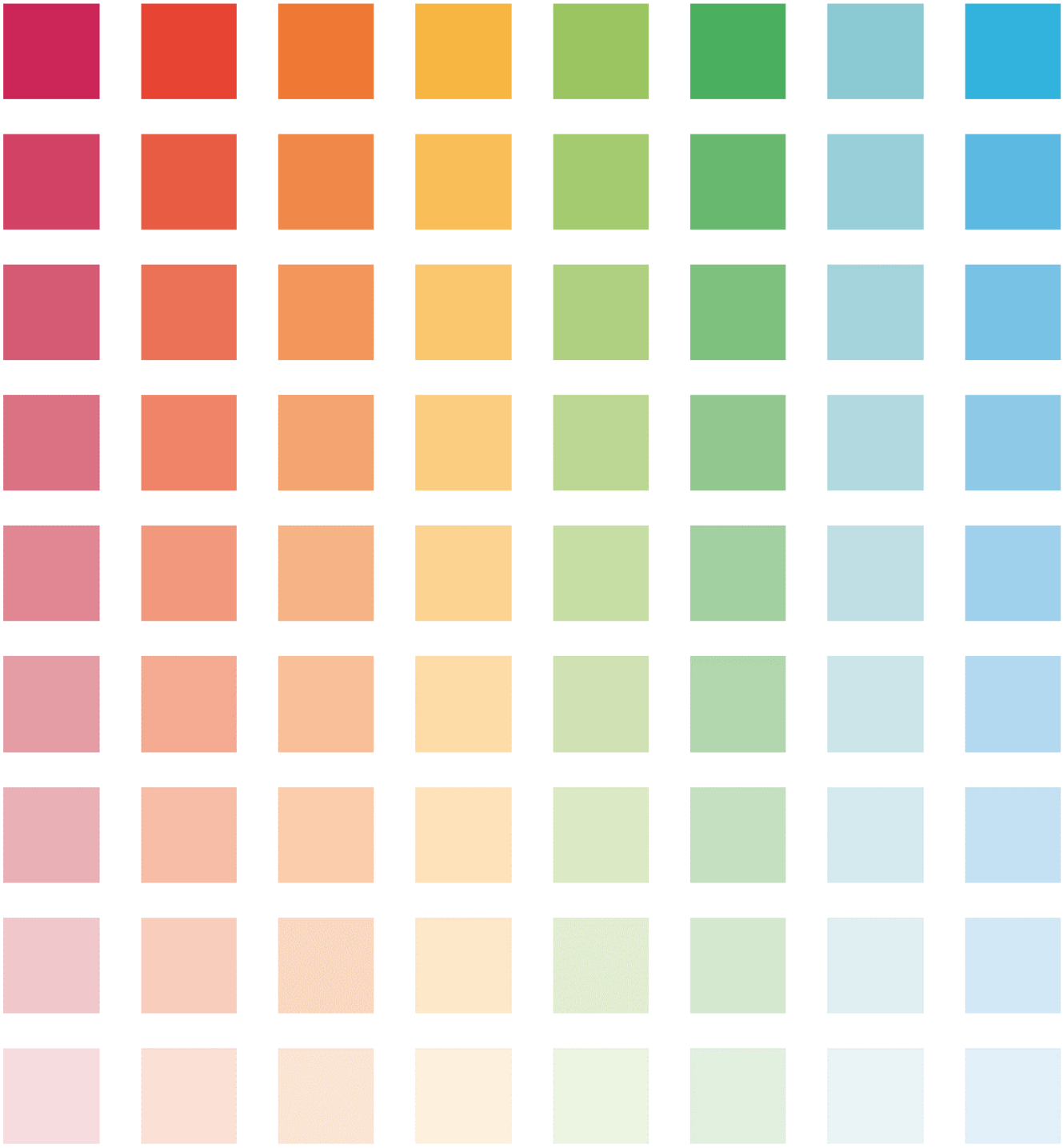

Towards a Universal Framework for Essential Skills

A Review of the Skills Builder Framework

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Contents

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Executive Summary

Essential skills are a key component of employability

The importance of developing a set of essential skills for individuals to thrive in education, employment and entrepreneurship has been long documented, from the CBI's landmark 1989 report[1] through to the Taylor Review in 2017[2].

These are the skills which 'almost everyone needs to do almost any job. They are the skills that make specific knowledge and technical skills fully productive'.[3] (UKCES, 2009)

Too often this is an area where terminology is confused and confusing. From the outset, it is important to differentiate between:

- *Knowledge:* content which can be recalled, understood and explained
- *Character attributes:* the choices individuals make, manifested as attitudes or behaviours
- *Skills:* the ability to successfully enact a repeatable process

Whilst all three are critical to employability, our focus here is on the element of skills, within which we define three broad types of skills:

- *Technical Skills:* those skills which are specific to a particular sector or role, sometimes drawing off a particular body of knowledge. These skills are not easily transferred beyond the sector or role to which they relate.
- *Essential Skills:* those highly transferable skills that everyone needs to do almost any job, which support the application of specialist knowledge and technical skills
- *Basic Skills:* these are literacy and numeracy, and basic digital skills.

The challenge of this report therefore is to identify those skills which can be classed as essential skills.

The challenge of building them

There have been efforts in the education system and around employment to build these skills more effectively. However, these efforts are widely perceived to have fallen short. After a decade of regularly reviewing employers' views of those they recruit, the CBI's 2018 Education & Skills Survey still found that employers had real concerns about their employability.

At the same time, the importance of these skills is growing. Nesta's Future Skills work in 2017 highlighted that the skills that would support a long and prosperous life in the future were those that could not be automated[4].

[1] Nicholson, B. (1989) *Towards a Skills Revolution: Report of the CBI Vocational Education and Training Taskforce*, CBI
[2] Taylor, M. (2017) *Good Work: The Taylor Review of Modern Working Practices*
[3] UKCES (2009) *The Employability Challenge: Full Report*, UKCES
[4] Bakhshi, H., Downing, J.M., Osborne, M.A. & Schneider, P. (2017) *The Future of Skills: Employment in 2030*, London: Pearson and Nesta

No single approach has ever reached a tipping point in adoption

Within our focus on essential skills, there are myriad proposed 'frameworks'. The UKCES in 2009 reviewed dozens of such sets. Although the language varies, as we will see, there is remarkable consistency when it comes to the broad themes of what is meant by essential skills: they broadly cover interpersonal, communication, self-management, and creative problem-solving skills.

The challenge is that none of these proposed approaches have ever achieved the three critical attributes to become universally used as a framework for essential skills. Such a framework would need to have:

- *Clarity:* It must be simple enough to be useful in a range of different contexts and to be used by individuals who are not experts. It must not be easily misunderstood or misinterpreted.
- *Measurability:* It should be possible to use the Framework to reliably understand the existing skillset of individuals, and to measure growth.
- *Authority:* The Framework should be backed by evidence and by organisations who give it credibility.

Finally, to become a common approach, such a Framework would need to have sufficient widespread usage in a wide variety of settings so as to become a common language.

A universal framework would bring meaningful benefits:

- *Ensuring alignment between education and employers* in terms of the employability skills that employers actually need, and what schools understand and are equipped to build.
- *Supporting the process of recruitment* through increased transparency of skills. This would help employers to assess more accurately the competences of new recruits, who would have clarity on what they are being assessed.
- *Facilitating upskilling and reskilling within the workplace* by increasing the clarity of what progression looks like in these foundational skills.
- *Creating a common vocabulary* for schools, colleges, universities, employers and employees to use when discussing skills with one another.

Many existing approaches blend skills, characteristics and knowledge together. Some are little more than sets of broad categories which cannot support measurability. Others lack the specificity to be useful. Most are designed with a very narrow purpose. None have achieved the universality needed to really make a breakthrough in this space.

The Skills Builder Framework

There is no perfect framework when it comes to these essential skills. The question must instead be whether we can agree on a framework which passes the three tests of clarity, measurability, and authority.

There are also inevitable trade-offs between the different characteristics – one might have to trade-off a degree of sophistication and nuance in order to achieve clarity to the normal user; measurability might mean that some broader but more subjective attributes cannot be included.

Over the last four years the Skills Builder Framework has been developed as such a framework, designed to make sense of how essential skills are progressed. It takes each of eight essential

skills, and breaks them down into sequential steps from expectations of children to a high level of mastery.

It was initially designed for use in the classroom or youth settings, as a tool to break down essential skills into teachable, measurable steps that could be used with children and young people.

During development it benefited from the input and engagement of more than sixty individuals and organisations, and was piloted in twenty settings.

The Framework is now being used in more than 700 organisations who are part of the Skills Builder Partnership: including 520 schools and colleges, 130 employers, and 50 other skills-building organisations. It has been adopted by leading national programmes including the government-backed Careers & Enterprise Company, the National Citizen Service, and endorsed by the CBI. This year, more than 250,000 children and young people will build their essential skills using the Skills Builder approach.

The Skills Builder Framework is fulfilling the three criteria for success in its context, which is to support the development of essential skills for children and young people. To be used more broadly as a framework for employability, it must also be usable beyond that, into apprenticeships, higher education and employment. This report captures the process of testing the Framework for that broader purpose.

Evaluating the Framework

For the Skills Builder Framework to become a universal tool, it must be sufficiently comprehensive to be used to support all the different stages of employability. One line of investigation is therefore to ensure that the Skills Builder captures those essential skills which can be found in four areas:

- Generic and specific employability frameworks
- Job advertisements
- Apprenticeship standards
- Graduate attributes outlined by higher education institutions

These four different lenses help to illuminate the extent to which the Skills Builder Framework is comprehensive in capturing the essential skills, highlighting any gaps.

The second perspective for evaluation is whether the contents of the Skills Builder Framework are relevant – that is, are any elements unnecessary?

Lens 1: Employability Frameworks (Chapter 3)

The goal of this part of the research was to understand the extent to which the Skills Builder Framework captures the skills and sub-skills laid out in some of the most widely cited employability frameworks:

- The six generic essential skills frameworks that were included in this exercise were: O*Net, UKCES, Personal Learning & Thinking Skills (PLTS), the CBI employability framework, Deloitte's Future Skills, and the EntreComp Framework.
- We also reviewed a sample of four frameworks used by individual organisations. These were: Chartered Global Management Accountant (CGMA) framework, Organisation for Economic Co-operation and Development (OECD) Competency Framework, Civil Service Competency Framework, and the KPMG Behavioural Capabilities.

In terms of *comprehensiveness*, we found that the Skills Builder Framework covered most of the skills called for. Some gaps were highlighted for further exploration, particularly networking, strategic thinking and client care. These were reviewed in Part 3.

In terms of *relevance*, we found that there was strong alignment between the contents of the Skills Builder Framework and what was called for in other frameworks. While not every step was called for in every framework, at least 3 frameworks called for each step, and the average match was 83%.

Overall therefore, the Skills Builder Framework is near comprehensive vis-à-vis other employability frameworks, and there is evidence for the relevance of both the eight skills and the steps that make them up. This analysis also demonstrated that the Skills Builder Framework has a higher level of detail and nuance than the other frameworks reviewed which indicates that it could be valuable beyond those frameworks previously created.

Lens 2: Essential Skills and Job Advertisements (Chapter 4)

One of the key parts of employability is being able to obtain employment. While existing employability frameworks are useful as a generalist overview, this part of the research seeks to better understand what employers prioritise when they come to actually recruit.

There is already some helpful recent work in this field – for example, from Nesta and the City of London. This gives some context as to how employers rank the different essential skills when making employment choices.

In this chapter we explored the aggregation of job advertisement data from Burning Glass Technologies to identify how those skills featured in those advertisements by employers compare to those set out in the Skills Builder Framework. We looked at the aggregated results of 4.2 million job adverts from all sectors of the UK in the previous 12 months.

We found that the essential skills laid out in the Skills Builder Framework are consistently called for by employers across all educational and experience levels. This is a helpful indication that what employers are actually recruiting for is in line with the employability frameworks previously reviewed.

However, one limitation with deeper analysis is that it is unclear whether the absence of a skill being mentioned is because it is implicitly assumed to be held. There is also an absence of granular data that allows a deeper understanding of what the expectation of ‘good’ looks like with regard to these skills.

Therefore, while this piece further corroborates the essential skills which employers expect, direct engagement with employers will be important to better understand the expectations that employers attach to these broad skills when recruiting.

Lens 3: Essential skills and apprenticeships (Chapter 5)

One area which does have greater promise for building a more nuanced understanding of essential skills are the apprenticeship standards. Apprenticeships are a growing development route – both for young people entering the workplace for the first time, but also for those who are upskilling or reskilling.

Each apprenticeship is underpinned by a standard, developed by employers, which outlines the skills, knowledge and behaviours that individuals are expected to be able to demonstrate to

successfully pass the apprenticeship. These are therefore a potentially helpful source of insight as to employer expectations around essential skills.

Currently, these standards are not in a format that lends itself to easy aggregation and analysis, so the approach was to take ten of the most widely used apprenticeship standards, and to analyse any references to the essential skills. In doing so, we can see the extent to which the Skills Builder Framework is comprehensive and relevant in this area.

We found that in this context the Skills Builder Framework continues to be near *comprehensive*, with ten sub-skill mentions that are only partly addressed by the Skills Builder Framework. Most of these are consistent with those already highlighted by the combination of employability frameworks reviewed in Chapter 3 and the job advertisement data in Chapter 4.

There is greater variety in the individual apprenticeship standards in the extent to which all of the sub-skills outlined in the Skills Builder Framework are *relevant*. We should also expect that the level of mastery required in each essential skill will vary according to job role and responsibilities, and the level of the role.

There are some indications that on average higher level apprenticeship qualifications require higher steps on the Skills Builder Framework, and that the relative importance of essential skills varies by role in an intuitive way. Exploring these areas in greater depth would require a much more comprehensive dataset though.

Finally, this work has highlighted that a universal framework for essential skills is likely to be valuable in the context of apprenticeship standards – both to make more explicit those expected skills which are often only implicit, and to add a helpful level of detail to what can otherwise be very broad skill types.

Lens 4: Higher Education and Graduate Attributes (Chapter 6)

The final lens that we wanted to bring to the question of whether the Skills Builder Framework could act as a universal framework was that of higher education. Particularly, to understand the extent to which the Skills Builder Framework could be used in the context of universities and higher education.

Universities and higher education institutions increasingly set out the broader development goals for their students through statements of outcomes known as graduate attributes. We will review a sample of these graduate attributes created or used by universities both in their careers departments to support employability, and those that link to success in higher education.

To achieve this we initially included three reviews of graduate attributes. This included all attributes listed in reviews from the Higher Education Academy (HEA), the Confederation of British Industry (CBI), and the Quality Assurance Agency for Higher Education (QAA).

We then reviewed eight individual frameworks as examples used by individual higher education institutions. These were: Aberdeen University, Bath Spa University, Cambridge University, Oxford Brookes University, Glasgow University, University of the Arts London, University of West Scotland and the University of York.

In line with our approach in Chapters 3 and 5, we compared from two different perspectives:

- *Is the Skills Builder Framework comprehensive?* That is, does it include all of the skills and sub-skills which were referenced in the graduate attributes?

- *Is the Skills Builder Framework all relevant?* That is, to what extent are the skills and sub-skills referenced in the Skills Builder Framework also reflected in those other graduate attributes? As higher education is focused at higher levels of qualifications, we might not expect explicit mention of earlier steps.

We found that the Skills Builder Framework is *comprehensive* in including those skills and sub-skills identified in the comparator graduate attribute frameworks. Some gaps in the Skills Builder Framework were identified, most notably skills associated with management of self and task (professionalism, time management, efficiency) as well as some which are intuitively aligned with higher education, like being able to challenge and defend different perspectives.

In terms of *relevance*, the majority of skills and sub-skills either fully or partially align: with 71% (42/59) of Skills Builder sub-skills identified in over half of the University graduate attribute frameworks. Only three (5%) were not explicitly stated.

Generally, the Skills Builder Framework is more detailed than those skill descriptors in the graduate attribute frameworks. This is particularly evident across the 'Creativity' and 'Listening' skillsets which demonstrate a weaker alignment.

Synthesis and key insights

Overall, this first stage of work gave greater confidence that the Skills Builder Framework has the potential to be extended into use into employment and to act as a universal framework.

One of the critical changes that was needed was to broaden the language to make it relevant beyond the educational context and to ensure it resonates in other settings.

In terms of relevance, we found that although creativity and leadership were less well represented through the different lenses that we applied they were still present. There were no sub-skills without representation in the analysis As such we will not be looking to remove any parts of the current Skills Builder Framework.

Beyond the skills themselves, we also found that there were calls for earlier steps in employment than we had originally hypothesised. This was particularly highlighted in the apprenticeship standards. As such, the universal framework should be for the full range of skill steps.

In terms of comprehensiveness, the terms that were missing from each area were aggregated. In light of the gaps or omissions that have been highlighted, there were four possible approaches to resolve these: deciding they were not material; adding a new skill alongside the current eight in the Skills Builder Framework; adding additional skill steps; or changing or expanding some of the steps to fill these gaps

For some of the omissions, it was felt that broadening the language and examples that were given in the Framework would fill the gaps.

