, manager and customers
	Recognise own strengths and able to present these
Respect and good manners	Listen and Learn
	Recognise the feelings of others
	Be polite
	Remain calm
Determination and resilience	Commitment to get things done
	Learn from mistakes and accept criticism
	Resist distractions
	Adapt to changes
Adaptability	Flexible to cope with changing demands
	Able to apply knowledge to different situations
Teamwork	Cooperate with others
	Recognise skills in others
	Value contribution from others
Numeracy	Apply simple mathematical concepts
	Understand simple arithmetic
	Understand costs and expenditure
Literacy	Able to express yourself in writing
	Understanding of business etiquette verbally and in writing
	Able to explain yourself verbally
Business and customer awareness	Understand commercial realities
	Able to professionally communicate with customers
	Manage your time effectively
Analytical and problem-solving skills	Investigate systematically
	Identify problems
	Look for better ways and suggest solutions
	Plan and organize tasks
Digital technology	Understand the development in technology for business
Qualifications	Achieve qualifications

Source: HCC, 2017

We are in an age where technology is king, where the patterns of living and working are heavily bound with the need to be both fluid and flexible in our working. We have graduated from a static set of 'technical and practical' skills for employment, to one where we require today's workers to be equipped to work in more than one occupation, and to be entrepreneurially driven to both create opportunities for their employers, and also for themselves [2]. The drive then is to look beyond simple academic achievements, to one that considers the broader attributes and traits of the individual's

'people and personal' skills, and 'technical and practical' skills that best fit his or her current and future occupation needs. This has meant that employer's views of essential and valuable skills have changed too, and it is now more about confidence, resilience and adaptability as well as the more specific skills around problem-solving and analysis, see table 1.4 below.

Table 1.4. School teachers' perspectives of effective means to address desired behavior, skills and attitudes (source: EER, 2017)

Knowledge, skills and experience	Exeter University study	University of Kent studies
Motivation and ambition	**Using Initiative and being self-motivated** – New ideas and personal drive	Action planning Time management Determination
Confidence	**Communications and interpersonal skills** – be clear and concise in both written and spoken means	Leadership skills Striving for excellence Assertiveness
Respect and good manners	**Valuing diversity and difference** – understanding and being considerate	Not mentioned
Determination and resilience	**Working under pressure and to deadlines** – Handling stress	Decision-making
Adaptability	**Ability to Learn and Adapt** – enthusiastic about work	Adaptability
Teamwork	**Team-working** – working well with others.	**Team-working**
Numeracy	**Numeracy** – using data and mathematics to support evidence	Numeracy
Literacy	**Organisational skills** – plan work, monitor progress and meet deadlines	Making effective presentations Spoken communication Written communication Language skills
Business and customer awareness	**Negotiation skills** – acknowledge people's feelings and express your own, to work towards a win-win outcome	Commercial Awareness Persuading, influencing and negotiating skills
Analytical and problem-solving skills	**Problem-solving skills** – breaking a problem down	Problem-solving Lateral thinking
Digital skills		Computing skills
Relevant qualifications		Not mentioned

Source: Research carried out by EER team[10]

1.5 Development of the survey instrument

The previous sub-section 1.4 provided the grounding for the development of the initial employability skills framework, and what follows in this sub-section is the development of the survey instrument used to explore the employer's understanding of this employability skills framework, and the important area of employer – education engagement. Each of the sub-sections below are an attempt

to extract the relevant employer perceptions linked to young people's employability skills, and their opportunity for future recruitment in their career aspirational pathway.

1.   Enterprise demographics

Initial health and current behaviours towards the employment of young people (16 – 24 year olds), particularly when the perception is that [11]:

'Employers are accustomed to take the easy option – seeking the 'oven ready' candidate who might be expected to stay for a rather shorter period of time, rather than investing in a young person and training them up (Carberry et al., 2015:4)'.

Key questions in this sub-section were:

1.   Have you taken on new staff this year?
2.   What is your turnover?
3.   What is the 'rough' age profile of your current workforce?

2.   Employment of young people

For young people entering into the labour market the dangers of becoming trapped in both poorly paid low-skilled work with little if any chance of higher skills training, has significantly increased [11].

Key questions in this sub-section were:

1.   How many young people have you employed and at what skill level?
2.   How many young people in the next 12 months do you anticipate to employ?
3.   What are the criteria you look for?

3.   Young people skills requirements

Significant studies over the last 5 – 10 years have focused on the mismatch between the skills that young people bring with them from their education, and those that the labour market demand [11]. Too few graduates can expect to find high-skilled employment, instead they are filling those middle-skilled jobs that previous young people with level 3 qualifications filled.

Key questions in this sub-section were:

1.   What knowledge, skills and behaviours do employers expect from young people applying for a role in their enterprise (essential, valuable and desirable but not essential)?
     a.   Motivation and ambition
     b.   Confidence

c. Respect and good manners

d. Determination and resilience

e. Adaptability

f. Numeracy

g. Literacy

h. Business & customer awareness

i. Teamwork

j. Analytical and problem-solving skills

k. Digital technology savvy

l. Qualifications

4. Work experience and employers' needs

With the increasing change in workplace dynamics, where zero-hour contracts, part-time and self-employment are growing, and significant growth in employment in the SME sector against larger employers is now more evident. This is driving the need for young people to be more adept and confident in their presentation of their adaptability and resilience to the changing workplace culture [11].

Key questions in this sub-section were:

1. How well prepared are young people for work, say over the last 2 -3 years?
2. What work experience schemes with young people are you engaged with?
3. What work inspiration activities have you engaged with over the last 2 – 3 years?
4. What are the main reasons for offering work placements to young people?
5. What are the reasons for not offering work experience for young people?

5. General employer engagement with education providers

With the increasing need to focus more on the application of knowledge, the enterprise style of learning is becoming more effective for both businesses and professionals. Its effectiveness is down to engaging with real people from real workplaces[11], endeavouring to bring action learning into the classroom.

Key questions in this sub-section were:

1. What are the principal reasons for using education providers (FE and HE institutions)?
2. What are the existing barriers to using FE and HE institutions?
3. What are your perceptions of the benefits and impact of using these FE and HE institutions for vocational training of your staff (young people)?

1.5.1 Research sample

The 120 Hertfordshire employers participating in the HESF study were representative of most business types (small to large businesses), and sectors in Hertfordshire, see figure 1.4 below. The one-to-one interviews were conducted with employers operating in the following seven sectors:

- Aerospace and advanced manufacturing
- Financial and professional services
- Public administration
- Food & restaurant
- Health and social care
- Life & medical sciences
- Construction
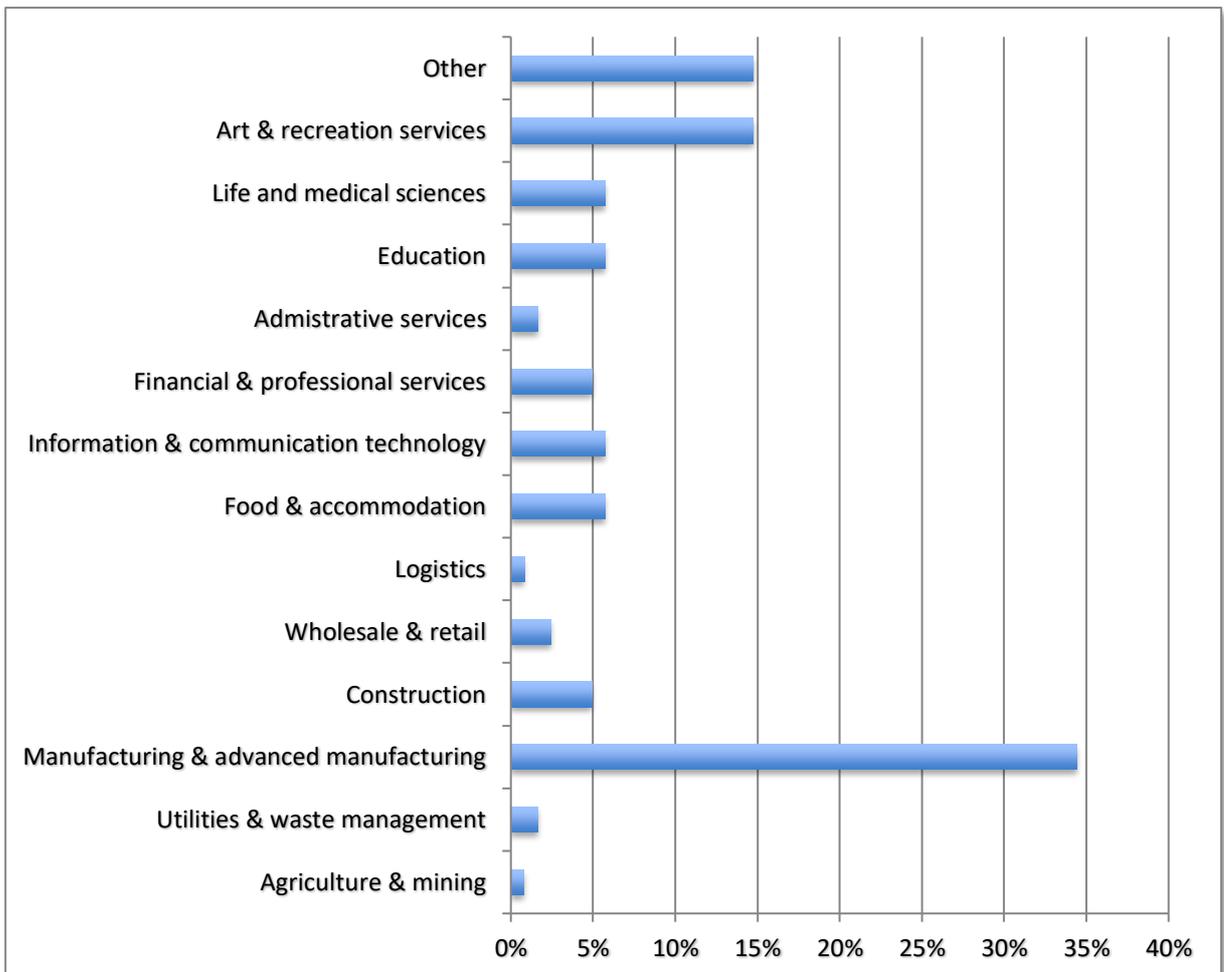
Figure 1.2 Sample businesses surveyed by sector (Source: HESF's, 2017)

2.   Hertfordshire young people employment
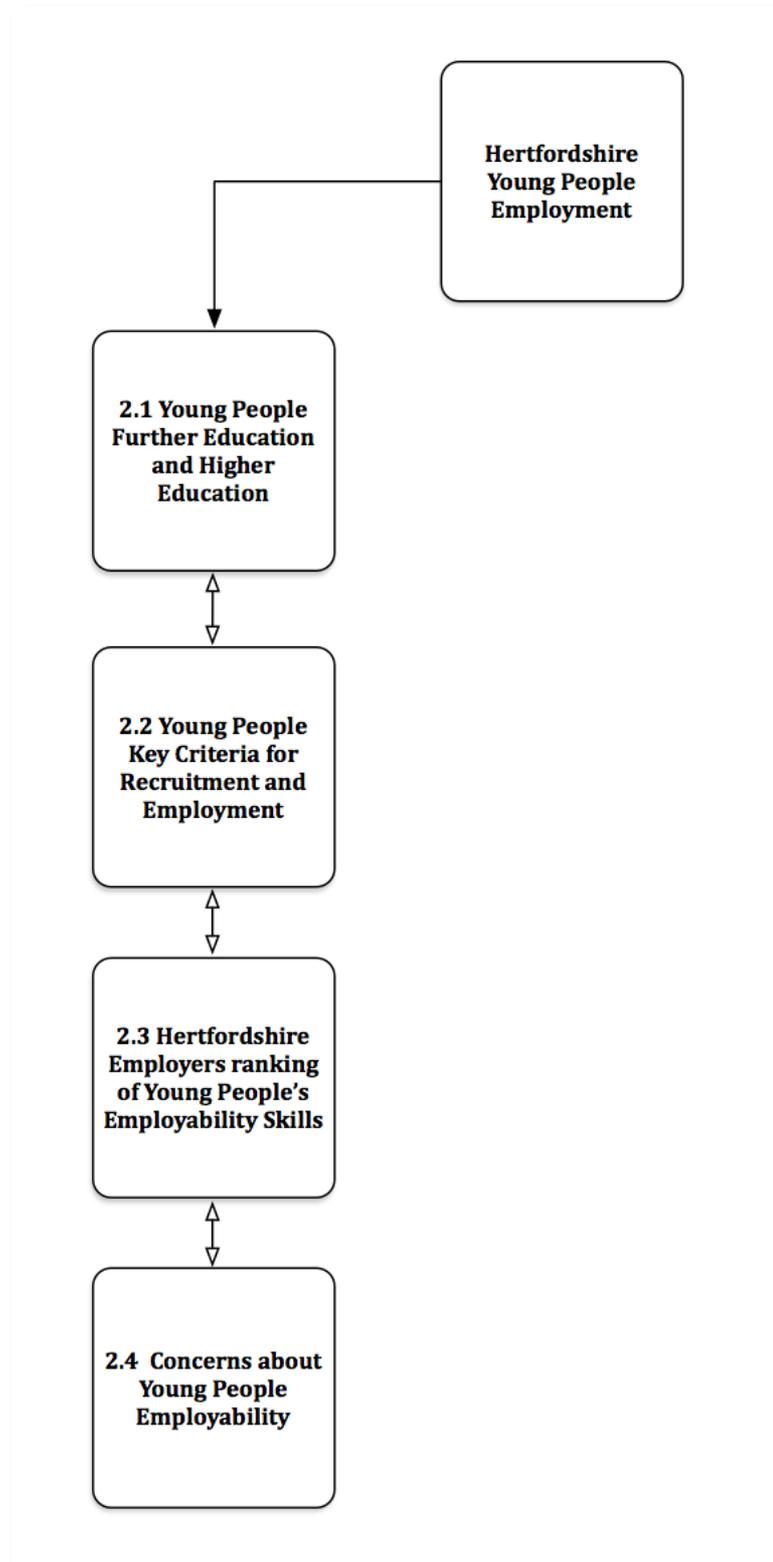
Figure 2.1 Flowchart of Hertfordshire young people employment section

The academic research reflected on in this section has been significantly informed by the meta-analysis conducted by McKeown and Mann in 2015[12]. Whilst the literature is extensive, it is by no means exhaustive, and so the authors of this report recommend that readers utilize the resources identified in section 5 bibliography.

