Good practice in Level 4 and 5 qualifications

Research report

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Executive Summary

Aims

This literature review explored good practice in the development and delivery of level 4 and 5 qualifications. It particularly focused on how or why courses or qualifications have gained popularity and achieved good outcomes at this level. The results of the literature review were then used to draw lessons on aspects of good practice for the design and delivery of level 4 and 5 qualifications.

Methodology

A review was undertaken of literature available via sources such as academic and online libraries, grey literature and organisation websites to identify published evidence on level 4 and 5 qualifications. Literature was sifted to focus specifically on good practice in qualification design and delivery. The review was England-wide only (although some data are presented at UK-wide level) and included literature from 2007 onwards to ensure relevance.

Level 4 and 5 qualifications in scope for this literature review were Certificate and Diploma in Higher Education (CertHE/DipHE), Higher National Certificate/Higher National Diploma (HNC/D), Foundation Degrees, level 4 and 5 Awards, Certificates and Diplomas, and level 4 and 5 National Vocational Qualifications (NVQs).

In addition to the literature review, 15 semi-structured telephone interviews were carried out with seven training providers, four sector bodies, two employers and two awarding organisations (with some of these having multiple roles e.g. sector body and awarding organisation). The interviews explored perceptions, use, design and delivery of qualifications, and perceived challenges. They were also used to highlight examples of good practice and explore how courses/qualifications had gained traction with various stakeholders.

When reading the report, it should be noted that:

- The terminology for level 4 and 5 qualifications is diverse and varies by focus and mode of delivery. This literature review uses 'level 4 and 5' to cover the broad range of qualifications noted in the scope, whilst referring to specific qualification types/alternative terminology only where mentioned explicitly in the literature.

- A deeper comparative study of employer skills needs versus the current qualification offer was out of the scope of this literature review. Where perceptions about meeting employer need were noted by interviewees, these have been reported.

- Apprenticeships were out of scope of this literature review. However, where there were gaps in evidence or useful contextual lessons to be learned, some literature relating to the design and delivery of Higher Apprenticeships has been referenced.

- Only a small number of telephone interviews were undertaken, therefore the case studies are intended to be illustrative rather than representative of all sector views.

Context

The Department for Education is conducting a comprehensive review of classroom based level 4 to 5 education with a focus on how technical qualifications at this level can best address the needs of learners and employers. This forms part of the Department's wider work on skills and Higher and Further Education, including the Review of Post-18 Education and Funding, the implementation of the Post-16 Skills Plan, and Industrial Strategy commitments to extend technical education reforms to higher levels and develop England's workforce. Take up of level 4 and 5 qualifications appears to have been in decline over recent years and accounts for less than one per cent of all adult skills budget funded qualifications being taken in the adult skills system.

Perceptions

- **Learners** report difficulties in understanding the different level 4 and 5 pathways available and a lack of information available about related progression routes into higher education and employment. Literature on Foundation Degrees in particular suggests that learners report a range of benefits from taking the qualification including increased self-confidence, improved knowledge and a positive impact on work practice. However, they also raise financial concerns related to tuition fees and the burden of study on family life, particularly among mature learners.

- **Employers** tend to regard vocational and technical qualifications at this level positively (although the case studies highlight some differences across occupational areas). Sometimes existing perceptions of qualifications may be more based on historical 'norms' in a sector rather than up-to-date data and knowledge of qualification content. However, it appeared to be generally accepted among employers that L4/5 qualifications can be used either to support progression to further, higher-level study, or to develop technical skills. The balance between use of qualifications for academic progression and specialism within employment varies by occupational area.

Perceptions of level 4 and 5 qualifications specific to sectors are highlighted throughout the case studies.

Case studies

Five sector case studies were developed, highlighting a range of considerations at level 4 and 5 for each.

1. **ICT and Digital:** Although some areas of the sector demand higher level qualifications (level 7 and above), in others level 4 and 5 are gaining popularity. There is also a range of commercial training available in this sector. It is therefore difficult to develop a clear impression of how employers perceive ICT and Digital qualifications at levels 4 and 5. In some areas they appear to be used as 'stepping stones' to higher levels of study, whereas in others they are valued for the grounding in practical skills rather than theoretical knowledge that they offer. Literature on the delivery, design and content of level 4 and 5 ICT qualifications was extremely limited, as research tended to focus on ICT education at school and up to level 3, or on degree level qualifications. Modular/coursework approaches to training were reported by providers to work well as these were familiar to learners moving through from level 3. The principles of flexibility and keeping pace with change in the sector were reported to be important factors in ensuring that ICT and Digital qualifications remain effective, with a need for consistency in terminology and a digital technical and professional route with clear progression pathways.

2. **Construction and the Built Environment (CBE):** There is a prevalence of HNC/D training across the sector, with these qualifications meeting industry standard and requirements. This appears to have contributed to a lack of confidence in Foundation Degrees to deliver the skills required by industry. Learner satisfaction with level 4 and 5 qualifications in the CBE sector is variable, suggesting that more needs to be done to understand the needs of these learners. The two CBE providers interviewed perceived the coursework/portfolio approach to be the most effective mode of assessment for the types of learner undertaking CBE qualifications at level 4 and 5. Both felt that their target market of mature learners would find examinations daunting, which could lead to underperformance. It was clear that networks of established employer contacts were key to attracting learners to level 4 and 5 CBE provision, however a lack of information available to learners about level 4 and 5 CBE qualifications was reported. The change in funding arrangements for level 4 qualifications was identified as a challenge in terms of affordability for learners, and providers noted challenges in the recruitment and retention of teaching staff in FE institutions.

3. **Engineering:** Although perceptions of level 4 and 5 qualifications in the sector are good, there does appear to be an issue attracting learners to them, and a shortage of those qualifying with advanced/higher technical skills. Qualifications at level 4 and 5 in this sector were reported by interviewees to be well valued due to their transferability within international markets. It was felt by providers that further modernisation was required to ensure that employer skills needs were met, with

interviewees suggesting a range of occupational areas in which these developments were required at level 4 and 5. However, awarding organisations and providers also noted that there were challenges for providers in delivering the most up-to-date provision as a result of knowledge gaps of lecturers, and resource constraints. Providers said during the interviews that they appreciated flexibility, for example where they were able to develop locally devised units, and they felt that increased employer engagement in qualification design was required. The lack of information in schools and colleges about level 4 and 5 qualifications and specifically those in engineering was noted – with careers advice perceived to lack quality and impartiality, and not raising awareness of the range of vocational and training options in engineering.

4. **Business:** Business qualifications at level 4 and 5 are very popular and have been reported as the most common tertiary awards at sub-degree level. The diversity and plenitude of careers with a business qualification underlies the subject's appeal for many students. There are hundreds of qualifications at level 4 and 5 related to business, ranging from general business management qualifications, to those which are specific to sector areas. This has contributed to a situation where both employers and learners have articulated that they struggle to differentiate between qualifications, judge skill levels and understand the competencies that each pathway may provide. Critically, employers have emphasised the need for business qualifications to modernise and become much more relevant and adaptable to their needs. There appears to be an increasing trend among employers in the sector to select industry specific professional qualifications at level 4 and 5, and in turn professional bodies were beginning to adapt their level 4 and 5 content to meet the requirements of Higher Apprenticeships. As with other sectors, a lack of awareness was highlighted among Business learners at level 4 and 5 as to the potential progression routes available to them upon completing their qualifications.

5. **Creative and Cultural Industries:** This sector is exceptionally broad and overlaps to some extent with ICT and Digital. Previously, there were concerns that qualification provision at level 4 and 5 was not meeting the needs of learners and employers, and as a result there were significant skills gaps in the sector. One of the responses to this issue was the establishment of The National Skills Academy (NSA) for Creative and Cultural Skills. The subsequent work to redevelop training and qualifications at level 4 and 5 appears to have improved perceptions of their relevance and currency. Employability has been identified as a core objective of training in the sector, alongside the need for individuals to develop a broad skills base in technical areas, marketing and promotion, business and digital technologies as well specific specialisms such as performance. This therefore allows for more transferability across the sector. Since the establishment of the NSA, increasing emphasis has been placed on involving employers in qualification design, particularly SMEs as they dominate the creative sector. However, SMEs can lack the capacity to be able to fully and effectively engage with providers.

Thus, building sustainable partnerships between education/training providers and employers to aid effective delivery has been reported as a significant challenge. A range of delivery modes are reported to be effective in engaging and retaining learners, although reports suggest a lack of information about the range and variety of qualifications that are available to learners.

Good practice

The literature and interviewees identified a number of factors that contributed to good practice in the design and delivery of level 4 and 5 qualifications. These were:

1. **The need for employer engagement in both design and delivery**. This highlighted three common issues.

   - Sustained engagement with qualification development can require a considerable commitment from employers (when they are often constrained by limited capacity and resource).
   - Some employers feel unclear about their role within the qualification development processes.
   - Employers can be unfamiliar with the processes, policies and terminology involved in qualification design.

2. **Supportive learner induction** processes including peer mentoring can help to engage and promote retention of learners.

3. **Provision of coaching and mentoring** from employers can make a significant impact on learners' experiences and perceptions of study at level 4 and 5. However, it is important to keep in mind the time and resource commitment this form of provision requires.

4. **Flexibility** in a range of areas appears to be important, including when applied to:

   - Delivery modes and study patterns, including full/part-time, distance, work-based, and web-based learning.
   - Progression routes and speed of progression.
   - Admissions requirements.
   - Assessment criteria and formats.
   - Entry and exit points.

Further detail on feedback relating to good practice can be found in section 8 of the main report.

Gaps in evidence

This literature review identified some areas where evidence was lacking and where further research may be useful in providing more specific examples of good practice at level 4 and 5 going forward. In particular, there were gaps in evidence relating to:

- Perceptions and take-up of level 4 and 5 in isolation from other levels, across the range of qualification types (i.e. not just HNC/Ds and Foundation Degrees) and outside of Apprenticeship delivery. There was very little relevant literature identified in relation to CertHE/DipHE and level 4 and 5 NVQs.

- Independent evaluation of professional body/industry federation qualifications at level 4 and 5 (e.g. Awards, Certificates and Diplomas) including why this type of qualification is gaining popularity among employers - particularly in light of the recent Apprenticeship reforms and the move by some professional bodies to redevelop their content specifically in line with Apprenticeship Standards.

- Level 4 and 5 qualifications at sub-sector level across Business, ICT and Digital, and Creative and Cultural sectors, and the varying perceptions and requirements about qualification and training needs within these diverse occupational areas.

Key points for consideration

- The range of terminology, qualification types, delivery styles and provider types at level 4 and 5 creates a complex landscape – potentially impacting on the ability of learners and employers to identify appropriate training pathways. All sectors reported a perceived lack of information available on qualifications at level 4 and 5 and the range of progression routes available. Clear information setting out the differences between qualifications/routes, consistent terminology and definitions at level 4 and 5 may help to increase take-up.

- Accreditation is important in some sectors (such as a sector body requiring individuals to hold a specific qualification at level 4 or 5 in order to meet industry regulations).

- Learners and employers are not always aware of qualifications available at level 4 and 5. Therefore, some qualification types appear to be less highly regarded depending on the sector. This presents issues around promotion and sustained employer engagement. Due to the varying sector perceptions of level 4 and 5 qualifications, tailoring promotional messages to local/employer need would be advantageous and may increase take-up.

- For qualification design, it is important that the needs, viewpoints and expectations of different stakeholder types are managed effectively. The balance in this process appears to be tipped towards those developing the qualification (referred

throughout as 'qualification development teams').[1] Although employers need to be as clear as possible in communicating their needs, qualification development teams should also find ways in which to ensure that feedback is being taken on board. To help address this, the need for clear jargon-free communication and inclusivity of all stakeholders throughout the process was noted.

- Flexibility in design is important to providers. Having a level of negotiation between providers and awarding organisations aided the suitability of the design of the qualification. Likewise, flexibility in delivery is important to suit the cohort of learners which tends to be attracted to these qualifications and to the range of employers.

- Providers/awarding organisations should ensure a continuous review cycle for qualification design, to ensure that content and delivery remains relevant, reflective of technological/business change, and up-to-date with employer needs.

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[1] A range of individuals and organisation types can be members of the steering and working groups that oversee the consultation, review and development of qualifications, units and standards. This can include awarding organisations (both Ofqual regulated and HE Providers with Degree Awarding Powers), training providers, sector bodies and independent consultants/specialists in writing technical specifications. For ease of reference, these groups are referred to as 'qualification development teams' throughout this literature review.

1. Introduction

This literature review explored good practice in the development and delivery of level 4 and 5 qualifications. It particularly focused on how or why courses or qualifications have gained popularity and achieved good outcomes at this level. The aims were to gather insights into:

- The ways in which successful level 4 and 5 courses have gained their market share and popularity (including their history)

- Perceptions of good student outcomes and why these are achieved in specific courses/subject areas

- Returns to students from various qualifications in case study areas

- Examples of good practice in course development, and how future course design can learn from these existing successful courses

1.1 Methodology

The approach was primarily desk-based using a literature search and review process supplemented by a small number of telephone interviews.

1.1.1 Approach to the literature review

Desk research involved systematic searches of academic and online libraries, grey literature and websites including Government research reports and key organisations, to identify relevant literature. This included, for example, reports and grey literature published by industry/sector skills bodies, and sector representatives and research organisations. Academic databases searched included JSTOR, Wiley Online Library, Taylor and Francis Journals, Directory of Open Access Journals (DOAJ), Web of Science, Google Scholar.

An initial broad scoping exercise took place to identify the types of information that could be gathered to help build a picture of how level 4 and 5 qualifications are developed and what makes them effective or successful.

A framework for the literature search was formulated as a result, including a range of search terms, for example: '[qualification type/level] development process', '[qualification type/level] employer consultation AND/OR employer perceptions', '[qualification type/level] effectiveness AND/OR success'.

In addition to the above, sector-specific searches were conducted (see scope of the research below) and broader searches of online sources and academic databases for areas such as Higher Education (HE) in Further Education (FE), patterns and trends in

FE/HE, progression of college students in England and implications of A level/qualification reform (including impact on other levels).

Literature was sifted to focus specifically on good practice in design and delivery of qualifications at levels 4 and 5. However, broader evidence around qualifications or key sectors was also included where relevant. The literature review was England-wide only (although some data are presented at UK-wide level) and focused on literature from the last ten years to ensure relevance (i.e. 2007 onwards). However, where it provides useful context, literature from 2000 to 2007 has been referenced.

1.1.2 Scope of the research

Level 4 and 5 qualifications in scope for this literature review were:

At level 4:

- Certificate of Higher Education (CertHE)
- Higher National Certificate (HNC)
- Level 4 Award

- Level 4 Certificate
- Level 4 Diploma
- Level 4 National Vocational Qualification (NVQ)

At level 5:

- Diploma of Higher Education (DipHE)
- Foundation Degree
- Higher National Diploma (HND)

- Level 5 Award
- Level 5 Certificate
- Level 5 Diploma
- Level 5 NVQ

1.1.3 Case studies

The development of five sector-specific case studies was a key element of this literature review. Case study sectors were selected following the result of the initial scoping exercise, which gave an indication of the range and popularity of some sector-related qualifications. These were also cross-checked with data held by DfE,[2] which provides outcomes and learner numbers across qualification levels and sectors. DfE also gave indications of priority sectors for inclusion. This culminated in the following five case study areas:

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[2] DfE (2017), *Further Education: Outcome based success measures, academic years 2013/14 and 2014/15.* The data relate to learners completing all Apprenticeships, all Traineeships, and Adult (19+) FE and Skills learners that completed an ESFA funded aim in academic years 2013/14 and 2014/15. Please see gov.uk for full technical details, guidance on use, and other measures that have been developed.