The ideas of adding an additional skill or additional skill steps were discussed but dismissed.

Instead, the decision was made to adapt the existing Framework through changing some of the wording in the steps and replacing a couple of them so that all the gaps were explicitly filled. At the end of this process, we have an expanded version of the Skills Builder Framework with the potential to be used universally

Testing with employers

Having created an updated version of the Skills Builder Framework, the second phase of the research was to further test and evaluate this Framework with employers. This was vital to ensure that the Framework was not only intellectually robust, but also practically useful.

A series of five roundtables were convened across the country, including more than thirty individuals. These individuals were deliberately chosen to represent a wide range of sectors and perspectives on the Framework and its potential usefulness. Attendees included HR professionals, line managers, recruitment specialists, apprenticeship managers and employability trainers.

Each roundtable was structured around several key questions:

- What works well out of the Framework as presented?
- Is the Framework comprehensive and relevant?
- Is the language in the Framework appropriate and accessible?
- What is the pattern of expectation around the level of competence in essential skills according to role or seniority?
- How do you currently assess and develop essential skills?
- How could the Skills Builder Framework be useful to you?

Overall, we found that participants regarded the proposed Framework as able to provide clear guidance on how to build the eight essential skills step by step. The proposed Framework was celebrated as a catalyst to 'level the playing field' for candidates and employees from disadvantaged backgrounds throughout all phases of employment.

Generally, the language used in the Framework aligned with employers' expectations for apprentice, graduate and entry-level roles. Variances in terminology and the linear progression of some skills were discussed in depth and several recommendations were made. For senior leadership and management roles the latter steps for each skill were deemed appropriate, with some potential changes to language.

Fifteen potential use cases were identified, spanning recruitment, skill assessment and professional learning and development. These expanded upon the initial ideas of the authors and reflected a real enthusiasm from participants to put the Framework into action.

Suggestions were also made about additional materials that could help to implement the Framework. These tools and resources included a detailed handbook for employers to understand how to build the skills themselves, self-assessment and reflective tools, and reosurces to support implementing the Framework to support the recruitment process.

Final adaptations: A universal framework

This second phase presented fifteen recommendations for further changes. Most relate to language changes, although there are some minor additions which have also be made.

One significant change was the decision to shift from a focus on pure ability captured by the 'I can' statements to instead focusing on 'I do' statements. This reflected the shift of focus of the Universal Framework from supporting and structuring learning and progression in the skills, to ensuring that they those skills are practically used and applied in employment and wider life.

With these changes, it is possible to present a final Universal version of the Skills Builder Framework. It is designed and tested to work beyond compulsory education, whilst maintaining the critical links back into how the Framework is already being applied in its current form.

Where next

Over the course of this research project we learnt a great deal and have been able to create a final Universal Framework that already achieves two of the three objectives that we set out:

- *Clarity:* The Framework must be easily understood and usable in different settings
- *Measurability:* The Framework must allow for easy understanding of the current skills of individuals and scope for growth

The Universal Framework certainly has the potential to achieve the third objective too: that of ensuring that it has *Authority*, not least because of the engagement and backing of the organisations in the Essential Skills Task Force: the CIPD; the CBI; the Gatsby Foundation; Business in the Community; the Careers & Enterprise Company; the EY Foundation; and the Skills Builder Partnership.

To fully achieve that potential though will require a lot more work to build up a growing group of employers and higher education providers, to build the framework into standards and policy definitions, and to, over time, build individual awareness of their own skills through the lens the framework offers.

There is much to be done, but this Universal Framework gives us the foundation we need to do it – and to ensure everyone builds the essential skills to thrive.

Chapter 1: What are essential skills, and why do they matter?

Chapter Summary:

- In this report, we focus on essential skills in the context of employability.
- Employability is about the capability to gain employment, maintain employment and, when necessary, to obtain new employment.
- One component part of employability is the assets that individuals possess, made up of their knowledge, character attributes, and their skills.
- Within skills, we identify basic skills (numeracy, literacy, digital literacy), technical skills which are sector or role specific, and then a middle layer of essential skills.
- We define these essential skills as *those highly transferable skills that everyone needs to do almost any job, which support the application of specialist knowledge and technical skills*.
- There is strong evidence that these skills matter: at the stage of gaining first employment out of school or college; in individuals' career progression; and when seeking further employment too.
- There are real challenges though when it comes to these skills – particularly how to identify, measure and build them further.
- To support all these objectives, there are repeated calls for a consistent, stable framework to define and break down those skills in a range of settings.

(a) Essential skills: What are they, and where do they fit in?

The starting point for this report is the notion of employability and exploring the role that essential skills can play in supporting employability. We will see later on that these same skills have an important role to play in education and wider life too, but we put that aside for now.

Employability

While definitions of employability vary, one regularly cited is 'having the capability to gain initial employment, maintain employment and obtain new employment if required'[5]

In the same paper, it is asserted that 'for the individual, employability depends on:

- their assets in terms of the knowledge, skills and attitudes they possess,
- the way they use and deploy those assets,
- the way they present them to employers, and
- crucially, the context (e.g. personal circumstances and labour market environment) within which they see work.'[6]

[5] Hillage, J. and Pollard, E. (1998) *Employability: Developing a Framework for Policy Analysis*, Research Brief RR85, Nottingham: Department for Education and Employment.
[6] Ibid.

Our focus

For the purpose of this paper, we are focused primarily on a sub-set of the assets that individuals build. However, we will see that these essential skills also support the use and deployment of some of the wider knowledge and technical skills that individuals hold. They also support how an individual can present their assets to an employer.

Digging into those assets, we see three distinct types of assets that employers care about:

- *Knowledge:* content which can be recalled, understood and explained
- *Character attributes:* the choices individuals make, manifested as attitudes or behaviours
- *Skills:* the ability to successfully enact a repeatable process

This is consistent with other definitions put forwards or adapted by organisations including the CBI who defined employability as 'a set of attributes, skills and knowledge that all labour market participants should possess to ensure they have the capability of being effective in the workplace'[7]. Similarly, from the perspective of higher education, Yorke & Knight (2006) define employability as 'a set of achievements – skills, understandings and personal attributes – that make individuals more likely to gain employment and be successful in their chosen occupations'[8].

Whilst knowledge, attributes and skills are all critical assets for employability, our focus here is on the element of skills, within which we define three broad types:

- *Technical Skills:* those skills which are specific to a particular sector or role, sometimes drawing off a particular body of knowledge. These skills are not easily transferred beyond the sector to which they relate.
- *Essential Skills:* those highly transferable skills that everyone needs to do almost any job, which support the application of specialist knowledge and technical skills.
- *Basic Skills:* these are broadly defined as literacy and numeracy, and basic digital skills[9].

This distinction is not a universal taxonomy. For example, the CBI have at times combined essential and basic skills. However, they maintain the distinction between specific technical skills and the 'suite of generic employability skills that equip workers to adapt' in a changing economy[10]. We will see in Chapter 3 that the universal importance of literacy and numeracy across all definitions of being employable means that there is no risk of separating basic and essential skills.

This report focuses on what we are calling essential skills. However, it is important to acknowledge that this group of skills is referred to in other ways, including:

- Core Skills
- Key Skills
- Functional Skills
- Skills for life
- Employability Skills
- Generic Skills

[7] Confederation of British Industry (CBI) (2007) *Time well spent*, CBI [https://www.educationandemployers.org/wp-content/uploads/2014/06/time-well-spent-cbi.pdf]
[8] Yorke, M. & Knight, P. (2006) *Embedding employability into the curriculum*. York: Higher Education Academy
[9] This is the approach taken by the Department for Education, among others who set out expectations around Level 2 English and Maths, as well as 'essential digital skills'. These can be found at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/738922/Essential_digital_skills_framework.pdf
[10] Confederation of British Industry (2007) *Time Well Spent: Embedding Employability in Work Experience* – Employment Competencies for Students.

- Enterprise Skills[11]
- Soft Skills[12]
- Transferable Skills
- Transversal Skills

Where the research findings of others are referenced, we will generally use the term that they used in their research.

We are using the term of **essential skills** for three reasons:

- Firstly, whilst these are essential skills for employment they are broader than that when applied to adults, as these are skills which also support success in other areas of their lives. For example, in hobbies, personal decisions and life planning, and relationships. These skills are sometimes referred to as life skills or soft skills to reflect this broadness.
- Secondly, these skills also play a vital role in education, and through the stages of child development. This continuity is a huge opportunity, but one that would be undermined if the language of employability was introduced to the parents or teachers of children as young as 3 years-old. In this context, the skills might alternatively be known as enterprise skills, thinking skills, or 21st century skills.
- Thirdly, even beyond compulsory education in higher education these are skills that universities are increasingly calling for[13] and developing[14]. Here, the skills are sometimes referred to as graduate skills or study skills. This is an area that we will explore further in Chapter 6 of this report.

For the rest of this report we will be defining essential skills as:

> *Those highly transferable skills that everyone needs to do almost any job, which support the application of specialist knowledge and technical skills*

This is consistent with the definition put forward by the UK Commission for Employment and Skills in their landmark report, *The Employability Challenge*[15].

With the scope of this paper clarified we can move onto the more engaging question of why these essential skills matter.

(b) Why do essential skills matter?

In the context of employability, the essential skills matter a great deal and at every stage of the journey.

(1) Importance to gain first employment

There is a broad consensus that for young people leaving school, these skills matter. Describing these skills as 'life skills', the Sutton Trust (2017) found that 94% of employers, 97% of teachers and 88% of young people saw these skills as being at least as important as academic grades to

[11] UKCES (2009) *The Employability Challenge: Full Report,* UKCES
[12] Institute of Student Employers (ISE) (2018) *ISE 2018 Development Survey: Trends, benchmarks and insights*
[13] For example, University of Cambridge (2017) *Key skills for undergraduates* [www.transkills.admin.cam.ac.uk/skills-portal/key-skills-undergraduates]
[14] Artess, J., Hooley, T., & Mellors-Bourne, R. (2016) *Employability: A Review of the Literature 2012-16*, Higher Education Academy.
[15] UK Commission for Employment and Skills (UKCES) (2009) *The Employability Challenge*

students' future success[16]. Indeed, more than half of teachers surveyed (53%) felt that these skills were *more* important than academic achievements in future success.

Since 2008, the CBI has been conducting an annual survey of employers to garner an insight into employers' perceptions of those that they recruit as school- or college-leavers and as graduates[17]. In the most recent 2018 report they found that 60% of employers ranked broader skills such as resilience, communication and problem-solving as being among the top three priorities when it comes to what they seek in school and college leavers. While this is less than the 70% of employers who rate the basic skills of literacy and numeracy among their top three considerations, it exceeds the 51% who would include qualifications in the top three[18].

This is reflected in analysis from the Institute for Student Employers (ISE) who carried out an annual review of their members' perceptions of what they term as 'soft skills', but which closely align to our definition of essential skills. Following a survey of 138 employers, they found that employers had high expectations of competence for graduate recruits, although these expectations varied considerably across the nine skills that they identified. For example, 91% of employers expect a high level of competence in teamwork including the ability to work well with others, to contribute to discussion and motivate others. Similarly, 81% of employers expected problem-solving competence. On the other hand, only 19% expected graduate recruits to have the ability to manage upwards.

The essential skills shortfall

In the ISE's 2018 report, they highlight that there is a consistent gap between employers' expectations of graduate skills and those that they experience. For example, a 21 percentage-point gap between expectations of competence in communication and what was perceived by employers[19]. The perception of the proportion of apprentices who have a good level of competence in these skills is consistently lower than for graduate recruits.

This mismatch between employer expectations and their perception of these essential skills in those they recruit into their first roles in employment is frequently cited[20]. The Sutton Trust found that 68% of employers said that 18-year-old school leavers lack the skills to thrive in the workplace[21].

This is reflected by the CBI's 2018 survey where 38% of employers were dissatisfied with the essential skills that young people demonstrated. A useful contrast here is that only 9% were dissatisfied with the academic results and qualifications of young people, and 25% with their basic literacy and numeracy skills[22].

Similarly, in a survey of over 91,000 employers, the UK Commission for Employment and Skills (UKCES) found a sizeable proportion felt applicants for new jobs lacked skills including: managing their own time and prioritising tasks (47%); working in teams (33%); and managing their own feelings, and the feelings of others (32%)[23].

[16] Cullinane, C. & Montacute, R. (2017) *Life Lessons: Improving essential life skills for young people*, The Sutton Trust. [https://www.suttontrust.com/wp-content/uploads/2017/10/Life-Lessons-Report_FINAL.pdf]. The terms used were: self-control, confidence, communication, motivation, and ability to cope with stress.
[17] CBI (2008) *Taking stock: CBI education and skills survey 2008*, CBI
[18] CBI (2018) *Educating for the Modern World: CBI / Pearson Education and Skills Annual Report 2018,* CBI: London
[19] Institute of Student Employers (ISE) (2018) *ISE 2018 Development Survey: Trends, benchmarks and insights*
[20] For example, House of Commons, Work and Pensions Committee (March 2017) *Employment opportunities for young people. Ninth Report of Session 2016-17*
[21] Cullinane, C. & Montacute, R. (2017) *Life Lessons: Improving essential life skills for young people*, The Sutton Trust. [https://www.suttontrust.com/wp-content/uploads/2017/10/Life-Lessons-Report_FINAL.pdf]
[22] CBI (2018) *Educating for the Modern World: CBI / Pearson Education and Skills Annual Report 2018,* CBI: London
[23] UKCES (2016) *Employer Skills Survey 2015: UK Results – Evidence Report 97,* London: UKCES

And as a final example, McKinsey & Company found that the skills which employers value but which they believe young people lack include spoken communication skills, work ethic, teamwork and problem solving[24].

This employability gap is often cited with reference to the rate of youth unemployment, with 16-24 year-olds four times as likely to be unemployed as the broader population. Research from the EY Foundation has also highlighted that young people often perceive themselves to have a low level of competence in essential skills. For example, just 25% felt they were good at communicating, only 15% believed they were good at presenting, and just 14% good at getting people to work together in a team[25].

There are also implications for social mobility, with evidence that these skills are less likely to be developed to a high level for students from more disadvantaged backgrounds[26].

The response from employers

The importance of these essential skills is reflected in a growing level of employer investment in their development. Based on an ISE survey of 105 employers in 2017, the average graduate receives 11 days of soft skill training across a multi-year development programme[27]. Interestingly, there is a strong trend of increases in investment in developing these skills with an increase from an average of 8 days of such training two years ago.

There are also calls for increasing engagement from employers with education, to help instil these skills at an earlier stage, before young people seek to join the employment market. That has included calls, from the CBI and others, to extend business engagement into the primary phase (5-11 year-olds)[28].

The response from universities

There has been growing emphasis from universities on the importance of developing employability as a core outcome of higher education[29]. This has been partly driven by market changes in the higher education system in England.

There continues to be a debate in higher education about the balance between higher education's purpose to generate knowledge for its own sake, and the achievement of particular graduate outcomes.

Overall though, there is a much greater expectation that universities should be supporting the development of employability skills. This includes: embedding employability into the curriculum; offering extra-curricular and co-curricular opportunities for students; building links with employers; supporting students to develop core attributes; supporting students' capacity to articulate their skills;

[24] Mourshed, M., Patel, J., & Suder, K. (2014) *Education to Employment: Getting Europe's Youth to Work*, Washington DC: McKinsey Center for Government
[25] EY Foundation (2016) *An Age of Uncertainty: Young people's views on the challenges of getting into work in 21st century Britain* EY Foundation & Chartered Management Institute
[26] Cullinane, C. & Montacute, R. (2017) *Life Lessons: Improving essential life skills for young people*, The Sutton Trust. [https://www.suttontrust.com/wp-content/uploads/2017/10/Life-Lessons-Report_FINAL.pdf]
[27] Institute of Student Employers (ISE) (2018) *ISE 2018 Development Survey: Trends, benchmarks and insights Page 24*
[28] BITC, Prudential & CBI (2016) *Principles and Practice for Primary Engagement* BITC. [Accessed on 20/6/19 at https://www.bitc.org.uk/sites/default/files/primary_education_engagement_toolkit.pdf]
[29] Artess, J., Hooley, T., & Mellors-Bourne, R. (2016) *Employability: A Review of the Literature 2012-16*, Higher Education Academy.

and investing in formal careers services[30]. Some of this work draws off the Embedding Employability in Higher Education framework put together by the Higher Education Academy[31].

For example, many universities now define a set of graduate attributes, including what we would recognise as essential skills. Some examples of these are explored in greater depth in Chapter 6.

The response in education

There has been a long-standing sense that the development of essential skills in the education system has been inadequate to the task. In the Sutton Trust's survey of teachers, already mentioned, 72% of teachers felt that their school should increase their focus on these skills. While 75% of students saw the link between these essential skills and future employability, only 20% responded to the survey that the school curriculum helps them 'a lot' in their development[32].