2.1   Young people Further Education and Higher Education

In 2014/15 over 2,613,700 adults participated in government-funded further education[13], this is a 10.8% decrease from 2013/14. The new University Technical Colleges (UTGs) have yet to make any sizeable impact on school/college leavers employability, but this is still a significant pathway by which 14 – 18 year olds will receive technical and scientific training. The ultimate intention is that this pathway will deliver young people with the knowledge, skills and experience necessary to develop them into the engineers, scientists and technicians of the future[14].
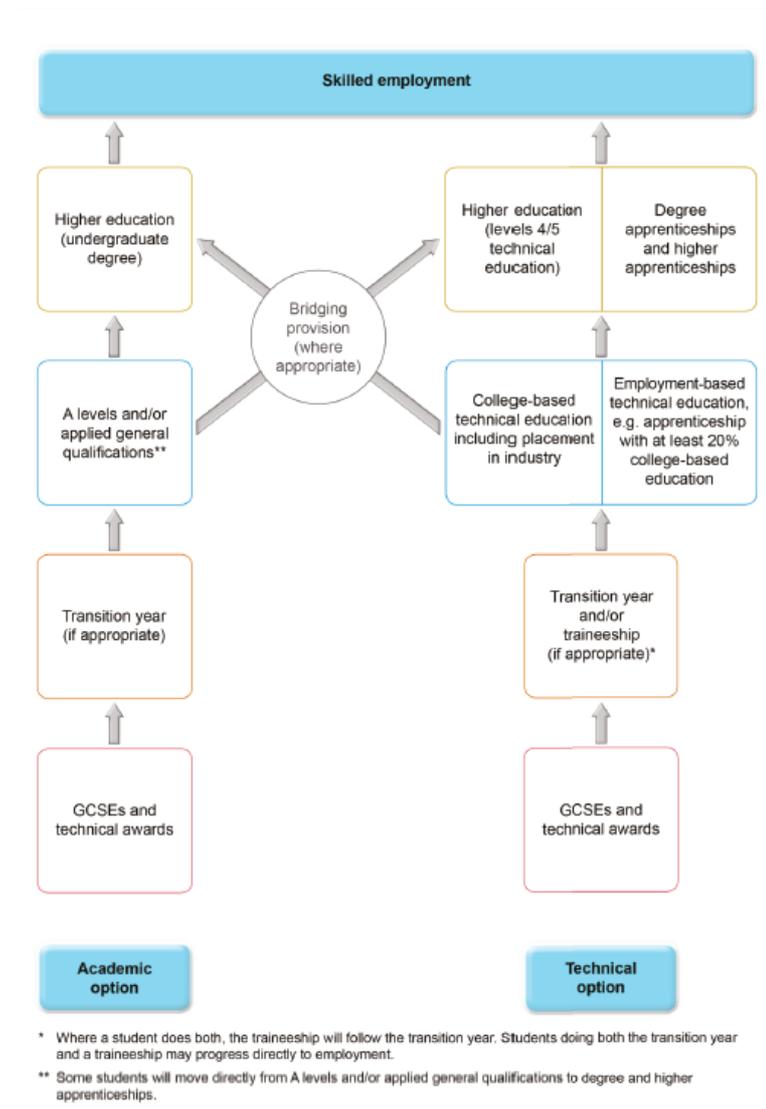

Figure 2.2 The choices between academic and technical options[15]

Over 50% of young people choose A levels at age 16, with around 30% choosing to take full-time vocational training at age 16, heading straight into further education. This technical option has now become a focus for the UK government in delivering a world-class technical education environment, culminating in a superior tertiary educational pathway[16].

2.2   Young people key criteria for recruitment/employment

With the rapidly changing UK labour market, forced primarily by continually evolving and adapting cycles of economic change, experiencing increasing demand from employers for young people to have higher relevant skills[4]. There is an increasing concern, from both employers and education providers, about the un-readiness of school, college and university leavers for work.

From national surveys, both by the UKCES and CBI, in the last couple of years, there are two key skills groups highlighted: 'people and personal' skills, and 'technical and practical' skills. These surveys highlighted the following 'people and personal' skills most affecting people's ability to perform their job role: time management (47%), persuading and influencing others (31%), managing and motivating other staff (team-working) (30%) and setting objectives and planning resources (22%). In the area of 'technical and practical' skills, these national employers highlighted lack of knowledge to perform the role (64%), solving complex problems (39%), and the lack of numerical and statistical skills (29%) as the top three technical and practice skills most essential and valuable to them.

In the HESF survey, we at first challenged our Hertfordshire employers to define the general criteria used to short-list potential applicants: these included the following - communication skills and team-working (29%), relevant work experience (22%), essential Mathematics and English (20%), with academic qualifications (15%).
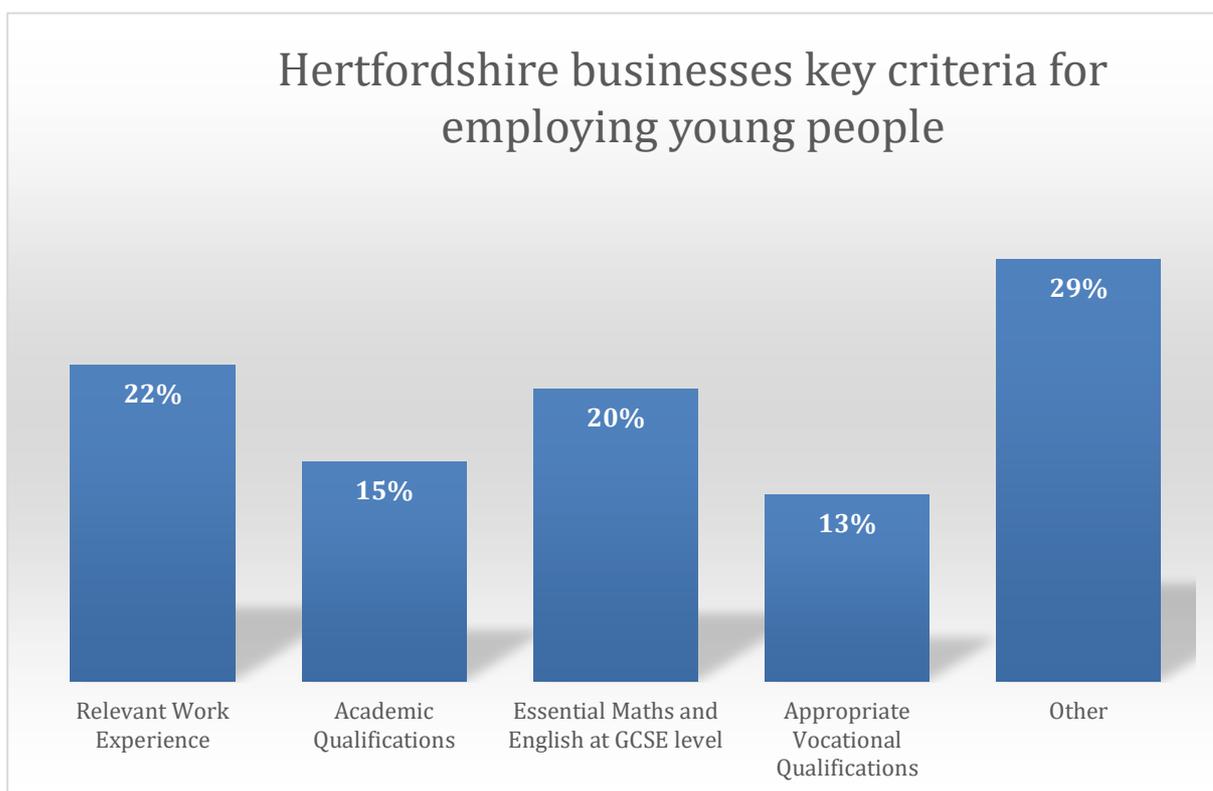
Figure 2.3 Hertfordshire employers' criteria for recruiting future young people (source: HESFs, 2017)

To drill-down deeper into the 'people and personal', and 'technical and practical' skills we proposed asking these same Hertfordshire employers to select those knowledge, skills and experiences that were essential, valuable to the business, and lastly those that are desirable for the role, see figure 2.3 above.

2.4   Hertfordshire employers' ranking of young peoples' employability skills

In figure 2.3 above, the 'other' criteria (29%) referred to by employers relates to important 'personal & people', and 'technical and practical' skills. For the purposes of this survey the employers were asked to rank these skills based on three criteria: essential, most valuable and most desirable skills to them. Each of these is examined in more detail in the next three sub-sections.

Essential knowledge, skills and experience

In the HESF survey of most essential 'people and personal' skills for new applicants to businesses, then 'respect and good manners' for young people was ranked the highest. In a recent national survey by the UKCES, similar metrics of managing own feelings, and those of others jointly were ranked 3rd and 4th [17]. 'Team-working' was 2nd highest ranked, with a corresponding ranking of 3rd in the UKCES 2015 survey. 'Literacy' and 'numeracy' were respectively ranked 3rd and 4th and nationally 6th and 7th. In the area of 'technical and practical' skills, employers considered 'analytical and problem-solving' less

essential, ranking this 10th, which contrasts to the national surveys who most often rank this 2nd to specialist skills or knowledge relevant to the business. 'Business and customer awareness' is ranked 8th in the HESF survey, whereas in national surveys it ranks 3rd and 4th respectively. So, though there are some differences between the HESF findings concerning the ranking of 'people and personal' and 'technical and practical' skills, they on the whole align with previous national survey results.

In figure 2.4 below, the summative bar consists of the top three rankings, in the case of 'respect & good manners' it was top for both employers' 1st and 2nd ranking scores, and the reason why nearly 70 employers ranked it in their top three essential 'personal & people' skills.
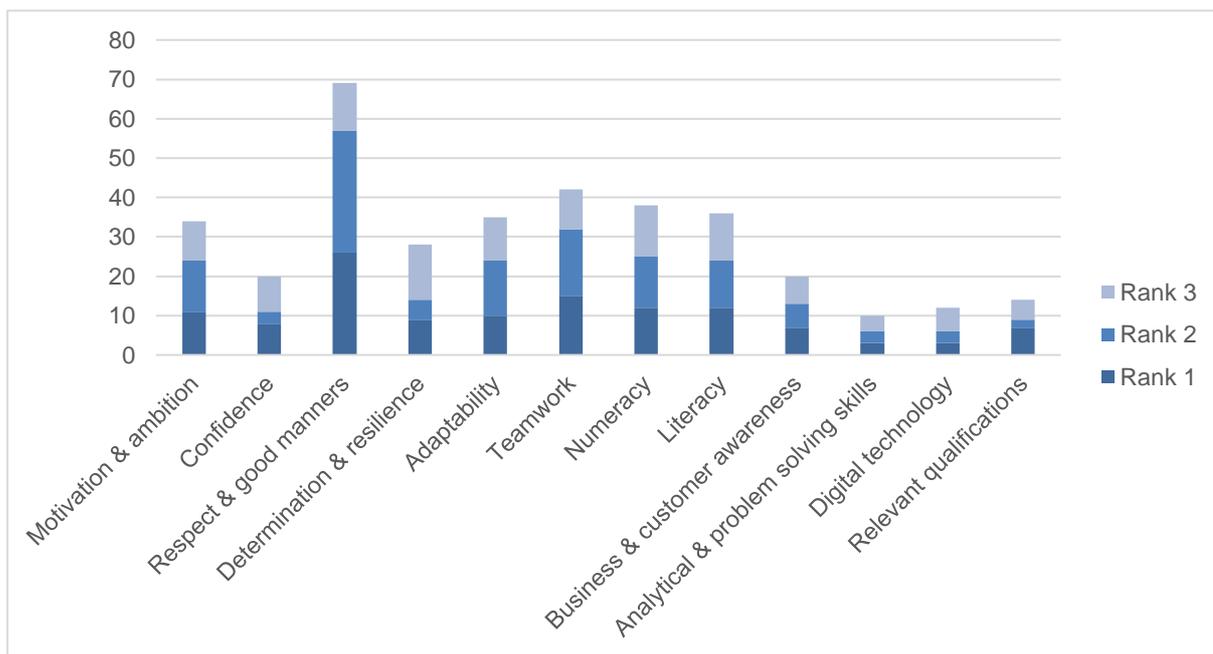
Figure 2.4 Hertfordshire employers' essential criteria for recruiting future young people (source: HESF, 2017)

Most valuable knowledge, skills and experience

In the HESF survey, Hertfordshire employers were asked what the most valuable knowledge, skills and experience that they would most like to see in young people applicants. The results from this are surprising but do link very closely with UK-wide employer surveys carried out by the UKCES and CBI. The four most highly ranked knowledge, skills and experience needs of these employers are all in the 'technical and practical' skills areas. Namely, 'relevant qualifications' (1st), 'basic and advanced IT skills' (2nd), 'business knowledge and customer awareness' (3rd) and 'analytical & problem solving' (4th). The UK-wide surveys equaled ranked these highest.

There are two interesting correlations between employer's skills needs from applicants, and the chronic skill-shortages existing in both the skilled trades, and those that school and college leavers

with NVQ level 3 qualifications and below often enter employment with, and the skills shortages recognised in the professional and associate professional occupations, those most often associated with higher education leavers. Firstly, the most valuable knowledge, skills and experience looked for, by employers, in 'skilled trades' applicants is[17]:

- Specialist knowledge (66%)

- Time management skills (48%)

- Solving complex problems (43%)

- Knowledge of business and products (36%)

Secondly, the most valuable knowledge, skills and experience looked for in 'associate and professional occupations' applicants is:

- Specialist knowledge (32%)

- Solving complex problems (22%)

- Basic and advanced IT skills (22%)

The correlation between the HESF study and the UK-wide surveys is that Hertfordshire and UK employers are experiencing the same skill-shortages amongst their current workforce, and this is having a positive impact on loss of orders (42%), a delay in developing new products and services (40%), and a difficult of introducing new technology (23%) and its subsequent impact of introducing new working practices (35%)[17].