1. ICT and Digital

2. Construction and the Built Environment

3. Engineering

4. Business

5. Creative and Cultural industries

1.1.4 Telephone interviews

To provide wider context for this literature review and fill gaps in evidence, 15 semi-structured telephone interviews were carried out with seven providers delivering level 4 and 5 qualifications (FE, HE and professional qualifications), four sector bodies, two employers and two awarding organisations (with some of these having multiple roles e.g. sector body and awarding organisation). At least three telephone interviews were conducted per case study area (although some respondents discussed multiple sectors, e.g. where they deliver qualifications in different subject areas). The interviews explored their perceptions, use, design and delivery of qualifications, and perceived challenges. These discussions were also used to highlight examples of good practice and explore how the courses/qualifications had gained traction with the various stakeholders.

1.1.5 Notes when reading the report

The report starts by providing some contextual background; a brief explanation of recent policy developments and changes in take-up and development of level 4 and 5 qualifications. It then gives some overarching research findings around outcomes and progression, learner and employer perceptions. Following this, there are five separate case studies presented across different sectors. Based on evidence found during the literature review and telephone interviews, these outline perceptions of level 4 and 5 qualifications, how they are designed and delivered and identify evidence of effectiveness and good practice in each sector. Section eight draws together wider evidence of good practice in design and delivery of level 4 and 5 qualifications and is followed by overarching conclusions and points for consideration.

When reading the report, the following should be considered:

- The terminology for level 4 and 5 qualifications is diverse and varies dependent on the focus and mode of delivery. Terminology such as 'tertiary education', 'intermediate qualifications', 'non-degree', 'sub-degree' and 'sub-bachelor' are some of the expressions used. As the Quality Assurance Agency for Higher Education (QAA) set out in its scoping study of sub-bachelor higher education, there is no standard definition or consistent terminology to describe higher education below degree level (i.e. at levels 4 and 5).[3] This literature review uses

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[3] QAA (2016), *Sub-Bachelor Higher Education in the United Kingdom*, p.1

'level 4 and 5' to cover the broad range of qualifications noted in the section above entitled 'scope of the research', whilst referring to specific qualification types/alternative terminology only where mentioned explicitly in the literature.

- A deeper comparative study of employer skills needs versus the current qualification offer may highlight areas where qualifications at level 4 and above are available but do not match employer need (or conversely, where they are not available but are required). However, this sort of comparative analysis was out of the scope of the literature review. Where perceptions about meeting employer need were reported by interviewees, these have been included in the case studies.

- Apprenticeships were out of scope of this literature review. Where there were gaps in evidence or useful contextual lessons to be learned, some literature relating to the design and delivery of Higher Apprenticeships has been referenced. Wherever possible however, this has focused on the level 4 and 5 qualifications as part of an Apprenticeship rather than the delivery of Apprenticeships as a whole.

- As only a small number of telephone interviews were undertaken, the case studies are intended to be illustrative rather than representative of all sector views.

2. Introduction to Level 4 and 5 Qualifications

This chapter provides a summary of the context and background to current level 4 and 5 qualifications, including take-up, perceptions and outcomes.

2.1 Policy context

There has been much focus in the last two years on the review and development of qualifications at level 4 and 5. The Sainsbury Review of technical education provided strong support for the simplification of the qualifications landscape at this level.[4] In particular, it highlighted the need for parity of student funding across qualification types,[5] to broaden the provider base, and to conduct further work 'to ensure clear progression routes develop from levels 4 and 5 to degree Apprenticeships and other higher education at levels 6 and 7'.[6] Subsequently, in October 2017, DfE confirmed its intention to conduct a comprehensive review of classroom based level 4 and 5 education (the "Level 4-5 Review" or the "Review") with a focus on how technical qualifications at this level can best address the needs of learners and employers. This forms part of the Department's wider work on skills and Higher and Further Education, including the Review of Post-18 Education and Funding, the implementation of the Post-16 Skills Plan, and Industrial Strategy commitments to extend technical education reforms to higher levels and develop our workforce.

2.2 Exploring level 4 and 5 qualifications

2.2.1 Take-up and nature of provision

As noted in the 'scope of this research' (see section 1), a wide range of qualification types are available at level 4 and 5, and these are delivered by different provider types and through a range of pathways, broader training frameworks and funding streams. They also tend to be referred to using a variety of terminology and definitions. This complexity in the landscape creates difficulties in collating a holistic picture regarding the take-up of level 4 and 5 qualifications in England alone.

Evidence from the Education Policy Institute (EPI) suggested that the number and availability of tertiary awards at sub-degree level has declined rapidly over recent years in both Higher and Further Education institutions.[7] It concluded that tertiary awards account for less than two per cent of substantial qualifications being taken, and less than one per cent of all qualifications being taken in the adult skills system.[8] This led to the

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[4] Sainsbury Review (2016), *Report of the Independent Panel on Technical Education*

[5] For example, the review highlighted that whilst Foundation Degrees, HNCs and HNDs are eligible for HE student finance, other level 4 and 5 qualifications are not.

[6] Sainsbury Review (2016), *Report of the Independent Panel on Technical Education*, p.12

[7] Education Policy Institute (2016), *Remaking Tertiary Education: can we create a system that is fair and fit for purpose?*

[8] EPI defines 'tertiary education' as encompassing level 4 and 5 qualifications funded through both the adult skills and HE budgets. For example, Foundation Degrees, HNDs and HNCs can all be delivered, drawing on HE funding streams in HEIs, FE colleges and by Alternative Providers.

recommendation for a 'national system of sub-degree tertiary awards which can be offered in FE colleges as well as universities'.[9]

EPI's research also provided useful insight into the take-up of level 4 and 5 qualifications both under the college, and the adult skills, budget - though it should be noted that this therefore excludes all those studying qualifications which are funded through HE. It found that in 2014/15, there were 4,900 learners who achieved level 4 and above awards under the college budget; a fall of 36 per cent from the previous year. This total increased to 11,400 learners when including all learners funded from the adult skills budget.[10]

A decline in level 4 and 5 qualifications delivered within HE settings has also been noted. Data from the Higher Education Statistics Agency (HESA) identified that achievements of Foundation Degrees dropped by eight per cent between 2015/16 and 2016/17; with 13,570 learners achieving a Foundation Degree in 2016/17. Although there was a slight increase in numbers of learners that achieved a HNC/HND in 2016/17,[11] this was still significantly lower numbers than in previous years.[12] In the FE sector, between 2012 and 2014, HNC/D registrations had increased by six per cent. Furthermore, 23,825 students graduated with an HN in 2013, compared to 25,240 with a Foundation Degree.[13] Where studying in HE settings, learners on level 4 and 5 qualifications have been identified as more likely than those in FE colleges to be studying part-time 'predominately taking undergraduate units that provide credits towards a degree, rather than standalone qualifications'.[14]

In 2015, the Association of Colleges (AoC) commissioned research to develop its understanding of part-time HE courses delivered in FE colleges.[15] This research covered all qualifications delivery at level 4 and above, although some specific findings in relation to HN qualifications and Foundation Degrees were reported. A majority of the thirty colleges participating were stated to have increased HN provision, with a corresponding shift away from Foundation Degrees. This was reported to be due to: higher costs and longer timeframes for validating Foundation Degrees, and HNs offering greater flexibility to colleges 'both in terms of the choice of modules that could be delivered 'off the shelf' as well as enabling the colleges to be more employer responsive'.[16]

[9] Education Policy Institute (2016), *Remaking Tertiary Education: can we create a system that is fair and fit for purpose?*, p.8

[10] The additional awards were funded through workplace and Apprenticeship provision. Education Policy Institute (2016), *Remaking Tertiary Education: can we create a system that is fair and fit for purpose?*, p.19

[11] 6,295 achieved the qualification in 2016/17, an increase of 2% from 2015/16, whereas 7,610 obtained the qualification in 2012/13. Higher Education Statistics Agency (11 January 2018), *Higher Education Student Statistics: UK, 2016/17 - Qualifications achieved*; https://www.hesa.ac.uk/news/11-01-2018/sfr247-higher-education-student-statistics/qualifications

[12] Ibid.

[13] Ibid.

[14] Education and Training Foundation (2017), *College Based Higher Education,* p.13

[15] AoC (2015), *Understanding Part Time College Higher Education*

[16] Ibid., p.118

In 2016, QAA carried out a major review of *Sub-Bachelor Higher Education in the United Kingdom.*[17] As part of this work, it analysed the impact of the introduction of the Foundation Degree on wider enrolments onto level 4 and 5 qualifications. Focusing on the period 2000/01 (when the Foundation Degree was first announced) and 2009/10, the analysis found that the introduction of Foundation Degrees had not been sufficient to 'challenge the continuing and growing popular demand for the bachelor degree over this period. Nor was it sufficient to offset the reduction in student numbers for all the main sub-bachelor qualifications, except the DipHE'. This period showed a decrease in enrolments into HNDs (-72%), HNCs (-65%) and CertHEs (-31%).[18]

QAA provided more detailed information on the volume of students studying at this 'sub-bachelor' level. It found that in 2014/15 around 366,000 students (15% of the total) were pursuing sub-bachelor courses in UK universities and colleges. Another 40,000 were engaged in higher level Apprenticeships. However, the report emphasised that sub-bachelor HE was the smallest segment of the UK system.[19]

In terms of the patterns of provision, 'sub-bachelor' qualifications were being largely studied on a part-time basis and students tended to be older than those studying for bachelor degrees – 'close to one quarter of first year sub-bachelor students in higher education institutions were aged 30 and over, compared to 11 per cent of bachelor students'.[20]

However, there has been a growth in the number of Alternative Providers offering HE level courses at level 4 and above. In 2016, research for the Department for Business Innovation and Skills (BIS) identified 732 current Alternative Providers of HE, with 30 per cent offering HNCs/Ds.[21] More so, it showed that a fifth of learners attending Alternative Providers were undertaking HNDs/HNCs or Foundation Degrees.[22]

2.2.2 Higher National Certificates and Diplomas (HNC/Ds)

HNCs/HNDs have been in existence since the 1920s and were introduced as a technical vocational training route. They were generally regarded as a pre-employment option and less likely to involve progression to study at level 6. In 2014, Pearson Education Limited undertook an extensive consultation and review[23] of its BTEC Higher National (HN)

[17] QAA (2016), *Sub-Bachelor Higher Education in the United Kingdom*
[18] Ibid., p.53
[19] QAA (2016), *Sub-Bachelor Higher Education in the United Kingdom*
[20] Ibid., p.7
[21] Department for Business Innovation and Skills (2016), *Understanding the Market of Alternative Higher Education Providers and their Students in 2014*, p.35
[22] Ibid., p.73 - 74
[23] Pearson (2014), *2014 Higher National Review and Consultation: Key Findings and Action Points*; https://qualifications.pearson.com/content/dam/pdf/BTEC-Higher-Nationals/consultation/2014HigherNationalReviewandConsultation.pdf

qualifications,[24] with prior analysis conducted by London Economics.[25] This consultation was not conducted independently from Pearson, thus the findings should be treated with some caution. Nevertheless, its outputs offer valuable insight into the process of qualification design and delivery specifically at level 4 and 5.

The review emphasised that HNs were highly valued by colleges and highlighted the strength of take-up and growth of these qualifications overall. Common feedback from colleges included that:[26]

- The practical, work-related elements of HNs were fundamental to their identity.

- HNs needed to reflect industry needs, including updating BTEC units and creating new content that focused on technological and business developments.

- Most cohorts for HNs were perceived to be quite small (average 20-30), which offered learners the benefit of increased attention and focus from tutors. However, this was also reported to bring challenges, in particular 'the provision of resources (e.g. library resources); the building of a wider community of teaching, learning, scholarship and shared practice; marketing and public information about HNs; arranging and negotiating degree progression routes'.[27]

- It was important to maintain a regular qualification design cycle in order to keep pace with workplace and industry change.[28]

Whilst opportunities for progression to HE were perceived by colleges and learners as very important, it was also essential for these qualifications to maintain strong links with the workplace. Thus, colleges were supportive of the need for HNs to be 'a genuinely vocational approach to higher education, and a genuine alternative route into honours level degrees'.[29]

2.2.3 Foundation Degrees

'Foundation degrees [sic] are…seen as having the potential to raise the value of work-focused higher education and break down the status-divide between knowledge-based and vocational subjects while still meeting an academic standard at the appropriate level'.[30]

The Foundation Degree was first launched in academic year 2001/02, following consultation by the then Department for Education and Employment,[31] and was promoted

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[24] BTEC Nationals are career-based qualifications which aim to allow continuity for level 3 learners, providing them with a clear progression route to level 4 and 5

[25] London Economics (2010), *Returns to BTEC Vocational Qualifications;* London Economics (2013), *The outcomes associated with the BTEC route of degree level acquisition*

[26] Ibid., p.2-3

[27] Ibid., p.2

[28] Ibid*.,* p.4-5

[29] Pearson (2014), *2014 Higher National Review and Consultation: Key Findings and Action Points*, p.2

[30] Foundation Degree Forward (2009), *Review of research literature focussed on foundation degrees*, p.13

[31] Department for Education and Employment (2000), *Foundation Degrees*

as a new pathway for widening participation and reducing skills gaps. In 2009, Foundation Degree Forward commissioned an extensive review of all literature relating to Foundation Degree programmes. This covered over 300 publications relating to the policy, design, delivery and perceptions of Foundation Degrees.[32] General findings from this previous review are summarised below:

- **Value of Foundation Degrees:** There were concerns about the 'visibility' of these qualifications and a lack of promotion to learners, employers and provider staff. Distinguishing the qualification from HNC/Ds was considered important in generating buy-in among employers. There was some limited evidence that the qualification appealed to those with no family history of HE, but learners were confused about its relationship to progression pathways (both in terms of employment and further study).[33]

- **Collaboration and employer engagement:** Where the qualification was delivered through a collaboration, it was noted that these arrangements need to be clear and transparent; the review suggested a formal partnership agreement should be in place, specifying rights and obligations of all partners. This was particularly important where collaboration occurs between FE and HE providers, which often have contrasting cultures, resources and cohorts. Employers should be engaged through established, trusted networks such as sector bodies, and their commitment to inputting into design and development helped enhance the quality of Foundation Degree content.[34]

- **Student experiences:** Recommendations included that care should be taken to avoid clashes in work demands, for example between coursework deadlines and workplace requirements; feedback should be given in relation to both workplace and academic criteria; learning should enable learners to connect different types of knowledge.[35] Learners appreciated aspects such as peer support, making employer contacts and the various learning styles adopted; however, they reported challenges in terms of time-management, a lack of 'pre-entry' information and guidance about the qualification, and transitioning to HE.[36]

- **Work-based learning:** This element was perceived to be effective across the literature where it was delivered in the workplace and aligned with business need, offering 'explicit links between workplace and classroom content' to ensure theory and practice were 'integrated'; and where both the provider and employer were committed, with the employer contributing to the design of this element. Workplace mentoring was identified as key, with this being effective where the role of the

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[32] Foundation Degree Forward (2009), *Review of research literature focussed on foundation degrees*
[33] Ibid., p.22
[34] Ibid., p.35 - 36
[35] Ibid., p.36
[36] Ibid., p.57

mentor was clear, the mentor was appropriately trained and had the necessary resource (time) to contribute meaningfully.[37]

- **Student support and guidance:** The support of tutors was regarded particularly important for learners on distance learning Foundation Degrees, and peer support was also perceived by learners and tutors to be valuable. Challenges to accessing academic support were identified for Foundation Degree learners specifically, especially where they perceived themselves to be 'outsiders' to academia.[38]

- **Programme design, development and delivery:** Pedagogy needs to be flexible, to meet the needs of diverse learner groups and assessment criteria (particularly for workplace assignments) need to be clear;[39] it was concluded that peer support/learning could play a stronger role in work-based elements of Foundation Degrees and that 'curriculum development needs to be a participative and negotiated process taking into account all partners rather than being determined by 'experts' (usually located in the university)'.[40]

Additional sector-specific findings related to Foundation Degrees are reported throughout the case studies.