There have been different efforts made through the education system over the last twenty years to fill this gap, including:

- *Enterprise education:* The 2002 Davies Review set out a structure for building enterprise capability in all young people[33]. This was followed by considerable investment by the government through to 2010. However, an evaluation commissioned in that year by the Labour Government found that confusion about goals and outcomes persisted and evidence of impact was 'patchy'[34].
- *Personal Learning and Thinking Skills (PLTS):* In 2004 the Tomlinson Review of 14-19 education proposed the development of new Diploma qualifications and the movement away from GCSEs and A-Levels[35]. One of the drivers was that "too many young people leave education lacking basic person skills", such that "employers [are] having to spend large sums of money to teach the 'basics'". A key component of the Diplomas was the Personal Learning and Thinking Skills (PLTS) which are reviewed in Chapter 3. Unfortunately the Diplomas themselves were wound down having never achieved their larger goals.
- *Social and Emotional Aspects of Learning (SEAL):* This initiative, first piloted in 2004-06 was targeted at developing some critical personal and social skills: self-awareness, managing feelings, empathy and social skills[36]. By the time it was evaluated in 2010, it was being used in 90% of primary and 70% of secondary schools. Unfortunately, there was limited evidence of consistent impact[37].
- *Character Education:* Launched in 2015 by Nicky Morgan, the Character Awards were intended to shine a light on those schools and organisations building wider traits like respect, aspiration, responsibility, determination and others in their students[38]. These were

[30] Ibid.
[31] Higher Education Academy (2016) *Framework for Embedding Employability in Higher Education* [https://www.heacademy.ac.uk/system/files/downloads/embedding-employability-in-he.pdf]
[32] Cullinane, C. & Montacute, R. (2017) *Life Lessons: Improving essential life skills for young people*, The Sutton Trust. [https://www.suttontrust.com/wp-content/uploads/2017/10/Life-Lessons-Report_FINAL.pdf]
[33] Davies, H. (2002) *A Review of Enterprise and the Economy in Education*, Norwich: HM Stationery Office
[34] McLarty, L., Highley, H. and Alderson, S. (2010) *Evaluation of Enterprise Education in England,* London: Department for Education
[35] Tomlinson, M. (2004) *14-19 Qualifications and Curriculum Reform: Final Report of the Working Group on 14-19 Reform,* Department for Education and Skills
[36] Humphrey, N., Lendrum, A. and Wigelsworth, M. (2010) *Social and emotional aspects of learning (SEAL) programme in secondary schools: National evaluation*, Department for Education
[37] Ibid.
[38] Morgan, N. (2015) *Winners of the Character Awards announced*, Department for Education [Accessed 20/6/19 at www.gov.uk/government/news/winners-of-the-character-awards-announced]

discontinued when Nicky Morgan was replaced as Education Secretary, but there has been recent talk of their revival[39].

However, it is argued elsewhere that such initiatives have failed to fill the gap for several reasons[40] [41]:

- A confusion between components of knowledge, skills and character and a lack of consistency in definitions.
- Insufficient tangibility or guidance in how to achieve the outcomes that were laid out.
- An absence of training or prioritisation to support teachers to become effective in building these skills
- A lack of recognition of these broader outcomes in the school inspection and accountability regimes
- Inadequate means of measuring and tracking such outcomes
- Limited resource to support initiatives or management capacity within schools and colleges
- Starting with children and young people too late to build the skills
- No consistent engagement of employers and other organisations

More recently, the introduction of the Careers & Enterprise Company in England has led to a renewed focus on ensuring a consistently strong approach to careers and employability across secondary schools and colleges. The Gatsby Benchmarks for good career guidance have been used to set a higher expectation of the programme of activity that should be undertaken, and has been built into statutory guidance[42].

Since 2018, the Careers & Enterprise Company has adopted the Skills Builder Framework as part of its employability outcome measures[43]. It is also using the Framework as its definition of employability as part of the work that is being piloted at primary school level[44]. The Skills Builder Framework is explored in full in the next Chapter.

Finally, the new school inspection framework from Ofsted also recognises the importance of broader personal development, particularly that 'the curriculum extends beyond the academic, technical or vocational' and that 'at each stage of education, the provider prepares learners for future success in their next steps'[45]. There is also an expectation that the provider's curriculum is coherently planned and sequenced towards cumulatively sufficient knowledge and skills for future learning and employment'[46].

[39] Hinds, D. (2019) *Education Secretary sets out vision for character and resilience* Department for Education [Accessed 20/6/19 at https://www.gov.uk/government/news/education-secretary-sets-out-vision-for-character-and-resilience]
[40] Ravenscroft, T. (2017) *The Missing Piece: The Essential Skills that Education Forgot* John Catt Publishing
[41] Millard, W., Menzies, L. and Baar, S. (2017) *Enterprise Skills: Teachability, Measurability and Next Steps*, LKMCo.
[42] Department for Education (2018) *Careers guidance and access for education and training providers: Statutory guidance for governing bodies, school leaders and school staff,* Department for Education
[43] Careers & Enterprise Company (2019) *Our Impact Measurement Tool*, Careers & Enterprise Company [Accessed 20/6/19 at https://www.careersandenterprise.co.uk/schools-colleges/our-impact-measurement-tool]
[44] Careers & Enterprise Company (2018) *Primary Fund Prospectus,* Careers & Enterprise Company
[45] Ofsted (2019) *The Education Inspection Framework,* Ofsted.
[46] Ibid.

(2) Maintain employment

Once in a role these skills continue to matter.

The UKCES reported biennially on employers' perceptions of the skills of their workforces. In their final report, they noted that skills gaps were most prevalent in what were traditionally known as unskilled or semi-skilled occupations. Of, these 'the most common skills deemed to be lacking among existing staff were people and personal skills relating to workload management and teamwork'[47].

Indeed, five of the six skills most commonly found to be wanting among staff already employed by the organisation were related to these 'people and personal skills'. As individuals sought to develop further, the lack of management and leadership skills was cited in relation to nearly 60% of all skills gaps.

Beyond the impact on individuals, other impacts of these skills gaps for the employer included: increasing staff workload; difficulties meeting quality standards; difficulties introducing new working practices; losing business to competitors; delays in introducing new products or services; and the need to outsource work.

Work by Development Economics linked to the Backing Soft Skills campaign run by McDonald's UK asserted that soft skills were worth over £88bn in Gross Value Added to the UK economy each year (6.5%). In the same analysis, they estimated that by 2020 at least 500,000 UK workers would be significantly held back by soft skill deficits[48].

There is also evidence that acquiring these essential skills can support the deployment of other skills. For example, there is evidence that soft skills support the transfer of technical skills and knowledge between other workers, increasing productivity. In a study of manufacturing in 2005, it was found that total factor productivity was positively related to the combination of what the authors deemed to be 'hard and soft skills'[49].

The importance of these skills are reflected in competency frameworks that are developed by individual organisations, some of which are reviewed in Chapter 3. What becomes clear is that employers explicitly emphasise the acquisition and development of essential skills when it comes to promoting their staff.

(3) Obtain new employment

Beyond initial recruitment into the workplace, these essential skills continue to play an important role. This is true today in traditional employment, is even more acute in modern employment and working practices, and essential skills look to become only more important in the future.

The biennial survey of employers from the UKCES explored the experience of employers seeking to fill vacancies, beyond those just recruiting individuals into their first roles.

They identified that skill gaps were leading to difficulties for employers in filling vacancies – including for those who had the technical skills and qualifications to be eligible for the role but were not considered as being suitable by employers on the basis of their essential skills. In those

[47] UKCES (2016) *Employer Skills Survey 2015: UK Results – Evidence Report 97,* London: UKCES
[48] Development Economics (2015) *The value of soft skills to the UK economy*, McDonald's UK.
[49] Haskel et al (2005) *Skills, human capital and the plant productivity gap: UK evidence from matched plant, worker and workforce data*

employers with at least one skill-shortage vacancy (i.e. a role that they would like to fill but felt unable to), skills frequently cited as lacking include:

- Personal organisation (47% lacking)
- Customer handling (39% lacking)
- Persuading and influencing (31% lacking)
- Managing or motivating other staff (30% lacking)

On this basis, it appears that developing these essential skills would make the difference between being in employment or not.

The recent review of working practices led by Matthew Taylor highlighted the changing nature of employment over time, including gig work[50]. Greater labour market flexibility means that individuals need to be better equipped with the skills to navigate a less clear and certain career route. However, it also makes investing in those skills more difficult – both because there is less time for an employer to support that investment, but also that transferring those skills becomes more important.

Looking further forward, Nesta and the Oxford Martin School looked at the trends that would likely affect the nature of work by 2030[51]. These include environmental sustainability, urbanisation, increasing inequality, political uncertainty, technological change, globalisation and demographic change. They predicted that interpersonal skills as well as higher-order cognitive skills would be increasingly important. The ability to generate new ideas and to communicate those ideas effectively would also be important.

Crucially, while much of the conversation around future work trends can be framed around the dangers of automation, the study found that 'many occupations have bright or open-ended employment prospects'. However, in many cases they would need a different skills mix. For example Deming (2017) finds that in the US context, most job creation has been in occupations where social skills are critical[52].

Skills (drawn from the O*Net classification, reviewed in Chapter 3) were ranked by Pearson correlation to indicate their importance to future demand for UK occupations. This gave the top ten skills and abilities as:

- Judgement and decision-making
- Fluency of ideas
- Active learning
- Learning strategies
- Systems evaluation
- Deductive reasoning
- Complex problem solving
- Systems analysis
- Monitoring

While we will explore these skills in greater depth in Chapter 3, the strong conclusion from this work is that the blend of essential and technical skills together will be critical to thrive in the future job market. As the report authors reflect, 'our skills results confirm the future importance of 21st century

[50] Taylor, M. (2017) *Good Work: The Taylor Review of Modern Working Practices*
[51] Bakhshi, H., Downing, J.M., Osborne, M.A. & Schneider, P. (2017) *The Future of Skills: Employment in 2030*, London: Pearson and Nesta
[52] Deming, D.J. (2017) *The Growing Importance of Social Skills in the Labor Market*, Harvard University and NBER [https://scholar.harvard.edu/files/ddeming/files/deming_socialskills_aug16.pdf]

skills – the combination of interpersonal and cognitive skills that has been an increasing preoccupation of policymakers in recent years'[53].

Similar conclusions have been reached by others, including Deloitte. In their report *Power Up UK Skills* they found that job growth in the UK economy has 'been driven overwhelming by growth in occupations with the strongest transferable "human" skill sets'. These include creativity, problem solving, collaboration and empathy[54]. Likewise Goldman Sachs commissioned a report into the future of work that highlighted that employment opportunities of the future would draw particularly on flexibility, creativity and strong interpersonal skills[55].

The role of essential skills in obtaining new employment is explored in much greater depth in Chapter 4, where we draw on current data about jobs being advertised in the UK.

(4) Essential skills outside of employment

Finally though, while essential skills have an important role in employability, these same skills have a level of continuity that stretch all the way back through into childhood and beyond the other side into retirement and beyond[56].

Indeed, Lucas & Hanson point out that the development of employability skills in the context of education has a double benefit for employers in that they can also demonstrably improve educational outcomes[57].

(c) What is the opportunity?

This work looks to address one of the most critical gaps in ensuring that everyone can build the essential skills to succeed. For us, that is the existence of a clear, stable and collectively owned definition of what we mean by essential skills.

A call for such a framework has a long pedigree. As examples:

- In their 2012 report[58], the CBI argued that in order to make progress in building these skills in the education system it would be essential to have a 'clear, widely-owned and stable' statement of outcomes beyond the academic.
- The National Children's Bureau highlighted that one of the challenges was a lack of understanding of what employability skills actually were and how to measure them[59].
- In their review of employability, Lucas & Hanson argue that 'although numerous reports claim that precise definitions of employability skills are not essential for progress in

[53] Bakhshi, H., Downing, J.M., Osborne, M.A. & Schneider, P. (2017) *The Future of Skills: Employment in 2030*, London: Pearson and Nesta – page 89
[54] Deloitte (Date unknown) *Power Up: UK skills* London: Deloitte [https://www2.deloitte.com/uk/en/pages/innovation/articles/power-up-uk-skills.html]
[55] Strongin, S., Lawson, S., Banerjee, S., Hinds, M., Maxwell, K. and Shan, H (2016) *Narrowing the Jobs Gap: Overcoming Impediments to Investing in People*, Goldman Sachs.
[56] Scott, A. & Gratton, L. (2016) *The 100 Year Life,* Bloomsbury
[57] Lucas & Hanson (2015) *Learning to be Employable: Practical lessons from research into developing character*, London: City & Guilds, page 38
[58] CBI (2012) *First steps: a new approach for our schools.* London: CBI
[59] Lucas & Hanson (2015) *Learning to be Employable: Practical lessons from research into developing character*, London: City & Guilds, page 38

developing the employability of young people, there may be risks in not having such specifications'.[60]

- In the culmination of the Backing Soft Skills campaign, the greatest need was to 'create a framework for defining, developing and assessing (formally and informally) soft skills at every stage of education and work'[61].
- Similarly in the Taylor Review, there was a call for 'a commonly understood spine of employability skills [which] could also form the basis for conversations between employers and employees about job design, on the job training and appraisal, all with the aim in mind that every job enables people to develop their future employment potential'[62].

(d) What would good look like?

If we could develop such a Framework, then there are four key problems that we might be able to solve:

- **Ensuring alignment between education and employers** in terms of the employability skills that employers actually need, and what schools understand and are equipped to build. This alignment can then be naturally extended into T-Levels, Apprenticeships and graduate qualifications.
- **Supporting the process of recruitment** through increased transparency of skills. This would help employers to assess more accurately the competences of new recruits, who would have clarity on what they are being assessed. Rather than recruitment processes falling back on perceptions of self-confidence or 'polish', transparency would give a diverse range of applicants the opportunity to display their competences.
- **Facilitating upskilling and reskilling within the workplace** by increasing the clarity of what progression looks like in these foundational skills.
- **Creating a common vocabulary** for schools, colleges, universities, employers and employees to use when discussing skills with one another.

To be successful, a universal framework for essential skills would need three qualities:

- *Clarity:* It must be simple enough to be useful in a range of different contexts and to be used by individuals who are not experts. It must not be easily misunderstood or misinterpreted.
- *Measurability:* It should be possible to use the Framework to reliably understand the existing skillset of individuals, and to measure growth.
- *Credibility:* The Framework should be backed by organisations who give it credibility, authority and permanence.

(e) Conclusion and next steps

In this chapter we have set the scope of this report within the broader theme of employability. We narrowed our focus within employability to the assets individuals have of knowledge, skills and

[60] Lucas & Hanson (2015) *Learning to be Employable: Practical lessons from research into developing character*, London: City & Guilds
[61] McDonald's UK (2015) *Backing soft skills: a plan for recognising, developing and measuring soft skills at every stage of education and work*,
[62] Taylor, M. (2017) *Good Work: The Taylor Review of Modern Working Practices* page 86

character attributes. Within skills we drew a distinction between basic, essential and technical skills and based on the UKCES definition, defined the essential skills that will be our focus in this report as:

> *Those highly transferable skills that everyone needs to do almost any job, which support the application of specialist knowledge and technical skills*

We saw that essential skills are relevant in every part of employability: in getting a first job; in maintaining that job; and securing a next job. They also have a relevance beyond employability too, but that is not in scope here.

As such, considerable efforts are being made by employers, educators and other skills-building organisations to identify and develop these skills. However, a common challenge is the absence of a common language or shared outcomes to focus these efforts.

Such a universal framework would have the benefits of ensuring alignment between education and employment, supporting recruitment, facilitating upskilling and reskilling, and creating a common vocabulary.

In order to be successful a universal framework would need to fulfil three criteria of clarity, measurability and credibility.

The next chapter will explore the extent to which the Skills Builder Framework, which has been widely adopted as a common framework for children and young people can be extended to act as a universal framework for essential skills.

Chapter 2: The Skills Builder Framework

Chapter Summary:

- The Skills Builder Framework was originally developed by Enabling Enterprise to underpin a more rigorous approach to developing essential skills in the context of 3-18 education.
- Over a period of four years, the Framework was built through a combination of literature review, testing and iterative refinement. During that time, it was used with over 200,000 children and young people in 500 organisations.
- The Framework was improved through the input of more than sixty individuals and organisations spanning education, employers, academia, and youth organisations.
- The Framework has independently reviewed twice: Firstly by PwC who checked that the skills and the outcomes aligned with employer and college expectations, and secondly by LKMCo who reviewed the Skills Builder approach against the literature base and also schools' experience of putting it into practice.
- Since officially launching in spring 2018, in 2018-19 more than 520 schools and colleges, 130 employers and 50 other providers were part of the Skills Builder Partnership, committed to using the Skills Builder Framework to underpin their work.
- As the Framework is increasingly used, it is creating new insights and demonstrating the value of a common language and shared approach.
- If extended further into employment, the Skills Builder Framework has the opportunity to provide continuity between education, apprenticeships or higher education, and employment. It would also support employers in the process of recruitment, as well as upskilling or reskilling their workforces.