    In figure 2.5 below, the summative bar consists of the top three rankings, in the case of 'relevant qualifications' it was top for both employers' 1st and 2nd ranking scores, and the reason why nearly 50 employers ranked it in their top three most valuable 'technical & practical' skills.
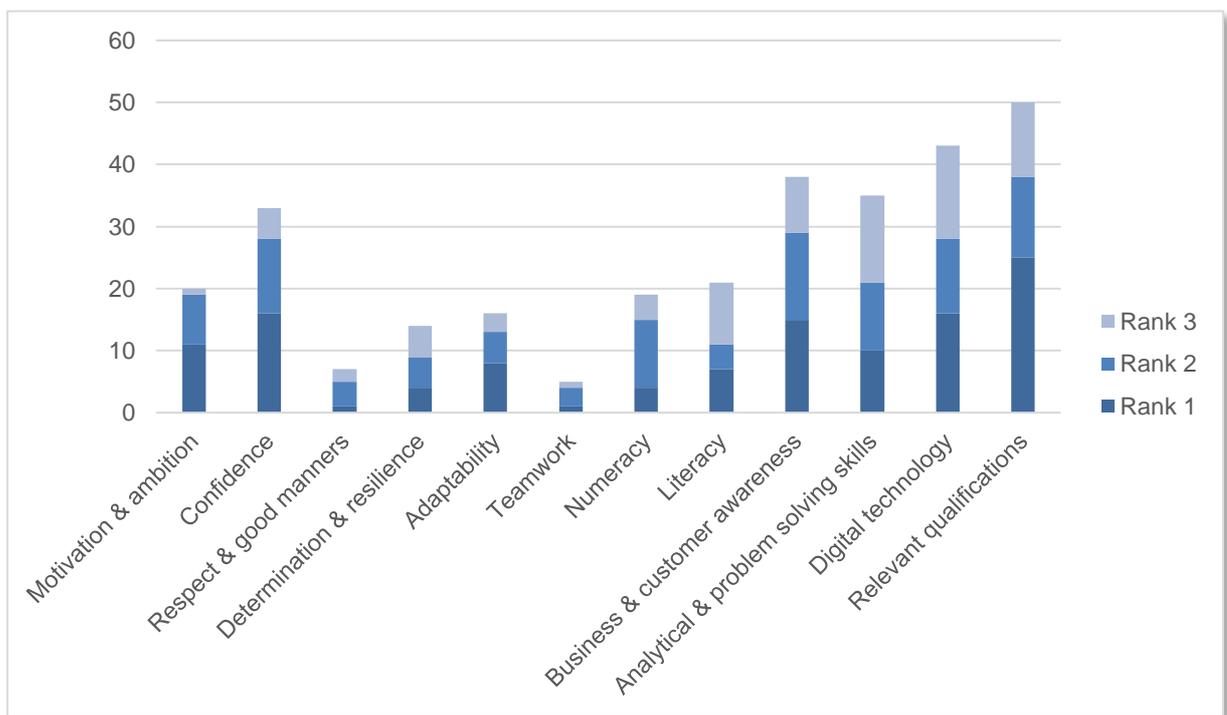
Figure 2.5 Hertfordshire employers' valuable criteria for recruiting future young people (source: HESFs, 2017)

Most desirable knowledge, skills and experience

Hertfordshire employers were asked to rank the knowledge, skills and experience most desired in young people applicants, nearly 14% of those Hertfordshire employers approached had long-standing skills gap within their current workforce. UK and regional surveys highlight that over 3 in 5 skills gap inside businesses are caused by the newness of the staff in their respective roles [17]. With this in mind we asked Hertfordshire employers to rank these desired knowledge, skills and experience of young people applicants:

- Determination and Resilience (1st)

- Adaptability (2nd)

- Confidence (3rd)

- Motivation and Ambition (4th)

All four of these attributes link closely to the traits most valued by employers in both their existing and new staff. Firstly, young people's 'determination and resilience' and their 'adaptability' are likely to ensure a quicker training period in their new role, and the proficiency in which they will carry out their responsibilities. Equally, their 'motivation & ambition' is key to future role success and their onward learning journey, see figure 2.6 below.

In figure 2.6 below, the summative bar consists of the top three rankings, in the case of 'determination & respect' it was top for both employers' 1st and 2nd ranking scores, and the reason why nearing 45 employers ranked it in their top three ranked essential personal & people skills.
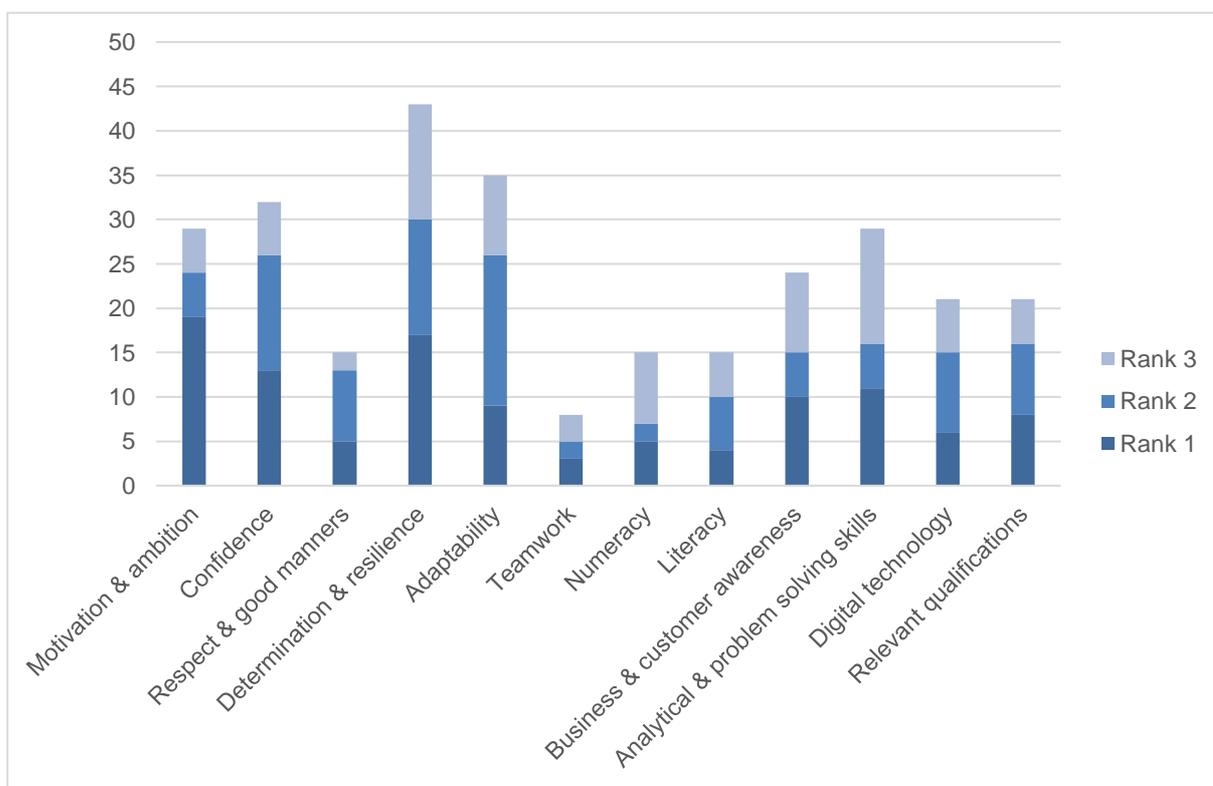
Figure 2.6 Hertfordshire employers' desirable criteria for recruiting future young people (source: HESFs, 2017)

2.5   Concerns about employability of young people

It is true that young people entering the labour market are at a disadvantage compared to their older more experienced colleagues. Whilst this lack of relevant experience, job-seeking insights and networking ability does work against young people, however in other OECD countries this is mitigated by extensive employer engagement across the educational provision (school, college and university). This student access to employers and employees provides a very valuable opportunity to understand the value and power of work insights and the importance of networking. This is often addressed later in their learning journey, either in the FE or HE sector, where more opportunity exists for them to gain this all-important employer and their workplace perspective. This reflects in their 'work-readiness' as demonstrated in figure 2.7 below.
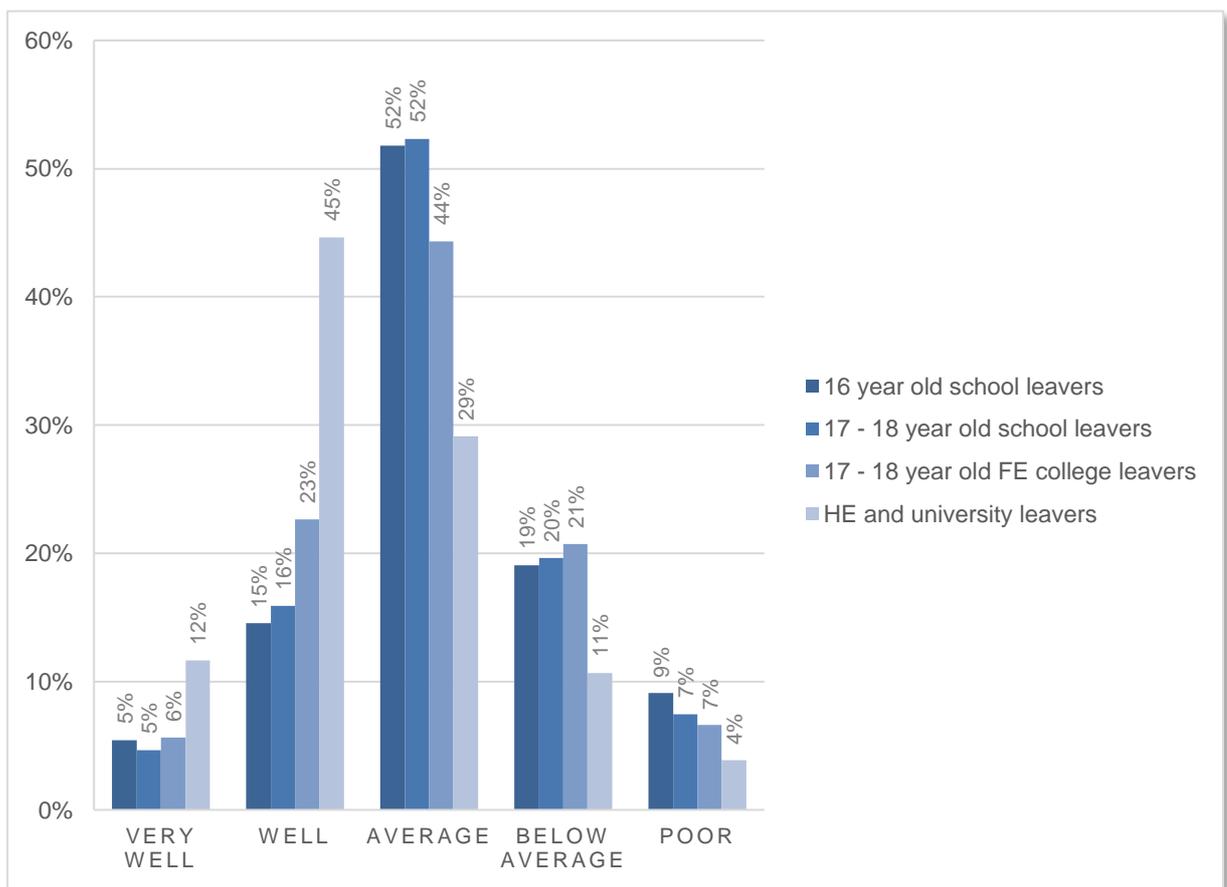
Figure 2.7   How ready are young people for work (source: HESFs, 2017)

'Whereas, a German or Swiss young person, on a vocational programme, might expect to spend several months learning in the workplace alongside classroom study, the British counterpart could typically expect two weeks work experience (with limited training involved) overwhelmingly at 14-16 years, and then a range of much shorter interventions such as careers' fairs, workplace visits or enterprise days (OECD,2010:13) [18].

The research therefore suggests that those young people experiencing this extensive employer engagement are most likely to experience new networks of individuals that will provide them with insights and other resources. This new information and access to expertise will facilitate better decision-making over future career aspirations, and the appropriate pathways to achieve these. These individuals will be motivated to pursue those employers most able to provide the working opportunities of direct relevance to their career aspirations[18].

3.   Hertfordshire employer's Engagement with Education Providers
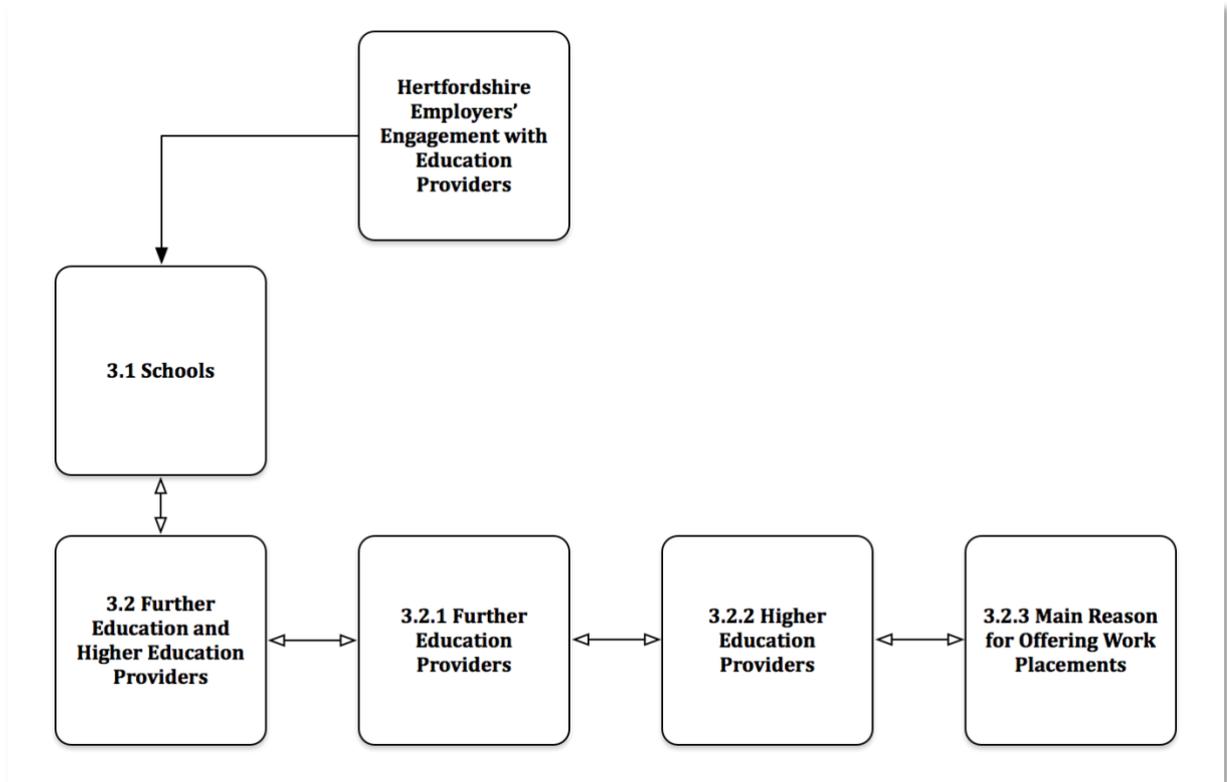
Figure 3.1 Flowchart of Hertfordshire young people employment section

Previous UK-based employer skills survey's have identified significant numbers of employees, over 1.4 million in the UKCES survey of 2015[19], who by their employers' own testament are not fully proficient at their role. 60% of the skills gap are attributable to the staff being either new to the role, and/or their training being only partially complete. In 2016, the UK government responded to the various calls to develop a Post-16 Skills Plan and have now released this to help reform and focus the technical education providers' skills training provision in England[20].