2.3 Perceptions

This section provides a summary of the perceptions of level 4 and 5 qualifications among employers and learners, where not already covered above. More specific feedback is provided in the case studies.

2.3.1 Learner perceptions

A brief search provided limited literature on learners' perceptions of level 4 and 5 qualifications. Much literature tends to focus on Apprenticeships rather than qualifications, whether they are included within Apprenticeships or delivered separately, however some general perceptions were possible to glean.

UCAS (2017) highlighted some difficulties in students' understanding of the different level 4 and 5 pathways available to them and the potential outcomes (i.e. employment destinations and salaries) of these pathways.[41] The research was focused on 'pathways which give students the opportunity to progress to a bachelor's degree' rather than considering all potential progression routes/destinations and therefore findings were limited in this respect.[42] However, the report is informative in highlighting perceptions of

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[37] Ibid., p.75
[38] Ibid., p.80
[39] Ibid.
[40] Ibid., p.84
[41] UCAS (2017), *Progression Pathways 2017: Pathways through higher education*
[42] Ibid., p.5

learners wishing to progress to further study. It identified confusion amongst students, advisors and employers and in particular highlighted:

- A lack of comprehensive information and advice about different level 4 and 5 pathways.

- The limited comparable information available on potential employment destinations and earnings through these pathways, and this lack of information was reported to 'also make it difficult to determine the value and utility of these pathways'.[43]

Literature on learners' experiences and perceptions of Foundation Degrees has ascertained that learners had taken the qualification to further their career, and reported improved soft skills (e.g. self-confidence) along with increased knowledge, understanding and a positive impact on their work practice. However, they also raised financial concerns related to tuition fees and the burden of study on family life, particularly among mature learners.[44] A further study, focusing on learners' perceptions of Foundation Degrees, found that full-time Foundation Degree students were positive about their experience and rated the tuition and learning support they had received highly. However, only around half felt that their course was good value for money.[45] A small survey of graduates on a Foundation Degree in Health and Social Care supported these findings, identifying that graduates perceived the benefits of a Foundation Degree as being 'enhanced knowledge at work; enhanced skills at work [and] an impact on personal performance and on the service provided'.[46]

Research by AoC (2015) gathered the feedback of 1,200 part-time learners studying on HE courses delivered in FE colleges. Although this covered all qualifications at level 4 and above, most were studying for an HNC/D (37%), or a Foundation Degree (27%); in relation to the focus of this literature review, a further 23% were studying for a professional qualification at level 4 or above and 12% for a Dip/Cert HE.[47] Analysis is not provided in this report regarding specific level 4 and 5 qualifications, but given the respondent profile it does give some indication as to the recent perceptions of learners studying these courses part-time in FE colleges.

The majority of learners participating in the survey (64%) reported to be studying to 'get better opportunities in life', but other reasons included entering or furthering a chosen career (50%), personal interest (37%) and to develop confidence (30%). For all learners studying part time HE at FE colleges, including professional qualifications:

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[43] Ibid., p.6
[44] Foundation Degree Forward (2009), *Review of research literature focussed on foundation degrees,* p.56
[45] Higgins, H., Artess, J. and Johnstone, I. (2010), *Students' experiences of full-time Foundation Degrees*
[46] Griggs, C. (2013), 'The impact of a foundation degree: graduate perspectives'. *British Journal of Healthcare Management* 19: 12
[47] AoC (2015), *Understanding Part Time College Higher Education,* p.168

'The key reasons for choosing their courses were the ability to fit their course around their work commitments and the funding from the employer. A majority of students were in employment and the ability to manage their work and studies was a crucial aspect of their decision making. The choice of the course also related to their career enhancement and employment opportunities in general…Location of the college and its proximity to home was also an import part of students' decision making'.[48]

2.3.2 Employer perceptions

At a generic level, evidence indicates that employers have a positive view of vocational and technical qualifications, although it is less clear how these views have been formulated. Historic literature has found that vocational qualifications were perceived to reflect recognised national and professional standards within a sector, and that some individuals achieving HNC/HNDs were perceived by employers to possess better practical and technical skills than graduates in comparable subjects.[49] Therefore, more recent studies have still tended to show that employers value level 4 and 5 qualifications because of their long-standing reputation and familiarity within industry (see case studies for examples). A survey for Ofqual (2017) was carried out to better understand employer perceptions and use of vocational, technical and Functional Skills qualifications.[50] Although encompassing qualifications at all levels, and not just those at level 4 and 5, this survey found that employers in retail, manufacturing, food and drink, sport and leisure, rated vocational and technical qualifications highly – but, ultimately (and significantly for this literature review) employers could not provide a rationale for this view. The report suggested that 'perceptions were formed based on sector 'norms' suggesting there are culturally embedded views [in these sectors] because recruitment and training is 'always done this way'.[51]

The lack of specific feedback on the value of level 4 and 5 qualifications may be explained by an apparent lack of knowledge among employers about the different types of qualification available at this level. Research undertaken for HEFCE[52] in 2016 explored employer demand for 'intermediate technical education in higher education', defining this as qualifications at level 4 and 5 on the Framework for Higher Education Qualification (FHEQ) in England, Wales and Northern Ireland. Whilst the research found that employers had a reasonable awareness of the different types of qualifications at this level, recruitment of individuals with intermediate qualifications was minimal. Reasons for this included a lack of clear knowledge about these qualifications: instead, employers were found to be 'prioritising degrees because of their status and prestige'.[53] The

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[48] Ibid., p.209
[49] Learning and Skills Development Agency (2004), *Vocational higher education – does it meet employers' needs*
[50] Ofqual (2017), *Employer Qualification Perceptions Survey: Final report*
[51] Ofqual (2017), *Employer Qualification Perceptions Survey: Final report*, p.40
[52] HEFCE (2016), *Employer demand for intermediate technical education in higher education*
[53] Ibid., p.9

research concluded that although there was latent demand for intermediate technical qualifications by employers, in order for this hidden demand to be released there needed to be much greater awareness of intermediate technical qualifications and the benefits they could bring for employers.

This need for greater awareness of qualifications at level 4 and 5 appears to contradict that of their use as a 'sector norm' across some areas. This is likely to reflect the differences in how qualifications at level 4 and 5 are regarded within specific occupational areas, a point highlighted again through AoC research:

> 'Whilst a number of [FE colleges] indicated institutional preferences for Higher National awards, some interviewees made distinctions between Foundation degrees and Higher Nationals on the basis that Foundation degrees served a better purpose in certain subject areas whereas Higher Nationals were more recognised in other sectors'.[54]

This was therefore explored further during the sector case studies for this literature review (see sections 3 to 7).

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[54] AoC (2015), *Understanding Part Time College Higher Education*, p.118

3. Case Study: Information and Communication Technology (ICT) and Digital

This case study focuses on level 4 and 5 ICT and Digital qualifications, drawing on evidence across the sector and industry more broadly where relevant to ICT and Digital qualifications. It summarises common themes from the literature and includes feedback from interviews conducted with two training providers delivering level 4 and 5 ICT and Digital qualifications, and one awarding organisation.

3.1 Perceptions of level 4 and 5 qualifications

Due to rapid development in the sector, the definition of 'digital skills' has broadened over time, making the landscape increasingly complex.[55] However, the sector generally tends to be highly qualified. Research for the National Centre for Universities and Business (2013) found that the ICT sector had a high proportion of the workforce qualified at level 4 or above (65.1%), with only the 'education' sector and 'professional, scientific and technical activities' showing slightly higher proportions.[56] In support of this, the Institute for Public Policy Research (IPPR) North (2017) found that there is less demand among employers for digital tech workers graduating from FE colleges than from Higher Education Institutions (HEIs).[57] For example, employers in areas such as computer science tend to be looking for qualifications at level 7 and above, suggesting that 'FE leavers do not have the requisite skills to meet the needs of digital tech employers'.[58]

However, this is not the complete picture. In other areas of the sector, vocational routes are gaining traction. For example, stakeholders interviewed for ECORYS UK (2016) suggested that employers are increasingly 'turning towards apprenticeships or employing candidates who have NVQ qualifications'.[59] It found that 'for many employers, the ever-changing landscape of digital skills means that it is more valuable having employees who can learn the relevant skills on-the-job'.[60] The sector is further complicated by the popularity of proprietary training from companies such as Microsoft, Novell and CISCO. There is also extensive commercial provision of digital skills training through companies such as Google, SAS and Freeformers.[61]

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[55] Definitions initially focussed on computer use/theory, but more recently have developed to include cognitive, attitudinal, social and emotional skills. Further complexities arise in that digital skills are increasingly required across all sectors and services. See: ECORYS UK (2016), *Digital Skills for the UK Economy*, p.17 – 25.

[56] Hughes, t., Sheen, J. and Birkin, G. (2013), *Industry graduate skills needs: Summary report for the National Centre for Universities and Business,* p.9

[57] IPPR North (2017), *Devo Digital: Digital Skills for the Northern Powerhouse,* p.13 - 16

[58] Ibid., p.22

[59] ECORYS UK (2016), *Digital Skills for the UK Economy*, p.49

[60] Ibid.

[61] Ibid*.,* p.65

An increasing number of individuals across sectors and occupations also appear to be accessing ICT and Digital qualifications at lower levels. A review by the Skills Funding Agency (2016) identified that the vast majority of new enrolments for advanced and specialist digital skills qualifications in 2013/14 were at level 3 or below, with just 80 out of 6480 (1.2%) enrolments at level 4.[62] This focus on lower level qualifications appears to be supported by a search of Ofqual's Register of Qualifications.[63] Using search terms such as 'ICT', 'information technology', 'digital' or 'computing', a relatively small number of qualifications at level 4 or 5 was listed. Out of the total of 1059 qualifications available to learners, 72 were at level 4 and 17 at level 5, compared to 891 at level 3 or below.

As the routes through which digital skills are gained can be diverse, it is difficult to develop a clear impression of how employers perceive ICT and Digital qualifications at levels 4 and 5. An awarding organisation noted during the telephone interviews that perceptions of qualifications vary depending on the sector and the specific disciplines within sectors. Consequently, interviewees suggested that level 4 and 5 ICT and Digital qualifications in some areas are used as 'stepping stones' to higher levels of study, whereas in others they were valued for the 'practical' skills they offered to learners.

Therefore, in areas such as computer science, qualifications at level 4 and 5 would more likely be part of a longer-term training pathway, rather than a direct route into employment. Subsequently one training provider had tailored their level 4 and 5 qualifications to 'dove-tail' into a top-up degree.

> 'A lot of the time employers expect students to have a degree rather than a level 4/5 HND, particularly because of the nature of the skills provided on the HND and degree programme…It's to do with the skills that we have been instructed by employers to deliver. A lot of our local employers tend to be in areas such as Software Design and Web…The top-up degree is with a university, so the choices we have made have had to be quite cleverly put together to meet the needs of employment, and also meet the entry level requirements for the degree'. (ICT/digital training provider)

Conversely, employers in areas such as animation, gaming and visual effects were perceived by training providers to be more likely to value HNC/Ds rather than degrees, as university graduates were seen to be 'very highly educated, but in theoretical, not highly practical, ways'. This was echoed by the second training provider interviewed.

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[62] Skills Funding Agency (2016), *Review of publicly funded digital skills qualifications: Annex A*, p.44
[63] https://register.ofqual.gov.uk/. Ofqual's Register of Qualifications includes all recognised (regulated) GCSE, A level, AS level and vocational qualifications in England and Northern Ireland (including NVQs, Diploma, Awards, Certificates, HNC/Ds). It does not include Foundation Degrees and Cert/Dip HE.

> 'The HNC/D route is a useful route to go down, even if you are going to end up with a degree anyway…If you go down the A level route and do for example, A level computer sciences, you would [also] be doing…units in other subject areas that may not be directly [relevant for] someone who is wanting to do a computer sciences related degree….[But in an] HNC, all the units are subject related, specially chosen by demands of employers... Moving from those sorts of programmes onto HE…there's a lot more experience, in our case in software and hardware, that will prepare them for university and employment than the more generic nature of A level.' (ICT/digital training provider)

It was also noted during the interviews that some level 4 and 5 qualifications in ICT and Digital could suffer from a general lack of awareness and perceived value among employers because of the existing familiarity of vendor training packages.

> 'I think if I was a young person… and I sent my CV out to managers in IT, on my CV I've got maybe a City and Guilds level 4 Diploma in Web Design. They probably wouldn't really know what that qualification was or what it entailed to do it. If I've also got a Microsoft Windows 10 certification, a CompTIA network plus qualification, a Microsoft Technology Associates certification…they would know what you know. A City and Guilds Diploma might not necessarily mean that to them.' (ICT/digital training provider)

The ability to combine practical work-based training with the development of higher level knowledge, as per the Higher Apprenticeships route, may therefore be a valuable consideration for qualification design at level 4 and 5 within ICT and Digital provision. Indeed, a survey of employers in 2017 identified that over half (55%) of ICT employers not currently offering them felt that Higher Apprenticeships might be relevant to their organisation; this proportion was considerably higher than in some other sectors.[64] Furthermore, the UK Digital Skills Taskforce report (2014) argued that 'the Apprenticeship approach is well suited to both prospective employers and apprentices' in the sector, whereby employers can ensure that education and training meets their particular needs, and that learners remain up-to-date in a fast moving industry.[65]

3.2 Delivery, design and content

Literature on the delivery, design and content of level 4 and 5 ICT qualifications was extremely limited, as research tended to focus on ICT education at school and up to level

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[64] Department for Education (2017), *Apprenticeships evaluation 2017: employers*, p.66
[65] UK Digital Skills Taskforce (2014), *Digital Skills for Tomorrow's World. Interim Report*, p.60

3, or on degree level qualifications; [66] therefore, the telephone interviews were used to supplement some of the gaps in evidence.

Interviewees reported that having a flexible approach to using different modes of delivery was an important way to maximise access and meet the varied needs of learners.