(a) What is the Skills Builder Framework?

The Skills Builder Framework[63] is based around eight essential skills:

Listening: The receiving, retaining and processing of information or ideas.

Also links to: communication; active listening

Presenting: The oral transmission of information or ideas

Also links to: communication; speaking; talking

Problem Solving: The ability to find a solution to a complex situation or challenge

Also links to: critical thinking; investigation

Creativity: The use of imagination and the generation of new ideas

Also links to: innovation; imagination

Staying Positive: The ability to use tactics and strategies to overcome setbacks and achieve goals

Also links to: resilience; robustness; adaptability; self-management

Aiming High: The ability to set clear, tangible goals and devise a robust route to achieving them

Also links to: aspiring; goal-setting; planning; self-management

Leadership: Supporting, encouraging and motivating others to achieve a shared goal

Also links to: motivating; interpersonal skills

Teamwork: Working cooperatively with others towards achieving a shared goal

Also links to: collaboration; interpersonal skills

[63] Skills Builder Partnership (2018) *Toolkit: The Framework and Principles for building essential skills*, Enabling Enterprise [Accessed on 20/6/19 at http://www.skillsbuilder.org/toolkit]

Conceptually, it is helpful to think of these eight skills as four pairs:

- Communication skills: Listening and presenting
- Problem solving and creativity
- Self-management skills: Staying positive and aiming high
- Interpersonal skills: Leadership and teamwork

Breaking down into steps

Beyond defining the set of skills, the Skills Builder Framework is a tool which is designed to break down the eight essential skills into incremental steps.

For example, teamwork includes:

- The ability to take it in turns
- Helping out with different jobs
- Making suggestions in a group discussion
- Encouraging others
- Resolving conflicts
- Measuring the effectiveness of the team

We are then able to put these into a logical order – because an individual is unlikely to be able to help out with different jobs if they can't take it in turns, and is unlikely to be able to resolve conflicts if they can't encourage others.

As another example, presenting includes:

- Speaking clearly to one other individual
- Speaking in front of a small group
- Putting ideas into a logical order
- Using appropriate language when speaking
- Changing the level of detail being spoken to fit the needs of the audience
- Thinking about how the audience might react and planning ahead

Or as another, problem solving might include:

- Following simple instructions
- Asking for help when it is needed
- Finding extra information if needed
- Coming up with several possible solutions
- Using pros and cons to choose between them
- Thinking about causes and effects of complex problems

Bringing it all together

The Framework takes each of the eight skills and breaks them down into sixteen steps, arranged in a logical order from Step 0 through to Step 15. The full Framework can be seen in *Appendix A*.

The normal expectation would be that an individual would achieve the steps of progress sequentially, although we also see that sometimes gaps emerge in earlier steps which do not prevent some of the higher steps being achieved.

(b) Where it has come from

The Skills Builder Framework initially emerged as an educationally-grounded response to calls from employers, universities, and school educators themselves for the development of a more rounded approach to building essential skills.

First phase of development: 2015-17

The Framework was originally developed by the team of teachers at Enabling Enterprise to underpin the programmes that the social enterprise ran in primary and secondary schools. The goal was to create a simple, consistent way for teachers to better teach essential skills to their students.

The Framework was developed through a combination of approaches:

- Understanding the relevant skills that had already been identified or called for by employers, and linking those to those skills which were already explicitly identified in the national curriculum, including the Early Years curriculum.
- Reviewing the existing literature around these skills and identifying where they were broken down.
- An iterative process of filling in the gaps and fine-tuning how the skill steps were broken down.

During that period of development, the framework was used by teachers to assess the essential skills of their students. This gave a helpful set of data to better understand how teachers used the Framework, and to understand how the pattern of progress varied by age.

The Framework also benefitted from being externally reviewed twice:

Firstly, by PwC who worked with colleges and employers to check that the skills were the right ones, to see how the Framework could be useful to them and to check the calibration of expectations laid out in the Framework was approximately correct.

The second piece of work, by education consultancy LKMco explored the use of Framework by schools, explored the Principles that accompany its use, and drew out ideas for how the Framework

could be used more widely[64].This piece of work identified that the Skills Builder Framework was being effectively used in schools to:

- Break down each of the essential skills
- Increase teachers' and students' clarity about aims
- Conduct age-appropriate assessments
- Provide students with clear feedback
- Establish where individual students and cohorts need additional support
- Inform teachers' future planning, and:
- Reduce teachers' workload[65]

However, the report highlighted that in order to make further progress there was a need to 'build consensus around the language of [essential] skills, bringing greater coherence to work taking place across the education sector'.[66]

Second phase of development: 2017-18

In early 2017 the decision was made to explore whether the framework could be extended to be used by other organisations.

Over the following 12 months, the existing Framework that was being used by Enabling Enterprise was revised based on:

- The leadership of a **development group**, bringing together representatives from the lead organisations of Enabling Enterprise, Ark, Career Ready, Business in the Community, Teach First and the Careers & Enterprise Company.
- The expertise of a group of **advisors**, including sector leaders and practitioners from across business, academia and the voluntary sector.
- The input of five **expert groups**, covering experts on communication skills, creative problem-solving skills, self-management skills, interpersonal skills, and a final group of employers.

This revised framework was then **piloted** with twenty organisations as diverse as the National Literacy Trust, London Youth and the London Symphony Orchestra.

Alongside this, the intellectual underpinning of the Framework was laid out in a book published by John Catt Educational Publishing in 2017: *'The Missing Piece: The Essential Skills that Education Forgot'*[67].

This work culminated with the publication and launch of the Skills Builder Framework in May 2018, where it was endorsed by the joint General Secretary of the National Education Union, the President of the CBI and other organisations who had been involved in the work.

Alongside the simple matrix of outcomes by skill, the Framework is accompanied by:

- Toolkits of how to apply the framework in different settings for: classroom teachers; school leavers; skills-building organisations; and employers.
- Assessment tools – for both teacher-led assessments of students; and a student self- or peer-assessment tool.

[64] Millard, W., Menzies, L. and Baar, S. (2017), *Enterprise Skills: Teachability, Measurability and Next Steps*, LKMco.
[65] Ibid.
[66] Ibid. 8
[67] Ravenscroft, T. (2017) *The Missing Piece: The Essential Skills that Education Forgot,* John Catt Publishing Ltd.

- Practical resources and activities that teachers and others working with students can use to build skills[68].

(c) The underpinning design principles

The Framework itself was developed in tandem with a set of principles which helped to set the requirements for the effective use. These six principles parallel those which underpin the development of other important skills, like literacy and numeracy.

Together they informed the way that the Framework was designed and developed:

(1) Simplicity

One of the biggest challenges in achieving real clarity around the essential skills is that too often skills, characteristics and knowledge are used as if interchangeable.

The reality is that although in real life we might use all of these elements together, they are built differently and so combining them makes building them much more difficult.

As a result, there is a danger of thinking in terms of broad, abstract concepts like confidence, assertiveness, responsibility, empathy or persistence[69]. These broad dispositions are highly dependent on the context – an individual might appear confident in a particular context but that apparent confidence might vanish in another. They might take responsibility in some areas of their lives but not others.

It is also difficult to objectively assess whether these broad attributes are present. Finally, it is difficult to identify what progress looks like in these dispositions beyond an assessment of consistency.

Instead, the development of the Framework was led by the principle that the elements of the skills should be, in the words of the Brookings Institute 'specific, contextual, socially observable [and] easily malleable within the environment…'[70].

This meant that the goal with each step was to ensure that it could be taught directly, practiced and then assessed in as objective a manner as possible.

(2) A full journey

A second important principle that underpinned the development of the Skills Builder Framework was that it should support the development of essential skills all the way through a child or young person's time in education. While in this report we are looking at essential skills through the lens of employability, these skills are also fundamental to be able to engage in learning and to thrive in wider life.

One of the biggest challenges in closing the attainment gap between students from relatively disadvantaged backgrounds and their wealthier peers is differences in literacy and numeracy when

[68] These are all freely available at www.skillsbuilder.org/hub
[69] Whitehurst, G.J. (2016) *Grading Soft Skills: The Brookings Soft Skills Report Card*, Education Next [www.educationnext.org/grading-soft-skills-the-brookings-soft-skills-report-card/]
[70] Ibid.

they start school[71]. The same is true for essential skills – the Early Intervention Review highlighted that a child's development score at 22 months-old can serve as an accurate predictor of education outcomes at 26 years-old[72]. Indeed, the widely used *Development Matters* approach emphasises these skills early on as a foundation[73].

Therefore, as the Framework was developed, it had to work with children of all ages through to adults and provide a comprehensive journey.

(3) Measurability

The third principle was that the Framework should support the measurement of those skills. In line with Department for Education best practice[74], we wanted teachers to be supported to:

- Allow meaningful tracking towards expectations
- Provide information which is transferable and easily understood
- Differentiate attainment between students of different abilities
- Be reliable and free from bias
- Help provide information to improve the quality of teaching
- Give students feedback to improve their own learning, and be specific enough to be helpful
- Produce recordable measurements that can demonstrate comparison against expected standards and reflect progress over time

The Framework therefore needed to be specific enough with statements that could be assessed against and a means of codifying progress, for which the steps were introduced.

(4) Teachable

The fourth principle that underpinned our approach was that the Framework should then help to direct further progress. This was in a context where too often an abundance of activities were prioritised over a consideration of the learning outcomes and progress that were being sought[75].

Building essential skills is not the same as *using* essential skills. Anders Ericsson emphasises the importance of deliberate practice rather than just usage[76]. Such deliberate practice includes:

- Well-defined, specific goals for that session
- A near-exclusive focus
- Specific, external feedback
- Working in a stretch zone[77]

Thus, the framework had to help structure and support that learning journey.

[71] Fair Education Alliance (2016) *Report Card 2016*, Fair Education Alliance
[72] Allen, G. (2011) *Early Intervention: The Next Steps*, H.M. Government
[73] Early Education (2012) *Development Matters in the Early Years Foundation Stage (EYFS)*, British Association for Early Childhood Education [www.foundationyears.org.uk/files/2012/03/Development-Matters-FINAL-PRINT-AMENDED.pdf]
[74] Department for Education (2014) *Assessment Principles*, Department for Education
[75] Ofsted (2016) *Getting Ready for Work: How secondary schools prepare young people for work*, Ofsted
[76] Ericsson. A, (2016) *Peak: Secrets from the New Science of Expertise*, Eamon Dolan/Houghton Mifflin Harcourt
[77] Ibid.

(5) Support individual practice

The fifth principle was that the Framework had to be comprehensible to the individual, and not need to be interpreted by an expert. This is vital to ensure that individuals can practice applying their own skills and be able to draw out their own learning by reflecting on individual steps.

It is also important that individuals are able to make connections between how different parts of how they use skills fit together in a common conceptual framework – something that makes the difference between deep or shallow learning[78].

(6) Link to the real world

Finally, an underpinning principle in the development of the Framework was that it should support links between learning in formal education and employment.

This was guided by the goal of ensuring that young people were able to articulate their essential skills at the point of moving beyond the education system.

Together, these six principles underpinned the way that the Framework was designed and the criteria that it had to meet.

(d) Current usage

At the launch of the Skills Builder Framework in May 2018 there were three target user groups:

- Educators: Including those in primary, secondary and special schools as well as sixth form and further education colleges.
- Employers: Who would primarily use the Framework to support their outreach and employability work in education.
- Skills-building organisations: That wider group who sometimes act as external providers to schools, and who sometimes work with children and young people outside of the school environment.

To catalyse and support the users of the Framework, the Skills Builder Partnership was formed, led by Enabling Enterprise. This gives a clear view of some of those organisations who are engaged with using the Framework and other tools.

At the time of writing in June 2019:

- There are now more than fifty leading organisations who are already committed members of the Skills Builder Partnership. These include: National Citizen Service; the Careers & Enterprise Company; Business in the Community; the British Council; Ark; Teach First; National Literacy Trust; Apps for Good; the Fair Education Alliance; Sport Inspired; London Symphony Orchestra and QPR Community Trust; as well as many others.[79]
- More than 520 schools and colleges are signed up to Skills Builder directly, although many more have downloaded the Framework. These schools include nurseries, primary and secondary schools across the whole country.
- Finally, more than 130 employers are also involved in the Partnership. These range from NatWest to Birmingham Airport, and also include NHS Hospitals and the Civil Service[80].

[78] Willingham, D. (2010) *Why Don't Students Like School?*, American Educator: Spring 2009
[79] For latest list of partner and supporter organisations please see: www.skillsbuilder.org/organisations
[80] For latest list of employer partners please see: www.skillsbuilder.org/employers

Most host trips of students to help them to build their essential skills in this professional environment. Others have aligned their employability programmes with the Skills Builder Framework – including KPMG's Work Ready programme and Allen & Overy's internship programme.

Between our existing Enabling Enterprise programmes, our offer to schools and the aligned skills-building organisations more than 250,000 children and young people are currently taking part in programmes that are aligned with the Skills Builder Framework.

(e) The aspiration to extend it further

To fulfil its full potential, the Skills Builder Framework would be:

- Used consistently across schools as a set of clear outcomes and tools to build the essential skills of every child and young person as part of their education.
- Built upon during further and higher education by being embedded into T-Levels, Apprenticeships or as a complement to technical and graduate level qualifications.
- Useful to employers to help structure their approach to recruitment, including closer links between schools and employers, and also ongoing personnel development once individuals are in the workplace.

The opportunity therefore is to test and extend the Framework and supporting tools to ensure continuity from their use in schools into further and higher education and into the world of work. Small scale pilots with existing employer partners have shown a real appetite from employers to use the Framework in their own people strategies.

We have already outlined the three 'tests' that any universal framework must fulfil:

- *Clarity:* It must be simple enough to be useful in a range of different contexts and to be used by individuals who are not experts. It must not be easily misunderstood or misinterpreted.
- *Measurability:* It should be possible to use the Framework to reliably understand the existing skillset of individuals, and to measure growth.
- *Authority:* The Framework should be backed by organisations who give it credibility as it is extended into employment. That includes the organisations already in the Taskforce and employers who support it, as well as those who use it in their organisation.

The Skills Builder Framework is well on track for success in the context of children and young people:

Clarity: It must be simple enough to be useful in a range of different contexts and to be used by individuals who are not experts. It must not be easily misunderstood or misinterpreted.	• The Framework is being used by teachers, youth workers, individual students themselves, and volunteers from businesses working in schools. • In some contexts these individuals have received training, but in others they have not been directly trained.
Measurability: It should be possible to use the Framework to reliably understand the	• The Framework has been used as a tool to help to explore and assess the essential skills of individual children and young people. More than 20,000 have

existing skillset of individuals, and to measure growth.	been assessed against the framework by their teachers or youth workers. • Other organisations have been able to use the Framework to help evaluate their work, without needing specialist support or assistance.
Authority: The Framework should be backed by organisations who give it credibility	• Organisations who have promoted the uptake of the Skills Builder Framework include the CBI, Careers & Enterprise Company, Business in the Community, Movement to Work and many others. • Other organisations who are putting the Framework into practice include National Citizen's Service, the National Literacy Trust, Street League, and many others.

This is a promising start. In order to be able to perform a role as a universal framework, the Skills Builder Framework would need to fulfil these criteria beyond the current scope of children and young people.

The objective of the next part of this report is to stress-test whether the Skills Builder Framework is able to fulfil that role.

Research Phase 1: Testing and extending the Skills Builder Framework

The second part of this report looks to test how comprehensive the Skills Builder Framework is in incorporating those skills that are laid out in related standards and taxonomies for employment. We will look at this question through four different lenses, which together form the first phase of our research:

- **Chapter 3: Employability Frameworks**
  A comparative review of six of the most widely cited **employability frameworks** against the Skills Builder Framework. These are: O*Net, UKCES, Personal Learning & Thinking Skills (PLTS), CBI, Deloitte's Future Skills, and the EntreComp Framework. This has been extended to include four practical, organisation-specific frameworks too.

- **Chapter 4: Essential skills and how employers recruit**
  Using Burning Glass analysis of skills called for in job advertisements and how these compare to the Skills Builder Framework. This includes both a comparative review, and a frequency review. As well as looking at the aggregate statistics, we reviewed a number of hypotheses to explore how expectations of essential skills might vary by educational level or salary level.

- **Chapter 5: Essential skills and apprenticeship standards**
  Cross-referencing the Skills Builder skills against those called for in the apprenticeship standards. Given the lack of consistency, we identified the 10 most frequently started apprenticeship standards to identify the essential skills referred to and carried out a comparative review against the Skills Builder Framework. We also explored hypotheses around the essential skills needed in different sectors and at different apprenticeship standard levels.

- **Chapter 6: Essential skills and higher education**
  Finally, we carried out a comparative review of a sample of frameworks created or used by universities both in their careers departments to support employability, and those that link to success in higher education.