People and personal skills around 'time and task management', working well in teams and 'respect and good manners', were below expectations, especially in young people (16 – 24 years old). Equally, 'technical and practical' skills around overall 'business and customer awareness', complex analytical skills and 'adaptability' were especially lacking in those young people going for management and professional occupations.

Clearly, the main reason why young people are disadvantaged in the UK labour market is that in comparison to older workers, they lack these key 'people and personal' and 'technical and practical'

knowledge, skills and experience, and sufficient understanding of the importance and use of networks to gain the currently available jobs[18].

In all, over 60% of Hertfordshire employers surveyed highlighted that the 'technical and practical' skills gap in young people significantly impact on their ability to perform the job role.

3.1 Schools (pre- and post-16's)

From 2010-19 there is expected to be a continual decline in the numbers of young people aged 16 to 18 in Hertfordshire, but after this date the numbers will increase overall by 22% up until 2030. This significant increase is most noticeable in the Watford, St Albans and Hertsmere districts[5]. Recent trends in GCSE pass rates of 16 year old school pupils in Hertfordshire show that on average they perform between 7 – 10% better than the national average.

Hertfordshire employers still feel that schools are not equipping young people with the essential skills they will need to succeed in their future transition into work. Employers suggest that school leaver's lack work experience (56%), communication skills (50%), ability to analysis problems (50%) and self-management (48%)[4].

For employer's this breaks down into three essential phases:

Pre- 14 year olds   Employers would like more schools to develop general awareness and understanding of work, through direct business engagement (42%) and some early careers advice (38%);

Pre- 16 year olds   developing the core skills previously mentioned in section 1, and in particular communications and literacy (38%), numeracy (35%) and self-management (37%);

In the 14 - 19 year olds   utilizing employer engagement to promote a deeper understanding of what a 'working life' is, and the multitude of career paths on offer, particularly those associated with STEM subjects.

In all of these phases of a young person's development, there is a significant positive relationship between the number of employer and employee contacts (career talks, employer projects and work experience) that young person experiences (14 and 19 years olds) and[18]:

- Their confidence in progressing onto their ultimate career pathway and goals;
- The likelihood of them becoming a NEET, or non-NEET;
- Earnings if salaried.

Most importantly from this research is the revelation that young people are especially attentive to the views of these career professionals they come in contact with at school, or through school activities, and overwhelmingly agree that these interchanges help and guide their career decision-making [18]. A very recent report on careers and enterprise provision in secondary schools in England for the previous academic year 2016/17, recalled the importance of the eight Gatsby benchmarks for providing good career guidance [21].

There are several outputs of this relatively large sample of schools surveyed, that we will refer to. The first relates to schools' performance against the eight Gatsby benchmarks:

1. A stable careers programme
2. Learning from career and labour market information
3. Addressing the needs of each pupil
4. Linking curriculum learning to careers
5. Encounters with employers and employees
6. Experiences of workplaces
7. Encounters with Further and Higher Education
8. Personal guidance

Of the overall 578 schools surveyed, at least 50% of these schools are achieving, or partially achieving, 6.4 benchmarks out of the 8 measured against, see figure 3.2 below.
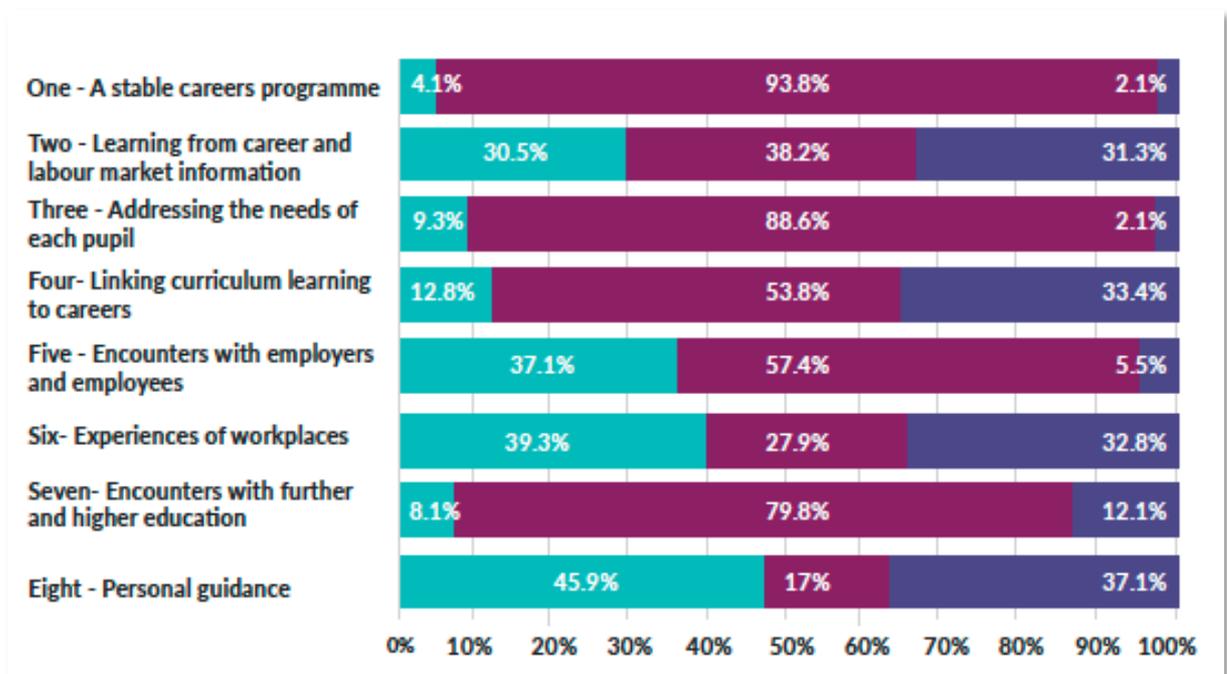
Figure 3.2 Gatsby benchmarks achieved, partially achieved (source: 'State of the Nation' 2017)

It is useful to look at three of these benchmarks, 4, 5 & 6, in slightly more detail.

3.1.1 Linking curriculum learning to careers

The Gatsby benchmarks stresses the importance of linking the curriculum learning, especially in STEM subjects to their relevance for the wider range of future career paths of the students, this is particularly concerning when looked at against employer's concerns of falling skills in literacy/numeracy from school and college leavers. Importantly, the data presented below suggests that young people are not presented with the opportunity to link their own future careers' pathways with a better understanding of their future employer's skills needs, and their own skill-set, see figure 3.3 below.
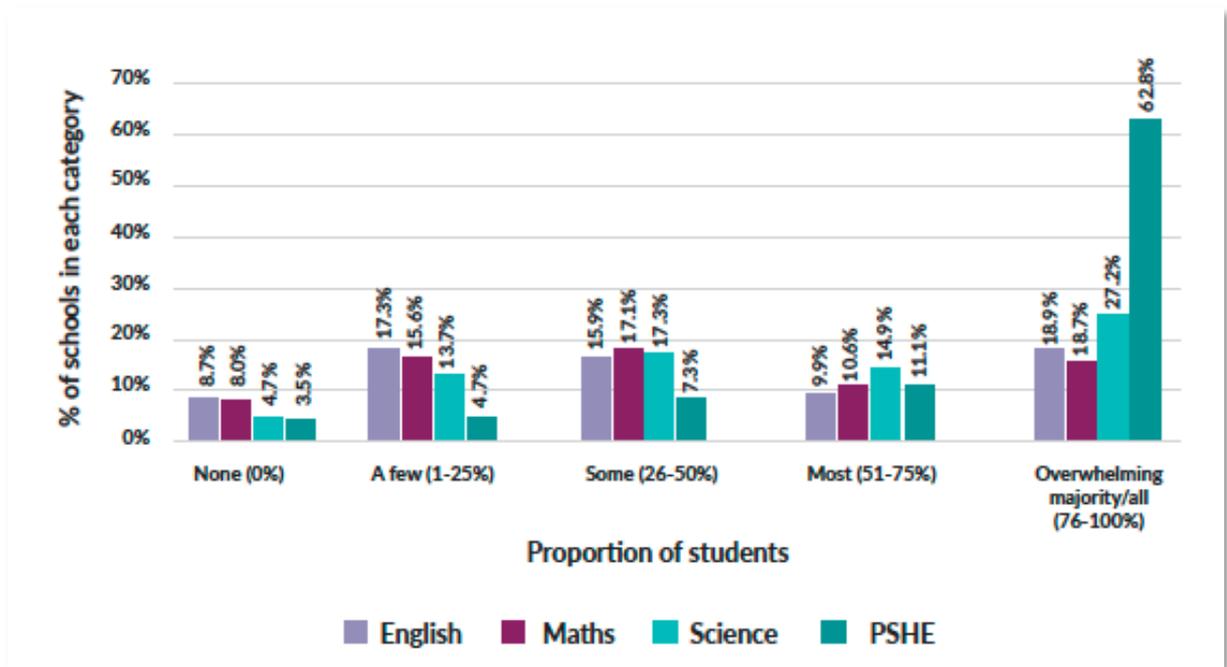
Figure 3.3 Proportion of students who experience career learning as part of their curriculum by the time they leave school (source: 'State of the Nation' 2017)

n.b. PSHE is Personal, Social and Health Education.

3.1.2 Encounters with employers and employees

The key achievement here is around the multiple opportunities that young people at school have to learn from employers about work and the workplace, employment opportunities and skills needs that are essential, valued and desired in the businesses. Figure 3.4 shows that only in years 9 – 13 do students have more than a 50% opportunity to have a meaningful encounter with either an employer or employee.
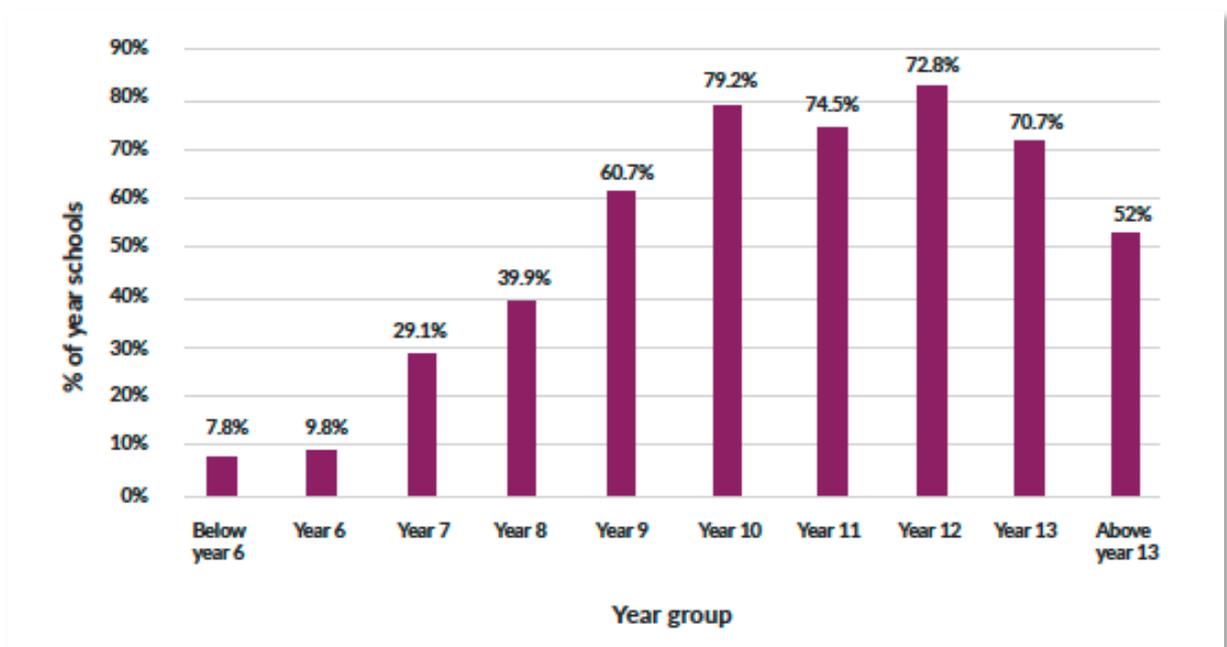
Figure 3.4 % of each year group in which the overwhelming majority of students has at least one meaningful encounter with an employer or employee (source: 'State of the Nation' 2017)