> 'It's certainly a college push for more online delivery…we're [therefore] trying to deliver a more flip learning approach …[67] [Changes in delivery] can be done in a way so that people can learn more flexibly at home and in the evenings…[and] we have more time for more individualised approaches to teaching and learning in the classroom.' (ICT/digital training provider)
>
> 'There isn't a defined mode of delivery. Some centres will do full-time, some centres will do part-time, some will do distance learning or blended learning, so there's a flexibility to it which allows centres to take what is a national qualification but offer it in a way that supports their particular students'. (ICT/digital awarding organisation)

A training provider delivering ICT HNC/HND courses explained that their delivery was primarily based on a modular/coursework approach. This was felt to work well as many learners continued directly through to level 4 and 5 from study at level 3. The delivery style was therefore similar, and learners were *'used to the same regime'*. In terms of the design of ICT qualifications at level 4 and 5, employer engagement was reported to be an important factor in helping ensure that qualifications met sector needs.

> 'We take a lot of care to make sure that we're engaging with stakeholders throughout the whole process of designing Higher National courses. To as great a degree as possible [we're] responding to stakeholders so that we can be sure that when a qualification goes out, we are fairly confident that we are providing something that will meet students', colleges' and employers' needs'. (ICT/digital awarding organisation).

Interviewees also described how employers provided input to course content, for example, through:

- Providing information on the types of software or hardware being used in the workplace.

- Requesting providers to tailor a generic qualification to their needs, for example an HNC/D in Computing could be tailored through the choice of specific units that meet the demands of that business.

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[66] For examples see: House of Commons Science and Technology Committee (2017), *Digital skills crisis: Second Report of Session 2016-17*
[67] Flipped learning is a teaching method that delivers instructional content outside the classroom (often online), leaving the classroom to become a more interactive space for discussion and activities.

3.3 Effectiveness and good practice

Literature on effectiveness and good practice for level 4 and 5 ICT and Digital qualifications also appeared to be extremely limited. The Skills Funding Agency (2016) made a range of recommendations as to what 'a 'good' publicly funded digital skills offer should look like in the future'. Recommendations included that there should be: [68]

- Consistency in the terminology used in the sector.

- Clear standards to support the different stages of digital skills development (identified in the report as 'basic', 'general' and 'advanced and specialist') determined by employers to ensure they are current and relevant.

- A digital technical and professional route which provides clear steps to the attainment of high-level digital skills for those in specialist digital job roles.

Furthermore, through the use of case study examples of good practice, IPPR North (2017) identified a number of lessons learned for tackling digital skills gaps, which could be applied to level 4 and 5 qualifications: [69]

- Collaboration between education and businesses across sectors is critical to ensure the workforce acquires the right digital skills.

- Training combining both technical and soft skills development is essential to address skills gaps and should include work placements to provide valuable real-world experience.

- There is a need to embed the continuous nature of reskilling within the ICT workforce to ensure it can keep pace with technological change.

The principles of flexibility and keeping pace with change in the sector are therefore common and important factors for ensuring that ICT and Digital qualifications are effective – an approach that one training provider defined in the interviews as ensuring learners' 'preparedness for industry'.

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[68] Skills Funding Agency (2016), *Review of publicly funded digital skills qualifications,* p.44
[69] IPPR North (2017), *Devo digital: Digital skills for the northern powerhouse*, p.26-32

4. Case Study: Construction and the Built Environment

This case study focuses on level 4 and 5 qualifications within the Construction and Built Environment (CBE) sector. It explores examples of practice perceived to be good or effective in the CBE sector, and the challenges to these. It draws on common themes emerging from the literature and also includes feedback from interviews conducted with two providers delivering level 4 and 5 CBE qualifications, and a CBE employer.

4.1 Perceptions of level 4 and 5 qualifications

A search of Ofqual's Register of Qualifications[70] for qualifications in the CBE sector lists 55 at level 4 or 5, with the majority falling into level 3 (473) and level 2 (308). Annual research conducted by the Construction Industry Training Board (CITB) tracks the number of people entering construction industry training.[71] In 2016/17,[72] two per cent of the 15,800 entrants were undertaking a qualification at level 4 or above - a figure consistent with 2015/16.[73] In addition, of the 20,500 CBE enrolments into HE, two per cent were onto Foundation Degree courses.[74] CITB (2017) found that most CBE learners in FE at level 4 and above (55%) were undertaking qualifications in professional services. They were typically studying towards HNC/Ds (80%). However, the overall proportion of learners taking these qualifications at level 4 and 5 was small (2%).[75]

The low proportion of enrolments at levels 4 and above is likely to reflect the fact that for construction craft occupations, relevant qualifications (e.g. NVQs and Diplomas) are delivered up to level 3; level 4 and above are likely to be undertaken by those in professional services occupations such as architecture, construction management and surveying.[76] However for some occupations, training at level 4 and above is mandatory (i.e. those with regulated standards such as plumbing and electricals).[77] Indeed, CBE learners at level 4 and above have been reported to be far more likely to have started their FE course to develop their existing careers compared to those studying at level 3 or below. [78]

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[70] https://register.ofqual.gov.uk/

[71] The Trainee Numbers Survey gathers data on first year entrants/apprentice numbers via a survey of colleges, private training providers and construction industry training centres; responses are self-selecting and are not representative of the construction as a whole.

[72] CITB (2017), *Training and the Built Environment*

[73] The vast majority (91%) were undertaking qualifications between level 1 and level 3. CITB (2016), *Training and the Built Environment*, p.9 - 10

[74] CITB (2017), *Training and the Built Environment,* p.24

[75] Learners at level 4 and above were presented as one group in the report. They constituted 2% of the 1,729 individuals participating in the survey. No data were provided to indicate the proportion of learners at level 4 and above that were at level 4 and 5, and those that were undertaking qualifications at level 6 and above. CITB (2017), *Destinations of Construction Learners in Further Education,* p.11

[76] CITB (2017), *Training and the Built Environment,* p.11

[77] Construction Industry Training Board (2017), *Value of vocational qualifications in the Construction and Built Environment Sector,* p.59

[78] 46% compared to 16% at level 3, 11% at level 2 and 7% of entry level/level 1. CITB (2017), *Destinations of Construction Learners in Further Education,* p.19

> 'I think [level 4 and 5] enables stepping stones for other larger qualifications. I think on civil engineering and construction routes it could be onto chartership or other professional qualifications that follow on afterwards. I think it is seen by a lot of students as one of many steps on the way to their ultimate goal'. (CBE college provider)

There is a prevalence of HNC/D training across the sector, with these qualifications regarded as meeting industry standard. This appears to have contributed to a lack of confidence in Foundation Degrees to deliver the skills required by industry. In 2011, the Construction Industry Council (CIC) undertook a consultation with industry professionals to establish whether vocational qualifications were the best way to deliver the higher-level skills required by industry. [79] Responses provided a mixed picture on the suggested use (and understanding) of a) the ability for Foundation Degrees, HNCs and NVQ Diplomas to cover the competence and learning requirements, and b) 'the respective levels, purposes and relationships between academic, vocational and professional qualifications'.[80]

During the telephone interviews, apparent ambivalence towards Foundation Degrees across the sector had informed one provider's decision to stop offering the qualification.

> 'The HNC has been around a long time and the industry understands it. When you start to go into the realms of the Foundation Degree, the industry doesn't like it. It doesn't have time to work out what level it is [and] what the content is. [The sector] understands HNC. We don't have any plans to change it in the future. It's because the value and currency of the HNC is so high'. (CBE college provider)

Another provider had considered the option of collaborating with universities to deliver Foundation Degrees but concluded that the HNC/HND provided better value in terms of equipping students with the skills they needed for progression. Indeed, CBE employers have reported vocational qualifications and training as effective in preparing individuals to work in the sector, with benefits to the workplace including:[81]

- Improved productivity.

- Increased efficiency and flexibility of workers.

- Increased employee retention.

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[79] Construction Industry Council (2011), *Consultation on Technical Apprenticeships and Higher Apprenticeships in England and Wales*

[80] Ibid., p.7. Concerns tended to be voiced by professional bodies, as to whether a Foundation Degree would deliver the full range of knowledge plus work-based competences required by the sector. Ultimately, level 4 frameworks included HNC/Ds, with a mix of HNC/Ds and Foundation Degrees being incorporated at level 5 depending on the pathway. See for example CITB (2017), *Apprenticeship Framework: Higher Apprenticeship in Construction Management Levels 4, 5, and 6 (England)*.

[81] CITB (2017), *Value of vocational qualifications in the Construction and Built Environment Sector,* p.58

- Better opportunities for winning new work due to a more highly skilled workforce.

Supporting this, the CBE employer interviewed emphasised that - going forward - level 4 and 5 qualifications will support the delivery of Apprenticeships. Nonetheless, between 2014 and 2016 there was:

- A decrease in the extent to which employer training towards HNC/HND qualifications was undertaken.[82]

- An increased uptake of CBE training through professional bodies and industry federations, suggesting that such packages are beginning to gain traction at this level of the sector.[83]

Furthermore, learner satisfaction with level 4 and 5 qualifications in the CBE sector is variable, suggesting that more needs to be done to understand the needs of these learners.[84] CITB (2017) identified that levels of dissatisfaction were consistently higher amongst learners studying a level 4 qualification or above (most of whom were studying for HNCs/HNDs in the professional services area). Specifically, these learners were more dissatisfied with:[85]

- The quality of facilities and equipment and feedback received.

- The quality of teaching.

- The amount of teaching hours/contact time.

In addition, just 62 per cent of learners at level 4 and above were satisfied six months after their course.[86] Although this research provides some insight into learner satisfaction with qualifications at level 4 and above, it is particularly lacking in detailed qualitative learner feedback. This leads to difficulties in fully understanding perceptions of level 4 and 5 qualifications amongst this cohort.

4.2 Outcomes

In 2017, CITB aimed to estimate the monetary value of vocational qualifications in the sector.[87] This was calculated by examining the benefits of holding a qualification for the individual (increased wages and probability of being employed), the Government (tax

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[82] 'In terms of the extent to which training towards HNC/HND qualifications has been undertaken, there has been a decrease since 2014, with around only 5% of training employers having trained their staff towards HNC/HND qualifications this year [2015/16]. There has also been a decrease in provision of training towards NVQs/SVQs, with 29% of employers that have trained providing training towards these qualifications, compared with 40% in 2014'. Ibid.

[83] Ibid., p.7

[84] CITB (2017), *Destinations of Construction Learners in Further Education,* p.3

[85] Ibid*.,* p.22

[86] Ibid., p.49

[87] CITB (2017), *Value of vocational qualifications in the Construction and Built Environment Sector*

contributions and reduced unemployment benefit) and the employer (increased output). It found that:[88]

- The estimated monetary value of vocational qualifications in the CBE sector ranged from £12,800 (below level 2 vocational qualification) to £68,400 (level 4 qualifications and above) over a ten-year period. Specifically, the estimated monetary value of vocational qualifications in the CBE sector at level 4 and above was higher than in all other sectors.

- Vocational qualifications at level 4 and above provided a greater benefit than qualifications at level 3. In the civil engineering subsector specifically 'the value of vocational qualifications at level 4 and above is higher than for academic qualifications'.[89]

CITB's study of learner destinations supported these findings, showing that median earnings increased with level of study.[90]

4.3 Content, design and delivery

Levels of involvement in the design of level 4 and 5 CBE qualifications varied between the two providers interviewed. One felt that it would be helpful if providers were more involved. However, the second was not as enthusiastic and appreciated instead the ability to be flexible with units and deliver those demanded by learners and employers.

> 'For our organisation at the moment we wouldn't want more involvement with the design of the qualifications. The freedom we get from [the awarding organisation] is the right balance. We can meet with the reps and put suggestions forward. We are not heavily involved with curriculum design. I have been at other institutions where we had very specific needs and were involved in the development of Foundation Degrees, but I think for [this college], we don't have sufficient numbers enrolled for HE to warrant that' (CBE college provider)

Due to the costs associated with delivering bespoke units for small numbers of students, the focus for this provider was on negotiating with employers to find the most appropriate unit/module for their employees. The second CBE provider felt that there should also be greater flexibility in allowing providers to be selective in the criteria they choose for assessment as well as delivery.

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[88] Ibid., p.15
[89] Ibid.
[90] CITB (2017), *Destinations of Construction Learners in Further Education,* p.33

'I feel that some of the units…it doesn't give you that freedom to go and explore areas of local interest, or maybe expand on areas that have got the interest of that group...We need 'and/or' back on the assessment criteria'. (CBE training provider).

The employer interviewed had been involved in the design of Trailblazer Apprenticeships[91] in the sector. They noted the need to ensure that qualifications remain reflective of 'technology change' across CBE occupations particularly for those working within professional services areas. In addition, they felt that health and safety needed to be 'built into [a] qualification as opposed to a standalone particular module' to ensure that learners understand it is embedded into all practice. It has also been noted, in previous literature on Foundation Degrees in Construction Management specifically, that providers need be mindful of the time commitment requested from employers involved in delivery; 'Part time flexible [and face-to-face] delivery is seen as the core approach, avoiding block release or full time approaches. Typically, SMEs cannot afford the staff time off for the latter'.[92]

Small scale research undertaken for the Federation of Master Builders collected a small amount of feedback on the NVQ level 5 Diploma in Construction Management.[93] It suggested that this qualification was of particular interest to businesses looking to implement more structured ways of working and to improve management performance. Learners taking the qualification found that it had been a valuable opportunity to develop a range of management skills.[94] Learners were positive about the experience, particularly valuing the flexibility of the programme due to the online mode of delivery, as this made it possible for them to accommodate their training around existing commitments.[95]

Learners also valued the support they received from the provider and the ability to develop a portfolio of evidence, particularly by 'those coming to topics for the first time'.[96] The two CBE providers interviewed perceived the coursework/portfolio approach to be the most effective mode of assessment for the types of learner undertaking CBE qualifications at level 4 and 5. Both felt that their target market of mature learners would find examinations daunting, which could lead to underperformance.

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[91] CITB, Trailblazers: https://www.citb.co.uk/qualifications-standards/trailblazers/
[92] Foundation Degree Forward (2008), *Demand Led Foundation Degrees In Construction Management,* p.16
[93] Federation of Master Builders (Year unknown), *Learner Feedback on FMB Build and Grow Workshops Research*
[94] Ibid., p.14
[95] Ibid.
[96] Ibid., p.15

4.4 Attracting learners and employers

It was clear that networks of established contacts were key to attracting learners to level 4 and 5 CBE provision.

- A college offering HNCs in Construction commented that having an established employer network was important. It meant building long-term relationships with local companies from which they received many of their CBE students.

- A training provider discussed their largest market for level 4 and 5 qualifications as being mature learners returning to education. They emphasised the importance of word of mouth among previous learners.

> 'We get quite a lot from our old student network…They secure senior positions and then encourage the younger ranks below them to go and get their formal qualifications. I get a lot of emails from potential students saying that they work with such and such who came here before (I've been here for 18 years). So, it's our reputation that we're very proud of' (CBE training provider).

4.5 Challenges

One provider felt that there was lack of information available to learners about level 4 and 5 qualifications, commenting that they received regular requests for information from learners who were unsure of the routes available. At an access level, the change in funding arrangements for level 4 qualifications was identified as a challenge in terms of affordability for learners and limiting progression:

> 'I think the funding change at level 4 has significantly reduced the number of learners that are able to progress up the ladder…I think the barrier now between level 3 and level 4 is…quite huge because of the cost of it. From an FE perspective here at [name of college], we find that a number of learners don't progress onto level 4 anymore because of the cost [to learners]' (CBE college provider).

Both providers noted that the recruitment and retention of staff was a challenge. One commented that it was difficult to recruit staff to deliver the HNC. Another perceived a disadvantage to students, as FE institutions did not have the same level of resource to keep their delivery staff up-to-date.