The next part of this report gathers together the key insights from this initial phase of work, and then proposes some changes to the existing Skills Builder Framework to allow it to act as a universal framework beyond education:

- **Chapter 7: Key insights**
  Gathers together the key insights from Part 2 and the analysis of other employability frameworks, job advertisement data, apprenticeships standards and higher education approaches.

- **Chapter 8: Proposed approach and next steps**
  Reviews the gaps and omissions highlighted in Chapter 7, and evaluates different approaches to addressing them. It culminates with a proposed updated Framework to take into the Research Phase 2.

Chapter 3: Employability Frameworks

Summary:

- The goal of this part of the research was to understand the extent to which the Skills Builder Framework captures the skills and sub-skills laid out in some of the most widely cited employability frameworks.
- The six generic employability skills frameworks that were included in this exercise were: O*Net, UKCES, Personal Learning & Thinking Skills (PLTS), the CBI employability framework, Deloitte's Future Skills, and the EntreComp Framework.
- We also reviewed a sample of four frameworks used by individual organisations. These were: Chartered Global Management Accountant (CGMA) framework, Organisation for Economic Co-operation and Development (OECD) Competency Framework, Civil Service Competency Framework, and the KPMG Behavioural Capabilities.
- We compared from two different perspectives:
    - *Is the Skills Builder Framework comprehensive?* That is, does it include all of the skills and sub-skills which were referenced in the other frameworks so there is nothing which is left out?
    - *Is the Skills Builder Framework all relevant?* That is, are all of the skills and sub-skills referenced in the Skills Builder Framework also reflected in those other frameworks?
- In terms of *comprehensiveness*, we found that the Skills Builder Framework covered most of the skills called for. Some gaps were highlighted for further exploration, particularly networking, strategic thinking and client care. These will be investigated further in Part 3 with employers.
- In terms of *relevance*, we found that there was strong alignment between the contents of the Skills Builder Framework and what was called for in other frameworks. While not every step was called for in every framework, at least 3 frameworks called for each step, and the average match was 83%.

(a) The purpose of this work

The overall purpose of this research is to test the Skills Builder Framework against employers' recruitment needs, laying the foundation for the extension of the existing tried and tested school-based Framework into the world of work.

Research into employee training and development programmes identify a significant relationship between professional development and overall job satisfaction[81] [82]. An effective training programme is desirable for an employer seeking to develop and retain a functional workforce and according to The Chartered Institute of Personnel Development (CIPD) [83] recruitment and training competency frameworks, 'when done well, can increase clarity around performance expectations and establish a clear link between individual and organisational performance'. An awareness of this need and recognition of the Skills Builder Framework led to the conception of this research.

[81] Schmidt, S., W. (2007) *The relationship between satisfaction with workplace training and overall job satisfaction.* Human Resource Development Quarterly, pp. 481-498.
[82] Jackson, D., W. & Sirianni, N., J. (2009) *Building the bottom line by developing the frontline: Career development for service employees*. Business Horizons, vol. 52(3), pp. 279.
[83] Weeks, A. (2019) *Competence and Competency Frameworks: The Chartered Institute of Personnel Development*. Available: https://www.cipd.co.uk/knowledge/fundamentals/people/performance/competency-factsheet, accessed 5/9/19

This chapter summarises the key findings of our desk-based research which compared the skills and sub-skills laid out in widely cited employability frameworks against the existing Skills Builder Framework. We will begin with an overview of the comparison frameworks selected and an overview of the approach taken. This will provide context for the research findings which answer the following two main questions:

1) **Is the Skills Builder Framework *comprehensive*?**
   That is, does the Framework cover those skills and sub-skills which feature in other employability frameworks, or is anything missing.
2) **Is the Skills Builder Framework *all relevant*?**
   That is, are the skills and skill-steps in the Skills Builder Framework appropriate and featured in other frameworks, or is anything excess to requirements.

(b) The comparator frameworks chosen

To accurately reflect a range of framework approaches and skills ten frameworks were compared with the existing school-used Skills Builder Framework. These frameworks were recommended by the Essential Skills Taskforce based on a review of most commonly cited frameworks. A contextual overview of the comparator frameworks selected is provided below:

General Employability Frameworks

- *Occupational Information Network (O*NET):* The O*NET database contains hundreds of standardized and occupation-specific descriptors on almost 1,000 occupations covering the entire U.S. economy. The database is continually updated from input by a broad range of workers in each occupation. O*NET is developed under the sponsorship of the U.S. Department of Labor / Employment and Training Administration (USDOL/ETA)[84].

- *UK Commission for Employment and Skills (UKCES):* The UKCES framework is taken from the 2009 paper of the UK Commission for Employment and Skills entitled 'The Employability Challenge'. The paper was written to provide a context for the wider work of the UKCES over the following years. As part of the paper, the authors reviewed around 200 definitions of employability, including a detailed comparison of twenty fuller ones, incorporating these into a skill competency frame[85].

- *Personal Learning & Thinking Skills (PLTS):* Personal Learning and Thinking Skills (PLTS) comprises six groups of skills that advocates of PLTS believe to be essential to success in learning, life and work[86].

- *Confederation of British Industry (CBI):* Their 2007 report, *Time well* spent, outlines the CBI's vision for how employers, students and schools can work together to build employability skills. The research conducted for this report provides evidence on the employability

[84] The Occupational Information Network (O*NET) (2019) *The Occupational Information Network (O*NET) database*. Available: https://www.onetonline.org/find/descriptor/browse/Skills/. Accessed: 08/05/2019.
[85] UK Commission for Employment and Skills (2009) *The Employability Challenge*. Available: UKCES https://www.educationandemployers.org/wp-content/uploads/2014/06/the-employability-challenge-ukces.pdf Accessed: 25/03/2019.
[86] Qualifications and Curriculum Authority, *Personal Learning & Thinking Skills*. Available: https://dera.ioe.ac.uk/7268/3/PLTS_framework_v2_tcm8-936-1.pdf. Accessed: 25/03/2019.

competencies that employers look for in school leavers and a simple framework that has been referenced elsewhere[87].

- *Deloitte (Future Skills):* The report *Power Up: UK Skills* examines the opportunities for employers, educators and policymakers to recognise the underlying transferable skills inherent in different occupations to smooth transitions for workers between different industries and occupations. Research builds on the analysis in Deloitte's report *Talent for Survival: Essential skills for humans working in the machine age*. The report uses resources from the Occupational Information Network (O*NET). The researchers mapped O*NET data which describes the importance and depth of 120 attributes (exc. knowledge) associated with every task within each occupation in the US labour force, against 366 occupations in the UK labour force[88].

- *EntreComp:* The Entrepreneurship Competence Framework, also known as EntreComp, offers a tool to improve the entrepreneurial capacity of European citizens and organisations. The framework aims to build consensus around a common understanding of entrepreneurship competence. EntreComp was developed by the Joint Research Centre (JRC) of the European Commission on behalf of the Directorate General for Employment, Social Affairs and Inclusion (DG EMPL)[89].

Individual Employer Frameworks

- *Chartered Global Management Accountant (CGMA, CIMA):* The CGMA Competency Framework is designed to help management accountants and their employers understand the knowledge requirements and assess the skills needed for both current and desired roles. The CGMA Competency Framework was developed through three phases of research: face-to-face interviews, round tables and an online survey. The participants were finance and non-finance staff at mid to senior levels, from diverse industries in both the private and public sectors. A total of 130 organisations from across 14 countries participated in the face-to-face interviews. The round tables were held in 20 countries from Asia, Europe, Africa and the Americas. Nearly 5,000 responses were received to the online survey, including CIMA members, employers, students, the wider finance community and academics[90].

- *Organisation for Economic Co-operation and Development (OECD):* The OECD Competency framework comprises of fifteen core competencies which are presented in three clusters (delivery related, interpersonal and strategic competencies). The core competencies summarise the capabilities that the OECD classify as important across all OECD jobs and collectively contribute to the OECD's overall success. The competencies outlined state the expected areas and levels of performance and what is valued and rewarded in the organisation[91].

[87] Confederation of British Industry (2007) *Time Well Spent: Embedding Employability in Work Experience* – Employment Competencies for Students. Available: https://www.educationandemployers.org/wp-content/uploads/2014/06/time-well-spent-cbi.pdf. Accessed: 29/05/2019

[88] Deloitte (2018) *Power Up: UK Skills – Recognising Transferable Skills*. Available: https://www2.deloitte.com/uk/en/pages/innovation/articles/power-up-uk-skills.html#. Accessed: 16/04/2019.

[89] Joint Research Centre (JRC) of the European Commission (2016) *The Entrepreneurship Competence Framework (EntreComp)*. Available: http://publications.jrc.ec.europa.eu/repository/bitstream/JRC101581/lfna27939enn.pdf. Accessed 16/05/2019.

[90] Chartered Global Management Accountant (2019) *CGMA Competency Framework*. Available: https://www.cgma.org/resources/tools/cgma-competency-framework.html. Accessed: 28/05/2019.

[91] Organisation for Economic Co-operation and Development (2014*) Learn, Perform, Succeed: OECD Competency Framework*. Available: https://www.oecd.org/careers/competency_framework_en.pdf. Accessed: 28/05/2019.

- *UK Civil Service:* The Civil Service competency framework supports the Civil Service Reform Plan and the performance management system. The competencies outlined in the framework are the skills, knowledge and behaviours that lead to successful performance in the Civil Service. The framework identifies ten competencies, which are grouped into three clusters: Set direction; engage people and deliver results. The competencies are intended to be discrete and cumulative, with each level building on the levels below. These indicators are not designed to be comprehensive, but provide a clear and consistent sense of what is expected from individuals in the Civil Service[92].

- *KPMG:* During the recruitment process KPMG reference 'Behavioural Capabilities'. These are the skills and behaviours that are consistent between all individuals at KPMG and are considered to be the values that underpin the business. Behaviour capabilities are categorised into nine areas: Career motivation, delivers quality, drives collaboration and inclusion, strives for continual improvement, exercises professional judgement, makes an impact, seizes business opportunities, demonstrates innovation and curiosity, and resilience. Applicants are assessed on these throughout the entire recruitment process[93].

(c) The approach taken

Data collection: Desk-based Research

The findings presented in this chapter are the product of desk-based research. Secondary data is a useful starting point for comparative studies as it allows the researcher to examine existing findings and use these to inspire further research or hypotheses[94]. An additional benefit of using secondary data is the time-efficient availability of large data sets which would have been difficult to obtain independently in such quantity[95].

To identify the essential skills required by employers, care was taken to remove industry-specific, prescriptive skill steps. The CIPD recommend that employment competency frameworks should 'balance detail with flexibility and avoid an overly prescriptive and non-inclusive approach'[45]. To this end, technical skills (specific to a particular sector or role) and basic skills (literacy, numeracy and digital skills) were classified as out of scope. Only essential skills (which are transferable to almost any job) were included in the analysis. The specific skills and sub-skills identified as in or out of scope can be found in the detailed framework comparisons in the Appendix.

Widely cited frameworks, which included Government collected data and employer-specific frameworks, were used in this research. The selection of ten frameworks for comparison has proven to be adequate for analysis purposes. During data analysis, it became clear that the sample size had produced adequate data to achieve thematic saturation (no further or different insight) suggesting further framework comparison would not have been useful[96].

[92] UK Civil Service Human Resources (2017) *Civil Service Competency Framework.* Available: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/436073/cscf_fulla4potrait_2013-2017_v2d.pdf. Accessed: 31/05/2019
[93] KPMG (2019) *Behavioural capabilities*. Available: https://www.kpmgcareers.co.uk/graduates/how-to-apply/behavioural-capabilities. Accessed: 31/05/2019.
[94] Stewart, D. W., Kamins, M. A. (1993) *Secondary Research: Information Sources and Methods*. Sage, Newbury Park: CA.
[95] De Vaus, D. (2001) *Research Design in Social Research*. Sage, Thousand Oaks: CA.
[96] Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H., Jinksm, C. (2018) *Saturation in qualitative research: exploring its conceptualization and operationalization*. Quality and Quantity, Vol.52, no.4. pp.1893-1907.

The use of official, published skill competence frameworks increases the reliability, accuracy and authenticity of the data being analysed. Additionally, the comparator frameworks selected shared a similar purpose with this research: to identify the skills required by employers and seek to develop the skill capacity of employees. For this reason, any risk of the comparative data being irrelevant or invalid to this research is minimal – allowing direct comparison with the Skills Builder Framework.

Data Analysis: Gap Analysis

A gap analysis method was used to compare the framework skill data, this enabled interpretation of which employability skills are being met and which could be incorporated to ensure alignment between what employers require and the existing Skills Builder Framework. The steps taken to complete this analysis have been adapted to reflect standard gap analysis procedure[97]:

1) Identify skill and sub-skill requirements currently required across a broad selection of widely cited, representative employability frameworks.
2) Map Skills Builder framework skills and sub-skills against the above employability frameworks.
3) Test the legitimacy of the gaps considering a macro-analysis of gap percentage frequency.
4) Recommend gap resolution based on gap frequency and ability to explicitly teach skill as a re-useable process.

To ensure comprehensiveness, analysis incorporated two different comparison perspectives:

- Check of *comprehensiveness*: Employment framework skills and sub-skills matched with Skills Builder.
- Check of *relevance*: Skills Builder skills and sub-skills matched with employment frameworks.

The findings of this analysis are presented in the next section of this chapter and detailed analysis tables can be viewed in Appendix B

Limitations

To enable comparison in this research, researcher interpretation of the skills and sub-skills identified in the employability frameworks had to be deployed. During the process of comparison it became clear that not all frameworks use the same level of detail in their skill and sub-skill descriptors.

For example, Deloitte's Framework identified the skill 'Problem Solving' as consisting of the following sub-skills:

Problem Solving	Critical thinking
	Deductive reasoning
	Inductive reasoning

[97] Yochum, C. (2019) *Conducting A Gap Analysis: A Four-Step Template*. Available: https://www.clearpointstrategy.com/gap-analysis-template/. Accessed: 07/06/2019

	Information ordering
	Complex problem solving
	Active learning
	Flexibility of closure (The ability to identify or detect a known pattern (a figure, object, word, or sound) that is hidden in other distracting material)
	Perceptual speed
	Systems analysis

The granular description provided by Deloitte contrasts with O*NET's high-level, single descriptor for the same skill:

Problem Solving	Complex Problem Solving — Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.

Some, such as the Civil Service Framework, did not state 'Problem Solving' as a required skill but implicitly referenced it in sub-skill descriptors:

People Cluster	Delivering Value for Money *(non-civil service specific knowledge and processes only)*
	Making effective decisions *(non-civil service specific knowledge and processes only)*

Definitions associated with skills and sub-skills vary from one framework to another, for example, the term 'leadership' holds multiple interpretations for those practising and defining the concept[98]. Such limitations are not unique to this research design because reality is multi-perspectival and untainted descriptions are difficult to achieve in any research study[99].

However, according to Gronn (2007) a researcher's active recognition of their potential influence on the data they interpret will help reduce bias and produce quality research outcomes[100]. The professional expertise of the authors who performed this research, reduces the potential misinterpretation of the various skill descriptors. Shared consultation of interpretation between the two authors validates such interpretations further – a process actively deployed due to recognition of potential researcher bias or interpretation error. It is with confidence in the validity of the interpretations required to enable comparison, that an overview of the findings will now be presented.

[98] Day, C., Sammons, P. (2016) *Successful School Leadership,* Education Development Trust, Nottingham University.
[99] Morrison, M. (2007) *Validity in Research*, in Briggs, A. R. J., Coleman, M., Morrison, M. (eds.) *Research Methods in Educational Leadership and Management* (3rd ed.), London, Sage.
[100] Gronn, P. (2007) *Interviewing Leaders: Penetrating the Romance*, in Briggs, A. R. J., Coleman, M., Morrison, M. (eds.) *Research methods in educational leadership and management* (3rd ed.), London, SAGE.

(d) Key results: Is the Skills Builder Framework *comprehensive*?

Overall, comparison data indicates a strong fit between employer required skills and the Skills Builder Framework skills. That is, the Skills Builder Framework is *comprehensive* in including those areas which are called for in the comparator employability frameworks.

There is a good fit between the between the comparator frameworks' sub-skills and the Skills Builder framework sub-skills. Collectively, the majority of skills and sub-skills either fully or partially align. The anomaly fit can be seen with the CGMA framework. A possible reason for this could be the industry-focused nature of this framework (accountancy) which makes comparison harder with general skill descriptors.

An overview of the % fit between employability frameworks and the Skills Builder Framework is provided in Table 1. Further framework-specific data summaries can be found in the Appendix B.