3.1.3 Experiences of workplaces

The Gatsby benchmarks suggest that every pupil should have first-hand experience of the workplace through work visits, work shadowing and/or work experience to help them explore their career opportunities and start to develop their own networks. Figure 3.5 and 3.6 shows that despite successive reports expressing the benefits that come in 'helping young people to obtain genuine work experience….' [22, 23], both by the government and other leading researchers, that only slightly more than 50% of schools are achieving this is disappointing.
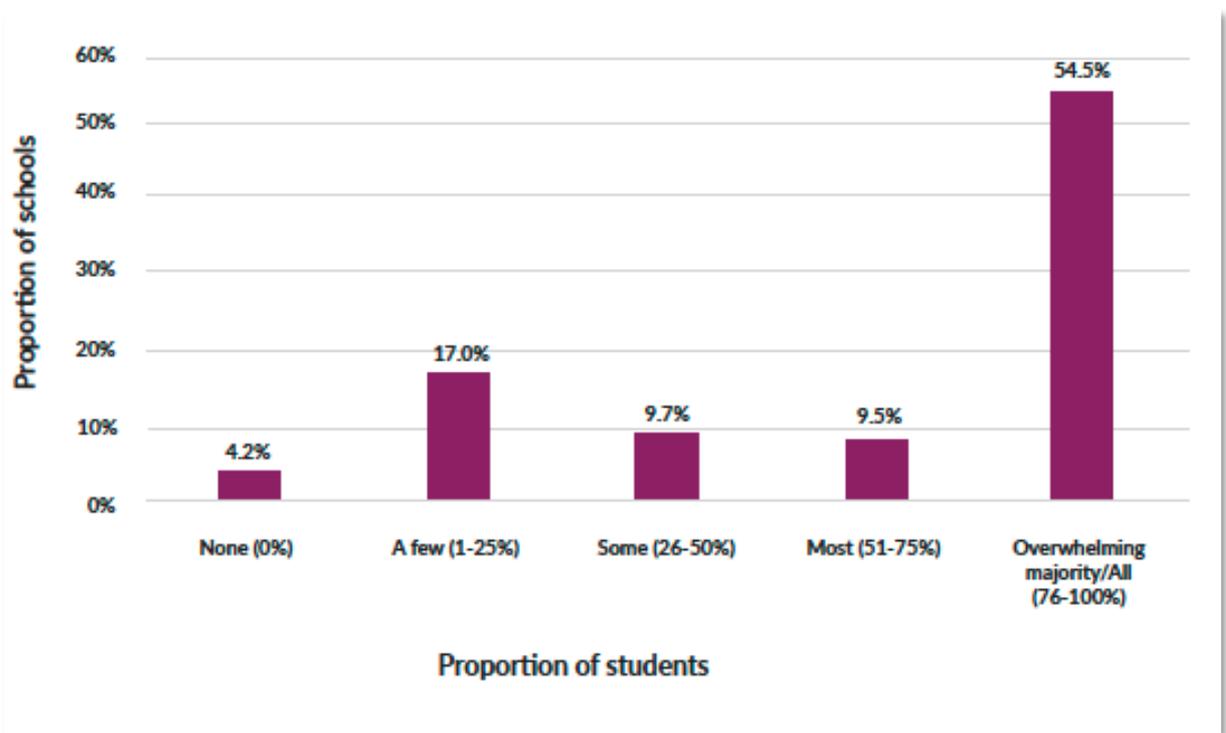
Figure 3.5 Proportion of students that have had a meaningful experience of workplace by the end of year 11 (source: 'State of the Nation' 2017)
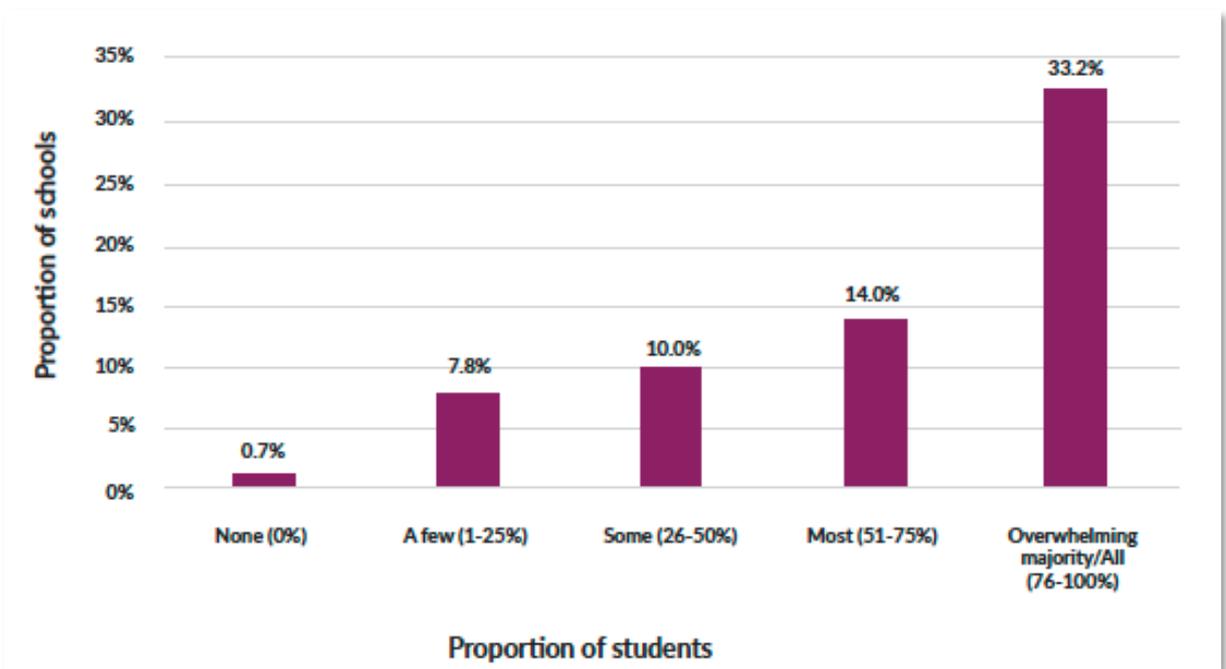
Figure 3.6 Proportion of students that have had a meaningful experience of workplace by the end of year 12-13 (source: 'State of the Nation' 2017)

3.2 Further Education and Higher Education providers

Further Education providers are a significant player in the vocational training marketplace, no more so than to help create employable young people through the provision of vocational education and alongside other training providers helping to increase the opportunities for the existing workforce to access higher apprenticeships, and other trainee provision[2].

As previously identified, Hertfordshire employers have and will continue to need young people with higher-level skills [4]. UK businesses continue to need graduates, this is evidenced by 29% of UK businesses increasing their graduate intake, against only 9% actually reducing their graduate intake [4]. But underlying this increasing trend for graduates is the employer's focus on core skills and 'people & person' skills, with 87% of businesses ranking these above both what university they attended (13%) or the degree classification they obtained (23%)[4]. Encouragingly, the increased focus of universities on employability skills has improved the situation of perceived 'work readiness' of graduates from the employer's perspective, where over 80% are very satisfied or satisfied with them. Rating their core skills on literacy and numeracy at 91%, problem solving (79%) and communication skills (77%), a picture that needs to be carefully watched.

3.2.1 Further Education (FE) providers

Local FE colleges are increasingly scaling up to the challenge of meeting local demand for high-level technical skills, and through this address specific issues in the pharmaceutical, defense and aerospace industries in Hertfordshire. Nationally, there are still significant challenges around addressing future highly skilled worker shortages caused by increased retirement over the next 5 -10 years, in the nuclear industry alone some 70% of their highest skilled workers will have retired by 2025[16]. As a consequence of this broad challenge to many essential sectors and industries, facing future higher skills shortages, the UK government in collaboration with other stakeholders have launched an initiative to create new National Colleges to both lead, design and deliver enhanced technical skills training at levels 4 – 6 in the following five key sectors: nuclear, digital skills, high speed rail, onshore oil & gas, and the creative and cultural industries[16].

3.2.2 Higher Education (HE) providers

Data collected via HEFCE Polar 3, showed that in Hertfordshire the progression rate of young people to Higher Education (HE) who reached the age of 18 was 42.2% across the county. This compares to the national rate of progression, over the same period (2005/6 to 2010/11) of 32.6%[5]. Each year the

Higher Education Statistical Agency publishes various data on HE graduates, in 2015/16 there were just under 500,000 under-graduates and just over 250,000 post-graduates, see figure 3.7 below.
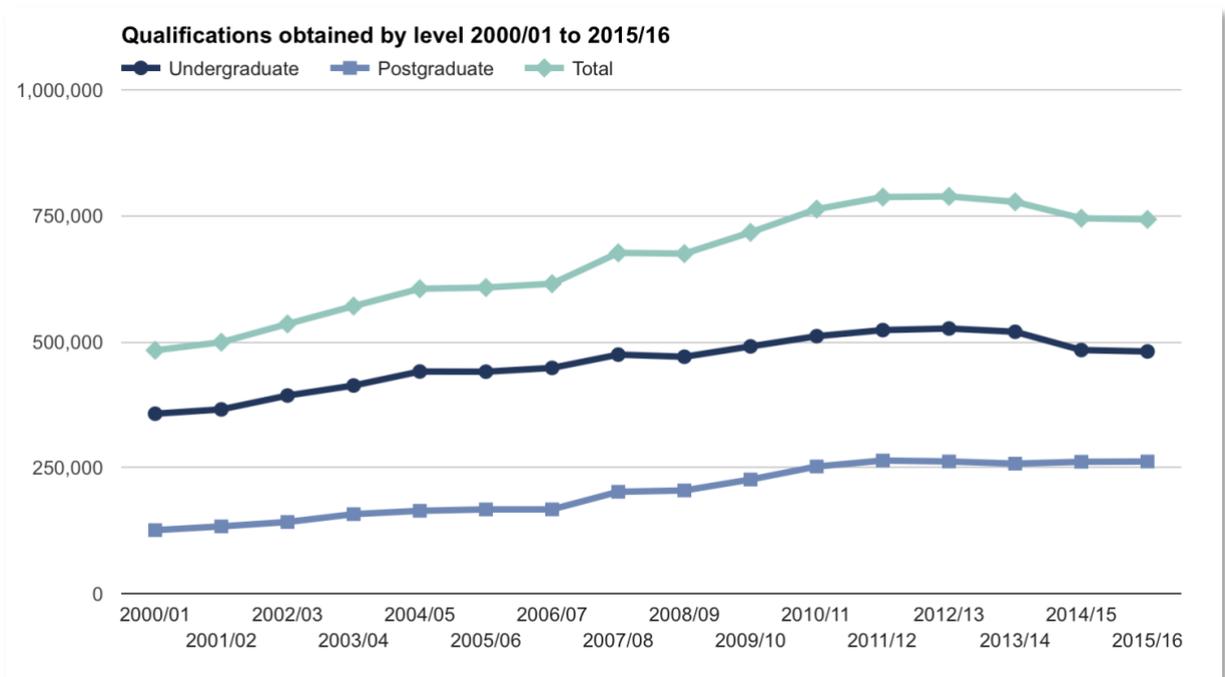
Figure 3.7 Qualifications obtained by level 2000 – 2016 (Source: HESA, 2017)

To better understand the end destination of these 750,000 graduates data is collected and recorded via the Destination of Leavers from Higher Education (DLHE) survey, and a summary of this is displayed in figure 3.8 below.
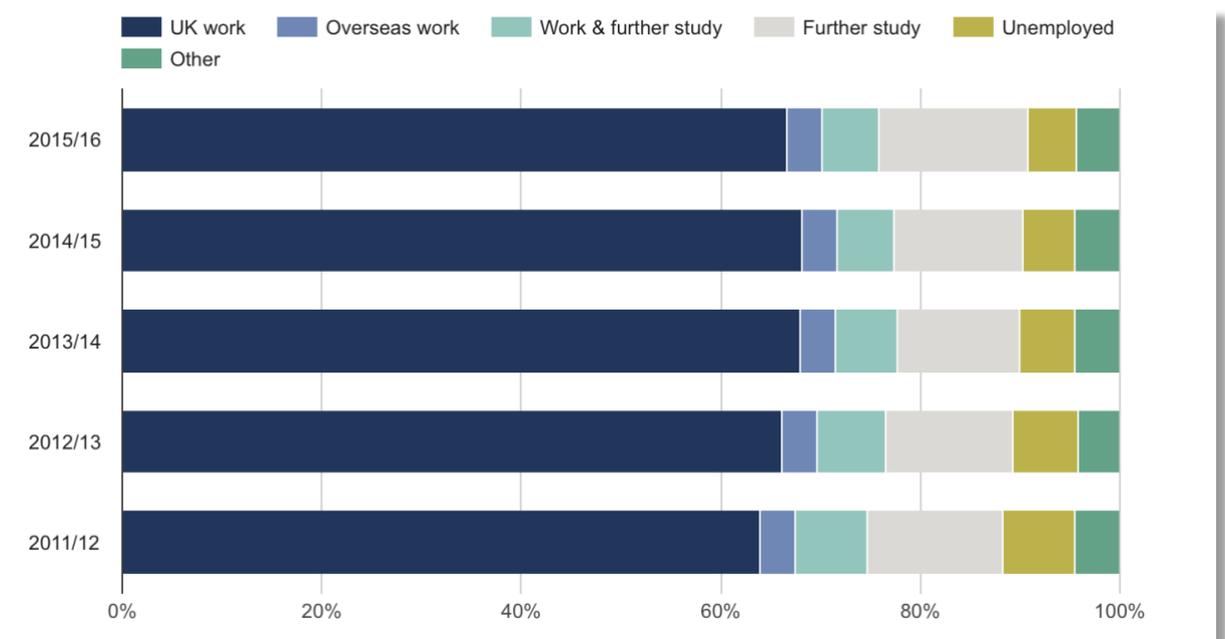
Figure 3.8 Destination of UK and other EU domiciled leavers 2011/12 to 2015/16 (Source: HESA, 2017)

When you drill down into the specific sectors that graduates are entering, then it is less clear as to the types of jobs they are entering, and if these are real 'graduate roles', see table 3.1 below.