> 'There's a limit to what you can cover. Not so much at level 4 but as you're progressing up the levels. Students will be at a disadvantage because of that aspect of it. We do try to accommodate it and ensure that our staff are upskilled, but we would have limitations compared to some of the big universities in terms of [being able to undertake] research' (CBE college provider).

5. Case Study: Engineering

This case study focuses on level 4 and 5 qualifications within the engineering sector. It explores the use, design, delivery and assessment of these qualifications and examples of practice perceived to be good or effective in the sector. It presents common themes emerging from literature and also includes feedback from interviews conducted with three training providers and two awarding organisations.

5.1 Perceptions of level 4 and 5 qualifications

A search of Ofqual's Register of Qualifications[97] for 'Engineering' lists 62 at level 4 or 5, with the majority falling into level 3 (342) and level 2 (269) categories. Although perceptions of level 4 and 5 qualifications in the sector are good, there does appear to be an issue attracting learners to them, and a shortage of those qualifying with advanced/higher technical skills. As reported by NFER (2014), there is a demand for engineering skills and this skill shortage is considered to be a real threat to the UK's capacity for growth.[98] It was suggested that there was a lack of positive promotion of relevant engineering qualifications and, with a rise in demand, businesses were therefore reporting difficulties recruiting skilled staff.[99]

The interviews with providers and awarding organisations suggested that current level 4 and 5 qualifications are viewed positively within the sector, and regarded as the main 'traditional' route for developing higher technical skills and an alternative to university. They were also reported by interviewees to be well valued due to their transferability within international markets. A focused piece of case study research for Foundation Degree Forward (2009) included analysis of a Foundation Degree in aircraft engineering. It found that this qualification was valuable for having enabled learners to make a 'gradual transition' from the 'college environment to an operational aircraft hangar'.[100]

The Foundation Degree [in aircraft engineering] provided an answer to skill shortages in the industry and was flexible enough to meet employer needs. This had not been the case with HN qualifications or traditional engineering degrees. The Foundation Degree provided a way to develop employees to meet Europe-wide registration requirements while at the same time providing the option for academic progression. Students took the programme because it provided the licence and, thus, entry into well-paid employment: although some students progress to honours degrees with a view, *inter alia* of going into management.[101]

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[97] https://register.ofqual.gov.uk/
[98] NFER (2014), *Consultation on Science, Technology, Engineering and Mathematics (STEM) for the Education and Training Foundation*
[99] Ibid., p.36 - 42
[100] Foundation Degree Forward (2009), *Review of research literature focussed on foundation degrees,* p.30
[101] Ibid.

A 2009 literature review focused on Foundation Degrees identified that learners in engineering disciplines found the qualification challenging, and they were positive that it would enhance their career progression.[102] The providers interviewed identified the need for level 4 and 5 qualifications to keep up with the changing needs of industry and HE. It was felt that further modernisation was required to ensure that skills needs were met. Key areas for qualification development were identified as: permanent way construction, artificial intelligence, autonomous systems, robotics and having employees with the skills to be able to oversee the machinery and processes that would use such developments.

> 'There is a gap with a lot of railway engineering students [permanent way construction]. When they come to us we have to put them on the civil engineering programme. Quite generally they enjoy it and there's some skills stuff in there that they can relate to, but it doesn't actually make them particularly any better at their job as it doesn't have any permanent way construction in it. That's a gap for us with a lot of learners who would benefit.' (Engineering training provider)

However, awarding organisations and providers also noted that there were challenges for providers in delivering the most up-to-date provision as a result of knowledge gaps of lecturers, and resource constraints in the FE sector (see 'challenges').

5.2 Delivery

The delivery of level 4 and 5 qualifications in the engineering sector, as described by interviewees, was predominantly via a day release model. Providers described a class-room based delivery, with a day spent with a relevant employer. One provider noted that employers would prefer a change in teaching hours.

> 'I'm under some pressure from some of the employers to shift timetables to a 2 o'clock in the afternoon to a 9 o'clock at night [training session]. I can't meet the flexibility of the staffing to do that at the moment. But I very much believe the sector's going to move in that direction, particularly levy paying employers wanting to engage the existing adult workforce who are difficult to spare for a whole working day'. (Engineering training provider)

Assessment was reported to be largely all coursework-based, with some evidence of phased tests in the form of examinations to monitor progress. The coursework-based assessment was felt by providers to work well as it was based on learners' own interpretation and application of knowledge.

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[102] Ibid., p.45

> 'I have to say the employers like that because it's teaching [learners] research and analysis skills that they will be expected to undertake if their employer says to them 'I've got this particular project, it needs researching and then provide a board level report on it''. (Engineering training provider)

Accreditation was considered significant, in that learners and employers had the assurance that qualifications met the standards set by the engineering profession. The Engineering Council is the regulator for UK engineering and sets and maintains the standards for professional registration. A key element of this is setting the criteria that education programmes must meet to become 'accredited' or 'approved'.[103] Providers stated during the interviews that they actively encourage students to choose a vocational qualification that has been found to meet, or partially meet, the educational criteria for professional registration e.g. as an Engineering Technician.

5.3 Content and design

Providers felt that qualification design in the engineering sector was becoming increasingly employer-led but that this needed to be developed to ensure that relevant, up-to-date industry-specific experience and knowledge is embedded into qualifications.

> 'There needs to be more employers sat on the boards writing the units and the qualifications. They don't need to be an expert in the unit. They just need to be able to specify the skills and knowledge that's required for that particular subject. I sat on a couple and they do tend to be all academics all sat around discussing what the qualification should be. I think that's fundamentally wrong. They've been out of industry too long if they were ever even in it'. (Engineering training provider).

This was supported by a provider who was involved in the design of a civil engineering qualification: 'I feel the awarding body could do a better job by having a mini forum of specialists who could have input into [each unit]'. (Engineering training provider). NFER (2014) identified mutually supportive approaches taken by providers to encourage involvement and engagement of employers at level 4 and 5. For example, some providers had provided meeting spaces, with facilities such as 3D printers. Thus, businesses were using the meeting space and equipment, whilst also helping to shape qualification design and delivery. Another provider offered training on-site to businesses in exchange for support with developing the qualifications, teacher visits to industry and work experience for its students.[104]

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[103] Engineering Council (2018); *Database of Technician Qualifications.* https://www.engc.org.uk/education-skills/course-search/database-of-technician-qualifications/
[104] NFER (2014), *Consultation on Science, Technology, Engineering and Mathematics (STEM) for the Education and Training Foundation*, p.38

In addition, providers said during the interviews that they appreciated flexibility, for example where they were able to develop locally devised units. It was felt that this helped to meet the requirements of employers or learners. An example of such was a provider working with an engineering employer that required specialist training in aircrafts, electronic systems and radar. After consultation with the employer, the provider included additional tailored units as part of the qualification.

> 'We balance between what the employers want, what the students want and what we can afford. When employers contact us, they will tell us what they want. We will advise what our pathways are and if they come back and say 'we need a unit in this or that', we will either do a stand-alone unit for those employees, or we will speak to other employers and say, 'this has been suggested, what do you think?', then plan accordingly. We can't afford to run bespoke modules for one or two students, so we have to negotiate with employers to find the best middle ground that we can. Or we can pass on the cost to the employer for running a module just for their students. Some employers are quite keen to do this as a solution for their needs'. (Engineering training provider)

5.4 Challenges to delivery

The key challenges to the effective delivery of level 4 and 5 qualifications in engineering were identified by providers as relating to limited resourcing:

- Cuts in available funding.

- The ability to provide enough skilled staff.

- The need for up-to-date equipment in order to teach learners.

This was supported by awarding organisations, which reported that in the delivery of level 4 and 5 qualifications there were gaps at a provider level. This meant that although the qualifications could fulfil employer skills requirements, providers could not always translate these into practice. This was due to knowledge gaps among training staff and lecturers, recruitment/retention difficulties among tutors, or the lack of infrastructure/resource for FE colleges to deliver certain aspects of the qualifications.

> 'Last week we had a member of staff who joined, lasted one day and decided he couldn't to do the job and left. That's an extreme case, but we do struggle to recruit, it is a barrier. A colleague was in touch with another local college who are not running the HNC next year as they can't staff it. It is concerning. As a college it's good as we'll get an extra ten learners in that area next year, but from a point of view of staff as a resource and having something that we can be proud of, it is an issue'. (Engineering training provider)

Some providers attributed staff recruitment and retention issues to low pay levels and heavy workloads. They also felt that provision was too slow to react to sector needs.

> 'One of my experiences having been in industry for 30 years and then coming across to education…is always that education lags behind any game changer in industry. If industry can see a benefit from it, they invest the capital and they're off and doing it. Then they get hold of education and they say 'you should be educating people in this' and education can't afford the investment in it that industry can, as industry gets an immediate pay back as it's linked to production processes' (Engineering training provider).

NFER (2014) reported similar issues in the delivery of level 4 and 5 engineering qualifications. These included: 'decreases in funding over recent years, the associated lack of staff time for example, to engage in continuing professional development…and concerns about funding being directed through employers rather than providers'.[105]

Providers participating in the NFER research commented on the negative impact that the decrease in funding for post-16 provision was perceived to be having on areas such as planning and delivery.[106] They also reported heavy workload, and/or heavy content of subjects being difficult to cover in the time available. This meant that there was insufficient time for practical activities and to support young people with individual needs. It was also felt that there was not adequate time to invest in employer engagement, despite these partnerships being key in terms of provision meeting employers' needs and linking to real-world contexts.[107]

One possible solution suggested by providers during the interviews was 'dual professionalism' and co-delivery, which involved greater integration between local employers and providers i.e. an engineer going into a FE college to support course delivery and vice versa. Although this was reported to be happening in local areas, a perceived lack of co-ordination was said by interviewees to be preventing this taking place more widely. Providers also stated that in areas where there are large numbers of SMEs it was difficult to find the capacity to support such co-delivery.

5.6 Challenges to access

Providers commented on the lack of information in schools and colleges about level 4 and 5 qualifications and specifically those in engineering.

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[105] NFER (2014), *Consultation on Science, Technology, Engineering and Mathematics (STEM) for the Education and Training Foundation*, p.8
[106] Ibid., p.26
[107] Ibid., p.27

> 'Clearly people know what degrees are, not many people have an idea about [the level and types of study available]. A levels are known as the level before degrees, there's less awareness of that other space where you can go to study'. (Provider of level 4 and 5 qualifications)

Providers felt that school careers advice lacked quality and impartiality and that this was not raising students' awareness of the range of vocational and training options in engineering. NFER (2014) reported the difficulties that employers and providers had in linking with secondary schools to raise awareness of engineering study opportunities available in post-16 provision.[108] The report also highlighted the lack of understanding among school staff about engineering and the resulting lack of awareness, misconceptions and negative attitudes of students: 'It was felt that the status of engineering amongst young people remained low and that, due to the fast pace of change and emergence of new job opportunities, perceptions of careers were outdated with a lack of understanding of 'modern feats' of engineering'.[109]

Cost was also highlighted by providers as an issue. The fees for level 4 and 5 courses were reportedly off-putting for some potential learners and some providers had seen a decline in the progression of learners from level 3 to level 4.

> 'I think the funding change at level 4 has significantly reduced the number of learners that are able to progress up the ladder. I don't think every learner needs to go to university and I don't think that's the right option for everyone, but I think the barrier now between level 3 and level 4 is quite huge because of the cost of it.' (Engineering training provider)

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[108] NFER (2014), *Consultation on Science, Technology, Engineering and Mathematics (STEM) for the Education and Training Foundation*, p.8
[109] Ibid., p.8

6. Case Study: Business

This case study focuses on level 4 and 5 qualifications within the Business sector. It explores perceptions the examples of practice perceived to be good or effective and the challenges to these. It draws on the common themes emerging from the literature and includes feedback from interviews conducted with two training providers and one awarding organisation.

6.1 Perceptions of qualifications in the sector

Business qualifications at level 4 and 5 are very popular amongst students of all ages, from those looking for options at post-16, to employees stepping up into middle management and beyond. Pearson's review of its HNC/HND programmes noted that the business qualification was one of its most popular.[110] Furthermore, the Education Policy Institute (2016) noted that 'most tertiary awards at sub-degree level are Business qualifications [and that] a concentration on Business awards is very evident among 'Alternative Providers' who do not currently hold their own degree-awarding powers'.[111]

The combination of academic challenge and practical focus makes the prospect of studying business highly appealing. This was confirmed by an awarding organisation, noting that there was good take-up to level 4 and 5 leadership and management qualifications, with a mix of knowledge-based and competency-based qualifications. Business learners can go on to, or may already work in, many different sectors. Careers relevant to a business qualification include roles in accounting and finance, marketing and advertising, as well as retail, sales, human resources and business consultancy. Thus, the diversity and plenitude of careers with a business qualification underlies the subject's appeal for many students.

There are hundreds of qualifications at level 4 and 5 related to business. A search of Ofqual's Register of Qualifications[112] lists over 1,000 'business' qualifications just at level 4, covering more than 30 different sector areas. These range from general business management qualifications, to those which are specific to sector areas such as business in veterinary science. This complex qualification landscape has contributed to the situation where both employers and learners have articulated that they struggle to differentiate between qualifications, judge skill levels and understand the competencies that each pathway may provide. Critically, employers have emphasised the need for business qualifications to modernise and become much more relevant and adaptable to the needs of business in the digital age.[113]

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[110] Pearson (2014), *2014 Higher National Review and Consultation*
[111] EPI (2016), *Remaking Tertiary Education: can we create a system that is fair and fit for purpose?,* p.6
[112] https://register.ofqual.gov.uk/
[113] Pearson (2014), *2014 Higher National Review and Consultation*

Two key developments to support this claim were noted in the review of literature and the interviews with those working in the sector. These were:

1. The recent (2016) redevelopment of the HNC/HND in business offered by Pearson, one of the most popular business qualifications;[114] and

2. The emergence of Apprenticeship Standards, developed by employer groups (in partnership with educationalists) which emphasise the importance of developing both knowledge, skills and behaviours of students which are relevant to employment.[115]

Because of these two significant changes, most of the recent literature and feedback available related to these two key areas. In terms of the use of professional qualifications in the business sector, a training provider explained that, despite the continuing popularity of HNC/DS, there is an increasing trend among employers in the sector to select industry specific professional qualifications at level 4 and 5 – and particularly where they are delivered within Apprenticeships Standards.

> 'The knowledge in the level 4 accountancy Apprenticeship maps to FEMA, HCCA and ICEAW professional accountancy qualifications…You're giving the apprentice a qualification that they probably quite highly desire, a professional qualification in accountancy from a professional body. Plus, you are giving them the knowledge that is required to be gained by the Apprenticeship Standard.' (Business training provider)

Other professional qualifications mentioned by this provider, for example for human resources and management pathways, again they had moved from offering HNC/Ds to professional body qualifications that are part of the Apprenticeship Standard – 'the [professional body] level 5 in Management is a qualification that we offer to the management Apprentices'.[116] The provider explained that whereas Apprenticeship frameworks had included qualifications offered by Awarding Organisations, the new Apprenticeship Standards were more likely to include professional qualifications. This move towards delivering professional qualifications was also taking place because the provider had confidence in the level of employer involvement in the development of these training routes.