Table 1: % fit between employability frameworks and the Skills Builder framework

Framework	Skill Level Comparison			Sub-skill Level Comparison		
	Alignment (Full)	Alignment (Full + Partial)	Weak/ Gap	Alignment (Full)	Alignment (Full + Partial)	Weak / Gap
O*NET	43%	100%	0%	84%	92%	8%
UKCES	80%	100%	0%	91%	91%	9%
PLTS	100%	100%	0%	100%	100%	0%
CBI	100%	100%	0%	100%	100%	0%
Deloitte	67%	100%	0%	93%	97%	3%
EntreComp	14%	93%	7%	63%	83%	17%
CGMA	0%	67%	33%	50%	64%	36%
OECD	100%	100%	0%	53%	80%	20%
UK Civil Service	100%	100%	0%	22%	78%	22%
KPMG	56%	100%	0%	82%	86%	14%

Summary Conclusion:

The majority of skills and sub-skills referenced in the employability frameworks align with the Skills Builder skills and sub-skills, suggesting a good fit between them. The strongest alignment is evident in the CBI and PLTS frameworks which demonstrate no gaps between the required employability skills or sub-skills and the Skills Builder Framework. Partial gaps identified in the remaining frameworks may suggest the Skills Builder framework will need some phrasing alterations and light-touch amendments to cater for specific workplace sub-skills such as 'strategic thinking'.

Where gaps or partial gaps have been identified it is important to consider the influence levelled frameworks may have had upon the overall alignment figures. For example the CGMA, Civil Service, EntreComp, and OECD frameworks all include levels of competency (foundation>expert, levels 1>6). The higher the level of competency the more broad the skill descriptor. When reviewing overall alignment of each skill and sub-skill the different skill levels influenced the overall category of

‘full’ or ‘partial’ alignment. To reduce research subjective bias care was taken to not assume inclusion of lower-level skills (such as the ability to complete individual tasks in a team environment) in the higher levels associated with team work. Therefore the % alignment figures in Table 1 are likely to be more conservative than reality.

Table 2 summarises the gaps identified and qualifies the significance of these by the repetition value presented alongside.

Table 2: Gap Frequency Overview for Employment Frameworks

Summarised Gap ***(Employment Framework Required Sub-Skills)***	**Frequency (/10 frameworks)**
Punctuality and time management	2
Dress Code and behaviour fitting to context	1
Strategic thinking (organisation level & financial)	4
Networking (internal and external to organisation)	4
Client care	4
Ethical/sustainable working (Individual, organisational)	2
Risk management (organisation level)	1
Effective media use (communication)	1
Attention to detail	2
Curiosity	1

These gaps will also be considered alongside insights drawn from the next three chapters. These items will be taken forward to the next part of this research (see Part 3) to explore in greater depth. This will include direct engagement with employers, and the development of options for incorporating these skills or sub-skills if that is the best route.

(e) Key results: Is the Skills Builder Framework *all relevant*?

The Skills Builder Framework was evaluated by looking at each of the essential skills and sub-skill as defined in the Framework and then analysed as to whether the skills or sub-skill was also referenced in the comparator frameworks. In this way, it was checked that all of the component skills and sub-skills in the Skills Builder Framework are relevant, and that none are excess to requirements.

Overall, the Skills Builder Framework already includes the majority of the skills and sub-skills presented by employers. This can be seen in Table 3 below:

Table 3: Skills Builder Skill and Sub-Skill Fit with Ten Cited Employability Frameworks

Skills Builder Skills	Skills Builder Sub-Skills	Overall sub-skill % fit with employment skill frameworks	Overall skill % fit with employment frameworks
Teamwork: Working cooperatively with others towards achieving a shared goal	*Completes tasks:* Taking responsibility for completing own tasks within a team context (Step 3)	100%	100%
	Works positively: Able to get on well with team members (Step 4)	100%	
	Supports others: Willing to support others with their tasks in a team context (Step 5)	100%	
	Contributes to discussions: Contributes to team discussions and supports others to contribute too (Steps 6-8)	100%	
	Avoids negative conflict: Identify and avoid negative conflict in teams (Steps 9-10)	100%	
	Contributes effectively: Contribute to team meetings in a measured, valuable and concise way (Step 11)	100%	
	Evaluates performance: Evaluate a team's performance and suggest or influence improvements (Steps 12-13)	100%	
	Adaptive to others: Understands the strengths and weaknesses of others in the team and actively supports them on that basis (Steps 14-15)	100%	
Leadership: Supporting, encouraging and motivating others to achieve a shared goal	*Allocates tasks:* Ensures everyone has appropriate tasks across a team (Step 3)	100%	93%
	Takes responsibility: Takes responsibility for ensuring team completes tasks (Step 4)	100%	
	Builds consensus: Ensures team makes collective decisions and resolves differences of opinions (Steps 5-6)	90%	
	Builds on strengths: Can identify own strengths and weaknesses, and those of the team, using these to help achieve the tasks (Steps 7-9)	100%	
	Resolves conflicts: Keeps team focused on achieving goal, resolving conflicts (Step 10)	90%	
	Motivates team: Motivates team, being thoughtful about the situation (Steps 11-12)	90%	
	Adapts leadership style: Thinks about leadership style, aware of downsides, and able to adapt to circumstances (Steps 13-15)	70%	
Creativity: The use of imagination and the generation of new ideas	*Uses imagination:* Being able to use imagination to generate new ideas (Steps 3-4)	90%	63%
	Improves on ideas: Build off existing ideas to generate new or improved ones (Step 5)	100%	
	Understands creativity: Explain how creativity links to role and wider life (Steps 6-7)	30%	

	Uses tools for creativity: Use mind-mapping, random stimuli and other tools to generate more ideas (Steps 8-9)	50%	
	Manages creativity in a group: Use multiple perspectives to generate more ideas while avoiding group think (Steps 10-11)	60%	
	Optimises creative approach: Able to reflect on use of creative tools, choosing between options (Steps 12-15)	50%	
Problem Solving: The ability to find a solution to a complex situation or challenge	*Seeks help:* Get help from others when needed (Step 2)	80%	90%
	Finds information: Find extra information as required (Step 3)	90%	
	Creates options: Come up multiple options for simple problems and choosing between those options (Steps 4-5)	100%	
	Scopes and researches: Identify complex problems and carry out research to help solve them (Steps 6-7)	100%	
	Analyses problems: Identify causes and effects (Step 8)	100%	
	Evaluates routes of action: Create multiple options for complex problems and evaluate them (Steps 9-10)	100%	
	Deploys problem-solving tools: Use tools including logic trees, testable hypotheses and deductive and inductive logic to solve problems (Steps 11-13)	70%	
	Evaluates effectiveness: Identify underpinning assumptions on approach to problem-solving, and evaluate success of solutions (Steps 14-15)	80%	
Listening: The receiving, retaining and processing of information or ideas	*Identifies and retains information:* Can identify and remember relevant information when listening (Step 5)	70%	59%
	Listens in a group context: Take part in group conversation (Step 6)	70%	
	Interprets speakers: Taking meaning from language, gesture, emphasis and apparent status (Steps 7-9)	70%	
	Checks understanding: Asks questions to check understanding (Step 10)	70%	
	Compares perspectives: Be able to take in and reconcile different points of view (Step 11)	60%	
	Listens critically: Identify themes or biases when listening to others (Steps 12-13)	50%	
	Evaluates speakers: Evaluate how a speaker can become more effective (Steps 14-15)	20%	
Presenting: The oral transmission of information or ideas	*Communicates logically:* Order points logically when communicating (Step 4)	90%	89%
	Communicates appropriately: Use appropriate tone and language (Steps 5-6)	100%	
	Uses examples effectively: Bringing in appropriate examples to reinforce points (Step 7)	60%	

	Aware of context: Adjusting language and detail according to context (Step 8)	90%	
	Adapts to the audience: Adapt to the audience and their reaction (Steps 9-10)	90%	
	Highly persuasive: Adapts communication to persuade (Steps 11-12)	100%	
	Communicates brilliantly: Chooses the optimal communication approach depending on circumstances (Steps 13 -15)	90%	
Aiming High: The ability to set clear, tangible goals and devise a robust route to achieving them	*Open to challenge:* Look for opportunities to take on something that might be challenging (Step 4)	80%	84%
	Open to goals: Set goals with support (Step 5)	80%	
	Sets own goals: Set own goals, at appropriate level of stretch (Step 6)	100%	
	Prioritises: Can order and prioritise tasks to achieve a goal (Step 7)	90%	
	Secures resources: Identify and ensure access to appropriate resources to achieve goal (Steps 8-9)	60%	
	Seeks self-improvement: Reflects on own skillset and finds appropriate development opportunities (Step 10)	90%	
	Embraces autonomy: Can work autonomously using SMART targets (Step 11)	100%	
	Seeks feedback: Seeks out feedback, including constructive criticism (Step 12)	90%	
	Plans effectively: Can lead a long-term piece of work using milestones and suitably responsive personal strengths and to changes (Steps 13-15)	70%	
Staying Positive: The ability to use tactics and strategies to overcome setbacks and achieve goals	*Stays calm:* Ability to stay calm when facing setbacks (Step 3)	80%	84%
	Persists: Persists in the face of setbacks (Step 4)	90%	
	Encourages others: Encourages others to persist in face of setbacks (Steps 5-6)	80%	
	Identifies opportunities: Can identify opportunities in setbacks or challenges (Steps 7-8)	100%	
	Focuses on positive action: Turns ideas about solutions into action (Steps 9-10)	60%	
	Manages risk: Identify and manage risks appropriately (Steps 11-12)	90%	
	Manages emotional responses: Emotional self-awareness and moderates that according to the situation (Steps 13-15)	90%	

Overall, the Skills Builder Skills align well with the skills required across the employability frameworks analysed. Specifically, the Teamwork and Leadership skillset represent the strongest alignment (100%, 93%), followed by Problem Solving (90%), Presenting (89%), Aiming High (84%) and Staying Positive (84%). The weakest alignment was with the Creativity (63%) and Listening (59%) skill sets.

Summary Conclusion:

The relevance of the skill and sub-skills in the existing Skills Builder Framework seems strong against the ten comparator employability Frameworks.

Importantly, evaluation of this alignment must be put in context by an understanding of the level of detail used in the Skills Builder Framework vis-à-vis the comparator frameworks. The skills and sub-skills identified by organisations are written with less detail than the Skills Builder granular steps, this reduces the likelihood of a full fit between the comparator framework skill descriptors and those detailed in the Skills Builder Framework.

(f) Next steps

Through gap analysis of ten widely cited employability frameworks and the existing school-based Skills Builder Framework we have been able to test the Framework for its *comprehensiveness* and *relevance*.

We now have quantifiable comparison data which demonstrates the strength of fit between Skills Builder skills and sub-skills and those required by employers. Those areas which were identified as potential gaps and those that were potentially irrelevant will be considered in Chapters 7 & 8 and also taken to employer roundtables for deeper analysis and exploration.

Through this process further understanding will be sought to refine the Skills Builder Framework and the tools that would be required to make it usable in a work environment.

Chapter 4: Essential skills and how employers recruit

Summary:

- One of the key parts of employability is being able to obtain employment, and so this part of the research seeks to better understand what employers prioritise when they come to actually recruit.
- There is already some helpful recent work in this field – for example, from Nesta and the City of London. This gives some context as to how employers rank the different essential skills when making employment choices.
- In this chapter we also explore the aggregation of job advertisement data from Burning Glass Technologies to identify how those skills featured in those advertisements by employers compare to those set out in the Skills Builder Framework.
- We find that the essential skills laid out in the Skills Builder Framework are consistently called for by employers across all educational and experience levels.
- One limitation with deeper analysis is that it is unclear whether the absence of a skill being mentioned is because it is implicitly assumed to be held.
- There is also an absence of granular data that allows a deeper understanding of what the expectation of 'good' looks like with regard to these skills.
- Therefore, while this piece further corroborates the essential skills which employers expect, direct engagement with employers will be important to better understand the expectations that employers attach to these broad skills when recruiting.

(a) The purpose of this work

In the previous chapter, we reviewed six generic employability frameworks, and then four employability frameworks which were more specific to particular employers. In doing so, we saw that the Skills Builder Framework aligned well to these other frameworks – it is almost comprehensive in that it covers the skills and sub-skills of those comparators, with a few exceptions which were drawn out. From the other direction, the contents of the Skills Builder Framework were relevant as those skills and sub-skills were also present in those other frameworks too.

Beyond those frameworks though, it is worth remembering that one key component of employability is being able to gain a first job and, if necessary, subsequent jobs[101].

A second perspective on whether the Skills Builder Framework can act as a universal framework is to explore its alignment with what employers are actually calling for when they recruit. This will give additional insight by indicating those skills that are most called for, and those that are not featured in job advertisements.

There are three goals from this chapter:

- Firstly, to look at some of the existing literature and evidence about how employers think about essential skills when they are recruiting.

[101] Hillage, J. and Pollard, E. (1998) *Employability: Developing a Framework for Policy Analysis*, Research Brief RR85, Nottingham: Department for Education and Employment.

- Secondly, to extend the exercise in the previous chapter to those skills which are frequently named by employers when they advertise jobs, and to compare them to those skills present in the Skills Builder Framework.
- Thirdly, to provide greater context about the relative importance of the skills when recruiting, by identifying the frequency with which those skills are called for. We also briefly explore whether there are any links between those essential skills, and educational requirements or salary bands.

(b) Some of the existing work

There is other work in this area that has sought to better understand how employers make decisions based on the essential skills.

One of the most recent pieces of work is from Nesta, exploring how employers prioritised different skills when recruiting[102]. They shared twenty potential options to employers drawn from their Future Skills 2030 report[103] and a subsequent data-driven taxonomy of skills which identified transversal skills for their subsequent exclusion from the wider taxonomy[104].

Through this piece of research, 101 UK-employed respondents ranked these twenty options to give a top 12 transferable skills as rated by employers:

Transferable skill	High Priority (%)	Very High Priority (%)	Overall (%)	Close match to Skills Builder
Oral communication / presentation skills	49.5%	46.5%	96%	Presenting
Collaboration and teamwork	37.6%	56.4%	94%	Teamwork
Initiative	46.5%	46.5%	93%	Aiming High
Problem solving	50.5%	40.6%	91%	Problem Solving
Organisational skills	42.6%	45.5%	88%	Aiming High
Adaptability / flexibility	49.5%	38.6%	88%	Staying Positive
Independent working / autonomy	45.5%	36.6%	82%	Staying Positive
Written communication	52.5%	29.7%	82%	*Out of scope*
Critical thinking	48.5%	28.7%	77%	Problem Solving
Resilience	44.6%	27.7%	72%	Staying Positive
Creativity	46.5%	24.8%	71%	Creativity
Analysis & Evaluation Skills	40.6%	26.7%	67%	Problem Solving

What is interesting here is that the skills of listening and leadership which are included in the Skills Builder Framework did not feature in this top 12. In the case of listening, no similar option was

[102] Nesta (2019) *Transferable Skills in the Workplace: Key findings from a survey of UK Employers*, London: City of London Corporation
[103] Bakhshi, H., Downing, J.M., Osborne, M.A. & Schneider, P. (2017) *The Future of Skills: Employment in 2030*, London: Pearson and Nesta
[104] Djumalieva, J. & Sleeman, C. (2018) *An Open and Data-driven Taxonomy of Skills Extracted from Online Job Adverts.* London: ESCoE

presented to respondents as an option although it may have been implicit in oral communication. For leadership, this was given a combined score of 41%, placing it 17th in the list of 20.

However, this may have been partly driven by who had been recruited – 66% of respondents had recruited an individual at entry level whereas 16% were at a top level. The report itself notes that respondents fed back that 'their prioritisation of transferable skills would vary based on the role they were recruiting for'[105].

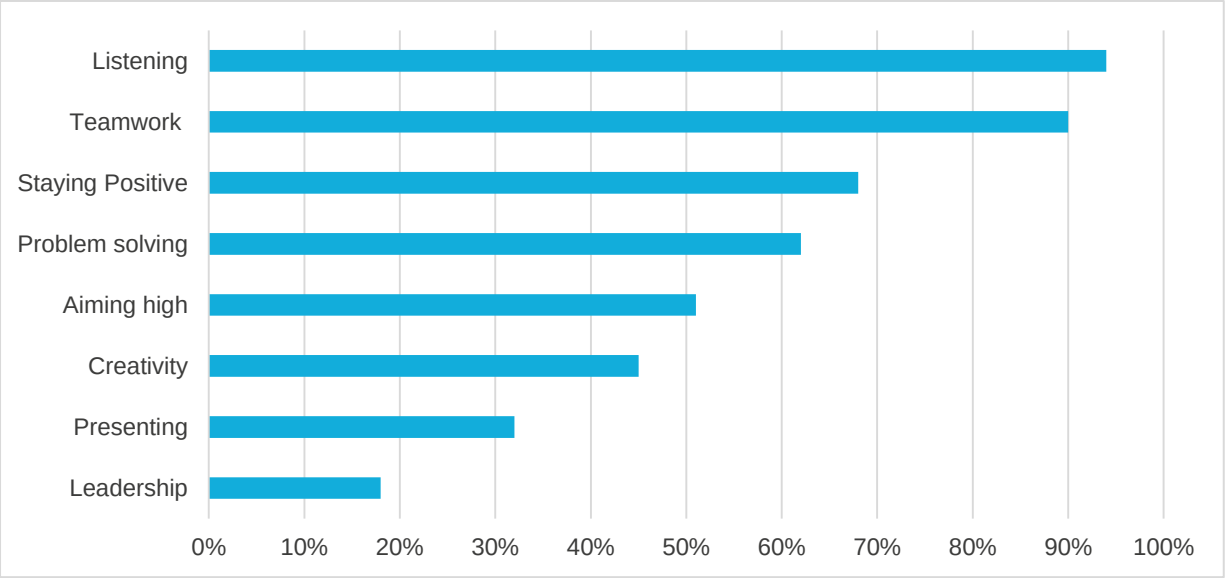
One important hypothesis to explore therefore is how skills that are called for vary according to the seniority of those roles. There is also little information about the sector in which those roles were sought.