Table 3.1 Industry of first degree leavers entering employment in the UK (Source: DLHE, 2017)

Industry sector[a]	2007/08	2008/09	2009/10	2010/11	2011/12
Total	133,565	132,290	143,205	151,245	159,960
Agriculture, forestry and fishing	0.3%	0.3%	0.3%	0.3%	0.3%
Mining and quarrying	0.4%	0.2%	0.3%	0.4%	0.5%
Manufacturing	4.2%	3.9%	4.3%	4.6%	4.4%
Electricity, gas and water supply	0.8%	0.7%	0.7%	0.7%	0.7%
Construction	1.7%	1.3%	1.4%	1.5%	1.4%
Wholesale and retail trade/repair	13.6%	16.9%	16.9%	17.2%	16.7%
Hotels and restaurants	4.9%	6.3%	6.3%	6.8%	6.2%
Transport, storage and communication	7.1%	6.1%	6.8%	6.9%	7.8%
Financial activities	6.0%	4.6%	5.8%	5.4%	4.9%
Property development, renting, business and research activities	15.8%	14.4%	15.8%	16.5%	16.7%
Public administration and defence/social security	6.9%	6.1%	3.9%	3.7%	4.3%
Education	12.4%	12.6%	11.5%	11.2%	11.8%
Health and social work	19.3%	19.8%	19.2%	17.7%	17.8%
Other community, social and personal service activities	6.3%	6.6%	6.3%	6.6%	5.8%
Private households with employed persons	0.1%	0.1%	0.1%	0.1%	0.1%
International organisations and bodies	0.0%	0.1%	0.1%	0.2%	0.0%
Not known	0.2%	0.2%	0.3%	0.2%	0.5%

Finally, the Office for National Statistics generates regular quarterly bulletins of the UK workforce (16 – 64 years of age), recording the total number of employed and percentages of those with above level 4 qualifications, and those holding degree level qualifications, see table 3.2 below.

Table 3.2 Sector breakdown of workers qualified to degree level, and Level 4+ (Source: ONS, 2013)

Industry sector	% with any qualification above Level 4	% of total employees in industry sector qualified to Degree level	% of total employees in industry sector qualified with a Higher Degree	Total number employed in industry
M Prof, scientific, technical activities	67.60%	41.20%	16.90%	1,992,525
P Education	65.20%	25.00%	29.70%	3,090,965
J Information and communication	65.10%	41.40%	14.70%	1,152,955
U Extraterritorial organisations	62.80%	35.90%	19.90%	38,930
Q Health and social work	53.80%	25.00%	10.70%	3,958,918
K Financial and insurance activities	48.90%	33.80%	8.10%	1,149,752
O Public admin and defence	47.70%	25.60%	10.20%	1,841,733
B Mining and quarrying	44.10%	19.40%	11.70%	133,080
D Electricity, gas, air conditioning supply	43.30%	18.70%	7.90%	181,069
L Real estate activities	38.80%	23.50%	3.70%	341,573
R Arts, entertainment and recreation	37.70%	22.20%	7.60%	721,763
S Other service activities	33.40%	17.40%	7.40%	795,048
T Households as employers	30.90%	16.80%	1.10%	58,627
C Manufacturing	30.00%	15.00%	4.10%	2,911,815
N Admin and support services	28.80%	15.90%	4.00%	1,346,352
E Water supply, sewerage, waste	23.10%	11.70%	5.70%	220,988
G Wholesale, retail, repair of vehicles	22.30%	13.30%	2.30%	4,011,980
I Accommodation and food services	22.30%	12.90%	1.90%	1,492,423
F Construction	21.70%	11.10%	2.50%	2,100,132
A Agriculture, forestry and fishing	21.30%	8.20%	2.60%	302,785
H Transport and storage	19.30%	9.90%	2.20%	1,478,678
Total	40.50%	21.10%	9.20%	29,322,091

3.2.3 Main reasons for offering work placements (16 – 24 year olds)

Hertfordshire employers are constantly challenged regarding accepting placement students. This survey sought to understand the main reasons they cite regarding the value and overall rationale for taking them? In 2016 in the UK Government's Post-16 skills plan report, particularly emphasis was placed on the FE providers and employers to more effectively collaborate on improving the work experience opportunities for students [20]. The study carried out with 134 major stakeholders, FE colleges and employers, showed that the existing outcome of increased work experience for students is enhanced learner motivation, and significant improvements in their quality of their destinations after college. The 'new call' to include HE providers in this increased focus on work placements and experience is likely to meet with considerable difficulties for employers, both being able and willing to absorb these additional learners in their workplace. In table 3.3 below, Hertfordshire employers articulated various reasons for taking students on work placements, the majority could perceive a positive business value, others suggested it was more altruist. Yet other employers suggested that they often offer work placement opportunities to existing employees or friends' children [24].

Table 3.3 Main reasons for offering work placements (source: HESFs, 2017)

Main Reasons given	Altruist Reasons (%)	Enterprise Benefit (%)	Circumstantial (%)
Reasons			
Gives them experience	14%	51%	35%
Benefits younger people	14%	44%	42%
Socially responsible	11%	31%	58%
Linking with education providers	10%	50%	40%
Helps with recruitment	11%	62%	27%
Helps with the workload	12%	61%	27%
Raises our profile in the recruitment market	12%	65%	23%
No need to pay for the work	20%	31%	49%
Brings fresh ideas and skills into the business	9%	70%	21%
Approached by an individual or organization	10%	45%	45%
A favour for a friend or family member	13%	19%	68%

4.   Sector employability skills needs and challenges
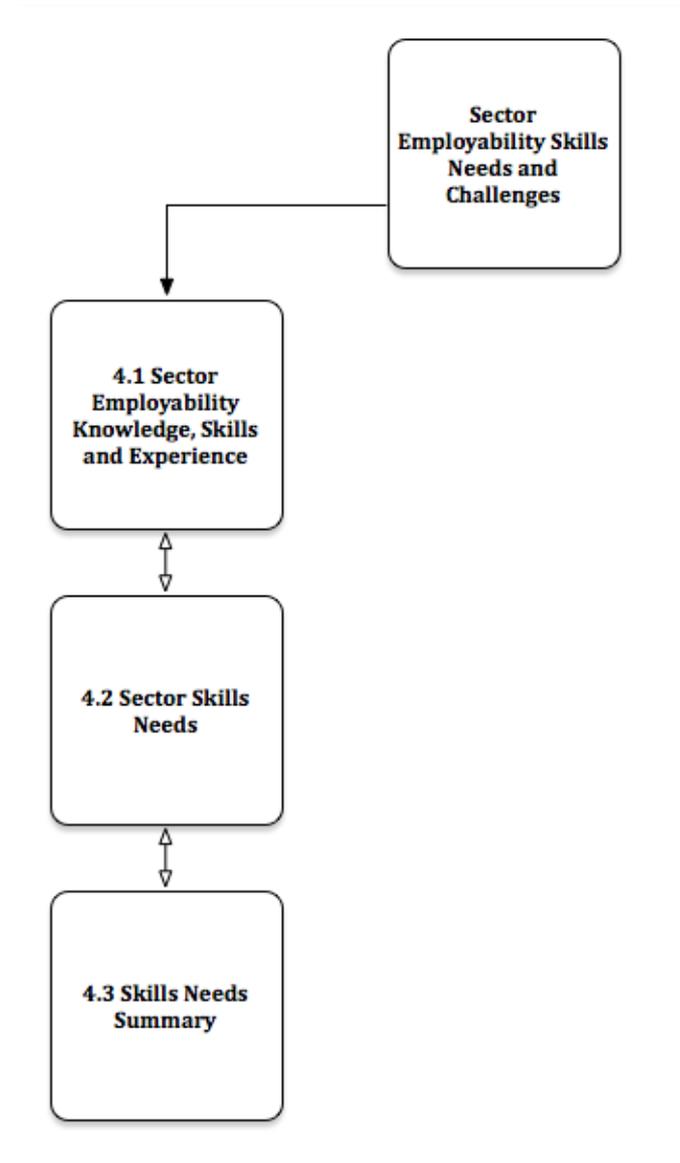
Figure 4.1 Flowchart of sector employability skills needs and challenges section

Employability skills have been an increasing challenge and issue for both, for schools, colleges and universities, as well as for employers. Employers have repeatedly feedback to schools, colleges and universities that leavers are still transitioning into the workplace without some of the key 'people and person' and 'technical and practical' skills required to make them 'work ready'. The employers are on the whole not challenging the professionalism of teachers/lecturers, but instead their focus. The ultimate goal for both teachers/lecturers and employers is to ensure that the pipeline of young talent transitioning into the workplace, is both, open to as broad a cross-section of society as possible, and that this young talent has the appropriate and relevant knowledge, skills and experience to benefit business and the individual in their future career pathway.

'The majority of skills needed to teach employability skills effectively are the same skills that all practitioners need to teach well, but they do need to be supplemented by knowledge of the world of work, and importantly how to meet the needs of the employer'[25]. In section 2.3 we discussed Hertfordshire employer's and the UK's general challenges and issues surrounding the 12 employability skills focused on in this study. In the next sub-section we explore the relative importance and the ranking of these across the six key sectors.

4.1 Sector employability knowledge, skills and experiences

Sector-based employability knowledge, skills and experience ranking

In section 2 above, the analysis of the HESF data revealed, across all sectors, a clear preference for certain skills based on the employers' perspective of their essential, valuable to the business, and desirable but non-essential, to the role and to the business overall. The researcher's wanted to 'drill down' into this by sector, so we asked Hertfordshire employers based on they anticipating taking on more than one young people (16 – 24 years old) in the near future, what were the essential knowledge, skills and experience they would expect. We then asked them to rank their choices and these are shown below broken down into the seven sectors, see table 4.1.

Table 4.1   Sector-based <u>essential</u> employability knowledge, skills and experience

	Manufacturing & adv. manufacturing	Construction	Wholesale & retail	Information & communication technologies	Financial & professional services	Life and health services	Art & recreation services
Personal & people skills							
Motivation & ambition			1	2		1	
Confidence							1
Respect and good manners	1	2	3	1	2	3	4
Determination and Resilience	3				1		
Adaptability		1				2	
Teamwork	4	4	2	4	4	4	2
Technical & practical skills							
Numeracy	2	5	4	3	3		
Literacy		3	5	5			
Business & customer awareness							3
Analytical & problem solving					5	5	5
Digital skills							
Relevant qualifications	5						

These essential knowledge, skills and experience expected of young people are most likely based on these Hertfordshire employer's previous experience of recruiting young people. Several interesting observations we can make from the above table, the first is that in nearly all the sectors the 'people and personal' skills rank in the top three. Secondly, in nearly all cases the two most important 'people and personal' skills are 'motivation and ambition' and 'respect and good manners'. Hertfordshire

employers are consistent in their determination to recruit young people that will both fit into their existing culture and who can be trained up. The right 'attitude' is more important that some of those 'technical and practical' skills often regarded as essential, hence why they rank lower than the 'people and personal' skills.

We then asked them what were the most valuable knowledge, skills and experience that young people could have that would be of most benefit to the business, we then asked them to rank their choices, these are broken down into the seven sectors, see table 4.2. When the employers were then asked to rank these 12 skills by that was most valuable to them, noticeable differences appeared between the sectors. Those sectors requiring prowess in adaptability, business & customer awareness and problem solving practical skills ranked these higher, sectors like manufacturing and information & communication technologies. Those more service orientated focused instead on the digital skills and business & customer awareness.

Table 4.2   Sector-based <u>valuable</u> employability knowledge, skills and experience

	Manufacturing & adv. manufacturing	Construction	Wholesale & retail	Information & communication technologies	Financial & professional services	Life and health services	Art & recreation services
Personal & people skills							
Motivation & ambition	1	1		1	3		4
Confidence		2	2	2	4	3	
Respect and good manners							
Determination and Resilience		3				2	1
Adaptability	2	4	1	3	1		2
Teamwork							
Technical & practical skills							
Numeracy							
Literacy							
Business & customer awareness	3	5	3	5	0	1	5
Analytical & problem solving	4		5	4	5	4	3
Digital skills	5		4		2	5	
Relevant qualifications							

Lastly the Hertfordshire employers were asked what were the desired, but non-essential, knowledge, skills and experiences they would like exhibited by young people applicants, we then asked them to rank their choices, these are broken down into seven sectors, see table 4.3. The most noticeable observation from the table is the clear focus on 'technical and practical' skills. Clearly what employers are signaling here is the desirability that school, college and university leavers transition into the workforce with more relevant knowledge, skills and experience.

The importance of these three tables, is to look at both the areas of consensus, and difference, and then try and understand why this is so? Interestingly, the three tables do show a marked difference, the essential knowledge, skill and experience table reflects the Hertfordshire employer's minimum

requirement. But the most valuable knowledge, skills and experience table reflects their real need for young people recruits, but still being pragmatists – accepting that school, college and university leavers are not going to change overnight, those that will add real value to the business. This often reflects those existing areas of the business that are already experiencing skills gap, due to shortfalls in the external labour market and highly skilled staff retiring, and areas where the business is particularly feeling an impact. Finally, the desired knowledge, skills and experience table reflects the future areas the business wants to develop but currently have skills gaps, that will make them more competitive and help create a sustainable business model.

Table 4.3   Sector-based <u>desirable, but non-essential</u> employability knowledge, skills and experience

	Manufacturing & adv. manufacturing	Construction	Wholesale & retail	Information & communication technologies	Financial & professional services	Life and health services	Art & recreation services
Personal & people skills							
Motivation & ambition	1		1			4	1
Confidence	2	1	2	2			
Respect and good manners			0				
Determination and Resilience			4				
Adaptability							
Teamwork					4		
Technical & practical skills							
Numeracy					5	3	
Literacy	5	3					4
Business & customer awareness	4	2	3	1	3		5
Analytical & problem solving		4		3		2	
Digital skills	3			4	2	1	3
Relevant qualifications		5	5	5	1	5	2

Every employer approached in this Hertfordshire employer survey expressed the vital role that work experience plays in helping young people transition from education into work, but also conceded that the current youth labour market often lacks sufficient depth [27].

The problem has been steadily getting worse over the last 15 years, with young people (16 -17 years olds) experiencing a dramatic fall in part-time working from 39% in 1992, to 20% in 2012. This trend is being felt in both, the 'death of the Saturday job', and the reducing opportunity for work experience placements by employers, with just 19% for school students, 9% for college students, and 7% for university students undertaking this [27]. The worst sectors being Construction (10%), Manufacturing (15%) and Financial & Professional Services (19%), the best sectors for work experience are Life and Health Sciences (46%), Retail & Wholesale (22%), and Information & Communications Services (21%).

4.2 Sectors' skills need

Increasingly employers are using two forms of recruitment, 'word of mouth' and/or 'personal recommendations'. Hertfordshire employers are relying more on knowledge of the prospective employee, their 'people and personal' and 'technical and practical' skills, as communicated through direct contact with their business. The following six sub-sections focus on the challenges and issues facing employers in each of these and the importance of their ranking of young people employability skills (Retail & Wholesale, Construction, Life Sciences and Health Services, Manufacturing & Advanced Manufacturing, Financial & Professional Services, Information & Communication Technologies and Art & Recreation Services).