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[114] Pearson (2016), *Higher National in Business: Specification*

[115] Instructus (2016), *Higher Apprenticeship in Business and Professional Administration (Level 4)(England)*

[116] For example, this would relate to the Level 5 Operations/Departmental Manager Apprenticeship Standard.

'We don't do what we might have done in the past…like an [NVQ] or an [HNC/D]. It's professional qualifications that are now included in the [Apprenticeship Standards]… The benefits of [moving to the professional qualification] is that for a start it is created by the employer group. It is created to be what the employer thinks somebody needs for a particular occupation, as opposed to something that is imposed on them by academics'. (Business training provider)

Furthermore, where the qualifications were being delivered as part of broader Apprenticeship Standards at level 4 and 5, the professional bodies were also operating as end point assessors. However, whilst there are many business qualifications available through professional bodies at level 4 and 5, this review identified little recent literature evaluating these qualifications in terms of good practice. A report from AoC (2015) focusing on part-time HE delivered in FE also noted that professional qualifications related to Business were being studied by increasing numbers of learners, with colleges participating in the research suggesting that professional qualifications in Business were 'better suited to meeting the employer needs because of the flexible start dates…unlike the prescribed courses that had rigid start dates, predominantly in September'.[117]

6.2 Skills gaps

In 2012, Skills CfA[118] produced a series of labour market intelligence reports[119] which estimated the size of the workforce and the proportion of total employment in several business areas.

Key findings from these reports relevant to level 4 and specifically identified that managers and senior officials continue to account for the largest occupational group in the UK, with more than 15 per cent of all those in work being classified as a manager and senior official. In the UK, managers remain significantly under-qualified compared to other professional occupations. The CfA report refers to UKCES Ambitions 2009, which revealed that 46 per cent of managers held a qualification at level 4 and above, compared to 82 per cent of professional occupations and 55 per cent of associate professional and technical occupations.[120]

Due to the above, there is potential for growth in the take up of level 4 and 5 qualifications amongst managers, whether this be through the apprentice route, more specialised professional qualifications, or generic business qualifications, such as the HNC/D. CfA asserted that the main challenges to achieving this are (i) that managers (and their bosses) do not necessarily recognise they have a skills gaps (many managers are promoted because they are good technically, rather than good business managers),

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[117] AoC (2015), *Understanding Part Time College Higher Education*, p.103
[118] Now Instructus Skills
[119] http://www.skillscfa.org/research-publications.html
[120] CfA business skills @ work (2012), *Leadership and Management Labour Market Report*, p.8

(ii) tighter budgets in periods of economic downturn and (iii) people who are managers are most commonly in their forties and have less time to study due to multiple pressures on their time.[121]

6.3 Design, delivery and content

Both training providers noted during the interviews that professional bodies were beginning to adapt their level 4 and 5 qualification content to meet the requirements of Higher Apprenticeships.

> 'So for example the [professional body] level 5 Diploma in Leadership and Management… they issued a new syllabus [last year]. Now within that syllabus there is an Apprenticeship pathway. What they've done is create eight new units within that qualification which map directly the knowledge requirements of the Apprenticeship Standards. For us that works really well… adapting their qualifications because they recognise where the volume is going to come from'. (Business training provider)

It was noted by one that a professional body for finance and accountancy was 'very proactive' in creating an 'easy to transfer' level 4 qualification that fits with the Apprenticeship but also enables progression from level 3 professional qualifications already on offer. Simultaneously, Pearson's redevelopment of the HNC/D in Business launched in 2016 resulted in the following changes:[122]

- Simplified structure, with optional units linked to specialist areas of study.

- General and specialist pathways at level 5, so suit a range of individual needs.

- Content closely aligned with professional body, employer and HE needs.

Similarly, demand was a key consideration according to an awarding organisation noting that this could determine whether a new qualification should be developed or existing qualifications should be reviewed and adapted to better meet needs.

> 'Who the target audience is? Is there a demand for the qualifications? How will it be delivered? How will it be quality assured? And is the method of assessment appropriate? These are fundamental to the design.' (Business awarding organisation)

Delivery of level 4 and level 5 qualifications in business varies depending on the pathway of the programme or the learner. Business programmes are designed to be undertaken either as full-time study or alongside work, and are therefore offered on either a full or part-time basis. A training provider noted during the telephone interviews that for level 4

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[121] CfA business skills @ work (2012), *Leadership and Management Labour Market Report*
[122] Instructus (2016), *Higher Apprenticeship in Business and Professional Administration (Level 4)(England)*

and above qualifications in areas such as accountancy, learners were often mature students.

> 'We see a lot of career changes. A lot of people who have been working in different fields and want to become accountants and try something different. They tend to do the level 3 first and then stay on for level 4'. (Business training provider)

Delivery tended to be flexible, with providers and professional bodies offering online material for learners to work through. Assessment for professional qualifications at level 4 and 5 in this sector was reported by one provider to be 'particularly heavily dependent on exams' but that these could also be completed either electronically or via hard copy.

6.4 Challenges

Providers noted during the interviews, and a limited amount of evidence in the literature, highlighted a lack of awareness among Business learners at level 4 and 5 as to the potential progression routes available to them upon completing their qualifications.

For example, in 2017, Pearson[123] surveyed HNC/D learners about their intended destinations. The majority of respondents were studying for an HNC/D in Business.[124] Although analysis of responses was reported at a top level, the high proportion of Business learners among respondents provides some indication as to the attitudes of these learners at level 4 and 5. They most commonly suggested that they were aiming to continue to degree level following completion of qualification, and were taking the HNC/D as it related directly to their occupational role. They requested more information about universities to which they could apply once they had achieved their HNC/D, suggesting more promotion of these pathways may be required for Business at level 4 and 5.[125]

In addition, a provider noted fluctuations in demand for Business qualifications.

> 'We tend to get a lot of demand in FE for evening classes…looking to get a qualification to enable them to get up into middle management…[The demand] dips in and out. I guess a lot of it is to do with the jobs market and how much money is out there in companies for training. At the moment companies don't have much of a budget for [Continuing Professional Development] and if they do, they spend it differently'. (Business training provider)

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[123] Pearson (2017), *BTEC HN Destinations Survey*
[124] Ibid., p.1
[125] Ibid., p.10

7. Case Study: Creative and Cultural Industries

This case study explores the design and delivery of qualifications in the Creative and Cultural sector. It draws together the common themes emerging from a range of literature and three telephone interviews (one each with a training provider, an employer and a professional body).

7.1 Defining the sector

The definition of 'creative and cultural industries' has evolved considerably over the last 20 years. In 2016, the Department for Culture, Media and Sport (DCMS) defined them as 'those industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property'.[126] This currently includes: advertising and marketing; architecture; crafts; product, graphic and fashion design; film, TV, video, radio and photography; IT, software and computer services; publishing; museums, galleries and libraries; music, performing and visual arts.[127]

The sector is therefore very broad and there is clear overlap with ICT and Digital. As a result, it is difficult to identify the number of related qualifications. Ofqual's Register of Qualifications lists a range of sector subject areas which could fall into creative and cultural industries, including: performing arts; crafts, creative art and design; languages, literature and culture; marketing and sales; media and communication; publishing and information services - totalling over 2,500 qualifications.[128] Isolating just the discrete sector subject area of the performing arts results in 64 level 4 and 5 qualifications.

Such a range of opportunities means that 'employment in the sector supports the need for a diversity of specialist [training] provision, partly because those working in the industry are often self-employed and/or work in micro businesses. Employees in the sector therefore need to have a range of skills to support a portfolio career'.[129] This style of portfolio career therefore informs the reasons why some individuals undertake level 4 and 5 qualifications in the sector. A training provider interviewed as part of the case study suggested that learners at this level tend to be 'people returning to education after a few years of working…They'd all been working other jobs or doing a bit of freelance work on the side and have decided that they want to focus … and that's why they've come back to us'. (Creative and cultural training provider).

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[126] Department for Culture, Media and Sport (2016), *Creative Industries Economic Estimates,* p.3
[127] Ibid., Annex C – Creative Industries Definition, p.22. Note that a separate case study has been developed for the ICT sector.
[128] (https://register.ofqual.gov.uk/)
[129] CDMT (2016), *An overview of higher level qualifications in music, dance and speech and drama subjects*, p.26

7.2 Perceptions of level 4 and 5 qualifications

Over the past 10 years a lot of work has been undertaken to improve the perception (and therefore use) of level 4 and 5 across creative and cultural industries. Although the majority of the creative and cultural workforce is qualified at level 4 and above, 'it has become generally accepted in the creative industries that the balance has shifted too far towards higher education', with the dominance of qualifications at level 6 and above potentially negating 'the chances of…mobility' in the sector.[130]

Previously, there were concerns that qualification provision at level 4 and 5 was not meeting the needs of learners and employers, and as a result there were significant skills gaps in the sector. Many qualifications at level 4 and 5 were reported by Creative and Cultural Skills to be too general to prepare learners for specific jobs, stating that 'employers within the sector have traditionally had very little involvement…and a need has been highlighted for much stronger partnerships between employers, awarding organisations and providers to ensure qualifications are fit for purpose'.[131] In addition, it was perceived by sector bodies that learners were more interested in performance-based courses than theory. Employers therefore offered practical non-accredited training, but this 'further exacerbated the divide between the needs of the sector and the offer from traditional training provider'.[132] One of the responses to this issue was the establishment of The National Skills Academy (NSA) for Creative and Cultural Skills, a subsidiary of Creative and Cultural Skills, with the aim to provide sector-specific training solutions in England. It was set up primarily in response to employers' concerns over the suitability of training for both new learners and those already employed within the sector.[133]

According to research conducted by CDMT in 2016, the subsequent work to redevelop training and qualifications at level 4 and 5 appears to have improved perceptions of their relevance and currency. Examples of 'good practice' were identified by CDMT, including Foundation Degrees in dance due to their successful partnership working between providers and employers.[134]

During the telephone interviews, a training provider commented that they were satisfied with how awarding organisations had addressed the pace of change in technical skills in the industry and their ability to keep the level 4 and 5 qualification specifications current by allowing providers more flexibility in content: 'They've tried to future-proof it by keeping the modules slightly looser'. (Creative sector training provider).

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[130] Creative & Cultural Skills (2013), *Building a Creative Nation: Evidence Review,* p.9-10
[131] Ibid, p.36
[132] Creative & Cultural Skills (2010), *The Performing Arts Blueprint. An analysis of the skills needs of the performing arts sector in the UK,* p.16
[133] Ibid., p.4
[134] CDMT (2016), *An overview of higher level qualifications in music, dance and speech and drama subjects,* p.10

7.3 Design and content

Research undertaken by The Higher Education Academy with performing arts professionals (2012) identified employability as a core objective of training in the sector and therefore should be considered when developing qualification content.[135] Additional consultation by AQA (2014) highlighted that providers and industry bodies are interested in higher level learners building 'a…broad base of skills for a future in industry'.[136] Thus it was felt important for qualifications at levels 4 and 5 to offer progression in sub-sector specific areas (such as performance) whilst developing broader skills in:[137]

- Technical[138]

- Marketing

- Business

- Team working

- Digital technology (lighting, moving images, visual arts, sound)

- Moving images

- Problem solving.

Since the establishment of the NSA, increasing emphasis has also been placed on involving employers in qualification design. Focusing on increasing involvement of SMEs was a particular aim of the NSA because these dominate the creative sector, with early evaluations of its work suggesting that this was successful.[139]

The increased involvement of employers in design processes was perceived by one case study interviewee to have created a greater understanding among providers and awarding organisations of the skills employers need and the types of qualification design that work well for the sector.

> 'I think there's much more dialogue in the creation of qualifications…There is more flexibility which the businesses appreciate. You can have more concentrated doses of learning. They can have more online learning and you can have more respect for what the business needs'. (Creative and cultural, professional body)

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[135] HEA (2012). *Mapping Technical Theatre Arts Training*, p.25
[136] AQA (2014), *The 2014 Creative Education Conference: Conference Report*, p.29
[137] Ibid., p.29
[138] This is not defined in the report. However, a literature review for Creative and Cultural Skills highlighted that technical skills were required specifically in design (e.g. use of specialist CAD software, technical drawing, graphic design, model-making, generating concepts), jewellery and craft (making and haptic skills), specialist technicians within performing arts and music (rigging, health and safety, recording and streaming events), and the cultural heritage sector (digitisation and dissemination of archival materials, creative engagement/learning). Creative & Cultural Skills (2015), *Building a Creative Nation: The Next Decade – What the current literature tells us about the future skills needs of the creative and cultural industries,* p.31-35
[139] BIS (2011), *Evaluation of National Skills Academies,* p.25

A training provider highlighted that one of the challenges in designing qualifications for this sector is keeping up with the rapid changes that occur, and the need to ensure that courses continue to reflect current practice. Subsequently, in order to remain relevant at level 4, this provider had focused on delivering provision for specific sub-sectors and joined an industry body representing around thirty different employers. The provider reported that this had been a useful network for developing its understanding the types of skills employers are looking for, thereby allowing it to design a curriculum that is fit for purpose.

7.4 Delivery

The delivery of provision in the creative and cultural sector tends to be more fluid and informal than those found in others. However, the Qualifications and Curriculum Authority (QCA) identified a mix of delivery models that were effective within the sector by engaging and retaining learners and keeping interest levels high. At levels 4 and 5:

- 'Enterprise days

- Mentoring

- Short courses

- Mock interviews in the classroom

- Peer reviews

- Group work

- Work experience

- Work shadowing

- Work-based projects

- Work visits out of the classroom'.[140]

The Paul Hamlyn Foundation (2012) reported that, for artists, 'the use of mentors within qualification delivery has been outlined by stakeholders as a valuable addition to a course in terms of participants benefiting from and offering the value of their skills and experience. However, the formal use of mentors appears to be fairly minimal given the level of resource required'.[141]

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[140] NESTA (2008), *Creative Opportunities A study of work-related learning opportunities in the creative industries for young people aged 14-19*, p.14
[141] Paul Hamlyn Foundation/Artworks (2012), *Mapping the terrain: Higher Education and Further Education – supporting artists to work in participatory settings*, p.62

7.5 Challenges

There are some challenges to high levels of industry involvement in qualification delivery. Time pressures and a lack of resources can make the involvement of employers difficult. Many creative and cultural employers are small and lack the capacity to be able to fully and effectively engage with providers. Thus, building sustainable partnerships between education/training providers and employers to aid effective delivery has been reported as a significant challenge.[142] An employer interviewed as part of this literature review commented that they would like to be involved in delivery but that expectations need to be clearly managed.

> 'We know about it, we want to be involved, but… The provider needs [us to be able to offer] the work experience… and at the moment we are not in a position to [do this]. Sometimes the barrier is a mismatch in expectations between what the employer and the provider does or can do'. (Creative and cultural employer).

To help reduce the amount of time that employers commit to face-to-face engagement such as mentoring, 'the use of new e-learning technology has proven to be successful.'[143] This included e-mentoring, video-conferencing and virtual visits to employers to support delivery at levels 4 and 5.

A further challenge to effective delivery was identified by PALATINE (The Higher Education Academy Subject Centre for Dance, Drama and Music) as the disparity in assessment practices created by a lack of clarity in assessment criteria. Concerns were raised specifically in relation to variable feedback given to learners in terms of quality and quantity across different modules and/or programmes and 'lack of clear information, for staff and/or students, on assessment criteria and marking schemes which leads to inconsistency of practice across programmes'.[144] These challenges led to changes in assessment driven by employers and sector bodies becoming increasingly involved in the design and development of qualifications.