One piece of work which addresses some of those challenges was carried out by World Skills UK in 2018. This is a particularly helpful piece for our purposes because it used the Skills Builder Framework's language and definitions.

A total of 346 employers with existing links to World Skills UK were asked to rate the importance the eight essential skills laid out in the Skills Builder Framework for young people entering the workforce[106]. By far the most important skills for those setting out in their careers were felt to be Listening and Teamwork, with over 9 out of 10 employers rating these skills as very important.

Staying Positive was cited as very important by two-thirds of employers, and Problem solving skills were highly rated by 6 in 10 employers. Aiming high was rated as very important by half of the employers surveyed. Skills that were felt to be less important were Leadership and Creativity, possibly because they are not viewed as important or relevant to all job roles.

Chart 1: Essential skills deemed important by World Skills UK employers



[105] Nesta (2019) *Transferable Skills in the Workplace: Key findings from a survey of UK Employers*, London: City of London Corporation - Page 9

[106] Employers were given the options of Not at all important; Not very important; quite important; very important; or Don't know.

This is helpful context that highlights that employers are thoughtful about essential skills and how they are prioritised. The Burning Glass data should help to provide another lens by identifying how these skills are specified by employers when advertising roles.

(c) About Burning Glass

Burning Glass Technologies creates a continuously-updated database of structured data about jobs by gathering and codifying job advertisements from online sources[107]. The database uses the company's own proprietary taxonomy to organise the data, including 14,000 skills, 550 skill clusters, 650 occupations and 23 career areas.

For this analysis, we used those jobs which were advertised in the previous 12 months in the UK from online sources. This returned 4.2 million basic listings which were further analysed as below.

The advantages of using this approach were:

- A substantial number of job roles, allowing for use of a large dataset
- This database has been used to support other analysis – for example, in some of the work carried out by Nesta[108]
- It is possible to analyse by other role attributes including salary level, years of experience required, or cited educational levels.

Some of the limitations are:

- The pre-existing taxonomy is not structured in the same way as the Skills Builder Framework. This limitation is similarly acknowledged in Chapter 3 where the subjectivity of language, and the need for some element of interpretation is discussed in detail.
- Jobs which are not advertised online are not captured in this database. Research suggests that online advertisements are reducing in their capacity to recruit. Instead, a recent LinkedIn survey suggested that 85% of all jobs are now filled via networking[109]. This process is something Rose (2016) calls the 'hidden job market' and by its very name is difficult to quantify in terms of skills considered by those network recruiting[110].
- The job advertisements themselves are often unstructured data so analysis at an aggregate level can include errors.

(d) Comparison

The first piece of analysis was a comparison of the terms that are used in the Burning Glass analysis and those used in the Skills Builder Framework.

A search was performed for all job advertisements analysed by Burning Glass over the previous 12 months (up to 11 June 2019). This returned 4,175,545 listings. Burning Glass makes a distinction between:

[107] Burning Glass Technologies (2019) *About Us* [Accessed 20/6/19 https://www.burning-glass.com/uk/]
[108] Bakhshi, H., Downing, J.M., Osborne, M.A. & Schneider, P. (2017) *The Future of Skills: Employment in 2030*, London: Pearson and Nesta
[109] Adler, L (2016) *The essential guide for hiring and getting hired*. Available: https://www.linkedin.com/pulse/new-survey-reveals-85-all-jobs-filled-via-networking-lou-adler?src=aff-lilpar&veh=aff_src.aff-lilpar_c.partners_pkw.10078_net.mediapartner_plc.Skimbit%20Ltd._pcrid.449670_learning&trk=aff_src.aff-lilpar_c.partners_pkw.10078_net.mediapartner_plc.Skimbit%20Ltd._pcrid.449670_learning&irgwc=1. Accessed: 21/06/2019.
[110] Rose, T. (2016) *The End of Average: How We Succeed in a World That Values Sameness*. HarperOne

- Baseline skills – akin to our essential skills definition
- Specialised skills – akin to our technical skills definition

For our purposes, these were combined, and then the results ranked according to the number of job postings referencing that skill:

Skills	Job Postings	Percentage	Skills Builder links
Communication Skills	1,641,030	58%	Listening & Presenting
Customer Service	750,323	26%	NA – Specialist skill
Organisational Skills	747,381	26%	Aiming High
Teamwork / Collaboration	685,301	24%	Teamwork
Planning	612,325	22%	Aiming High
Detail-Orientated	562,926	20%	NA – Attribute
Microsoft Excel	539,573	19%	NA – Digital skill
Sales	538,816	19%	NA – Specialist skill
Teaching	498,399	18%	NA – Specialist skill
Budgeting	446,699	16%	NA – Specialist skill
Creativity	424,661	15%	Creativity
English	406,929	14%	NA – Basic skill
Problem Solving	375,537	13%	Problem solving
Project Management	358,499	13%	NA – Specialist skill
Research	357,264	13%	Problem solving
Writing	340,132	12%	NA – Basic skill
Building Effective Relationships	337,536	12%	Teamwork
Microsoft Office	323,037	11%	NA – Digital skill
Leadership	272,940	10%	Leadership
Accounting	272,857	10%	NA – Specialist skill
Key Performance Indicators (KPIs)	241,339	8%	NA – Specialist skill
Customer Contact	235,180	8%	NA – Specialist skill
Business Development	231,587	8%	NA – Specialist skill

We then followed the Burning Glass definitions of baseline skills, with four modifications:

- Including teamwork and collaboration, which felt like a misclassification as a specialised skill.
- Excluding basic skills (EG: writing, English, etc.)
- Excluding digital skills (EG: Microsoft Office, computer literacy etc.)
- Excluding attributes (EG: detail-orientated etc.)

This gave a top 20 most requested skills in job listings that were:

Skills	Job Postings	Percentage	Notes and Skills Builder links
Communication Skills	1,641,030	35%	Listening and Presenting
Organisational Skills	747,381	16%	Aiming High
Teamwork / Collaboration	685,301	15%	Teamwork
Planning	612,325	13%	Aiming High
Creativity	424,661	9%	Creativity
Problem Solving	375,537	8%	Problem-solving
Research	357,264	8%	Problem-solving
Building Effective Relationships	337,536	7%	Teamwork
Leadership	272,940	6%	Leadership
Time Management	203,992	4%	*Not explicitly covered*
Meeting Deadlines	183,208	4%	Aiming High
People Management	169,532	4%	Leadership
Presentation Skills	162,593	3%	Presenting
Multi-Tasking	148,816	3%	Staying Positive
Mentoring	139,034	3%	Leadership
Verbal / Oral Communication	135,318	3%	Presenting
Positive Disposition	117,859	2%	Staying Positive
Analytical Skills	101,132	2%	Problem-solving

At a top level, therefore, we can see that all eight skills are present.

There are a few limitations with this data:

- There are terms used that are duplicates because they are drawn from the language used by employers, rather than being linked to a comprehensive taxonomy. For example, *communication skills* and *verbal / oral communication*. Because there are no definitions of these skills, we must assume their common usage.
- Some definitions (for example, 'communication skills') include multiple Skills Builder skills making it difficult to apportion to the relative importance of both components.
- There is insufficient specificity to identify how the expectations of these skills varies by job role.

It is therefore difficult to aggregate the data, but we can see that the broad themes that make up the Skills Builder Framework are certainly referenced:

- Communication skills (Listening & Presenting) are referenced in no less than 35% of job advertisements
- Self-management skills (Aiming High & Staying Positive) are referenced in no less than 16% of job advertisements
- Interpersonal skills (Teamwork & Leadership) are reference in no less than 15% of job advertisements
- Creative and problem-solving skills (Creativity & Problem Solving) are referenced in at least 8% of job advertisements

These numbers are likely to be meaningful underestimates because it makes the conservative assumption that any related mentions (EG: problem-solving and research) are duplicates from the same advertisement.

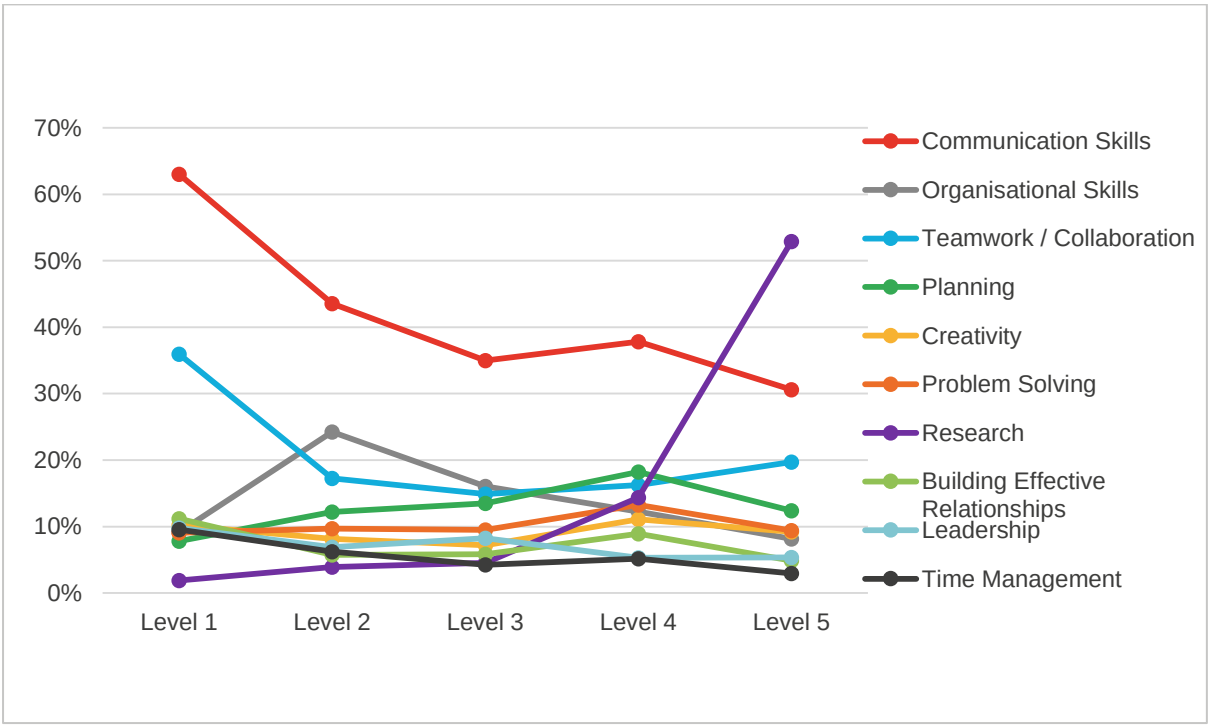
(e) Differences by education level

We then explored whether this job advertisement data could shed any further light as to how the essential skills varied in importance according to other factors.

The hypothesis was that there might be differences in expectations of essential skills according to education level. For example, it might be that in order to be able to effectively use the technical skills and knowledge that are reflected in a higher level of educational attainment, more emphasis is placed on essential skills.

To address this question, the proportion of job advertisements that referenced each of the top ten essential skills (as outlined in the previous table) were analysed in categories according to the level of educational attainment required for the role, if specified in the job advertisement.

Chart 2: Proportion of job roles mentioning essential skills by educational level, Burning Glass Data



Overall, there was limited systematic evidence of differences in the essential skills required with a couple of notable exceptions, which are worth further discussion.

- *Communication skills*: Which we presume include both presenting and listening were referenced most at Level 1 and declined thereafter. However, this is such a broad category that it is difficult to understand what is driving this.
- *Teamwork and collaboration*: This appears to decline from where it is mentioned a lot at Level 1 but beyond that it appears to rise again.

- *Research*: This is increases consistently across the education levels, peaking at Level 5. However, this is strongly influenced by the fact that Level 5 qualifications often underpin academic research and study. In these case, research skills might actually be technical skills rather than essential skills.
- *Planning*: This grows in importance as educational level increases up to Level 4, but is less frequently cited at Level 5.

Because the classifications of the data are at such a top level it is not possible to identify how employers' expectations of what applicants can demonstrate within the broad skill type vary. Where the skill referenced is more granular – for example, *research*, then does seem to be a link between higher expectations and education level which holds across all five levels.

Similarly, a lower skill step like time management is less explicitly referenced as the educational level increases which might reflect that it is not always consistently held by applicants with a lower level of educational attainment, but is an implicit expectation at the higher education levels.

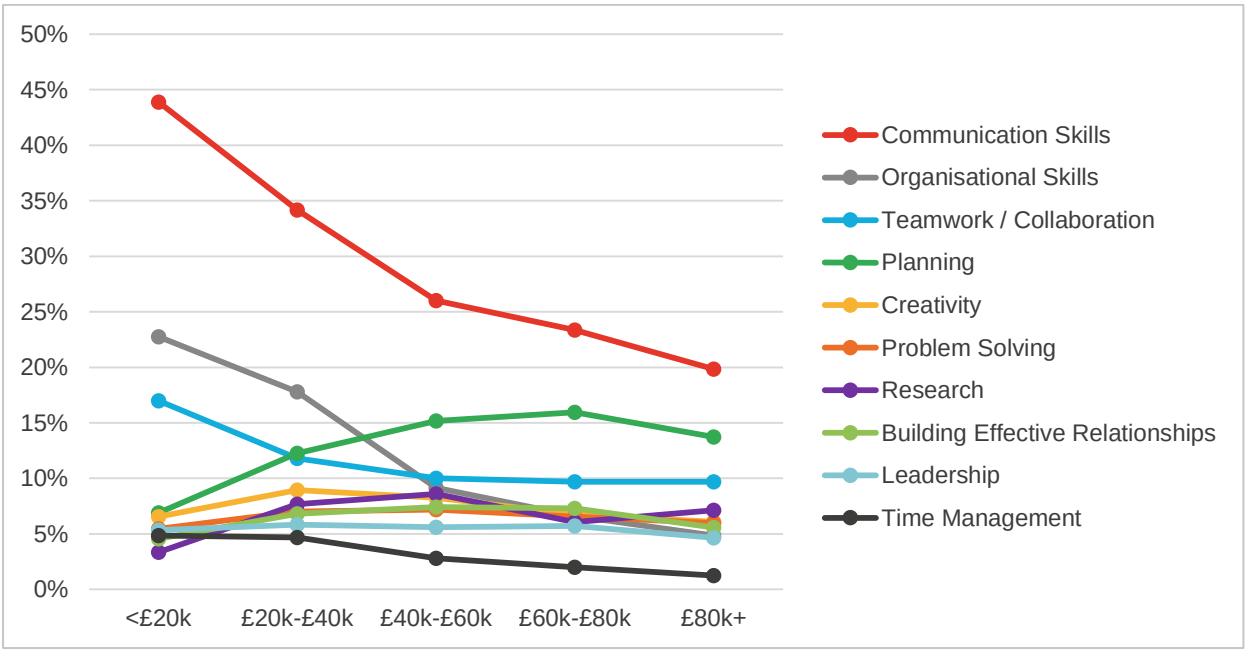
However, these are only hypotheses and the Burning Glass data is not sufficient to answer any of the more detailed questions about how the skill step required for different roles varies. This is an area that will have to be picked up later on.

(f) Differences by salary band

A second hypothesis that we addressed was whether there was any link between increased job seniority and the use of the essential skills. Because Burning Glass is not able to systematically identify job seniority in the advertisements that it stores, the salary range was used as a proxy.

To address this question, the proportion of job advertisements that referenced each of the top ten essential skills (as outlined in the previous table) were analysed in categories according to salary band of the role, if specified in the job advertisement.

Chart 3: Essential skills sought in job advertisements at different salary bands, Burning Glass data



This analysis presents a more interesting picture:

- *Overall*, explicit references for essential skills decrease as the salary range for the role increases.
- The decrease in explicit references for communication skills, organisational skill and teamwork and collaboration skills are particularly clear.
- Once again, those skills which are sub-skills in the Skills Builder Framework show interesting patterns:
    - Time management, which is a lower skill step is less called for as job salary increases.
    - Planning, which is a higher skill step is more called for as job salary increases.
- Some skills like creativity and problem-solving are fairly consistent across all the salary bands.