4.3.1 Manufacturing & advanced manufacturing

The Manufacturing and Advanced Manufacturing sector currently employs over 2,574,000 workers throughout the UK (ONS, June 2017), representing 7.6% of the total UK employed. In 2013 the sector contributed over £72 billion to the UK economy [28]. The sector is particularly strong in workers with high-level qualifications, with over 44% having a NVQ level 4 qualification or above. This is important when you consider that the UK and Europe lead the way in patent applications, with over 50% of all worldwide patent submitted.

The HESF study findings highlight that the manufacturing industry still demands high levels of 'people and personal' skills, particularly around motivation and adaptability, see tables 4.3 – 4.5 above. Manufacturing employers are keen that the 'technical and practical' skills are addressed alongside the traditional interest in leadership, management and business & customer management skills [28].

4.3.2 Construction

The construction sector continues to be a major foundation for future UK economic growth and fuller employment, with particular emphasis on meeting the nation's long-term low-carbon agenda and the UK government's aggressive residential new housing targets of over 200,000 homes per year for the next 10 years [29]. The sector currently employs over 2,230,000 workers UK wide, representing 6.5% of the total employed market (ONS, June 2017). Like most sectors, they are heavily impacted by new technology and new materials creating a need for existing workers to be re-trained (knowledge, skills and experience), the apprenticeship scheme at levels 2 & 3 is providing some help in this area. There is an increasing move of personnel towards the higher-level occupations (such as managers, professionals and associate professions), this has also significantly increased the number of workers now qualified to NVQ level 4 or above.

The HESF study findings point to the construction sector expressing more value around the 'people and personal' skills, than the traditional 'technical and practical' skills. The construction sector like many others often has the challenge of attracting young people into it, this is being partly addressed by expanding the apprenticeship recruitment into levels 4 & 5, and also improving the opportunities for work placement for both college and university students. Less than 15% of the construction workforce is in the 18 – 24 year old bracket [29].

4.3.3 Wholesale & retail

The wholesale and retail sector contributed £144 billion in 2012 to the overall UK's total Gross Value Added (GVA). This is the second largest sector contribution behind that of engineering and manufacturing. With over 350,000 businesses it is the UK's largest employer with over 5.112 million (ONS, June 2017). The sector has a low level of skills profile, with just 22% of the workforce having NVQ level 4 or above [30]. In the latest Working Future Report covering the period 2012 – 2022, the retail and wholesale sector is expected to achieve an annual growth of 4% up to 2022. The most significant growth occupations will be in customer service, managerial and professional & associate professionals, further backing up the increased higher skills-level needs of this sector, with recruitment focusing on those with NVQ level 4 – 6 qualifications [30, 31].

The HESF study findings for essential and valuable skills, found equal weighting between 'personal and people' skills and the requirement for 'technical and practical' skills, see tables 4.3.4 – 4.3.6 above. The increasing use of new technology-based services to satisfy consumer demand for quality, price and speed of delivery is having a profound impact on their staffs' skills needs. Most importantly the diversification and higher-level skills base in both, their in-store shop floor workforce, and those who are in the back-offices supporting the online customer, is improving their skills-level profile. The increasing importance of relevant qualifications in customer and consumer marketing, and a growing need for enhanced digital skills is having an impact on the overall sector staff recruitment – both as a challenge and an opportunity. The increased importance of upstream and downstream supply chain management is increasing the recruitment of young people who have better 'business and customer awareness', and increased 'confidence' in working effectively in teams, both evidenced in the table 4.3 – 4.5 above.

4.3.4 Information & communication technologies

The UK digital sector, including telecommunications, computer programming, design and photography, and programming and broadcasting, is a growing industry representing 1,460,000 workers, and 4.3% of the total UK workforce (ONS, June 2017). The wholesale digitalization of the UK economy has generated extremely strong demand for digital services. This likewise has created a

challenge for this sector in terms of both recruiting new workers with the necessary digital skills, and the existing workforces' skills gaps. The increasing reliance on graduate recruitment to satisfy this demand has surfaced a growing problem around employers' concerns over the 'work readiness of young people' – particularly around relevant 'technical and practical' skills [32].

The HESF study findings support this issue of 'work readiness' of both FE and HE graduates. ICT employers are increasingly making do with young people having broader 'people and personal' and 'technical and practical' skills. Whereas they would prefer to have FE and HE graduates who have more relevant industry qualifications and experience as a minimum. But desiring that these same applicants have digital and problem-solving & analytical skills increasingly becoming 'must haves' in the industry.

4.3.5 Financial & professional services

The financial and professional services is one of the eight key sectors in the UK economy. The sector employs over 4 million workers, and accounts for 11.8% of total employment (ONS, June 2017). Brexit will have a significant impact in this sector, as banks and other financial services businesses move over to other EU countries. More significantly, the financial and professional services sector is the oil that lubricates the cogs of the UK economy, providing finance and specialist business services that both capture business opportunities, and turn them into winning products and services that impact on the UK's position as a world-leader in creativity and innovation [33].

The HESF findings reflect the challenges common across sectors reacting to an aging workforce, where highly skilled professional and associate professionals are retiring, and these are then creating 'hard-to-fill' vacancies – in which the current labour market has adequate numbers of suitably qualified applicants. Hertfordshire financial and professional services employers are recognizing the difficulties of employing young people with relevant work experience and are instead demanding that they have at least a minimum of 'people and personal' skills, like motivation, determination and adaptability and at least some analytical skills to then come into their employ and be trained up. Yet what they really desire is that young people exit schools, colleges and university with more 'business and customer awareness', 'digital skills' and 'relevant qualifications' in areas directly relating to their aspirational career paths within this sector.

4.3.6 Life and health sciences

The life and health sciences sector is the largest employer in the UK economy, representing over 13% of the total UK workforce [34]. Of the over 4 million people employed in this sector, the majority are over 35 years of age. Over 54% of the workforce are NVQ level 4 or more qualified, this reflects the predominance of professional occupations in this sector. Yet this sector also has one of the highest

skills gap, 19% of Life and Health science employers reported having skills gap in their current workforce.

The HESF study findings reflect the challenges the sector is facing in terms of the increasing aging population, and their multiple long-term conditions (mental and physical ailments), explains their focus on 'people and personal' skills and backed up by the ability to adapt and adopt new technologies to improve carer services. Particularly highly ranked are those skills around 'team-working' and 'business and customer awareness', which match the skills deficiencies noted in the last UKCES study (2015) on skills and performance challenges in Health and Social Care sector[34]. The increasing advances in new medical and information technologies is likely to help put more control in the hands of patient and their carers. The need for the life and health science's workforce to embrace these advances and thus give the patients, and other service users, the opportunity to manage their own health, will call on more transformative skills [34].

4.3.7   Art & recreation services

The Arts and Recreation services sector accounts for 21% of the overall Tourism sector, which accounts for over 5% of the UK's total Gross Value Added (GVA), over £62 billion in 2010. The overall tourism sector employs over 3.2 million workers (ONS, June 2017), with 35.1% of these employed at elementary occupational level, see figure 4.2 below. The qualification profile for this sector is above that achieved nationally, with 21% of workers having a higher education qualification (level 4 or above).
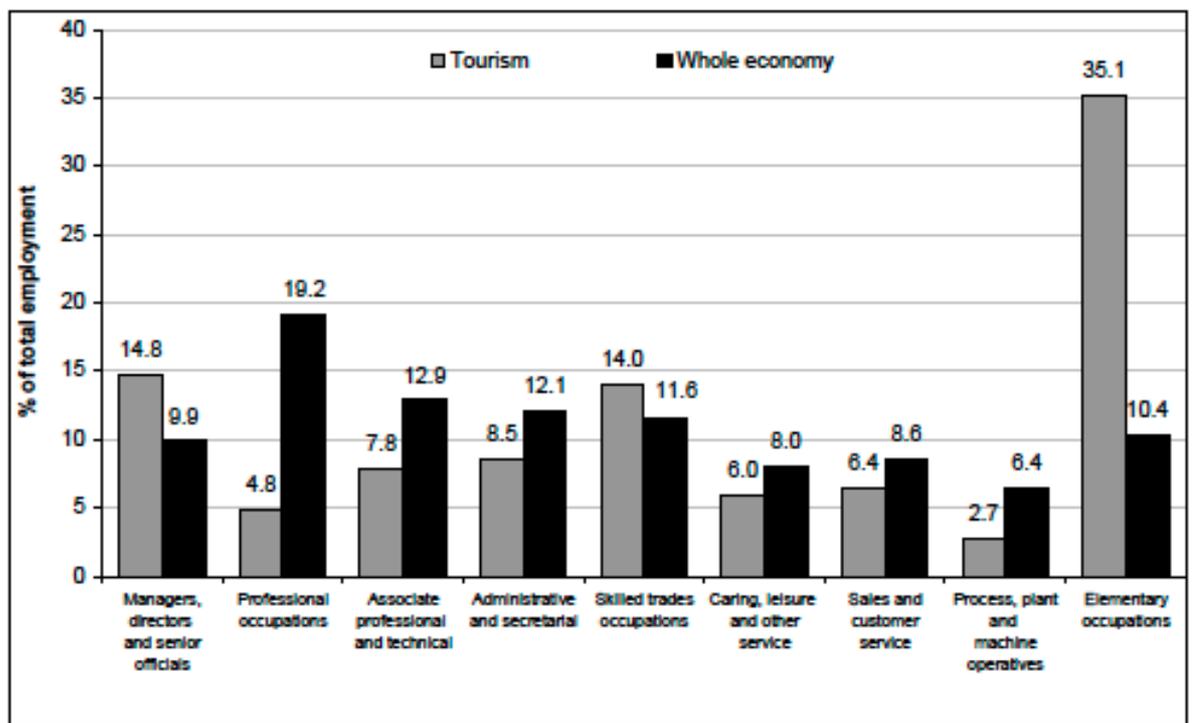
The HESF study findings around ranking of employability knowledge, skills and experience, see tables 4.3 – 4.5, suggests that 'personal and practical' skills rank higher for this sector's employers, than 'people and technical' skills. This is likely to change in the longer-term, as more roles will develop for digitally skilled professionals, as larger enterprises develop their digital footprint [35].   As the professional and associate professional occupations increase, at the detriment of the elementary occupations, so the need for stronger skills in both 'business and customer awareness' combined with digital skills will become important. So even though employers are not calling on these skills now, see table 4.3, they can see the future need for a good understanding of digital technology and its application. The importance of managing this future adoption, integration and use of new digital technology will increase as businesses maximize those associated business opportunities [35].

4.4   Skills need summary

The original definition of employability by Yorke and Knight (2006) defined it as:

'A set of achievements – skills, understandings and personal attributes – that make individuals more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy (Yorke and Knight, 2006:8)'

What this definition does is stress that employability, and its many traits, mindfulness and attributes is a work in progress throughout one's working life.

What is consistent throughout both the primary research carried out under the HESF study, and that collected during the extensive documentary research of past-research carried out on employers and other stakeholders, is the overall desire that school, college and university leavers possess a set of core knowledge, skills and experience traits [36]. These employability skills are more important than the degree subject and class of degree, and is supported by over 81% of Hertfordshire employers surveyed in this study [36].   In the previous sub-sections the researchers have tried to link the ranking of the 'people and personal' and the 'technical and practical' skills to the particular employer challenges each of them face in their respective sector. Finally, the researchers have started to work on a skills metric framework for use by schools, colleges and universities. The intention is that students can then map their own achievements against this, and therefore determine the areas they need to focus on based on the sector they would like to enter. This framework still needs some work, see table 4.4 below, but this needs to be done in collaboration with all education providers and employers, phase two of this project.

Table 4.4 Individuals skills metric framework

Personal & people skills	Motivation & ambition	Confidence	Respect & good manners	Determination & resilience	Adaptability (& adeptness)	Teamwork
Employers' Definition	Having the right work ethic - delivering business value.	We like a confident person, and we are looking for the right person to shine … deliver business value on day one	It is about respecting the people around you, and being polite	You need to know that when people are given things to do, they will do it. There are going to be distractions	The ability to fit in quickly and read the culture e.g. 9-5	Working in teams is about building on peoples' strengths and working around weaknesses
Evidence example	**Completing** a big project Participating in group activities **Planning:** an event	**Captaining** a sports team **Inspiring** others **Holding** an elected post in a student society	**Respect:** for oneself and others	**Organising:** an event or placement **Meeting deadlines:** for academic, paid or voluntary work Balancing study with other responsibilities such as employment, family issues, social and community activities	**Creative thinking** – participating in creative events, initiating innovative ideas, willingness to take risks **Good overall networking** and open innovation skills	**Being a member** of student committees and teams **Participating** in team sports, and other group activities **Sharing** a flat **Staging** an event **Participating** in various voluntary community and enterprise activities
PLATINUM	Excellent demonstration of the individual's ability to motivate themselves and others.	Excellent ability to make decisions based on understanding of others skills/competencies, sound judgements, opportunity to inspire others to work together to achieve shared goals and delegate work to others.	Excellent respect of themselves and of others. An excellent appreciation of the importance of good manners.	Excellent aptitude for working independently, setting goals, schedules and plans. Managing task effectively, fulfilling project aims and evaluating results	Distinctive work that shows imagination and creativity. Demonstrates substantial initiative, flexibility of approach, willingness to undertake new ventures	Exceptional motivation & outstanding effectiveness in team role. Substantial evidence of listening to, working with, and developing others.
GOLD	Good ability to motivate themselves and others.	Good ability to make decisions based on understanding of others skills/competencies, sound judgements, opportunity to inspire others to work together to achieve shared goals and delegate work to others.	Good respect of themselves and of others. An excellent appreciation of the importance of good manners.	Good aptitude for working independently, setting goals, schedules and plans. Managing task effectively, fulfilling project aims and evaluating results	Good work that shows imagination and creativity. Demonstrates good initiative, flexibility of approach, willingness to undertake new ventures	Good motivation & outstanding effectiveness in team role. Substantial evidence of listening to, working with, and developing others.
SILVER	Average ability to motivate themselves and others.	Average ability to make decisions based on understanding of others skills/competencies, sound judgements, opportunity to inspire others to work together to achieve shared goals and delegate work to others.	Average respect of themselves and of others. An excellent appreciation of the importance of good manners.	Some aptitude for working independently, setting goals, schedules and plans. Managing task effectively, fulfilling project aims and evaluating results	Work that shows imagination and creativity. Demonstrates initiative, flexibility of approach, willingness to undertake new ventures	Unreliable motivation & outstanding effectiveness in team role. Substantial evidence of listening to, working with, and developing others.
BRONZE	Basic ability to motivate themselves and others.	Lack of confidence to make decisions and difficulty inspiring others to work together.	Below Average respect of themselves and of others. An excellent appreciation of the importance of good manners.	No aptitude for working independently, setting goals, schedules and plans. Managing task effectively, fulfilling project aims and evaluating results	Work that lacks imagination and creativity. Demonstrates limited initiative, flexibility of approach, willingness to undertake new ventures	No motivation & outstanding effectiveness in team role. Substantial evidence of listening to, working with, and developing others.