> 'We feel that one of the benefits of the new system is that there is more assessment related to things that [learners actually do on the job. So [employers] are finding that more useful. They're actively involved in setting…project work, which has a value for the business and a value for the individual, and it's something that's replicable, because it's set by the business against the framework in the qualification'. (Creative and cultural, professional body).

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[142] NESTA (2008), p.4
[143] Ibid., p.14
[144] Higher Education Academy (2010), *Looking Further: A survey of the landscape of performing arts higher education in further education,* p.21

A lack of readily-available information about level 4 and 5 qualifications may have previously created a barrier to employer engagement in formal training.

> 'Predominantly our knowledge comes from the providers. I think more information from other sources on these qualifications would definitely be useful. I think information [needs] to be…bitesize [and in a format] that makes sense to the employer'. (Creative sector employer).

Furthermore, the literature review highlighted concerns that young people and potential recruits are less exposed to activities that may trigger an interest in creative and cultural qualifications.

> 'A young person's interest in the performing arts may first be sparked through exposure to school drama, GCSE or A level Drama or Theatre Studies or from opportunities with a youth theatre or music group. However, these opportunities for exposure are reliant on school curricula (in which drama and music are no longer compulsory), on local arts provision, or on family circumstances and parental support'.[145]

There also appears to be a lack of information about the range and variety of qualifications that are available. The Higher Education Academy (2012) reported that there are 'very few online information providers offering details of the full range of opportunities available to school leavers and mature students in FE, HE and through formalised work place training'.[146] It also reported lack of knowledge and confusion in school leavers, and a cultural divide where access to the full range and different kinds of education and workplace training is not available to all.[147]

Nonetheless, the introduction of the Apprenticeships Levy was felt by a sector body participating in the interviews to have led to an increase in the number of learners accessing level 4 and 5 qualifications (i.e. where these qualifications are part of the relevant Apprenticeship). This had led to increased awareness, and more employers engaging with formal training routes as a result.

> 'Before the levy we were averaging about 250 people accessing qualifications a year, we are aiming this year that we might have about 500, across lots of companies'. (Creative and cultural, professional body)

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[145] HEA (2012). *Mapping Technical Theatre Arts Training*, p.23
[146] Ibid., p.27
[147] Ibid.

7.6 Effectiveness and good practice

A range of research over the last decade has confirmed that for qualifications to be attractive to employers in the sector, it is important that they are responsive to the needs of the industry, whilst learners require skills development to meet the needs of the organisation with which they work (work-based learning), plus industry recognition.[148] Good practice in this sector, therefore, focuses heavily on building effective and strong industry links.

For example, the Learning and Skills Improvement Service (LSIS) reported that, in order for qualifications in the dance sector to be successful they needed to meet a range of skills that 'extend beyond just performance skills, and include skills such as motivation, communications, business, marketing and self-presentation'.[149] In terms of effective qualification delivery and development in dance specifically (but relevant to performing arts more generally), LSIS identified the need for strong evidence of: [150]

- Relevance to employer, sector and learner needs.

- Involvement of training providers and employers in qualification and curriculum development.

- Use of employer-led review and consultation to manage development, including the range and mix of provision and provider types.

Thus, to ensure that qualifications at level 4 and 5 are designed effectively the importance of employer links with providers (and vice versa) has been emphasised throughout the literature and the interviews. This includes a need for greater emphasis on working with employers during delivery in order to provide learners with accurate impressions of employment destinations. There can be challenges in this work however, particularly around confidentiality and the handling of sensitive creative output.

> 'We really struggle getting students into studios because of non-disclosure agreements, a lot of [employers] can be quite reluctant to take students on…. Companies are reluctant to give youngsters access to sensitive information'. (Creative sector training provider).

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[148] CDMT (2016), *An overview of higher level qualifications in music, dance and speech and drama subjects,* p.26; and Creative & Cultural Skills (2010), *The Performing Arts Blueprint. An analysis of the skills needs of the performing arts sector in the UK.*
[149] Learning and Skills Improvement Service (2009), *The Responsiveness of Dance Training to Employers' Needs,* p.4
[150] Ibid., p.12

8. Good Practice in Qualification Design and Delivery

This chapter explores factors associated with good practice in the design and delivery of qualifications at levels 4 and 5. Where information is specific to individual qualifications, these are identified.

8.1 Employer engagement in the development process

'Strong employer links...underpin all activities identified as good practice.'[151]

Employer engagement is a key aspect of the development and design of qualifications at level 4 and 5.

'A lot of institutions start from the wrong end, devising a Foundation Degree and then finding some supportive employers. You've got to start with the need and then develop a course to meet this need. It's about listening and responding, rather than dictating the provision on a take it or leave it basis.'[152]

Employers appear to appreciate the opportunity to be able to contribute to the development of qualifications, as detailed in each of the case studies in this literature review. Indeed, a number of examples for engaging employers in the design of qualifications including those at levels 4 and 5 have been identified in the literature, including Wiltshire Councils' 'Wiltshire 100'[153] and the former Diploma Development Partnerships (DDPs).[154]

However, involving employers in the design of qualifications at levels 4 and 5 can be challenging, with three key issues emerging from the literature.

1. **Sustained engagement with qualification development can require a considerable commitment from employers.** For engagement to be successful, as identified by the University of Warwick, there needs to be companywide support – with larger companies better equipped to release personnel on a regular basis compared to small and medium sized enterprises (SMEs), which tend to have less capacity and time to actively engage with qualification development.[155] This may

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[151] QAA (2005), *Learning from reviews of Foundation Degrees in England carried out in 2004-05,* p.16
[152] Foundation Degree Forward (2007), *Developing higher skills in the UK workforce: A guide to collaboration between higher education and employers*, p.19
[153] 'Wiltshire 100' is a direct engagement programme working with businesses that have been identified as being of strategic importance to the economy. Meetings are held with senior decision makers, and the key issues and opportunities facing each business are discussed. These are then fed back to local providers to aid the development of qualifications to meet the skill needs of employers and the sector.
Wiltshire Council, Children's Select Committee (2014), *Apprenticeships in Wiltshire*, p.7.
[154] Laczik, A. & White, C. (2009), *Employer engagement within 14-19 diploma development, Research in Post-Compulsory Education*
[155] Centre for Education and Industry (CEI) and University of Warwick (2010), *Employer Engagement in Curriculum Development in England - The New Diploma qualification*

therefore risk the viewpoints and specific needs of SMEs being missed in the design process.

2. **Some employers feel unclear about their role within the qualification development process.** Evidence gathered by Studies in Higher Education (2017)[156] found that there was confusion in terms of what employers felt their role was, and uncertainty about what level of involvement providers expected from them.

3. **Employers can be unfamiliar with the processes, policies and terminology involved in qualification design.** This can therefore create challenges for some providers/awarding organisations in effectively working with them. The Centre for Education and Industry (CEI) and The University of Warwick (2010)[157] highlighted that many employers were unfamiliar with the technicalities of qualification development and felt that their initial vision for the qualification had been lost when they saw the end result. Studies in Higher Education, (2017)[158] supported these findings, identifying that not all employers were able to articulate skills and knowledge requirements in academic language. What the study does not highlight however is that this also suggests a need for qualification development teams[159] to be able to ensure that each step of the development process is explained clearly to all participants, and that it is made clear in jargon-free language where employer feedback has been incorporated into the design.

As identified by Foundation Degree Forward (FDF), in order for the qualifications to actually meet the needs of employers, their input into vocational qualification development is important.

'However, a balance needs to be struck between specific employer demands and broader requirements of qualification validation, it is important that a dominant partner does not skew the design in favour of their own specific interests'.[160]

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[156] Studies in Higher Education (2017), *Degree and Higher Level Apprenticeships: an empirical investigation of stakeholder perceptions of challenges and opportunities*
[157] Centre for Education and Industry (CEI) and University of Warwick (2010), *Employer Engagement in Curriculum Development in England - The New Diploma qualification*
[158] Studies in Higher Education (2017), *Degree and Higher Level Apprenticeships: an empirical investigation of stakeholder perceptions of challenges and opportunities*
[159] A range of individuals and organisation types can be members of the steering and working groups that oversee the consultation, review and development of qualifications, units and standards. This can include awarding organisations (both Ofqual regulated and HE Providers with Degree Awarding Powers), training providers, sector bodies and independent consultants/specialists in writing technical specifications. For ease of reference, these groups are referred to as 'qualification development teams' throughout this literature review.
[160] Foundation Degree Forward (2006), *Engaging employers in Foundation Degrees: A guide for universities and colleges developing and delivering Foundation Degrees in the Active Leisure and Learning Sector*, p.19

DfE (2014) stated that for successful collaboration both the provider and the employer must 'recognise the benefits of employer engagement in qualifications and be committed to working together to support the development of learners, sharing responsibility for developing and maintaining the working relationship'.[161] It concluded that qualification design should include recognition from all stakeholders of the time constraints, commercial issues, and the need for all parties to fully understand the operational context.

8.2 Effective features of qualification delivery

The literature reviewed and interviews undertaken suggest that there are a number of factors that can support an effective and good practice delivery of a qualification. During the interviews, the effectiveness of level 4 and 5 qualifications was interpreted by providers and awarding organisations generally in terms of progression, whether that was in the workplace or moving onto higher qualifications.

> 'For us it's that the students who are working in a hands-on capacity, from the programme they then progress…into those technical and managerial roles that they always desire to go into. We get some learners who don't go into management or for some reason, some barrier, they don't go to the employment destination that they first thought that they would. But for me success is waking them up to other…opportunities for career progression, and progression for a minority to the next level [of study]'. (Provider of level 4 and 5 qualifications)

However, other important features of 'effective' qualification delivery have been identified in the literature, namely:

1. Supportive learner induction processes.
2. Provision of coaching and mentoring from employers.
3. Flexibility.

Each of these are summarised below.

8.2.1 Learner induction

The *What Works?*[162] student retention study highlighted the features of an effective induction process. For example, peer mentoring and small group work sessions was found to successfully engage and promote interaction between learners. *What Works?*

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[161] Department for Education (2014), *Employer Involvement in Qualifications Delivery and Assessment, Research report*, p.7
[162] What works? (2012), *Student Retention & Success, Building student engagement and belonging in Higher Education at a time of change: final report from the What Works? Student Retention & Success programme,* p.25

also stated that the induction period should extend over a longer period than just a few days, and that induction activities have an impact not only on successfully introducing students to a qualification, but on retention and success through three key areas: [163]

- Socialisation and formation of friendship groups, which provide a support network and promote social integration.

- Informing expectations of HE and helping students to be effective learners by developing their confidence and academic skills.

- Developing relationships with members of staff, allowing students to be able to approach them when they need to.

8.2.2 Coaching and mentoring

Another important element in the delivery of a qualification is the effectiveness of the coaching and mentoring provided. FDF found that workplace mentors played a 'pivotal role in facilitating the successful delivery of work-based HE programmes'.[164] It stated that key aspects of the mentor's role were to: agree a workplace learning programme with the student, ensure that appropriate time and support is provided, act as a point of contact between the employer and the HE provider and to provide academic and pastoral support to the student in the workplace. DfE (2014) further illustrated the importance of mentoring in the delivery of vocational qualifications.[165] However, it is important to keep in mind the time and resource commitments this requires, and the challenges already noted throughout this literature review in terms of the constraints experienced by both employers and providers.

8.2.3 Flexibility

Flexibility has been reported throughout the cases studies in this literature review as being important to qualifications at level 4 and 5, and can be applied to:

- Delivery modes and study patterns, including full/part-time, distance, work-based, and web-based learning.

- Progression routes and speed of progression.

- Admissions requirements.

- Assessment criteria and formats.

- Entry and exit points.

- Teaching and learning methods.

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[163] What works? (2012), *Employer Involvement in Qualifications Delivery and Assessment, Research report*, p.25
[164] Foundation Degree Forward (2007), *Developing higher skills in the UK workforce: A guide to collaboration between higher education and employers*, p.25
[165] Department for Education (2014), *Employer Involvement in Qualifications Delivery and Assessment, Research report*, p.30

An example of flexible delivery was highlighted by FDF (2007) where a university's part-time Foundation Degree in Sport and Leisure Management was designed to enable students and employees to participate as effectively as possible. In practice this meant that attendance was required one day per fortnight, with an open door for students to attend at other times to suit their work and family commitments. FDF reported that 'this flexibility has enabled employees to participate from well outside the catchment area as the reputation of the course has grown'.[166]

In terms of good practice relating to teaching and learning, literature indicates that a varied and engaging learning programme is important to the qualification design. A study by Educational Development with Plymouth University (2013) found that 'activities that motivate, encourage deep learning and are adaptable to different learning styles are most effective, as are those that are 'authentic, up to date and relevant'.[167] Such learning methods include: work placements and experience, industry professionals as tutors on courses, company visits, and guest speakers from industry/local organisations.[168]

> 'By interacting directly with learners, employers are able to motivate and
> provide insight into an occupational role or sector-area based upon first-
> hand experience which effectively engages the learner'.[169]

Qualitative evidence from the *What Works?* project found high quality, student-centred learning and teaching is at the heart of improving the retention and success of all students.

> 'Programmes that have higher rates of retention and success make use of
> group-based learning and teaching, and varied learning opportunities
> including real-world learning and work placements'.[170]

What Works? suggested the following strategies to make learning and teaching more engaging: 'active learning, engaging students in problem or practice-based learning and also collaborative learning, allowing students to share their own experiences, both in the classroom and beyond'.[171]

Owing to the range of individuals often involved in the delivery of qualifications at this level, Studies in Higher Education (2017), stated that in addition, 'assessments used in level 4 and 5 qualifications should be structured in a way that can be easily understood

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[166] Foundation Degree Forward (2007), *Developing higher skills in the UK workforce: A guide to collaboration between higher education and employer*, p.19
[167] Educational Development with Plymouth University (2013), *Designing your Programmes and Modules: Guidance notes*, p.27
[168] Foundation Degree Forward (2007), *Developing higher skills in the UK workforce: A guide to collaboration between higher education and employer,* (2007)
[169] Department for Education (2014), *Employer Involvement in Qualifications Delivery and Assessment, Research report,* p.30
[170] What Works? (2012), p.31
[171] Ibid, p.36

by all different stakeholders'.[172] *What Works?* (2012) found that a good level of understanding in relation to assessment processes influenced the retention rates of students. This research highlighted that students who have a clear understanding about the assessment process and requirements, have higher confidence levels and are less likely to think about leaving early.

> 'Understanding of assessment should be developed early, and students need to have positive relationships with staff so that they can ask for clarification. Feedback on assessment needs to be helpful to students, and they need to be guided how to use it to inform future assessment tasks'.[173]

Examples of poor assessment techniques were also identified by the *What Works?*[174] study. These included the provision of insufficient detail to students, for example with only a few written comments, or single words, and feedback which was unclear to the student about what specifically needed to be done or done differently.