Technical & practical skills	Numeracy	Literacy (communications)	Business & customer awareness	Analytical & problem solving	Digital technology	Relevant qualifications
Employers' Definition	Just the basics of calculating percentages and handling simple spreadsheets.	The ability to use verbal, written and presentation skills to get their message across.	Who understand who the customer is, and their importance to the business	Being confident in breaking a problem down, and the working solidly towards a solution	Can they work with computers effectively, and deal with the other technology in the office	The relevance of the degree to the sector/business
Evidence example	**Presenting:** statistical analysis in coursework, or on business projects. **Holding:** a financial post e.g. treasurer. **Gaining:** work experience involving calculations. **Negotiating:** pricing for an event.	**Writing:** essays, reports and other outputs **Delivering:** oral presentations, pitching new ideas, public speaking **Communicating:** being an active member of a society, committee	Completing a big project Participating in group activities	**Negotiating:** working on a team project and being instrumental in its success. **Balancing demands:** managing deadlines and budgets **Creative thinking:** reflection on wins/losses, suggesting different approaches	**Using** e-mail/social media Word processing\ excel\ power-point for reports, analyzing essay, and presentations **Producing** publicity **Using** the web as a source of information	Both academic and practical/technical skills achievements
PLATINUM	Excellent use of numbers and ability to present data in tables, graphs, etc. Outstanding statistical analysis and confidence interpreting data and using it to support your arguments.	Excellent use of language (verbal and written), and various communication tools. Excellent understanding of the audience. Confident delivery and response to questions/feedback.	Excellent understanding of general business systems and processes. Excellent awareness of the importance of the customer journey.	Exemplary evidence of critical thinking and decision-making skills. Interpreting negotiating choices and managing risks. Testing and rationalizing different options and implementing the chosen solution.	Excellent use of IT and ability to use many different software packages to diagnose and solve IT problems	Higher level of achievement
GOLD	Good use of numbers and ability to present data in tables, graphs, etc. Good statistical analysis and confidence interpreting data and using it to support your arguments.	Good use of language (verbal and written), and various communication tools. Clear purpose and structure. Mostly good understanding of the audience. Confident delivery and response to questions/feedback.	Good understanding of general business systems and processes. Good awareness of the importance of the customer journey.	Good evidence of critical thinking and decision-making skills. Interpreting the negotiation choices and managing risks. Testing and rationalizing different options and implementing the chosen solution.	Good use of IT and ability to use many different software packages to diagnose and solve IT problems	Good level of achievement
SILVER	Average use of numbers and ability to present data in tables, graphs, etc. Average statistical analysis and confidence interpreting data and using it to support your arguments.	Mostly good use of language (verbal and written), and various communication tools. Some purpose and structure. Excellent understanding of the audience. Mostly confident delivery and response to questions/feedback.	Average understanding of general business systems and processes. Average awareness of the importance of the customer journey.	Evidence of critical thinking and decision-making skills. Interpreting the negotiation choices and managing risks. Testing and rationalizing different options and implementing the chosen solution.	Average use of IT and ability to use many different software packages to diagnose and solve IT problems	Average level of achievement
BRONZE	Poor use of numbers and ability to present data in tables, graphs, etc. Poor statistical analysis and confidence interpreting data and using it to support your arguments.	Basic use of language (verbal and written) and use of communication tools. Some purpose and structure. Some understanding of audience. Unconfident delivery & response to questions/feedback.	Below average understanding of general business systems and processes. Below average awareness of the importance of the customer journey.	Lack of critical thinking and decision-making skills. Interpreting the negotiation choices and managing risks. Testing and rationalizing different options and implementing the chosen solution.	Poor use of IT and ability to use many different software packages to diagnose and solve IT problems	Below average level of achievement

A.1 Hertfordshire Skills Framework

Releasing our potential
Hertfordshire's Skills Strategy

Hertfordshire Skills Framework 2018

Personal & people	Hertfordshire understanding
Motivation and ambition	Actively participate Show enthusiasm Knowledge of the sector Pursue aspirations and goals
Confidence	Willing to meet new people Able to hold conversations with peers, managers and customers Recognise own strengths and able to present these
Respect and good manners	Listen and learn Recognise the feelings of others Be polite Remain calm
Determination and resilience	Commitment to get things done Learn from mistakes and accept criticism Resist distractions Adapt to changes
Adaptability	Flexible to cope with changing demands Able to apply knowledge to different situations
Teamwork	Cooperate with others Recognise skills in others Value contribution from others
Technical & practical skills	**Hertfordshire understanding**
Numeracy	Apply simple mathematical concepts Understand simple arithmetic Understand costs and expenditure
Literacy	Able to express yourself in writing Understanding of business etiquette verbally and in writing Able to explain yourself verbally
Business and customer awareness	Understand commercial realities Able to professionally communicate with customers Manage your time effectively
Analytical and problem-solving skills	Investigate systematically Identify problems Look for better ways and suggest solutions Plan and organize tasks
Digital technology	Understand the development in technology for business Basic knowledge of IT
Qualifications	Achieve qualifications valued by employers

Hertfordshire Local Enterprise Partnership
PERFECTLY PLACED FOR BUSINESS

University of Hertfordshire UH

Hertfordshire

A.1 Bibliography

[1]   Sir John Holman, "Good Career Guidance," p. 62Accessed on: 1st February 2018Available:
        http://www.gatsby.org.uk/uploads/education/reports/pdf/gatsby-sir-john-holman-good-
        career-guidance-2014.pdf

[2]   City & Guilds, "Learning to be Employable: practical lessons from research into developing
        character," p. 94Accessed on: 27th November 2017Available:
        https://www.cityandguilds.com/learningtobeemployable

[3]   House of Commons, "Apprenticeship Statistics: England," p. 21Accessed on: 1st February
        2018Available: researchbriefings.files.parliament.uk/documents/SN06113/SN06113.pdf

[4]   CBI, "The Right Combination: CBI/Pearson Education and Skills Survey," p. 52Accessed on:
        4th october 2017Available: http://www.cbi.org.uk/cbi-prod/assets/File/pdf/cbi-education-
        and-skills-survey2016.pdf

[5]   Department of Education, "Hertfordshire Area Review," p. 30Accessed on: 1st December
        2017Available:
        https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/635241/H
        ertfordshire_Area_Review_Report_FINAL.pdf

[6]   The LEP Network, Creating Successful Local Economies: review of Local Enterprise
        Partnership area economies in 2012, T. L. Network, ed., London, UK: The LEP Network, 2012,
        p. 81. [Online]. Available:
        http://www.cwlep.com/userFiles/review_of_lep_economies_2012.pdf.

[7]   UKCES, "Working Futures 2012-2022," p. 142Accessed on: 1st December 2017Available:
        https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/298510/w
        orking-futures-2012-2022-main-report.pdf

[8]   CBI, "Learning to Grow: what employers need from education and skills," *Education and Skills
        Survey 2012,* p. 60Accessed on: 23rd October 2017Available:
        http://www.ucml.ac.uk/sites/default/files/shapingthefuture/101/cbi_education_and_skills_s
        urvey_2012.pdf

[9]   I. P. E. Foundation, "Ready for Work: The capabilities young people need to find and keep
        work - and the programmes proven to help develop these," p. 33Accessed on: 23rd October
        2017Available: http://www.impetus-pef.org.uk

[10]   A. Mann, j. Dawkins, and R. McKeown, "Rowards an employer engagement toolkit: British
        teacher's perspectives on the comparative efficacy of work-related learning activities," p.
        37Accessed on: 28th September 2017Available:
        http://www.educationandemployers.org/research/towards-an-employer-engagement-
        toolkit-british-teachers-perspectives-on-the-comparative-efficacy-of-work-related-learning-
        activities/

[11]   K. Carberry *et al.*, "How should our schools respond to the demands of the twenty-first
        century labour market? Eight Perspectives," p. 33Accessed on: 16th August 2017Available:
        http://www.educationandemployers.org/wp-content/uploads/2015/02/How-should-our-
        schools-respond-to-the-demands-of-the-twenty-first-century-labour-market-eight-
        perspectives.pdf

[12]   R. McKeown and A. Mann, "Employer Engagement in Education," p. 16Accessed on: 14th August 2017Available: http://www.educationandemployers.org/wp-content/uploads/2015/11/Employer-engagement-in-education-a-bibliography-Nov-2015.pdf

[13]   Skills Funding Agency and Department for Business Innovation & Skills, Further Education and Skills: learner participation, outcomes ad level of highest qualification held, SFA, ed., London, UK.: ONS, 2015, p. 54. [Online]. Available: https://www.gov.uk/government/statistics/learner-participation-outcomes-and-level-of-highest-qualification-held.

[14]   Ofsted, "The Annual Report of Her Majesty's Chief Inspector of Education, Children's Services and Skills 2014/15," p. 124Accessed on: 30th November 2017Available: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/483347/Ofsted_annual_report_education_and_skills.pdf

[15]   Department of Education, "Post-16 Skills Plan," p. 50Accessed on: 21st June 2017Available: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/536043/Post-16_Skills_Plan.pdf

[16]   Department of Education, "Post-16 Skills Plan," p. 60Accessed on: 30th November 2017Available: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/536043/Post-16_Skills_Plan.pdf

[17]   UKCES, "The UK Commission's Employer Skills Survey 2015: UK Results," p. 244Accessed on: 29th September 2017Available: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/525450/UKESS_2015_Technical_Report__May_.pdf

[18]   A. Mann, "It's Who You Meet: Why employer contacts at school make a difference to the employment prospects of young adults," p. 25Accessed on: 30th November 2017Available: https://www.educationandemployers.org/wp-content/uploads/2014/06/its_who_you_meet_final_26_06_12.pdf

[19]   D. Vivian et al., "The UK Commission's Employer Skills Survey 2015: UK Results," p. 244Accessed on: 29th September 2017Available: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/525450/UKESS_2015_Technical_Report__May_.pdf

[20]   GSR, "Work Placements: a call for evidence," p. 44Accessed on: 30th November 2017Available: http://www.youthemployment.org.uk/dev/wp-content/uploads/2017/07/Work-placements-a-call-for-evidence.pdf

[21]   Gatsby Foundation, Good Career Guidance, London, UK.: Gatsby Foundation, 2014, p. 62. [Online]. Available: http://www.gatsby.org.uk/uploads/education/reports/pdf/gatsby-sir-john-holman-good-career-guidance-2014.pdf. Accessed on 18th January 2018.

[22]   Careers & Enterprise Company, State of the Nation: Careers and enterprise provision in England's schools, London, UK: Compass, 2017, p. 40. [Online]. Available: https://www.careersandenterprise.co.uk/research/publications/state-of-the-nation-2017. Accessed on 18th January 2018.

[23]   A. Wolf, "review of Vocational Education - The Wolf Report," p. 197Accessed on: 14th August 2017Available:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/180504/DFE-00031-2011.pdf

[24] P. Huddleston, A. Mann, and j. Dawkins, "Employer Engagement in English Independent Schools," p. 32Accessed on: 4th December 2017Available: https://www.educationandemployers.org/wp-content/uploads/2014/06/employer_engagement_in_english_independent_schools__july_2012_.pdf

[25] UKCES, "Employability: Incentivising improvement," *Employability,* p. 58Accessed on: 26th October 2017

[26] UKCES, "Employer Perspectives Survey 2016," p. 218Accessed on: 4th October 2017Available: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/622343/EPS_2016_UK_Report.pdf

[27] UKCES, "Scaling the Youth Employment Challenge," p. 22Accessed on: 21st August 2017Available: https://www.gov.uk/government/publications/scaling-the-youth-employment-challenge

[28] UKCES, "Sector Insights: Skills and perfomance challenges in the advanced manufacturing sector," p. 82Accessed on: 5th December 2017Available: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/439270/150626_AM_SLMI_report.pdf

[29] UKCES, "Sector Skills Insights: Construction," p. 98Accessed on: 5th December 2017Available: http://dera.ioe.ac.uk/15035/1/evidence-report-50-construction.pdf

[30] UKCES, "Understanding Skills and Performance Challenges in the Wholesale and Retail SEctor," p. 106Accessed on: 5th December 2017Available: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/466696/151008_Retail_SLMI_report_edited.pdf

[31] UKCES, "Understanding Skills and Performance Challenges in the Logistics Sector," p. 90Accessed on: 5th December 2017Available: https://www.gov.uk/government/publications/understanding-skills-and-performance-challenges-in-the-logistics-sector

[32] UKCES, "Sector Insights: Skills and performance challenges in the digital and creative sector," p. 122Accessed on: 5th December 2017Available: http://www.legco.gov.hk/general/english/library/stay_informed_overseas_policy_updates/digital_and_creative_sector.pdf

[33] UKCES, "Sector Skills Insights: Professional and business services," p. 103Accessed on: 5th December 2017Available: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/304188/Sector_Skills_Insights_Professional_and_Business_Services_evidence_report_56.pdf

[34] UKCES, "Sector Insights: skills and performance challenges in the health and social care sector," p. 91Accessed on: 5th December 2018Available: https://www.gov.uk/government/publications/sector-insights-skills-and-performance-challenges-in-the-health-and-social-care-sector

[35]   UKCES, "Sector Skills Insights: Tourism," p. 76Accessed on: 4th December 2017Available: https://www.gov.uk/government/publications/tourism-sector-skills-insights

[36]   CFE Research, "Industry Graduate Skills Needs: Summary report for the National Centre for Universities and Business," p. 36Accessed on: 7th December 2017Available: http://www.ncub.co.uk/reports/cfe.html