In terms of examples of good practice assessment specifically in work-based learning, a study for FDF (2006), found the most effective were: 'case studies, presentations, reports and project work, observation of practical work, personal development plans and evidence portfolios'.[175] FDF identified an example of work-based assessment undertaken by workplace mentors at a college in the Midlands. The college introduced a process where work goes through a second and a third marking procedure*.*

> 'The second marking is completed by the college mentor as part of the general mentoring process. The third marking is done by another member of the teaching team in line with the standard second marking process in use for all examiners and assessors. This extra tier of marking ensures that the required standards are developed and maintained in the pool of assessors who are industrially competent but not currently involved in full-time HE teaching and the assessment of module learning outcomes'.[176]

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[172] Studies in Higher Education (2017), p.10
[173] What works? (2012), p.36
[174] Ibid, p.36
[175] Foundation Degree Forward (2006), *Engaging employers in Foundation Degrees: A guide for universities and colleges developing and delivering Foundation Degrees in the Active Leisure and Learning Sector*, p.32
[176] Ibid, p.32

9. Conclusions and Points for Consideration

This literature review explored evidence and stakeholder feedback to provide a better understanding of good practice in the design and delivery of level 4 and 5 qualifications. It explored traction with learners, employers and training providers, the development and growth of qualifications – factors influencing success, and challenges. The findings of this exercise are summarised below.

9.1 Exploring evidence of level 4 and 5 qualifications

Although there is a large amount of literature relating to the development and delivery of qualifications generally, findings relating specifically to level 4 and 5 are more challenging to identify and isolate. Literature evaluating the design and delivery of professional qualifications at level 4 and 5 was particularly sparse – qualifications such as HNC/Ds and Foundation Degrees were more prominent.

Much of the evidence gathered through the literature review tended to be generic across levels, qualifications types or sectors, with specific references to level 4 and 5 pulled out of these reports where available. Likewise, during telephone interviews respondents would talk about qualifications and training generally whilst contextualising this by giving examples of level 4 and 5 provision.

The extent of publicly available evidence varied across the chosen case study sectors, also. Some industry areas – notably CBE and Engineering - presented a more extensive range of evidence. Literature on the delivery, design and content of level 4 and 5 qualifications in ICT and Digital was, in comparison, extremely limited. This sector tended to focus on ICT education at school and up to level 3, or on degree level qualifications.

In addition, terminology used to define level 4 and 5 qualifications varies considerably, with terms such as 'higher level', 'sub-degree', 'sub-bachelor' and 'tertiary' used by different research outputs. Definitions of these terms provided within the literature can include level 4 and 5 qualifications, but also those at other levels, thereby adding a layer of complexity to the navigation and identification of relevant and recent literature.

The following sections provide a summary of the evidence review and key considerations.

9.2 Scale and scope

- Take up of level 4 and 5 qualifications appears to have been in decline over recent years and accounts for less than one per cent of all qualifications being funded through the adult skills system. This landscape continues to be the smallest proportion of the UK education system.

- There has been a changing landscape at level 4 and 5, including a growth in number of Alternative Providers and greater emphasis on delivering level 4 and 5 through HEI alternative provision as they build their vocational offer. Building better links and collaborative partnerships between universities, employers, training providers, and further education colleges was seen as important by the range of stakeholders interviewed. The importance of effective collaborative arrangements was emphasised in literature relating to Foundation Degrees specifically.

- There is a huge variety of pathways and qualifications at level 4 and 5. However, a perceived lack of clear information about this range of vocational qualifications, training routes and progression pathways was evident in the literature and the interviews across all sectors. It was felt that this caused confusion for learners and employers, and challenges in the provision of effective careers information, advice and guidance.

- As noted, this literature review identified a wide range of terminology used in the delivery of level 4 and 5 qualifications. This is likely to be contributing to the sense of confusion and lack of awareness of relevant pathways as navigating this landscape can be complex.

9.3 Design and delivery

- There was considerable evidence – both in the literature and during the interviews – emphasising the importance of engaging employers during the design and delivery of qualifications at level 4 and 5. This was perceived to help ensure that qualifications are employer-led and meet their needs, whilst also helping qualifications to gain credibility (and take-up) across a sector.

- It was particularly emphasised within the literature and the telephone interviews that clear communication during the qualification design process was necessary in order to ensure effective partnership working between providers, awarding organisations and employers. These stakeholders can have very different perspectives, experiences and expectations - managing these appropriately was deemed to be a fundamental aspect of the process.

- Customisation and flexibility were suggested to be a significant factor in the successful delivery and assessment of level 4 and 5 qualifications, as this tended to enable them to be tailored to regional or local employer needs, and to meet the needs of individual learners. This was reported to require some level of negotiation between what is realistic for providers, and what is required by employers and learners. As a result, blended approaches to delivery and assessment were mentioned commonly by interviewees as working well.

- Those taking level 4 and 5 qualifications often tend to be mature learners upskilling and looking to progress in their career, and/or career changers; they will study part-time alongside employment. For some occupations in the CBE sector, training at

level 4 and above specifically is mandatory (e.g. in order to carry out roles in regulated sectors such as electricals and plumbing). It was therefore noted that the additional commitments and obligations of these learners needed to be taken into consideration when setting assessment criteria/deadlines. Practical/work-based elements were considered fundamental to content, providing a link between qualifications and the workplace. Consequently, this led to improved employer recognition for qualifications.

- Delivery and assessment of level 4 and 5 qualifications varies according to sectors, some tend to be predominantly coursework/portfolio based (such as CBE and Engineering), whereas others such as Business reported more examinations and paper-based learning. Generally, providers reported that fitting with learners' skills, learning styles and other commitments or needs was an effective approach to delivery – i.e. by offering flexible methods, online learning/assessment, and distance learning.

- However, for qualifications delivered via distance learning – often Foundation Degrees – it was noted that peer support and access to face-to-face sessions was important in order to help learners engage and feel supported throughout the qualification.

- Mentoring was noted as being a potentially very effective element to qualification delivery at level 4 and 5, particularly where this had a level of input from employers. However, providers noted that this approach was resource intensive and not always practicable especially in sectors with large numbers of SMEs (such as Creative and Cultural).

9.4 Perceptions

A key finding in this literature review was the fundamental difference in the ways in which level 4 and 5 qualifications are viewed by different sectors (and even between different occupations within the same sector). Even with a small sample of interviewees and across just five sectors, some variations were noted.

- Depending on the sector, level 4 and 5 qualifications were either regarded primarily as: 1) a 'stepping stone' to higher level learning, rather than into employment (e.g. in ICT and Digital sector – computer science), or 2) as a learning goal that enabled career progression in itself, (e.g. in CBE sector – mandatory qualifications to carry out a specific occupation, or for leadership and management roles).

- Employers were perceived to value HNC/Ds in sectors where these have become an established route, recognised and understood by employers across industry (e.g. CBE, Engineering and some areas of Business). However, Foundation Degrees were likely to be drawn upon by employers across the Creative and Cultural Sector. It appeared to be generally accepted, and in some sectors,

demanded among employers however that vocational and technical routes such as HNC/Ds remain distinct from academic and theoretical routes of learning.

- Familiarity, recognised national standards and professional recognition were reported to be key aspects of level 4 and 5 qualifications for employers. Engineering and Business sector level 4 and 5 qualifications were recognised as the 'industry standard' and an alternative to university. Engineering level 4 and 5 qualifications were valued due to their transferability with international markets.

- Across all case studies, vendor training packages and those offered by professional bodies appeared to be gaining popularity, especially where qualifications at level 4 and 5 were being redeveloped by professional bodies to reflect content required within Higher Apprenticeships

- Learners were reported to be accessing qualifications due to a range of motivations – predominantly wanting to secure a job and wanting to update their existing skills/knowledge. Learners at level 4 and above were generally motivated to undertake a qualification to enable them to develop their existing careers. However, interviewees perceived some lack of awareness among learners about the range of qualifications and pathways to and from level 4 and 5.

9.5 Challenges

- Challenges for learners accessing level 4 and 5 qualifications were that often these were reported to be mature learners or learners working alongside study. Therefore, they required flexibility in delivery and providers would offer 'familiar' delivery styles to qualifications at level 3 (such as coursework/portfolio-based approaches) to help ease this process. However, if teaching and learning styles do not reflect approaches at HEIs for example, this may cause some issues for transition beyond level 4 and 5.

- Resource constraints were noted to be a key challenge in terms of: a) employers having the time to commit to qualification design and delivery processes, particularly SMEs; b) FE colleges experiencing recruitment and retention challenges and less capacity (than HEIs, for example) for teaching staff to remain up-to-date with latest developments; c) learners limited in terms of progression due to the need to pay tuition fees.

- There was reportedly some lack of awareness of level 4 and 5 qualifications with learners, employers and careers advisors. Some employers (with less history in this arena) were reported not to understand these qualifications and prefer therefore, more recognised academic routes. The literature and interviews suggest that much greater awareness is needed of these qualifications and the benefits for employers and learners.

- There are some issues around level 4 and 5 qualifications and learner satisfaction (for example in the CBE sector).

9.6 Good practice

It has been possible to identify examples of shared good practice and common themes emerging from this literature review and the interviews which were conducted to supplement the document searches.

- The development, design, delivery and update of qualifications tends to be a cyclical process of review, consultation and response - with the outcomes of each of these elements informing the progress of others. Engagement with, and securing buy-in from, a range of stakeholders (including employers and training providers) throughout design and delivery helps to ensure qualifications are meaningful. For example, major sector changes can create need for a new technical level qualification at level 4 or 5, e.g. new skills required to use and manage emerging technologies and sector processes. Ongoing engagement with industry thus helps to ensure that qualification content remains relevant and up-to-date.

- Employer engagement is a key aspect of the development and design of qualifications at level 4 and 5. However, a balance needs to be maintained between: 1) the experience of employers in sector needs, and the forms of delivery and assessment that are valued, and 2) the expertise of qualification developers to design a package that meets those needs and meets requirements for qualification validation. Consultation can take place in a range of formats tailored to employer types, including online surveys for gathering initial evidence, with face-to-face discussion to develop detailed content (e.g. sole traders and SMEs may prefer to give online feedback rather than committing a longer period of time to attend face-to-face events).

- A range of examples of how to encourage meaningful employer contributions to qualification design and delivery were identified. These included: focused programmes of engagement to attract employers previously not involved, or that are economically significant to a sector/area; tailored incentives to help engage employers – e.g. use of providers' facilities/equipment (e.g. 3D printer) in return for involvement in consultation; involvement of all stakeholders from initial planning through to reviewing draft contents to ensure stakeholder buy-in and commitment during level 4 and 5 qualification development.

- To encourage a broader range of learners and employers to engage with training at level 4 and 5, the following strategies have been identified: communicating opportunities, choices and progression routes via a range of employer and learner networks; highlighting that in some sectors, level 4 or 5 qualifications are industry standard.

- Supportive learner induction processes can have an impact not only on successfully introducing students to a qualification, but on retention and success. This occurs through the formation of peer support networks, developing informed

expectations of provision, and creating relationships with members of staff. Provision of coaching and mentoring can offer both academic and pastoral support to learners, although this needed to be balanced with time and resource commitments required on the part of employers and providers.

- Flexibility in design was important to providers. Having a level of negotiation between providers and awarding organisations aided the suitability of the design of the qualification. Likewise, flexibility can be attractive and supportive of learner retention and progression, particularly where applied to: delivery modes and study patterns, including full/part-time, distance, work-based, and web-based learning; progression routes and pathways; admissions requirements; assessment criteria and formats; entry and exit points; teaching and learning methods. This flexibility can be particularly important for a cohort of learners that is often studying around existing work and personal commitments.

9.7 Gaps in evidence

This literature review identified some areas where evidence was lacking and where further research may be useful in providing more specific examples of good practice at level 4 and 5 going forward.

- Building on the small number of interviews undertaken for this literature review, wider and more in-depth qualitative research focusing specifically on the perceptions and take-up of level 4 and 5 in isolation from other levels could help to ascertain more specific detail around the good practice taking place at this level (especially for CertHE, DipHE and Level 4 and 5 NVQs where gaps were particularly evident). This should also focus on gathering more feedback on provision outside of Apprenticeship delivery.

- In relation to the above, and given that there was evidence of professional body/industry federation qualifications gaining traction across several sectors, more in-depth evaluation of these types of qualification and their delivery would be informative. This would include why this type of qualification is gaining in popularity among employers at level 4 and 5 – particularly in light of the development of Higher Apprenticeships, and the move by some professional bodies to redevelop their content specifically in line with Apprenticeship Standards.

- There appeared to be less level 4 and 5 evidence available in the literature in relation to the Business, ICT and Digital, and Creative and Cultural sectors. It is notable that these were also the three sectors that contained a plethora of sub-sectors, with quite varying perceptions and requirements about qualification and training needs within them. As level 4 and 5 qualification take-up in these sectors can be high (particularly Business), and they are priority areas for DfE, it may therefore be worthwhile considering case study research focusing at sub-sector

level so that rich and informative examples can be developed to enable a better understanding of the practices that are successful in the qualification design and delivery across these areas.

9.8 Key points for consideration

- The sheer range of terminology, qualification types, delivery styles and provider types at level 4 and 5 creates a landscape difficult to navigate – potentially impacting on the ability for learners and employers to identify the specific training pathways most appropriate to their needs. All sectors reported a perceived lack of information available on qualifications at level 4 and 5 and the range of progression routes available. Clearer information setting out the differences between qualifications/routes, consistent terminology and definitions at level 4 and 5 may help assuage the confusion felt by some.

- Accreditation is important in some sectors for credibility (such as a sector body requiring individuals to hold a specific qualification at level 4 or 5 in order to meet industry regulations). In these cases, the qualifications are highly regarded and learners are more likely to access a qualification, whilst employers will actively look for it. However, accreditation or delivery by a professional body does not automatically mean that all content is relevant - the lack of published literature that independently evaluates professional qualifications at this level makes this difficult to assess.

- Employers are not always aware of qualifications available at level 4 and 5 and their content. Therefore, some qualification types appear to be less highly regarded within a sector as a result (rather than the qualifications themselves not containing valuable content). This presents issues around promotion and sustained employer engagement. Due to the varying sector perceptions of level 4 and 5 qualifications, tailoring promotional messages to local/employer need would be advantageous and may increase take-up.

- For qualification design, it was noted throughout the literature and interviews that it was important that the needs, viewpoints and expectations of different stakeholder types were managed effectively. From the evidence gathered, it appeared that currently the balance in this process tended to be weighted at times towards the qualification development team, with employers perceived by some providers/organisations as unable to articulate their needs using the terminology appropriate to the process. Although employers need to be as clear as possible in communicating their needs, this also suggested that qualification development teams should find ways in which to ensure that feedback was being taken on board in such a way that instilled mutual confidence across stakeholder types. To help address this, the following were noted throughout the literature review as aspects of effective qualification design:

- **Communication**: openness and clarity, enabling all stakeholders to ask questions and feel comfortable to do so; for qualification development teams to find ways to show employers how their feedback is converted into technical language and how this remains connected to the overall agreed vision for the qualification; jargon-free information for employers about the development process and what the development team is looking for would be useful for this aspect.

- **Inclusiveness**: this includes clear explanation and acknowledgement to all as to the role each stakeholder plays, and the positive collaboration this can create, i.e. employers have valuable expertise from industry, and qualification development teams have the knowledge to create appropriate technical specifications. Employers could be invited to review draft specifications that includes clear explanation of where their feedback has been used to create content.

- Providers/awarding organisations should ensure a continuous review cycle for qualification design, to ensure that content and delivery remains relevant, reflective of technological/business change, and up-to-date with employer needs.

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