Once again, this deeper analysis throws up more questions than it answers, which can be taken forward in the next part of this research. Particularly:

- Are some of the broad skill areas less called for in higher-salary roles because they are implicit assumptions, or because they are less important?
- What are the expectations of employers around the sub-skills? Do these increase as job seniority increases in line with the Skills Builder Framework steps?

(g) Conclusions and next steps

It has been valuable to look at the Skills Builder Framework through an additional lens – what employers actually ask for when they recruit.

Some of the existing work in this area highlighted that employers rate essential skills as being a key consideration when they recruit. This has been shown in work from Nesta, as well as research carried out by World Skills UK.

Through analysis of data gathered by Burning Glass Technologies, there is also strong evidence that employers are explicitly calling for essential skills when they advertise roles. Additionally, the aggregated terms used by Burning Glass are captured with the Skills Builder Framework and there are no elements which are not. In this way, we can state that the Skills Builder Framework continues to be comprehensive when this additional data and taxonomy is introduced.

Attempting to draw deeper understanding through analysis of this data was less immediately helpful. Primarily, this was due to limitations in the data and its aggregation which meant that duplicates and definitions were not clear.

However, this deeper analysis has helped to form some further questions which can be approached in the next part of this research when we engage employers directly.

Chapter 5: Essential skills and apprenticeship standards

Summary:

- Apprenticeships are a growing development route – both for young people entering the workplace for the first time, but also for those who are upskilling or reskilling.
- Each new apprenticeship is underpinned by a standard, developed by employers, which outlines the skills, knowledge and behaviours that individuals are expected to be able to demonstrate to successfully pass the apprenticeship.
- These are therefore a potentially helpful source of insight as to employer expectations around essential skills.
- Currently, these standards are not in a format that lends itself to easy aggregation and analysis, so the approach is to take ten of the most widely used apprenticeship standards, and to analyse any references to the essential skills.
- In doing so, we can see the extent to which the Skills Builder Framework is comprehensive and relevant in this area.
- We find that there the Skills Builder Framework continues to be near comprehensive, with ten sub-skill mentions that are only partly addressed by the Skills Builder Framework. Most of these are consistent with those already highlighted by the combination of employability frameworks reviewed in Chapter 3 and the job advertisement data in Chapter 4.
- There is greater variety in the individual apprenticeship standards in the extent to which all of the sub-skills outlined in the Skills Builder Framework are relevant. We should expect that the level of mastery required in each essential skill will vary according to job role and responsibilities, and the level of the role.
- There are some indications that on average higher level apprenticeship qualifications require higher steps on the Skills Builder Framework, and that the relative importance of essential skills varies by role in an intuitive way. Exploring these areas in greater depth would require a much more comprehensive dataset though.
- Finally, this work has highlighted that a universal framework for essential skills is likely to be valuable in the context of apprenticeship standards – both to make more explicit skills which are often only implicit, and to add a helpful level of detail to what can be very broad skill types.

(a) Context

Apprenticeships are jobs that including industry-standard training in a recognised occupation. They combine training which is delivered on the job as well as off-the-job and then culminate in an assessment at the end of the apprenticeship[111].

They vary considerably, taking between one and four years to complete and are available at different qualification levels[112]:

[111] Institute for Apprenticeships & Technical Education (Date Unknown) *What is a quality apprenticeship* https://www.instituteforapprenticeships.org/quality/what-is-a-quality-apprenticeship/
[112] House of Commons Library (January 2019) *Briefing Paper Number CBP 03052: Apprenticeships and skills policy in England* London: House of Commons Library

Name	*Level*	*Equivalent educational level*
Intermediate	2	5 GCSE passes
Advanced	3	2 A level passes
Higher	4, 5, 6 and 7	Foundation degree and above
Degree	6 and 7	Bachelor's or master's degree

The Institute for Apprenticeships has been leading on approving and publishing apprenticeship standards which are increasingly replacing apprenticeship frameworks. The impetus for replacing the frameworks with standards was the sense that in some instances it was possible for apprentices to achieve the qualifications which were the focus in the frameworks, without having actually acquired the skills that were sought by employers to perform in the role. As a result these standards have been designed by groups of employers with a focus on how a job is carried out, rather than just as a qualification.

A meaningful number of young people now start working life through an apprenticeship – a total of 107,000 in 2017-18[113]. A greater number are using the route of apprenticeships whilst in employment to develop their skills and knowledge and to progress – in 2017-18, 114,000 individuals starting apprenticeships were aged 19-24, and 156,000 were aged over 25 years-old[114]. They are therefore clearly of great importance when it comes to our definition of employability earlier.

The apprenticeships continue to be a key part in the government's industrial strategy[115]. Although the common conception of an apprenticeship is often the learning of a trade or craft, the sectors with the most apprenticeship starts are:

- Business, Administration and Law (111,000 starts in 2017-18)
- Health, Public Services and Care (88,000 starts in 2017-18)
- Engineering and Manufacturing Technologies (59,000 starts in 2017-18)
- Retail and Commercial Enterprise (54,000 starts in 2017-18) [116]

The government has ambitious goals to grow the number of apprenticeships further, making them a key part of the workforce. This is demonstrated in their recent commitment for all UK public bodies with 250 or more staff having to employ an average of at least 2.3% apprentices in their workforce[117]. However, apprenticeships will still make up a very small proportion of post-secondary students relative to countries like Germany and Austria where the proportion is more than six times higher[118].

[113] House of Commons Library (February 2019) *Briefing Paper Number 06113: Apprenticeship Statistics: England* London: House of Commons Library
[114] Ibid.
[115] CBI (2019) *Getting Apprenticeships Right: Next Steps* London: CBI
[116] House of Commons Library (February 2019) *Briefing Paper Number 06113: Apprenticeship Statistics: England* London: House of Commons Library
[117] Department for Education (2019) Public sector apprenticeship target reporting: research brief. Available: https://www.gov.uk/government/publications/public-sector-apprenticeship-target-reporting-research-brief. Accessed: 21/06/2019.
[118] Kuczera, M. & Field, S. (2018) *OECD Reviews of Vocational Education and Learning: Apprenticeship in England, United Kingdom*, OECD

(b) About the apprenticeship standards and the approach taken

Apprenticeship standards are intended to list the skills, knowledge and behaviours that an apprentice is expected to be able to demonstrate by the end of their apprenticeship[119]. As such, they are an invaluable resource for understanding the role that essential skills play in supporting the employability.

Currently, there is no consistent language or taxonomy through the apprenticeship standards, although most use a variation of separating out the knowledge, skills and behaviours required to perform the role. This substantial variation between standards is a feature of the way that they were designed, which was by employer groups with minimal oversight or control from central government. The Institute for Apprenticeships and Technical Education was set up in 2017 with a remit to review and approve apprenticeship standards before they are adopted. This approval process means that they must all meet a quality threshold, and are normally reviewed on a three-year cycle. There should only be one standard for each type of role.

The absence of a consistent taxonomy makes analysis of aggregate data prohibitively difficult. As such, the approach here has been to analyse a sample of apprenticeship standards. To do so, we identified the ten the most frequently used apprenticeship standards according to the number of starts in 2017-18[120]:

- Team Leader / Supervisor
- Adult Care Worker
- Lead Adult Care Worker
- Customer Service Practitioner
- Operations / Departmental Manager
- Hair Professional
- Hospitality Team Member
- Installation Electrician / Maintenance Electrician
- Assistant Accountant
- Business Administrator

The number of starts in these apprenticeship standards range from 17,300 to 4,800[121].

For each of these apprenticeship standards we carried out a gap analysis, using an approach consistent with Chapters 3 and 4. However, we found that in the apprenticeship standards there is no distinction drawn between basic, essential or technical skills. As such, there is sometimes overlap between these skills in the descriptors that are given, and also with the technical knowledge that a particular role involves.

For example, from the Lead Adult Care Work apprenticeship standard, one expected skill is:

> *Lead and support colleagues to understand how to establish informed consent when providing care and support.*[122]

[119] HM Government (2017) *Apprenticeship frameworks and standards* https://apprenticeships.blog.gov.uk/2017/08/01/apprenticeship-frameworks-and-standards-the-main-differences/
[120] House of Commons Library (February 2019) *Briefing Paper Number 06113: Apprenticeship Statistics: England* London: House of Commons Library
[121] Ibid.
[122] Institute for Apprenticeships and Technical Education (2018) *Lead Adult Care Worker* Online [Accessed 20/6/19 at https://www.instituteforapprenticeships.org/apprenticeship-standards/lead-adult-care-worker/]

This actually has two elements: the technical knowledge of what constitutes the establishment of informed consent in this context; and the ability to lead and support colleagues which is linked to Leadership.

As another example, from the Customer Service Practitioner apprenticeship standard, one expected skills is:

> *Provide clear explanations and offer options in order to help customers make choices that are mutually beneficial to both the customer and your organisation*[123].

In this case, there will be considerable technical knowledge that will be required in order to make the right offer, and trading off some of the options in a specific context might also require technical skills or use of particular systems. However, the ability to generate options is a key component of problem solving, while communicating will draw on both presenting those options and listening to the response.

As such, we have sought to isolate the element which is the essential skill and analyse that against the Skills Builder Framework, rather than seeking a perfect match of the complete descriptor itself.

As before, we approached this analysis from two perspectives:

- Is the Skills Builder Framework *comprehensive*, in that it incorporates reference to the essential skills which also feature in the apprenticeship standards?
- To what extent is the Skills Builder Framework *relevant* to apprenticeship standards? Unlike Chapter 3, we are not expecting to see all of the skills steps referenced in each standard, but would be interested in seeing how different parts of the Skills Builder Framework are drawn on in different standards.

This is a further test of whether the Skills Builder Framework is comprehensive when extended to be used in the realm of apprenticeships and apprenticeship standards.

In the absence of a common taxonomy of essential skills in current usage through the apprenticeship standards, it also helps to explore the question of whether the Skills Builder Framework could act as a useful tool here.

(c) Key results: Comprehensiveness

We first explored whether the Skills Builder Framework incorporated the essential skills that were referenced in the apprenticeship standards. Unlike the similar analyses in Chapters 3 & 6, we do not try to match at the top level skill because the essential skills are not organised in such a way in the apprenticeship standards, and are often interwoven with technical skills.

As such this analysis has been carried out a sub-skill basis.

Overall, we found a strong fit between those essential skills called for in the apprenticeship standards that were reviewed.

An overview of the percentage fit between the apprenticeship standards and the Skills Builder Framework is provided in Table 4 below.

[123] Institute for Apprenticeships and Technical Education (2018) *Customer Service Practitioner* Online [Accessed 20/6/19 at https://www.instituteforapprenticeships.org/apprenticeship-standards/customer-service-practitioner/]

Table 4 Sub-skill level comparison with apprenticeship standards

Apprenticeship Standard	Sub-skill Level Comparison		
	Alignment (Full)	Alignment (Full + Partial)	Weak / Gap
Team Leader / Supervisor (Level 3)	100%	100%	0%
Adult Care Worker (Level 2)	90%	100%	0%
Lead Adult Care Worker (Level 3)	86%	100%	0%
Customer Service Practitioner (Level 2)	100%	100%	0%
Operations or Departmental Manager (Level 5)	88%	96%	4%
Hair Professional (Level 2)	75%	100%	0%
Hospitality Team Member (Level 2)	92%	8%	0%
Installation Electrician or Maintenance Electrician (Level 3)	100%	100%	0%
Assistant Accountant (Level 3)	92%	92%	8%
Business Administrator (Level 3)	95%	95%	5%

Table 5 summarises the gaps identified between what could be deemed to be essential skills according to our definition, and qualifies the significance of these by the repetition value presented alongside.

Table 5: Gap Frequency Overview in Apprenticeships Standards

Summarised Gap ***(Apprenticeship Standard Required Sub-Skills)***	**Frequency (/10 standards)**
Ensuring the environmental barriers to communication managed	1
Mentoring others	2
Forming professional relationships with other organisations	1
Coaching others	2
Negotiation and influencing	1
Meet standards of appearance	1
Client care and interactions	2
Time keeping / punctuality	1
Cultural awareness in dealing with others	1
Role modelling	1

These gaps will be analysed along those that have emerged in the other chapters in this part of the research in Chapters 7 and 8.

(d) Key results: Relevance

The skills and sub-skills as laid out in the Skills Builder Framework were then compared with each of the apprenticeship standards. Because these standards are more specific we were not expecting to see that every standard included all of the sub-skills for two reasons:

- Firstly, while the broad skill may be used it will not be necessary to have it to such a high level in every role.
- Secondly, that roles will naturally vary in which of the essential skills they draw on more or less.

Therefore, whilst in aggregate we would expect to see that the sub-skills are drawn on, we would expect that the proportions would be much lower.

Table 6: References to Skills Builder sub-skills in Apprenticeship Standards

Skills Builder Skills	Skills Builder Sub-Skills	Overall sub-skill % fit with apprenticeship standards	Overall skill % fit with apprenticeship standards
Teamwork: Working cooperatively with others towards achieving a shared goal	*Completes tasks:* Taking responsibility for completing own tasks within a team context (Step 3)	50%	41%
	Works positively: Able to get on well with team members (Step 4)	70%	
	Supports others: Willing to support others with their tasks in a team context (Step 5)	70%	
	Contributes to discussions: Contributes to team discussions and supports others to contribute too (Steps 6-8)	40%	
	Avoids negative conflict: Identify and avoid negative conflict in teams (Steps 9-10)	50%	
	Contributes effectively: Contribute to team meetings in a measured, valuable and concise way (Step 11)	10%	
	Evaluates performance: Evaluate a team's performance and suggest or influence improvements (Steps 12-13)	30%	
	Adaptive to others: Understands the strengths and weaknesses of others in the team and actively supports them on that basis (Steps 14-15)	10%	
Leadership: Supporting, encouraging and motivating others to	*Allocates tasks:* Ensures everyone has appropriate tasks across a team (Step 3)	40%	31%
	Takes responsibility: Takes responsibility for ensuring team completes tasks (Step 4)	40%	

achieve a shared goal	*Builds consensus:* Ensures team makes collective decisions and resolves differences of opinions (Steps 5-6)	40%	
	Builds on strengths: Can identify own strengths and weaknesses, and those of the team, using these to help achieve the tasks (Steps 7-9)	30%	
	Resolves conflicts: Keeps team focused on achieving goal, resolving conflicts (Step 10)	30%	
	Motivates team: Motivates team, being thoughtful about the situation (Steps 11-12)	30%	
	Adapts leadership style: Thinks about leadership style, aware of downsides, and able to adapt to circumstances (Steps 13-15)	10%	
Creativity: The use of imagination and the generation of new ideas	*Uses imagination:* Being able to use imagination to generate new ideas (Steps 3-4)	20%	7%
	Improves on ideas: Build off existing ideas to generate new or improved ones (Step 5)	20%	
	Understands creativity: Explain how creativity links to role and wider life (Steps 6-7)	0%	
	Uses tools for creativity: Use mind-mapping, random stimuli and other tools to generate more ideas (Steps 8-9)	0%	
	Manages creativity in a group: Use multiple perspectives to generate more ideas while avoiding group think (Steps 10-11)	0%	
	Optimises creative approach: Able to reflect on use of creative tools, choosing between options (Steps 12-15)	0%	
Problem Solving: The ability to find a solution to a complex situation or challenge	*Seeks help:* Get help from others when needed (Step 2)	60%	44%
	Finds information: Find extra information as required (Step 3)	80%	
	Creates options: Come up multiple options for simple problems and choosing between those options (Steps 4-5)	70%	
	Scopes and researches: Identify complex problems and carry out research to help solve them (Steps 6-7)	40%	
	Analyses problems: Identify causes and effects (Step 8)	40%	
	Evaluates routes of action: Create multiple options for complex problems and evaluate them (Steps 9-10)	30%	
	Deploys problem-solving tools: Use tools including logic trees, testable hypotheses and deductive and inductive logic to solve problems (Steps 11-13)	20%	
	Evaluates effectiveness: Identify underpinning assumptions on approach to problem-solving, and evaluate success of solutions (Steps 14-15)	10%	
Listening: The receiving, retaining and processing of	*Identifies and retains information:* Can identify and remember relevant information when listening (Step 5)	50%	31%
	Listens in a group context: Take part in group conversation (Step 6)	20%	

information or ideas	*Interprets speakers:* Taking meaning from language, gesture, emphasis and apparent status (Steps 7-9)	30%	
	Checks understanding: Asks questions to check understanding (Step 10)	70%	
	Compares perspectives: Be able to take in and reconcile different points of view (Step 11)	30%	
	Listens critically: Identify themes or biases when listening to others (Steps 12-13)	10%	
	Evaluates speakers: Evaluate how a speaker can become more effective (Steps 14-15)	10%	
Presenting: The oral transmission of information or ideas	*Communicates logically:* Order points logically when communicating (Step 4)	70%	41%
	Communicates appropriately: Use appropriate tone and language (Steps 5-6)	50%	
	Uses examples effectively: Bringing in appropriate examples to reinforce points (Step 7)	30%	
	Aware of context: Adjusting language and detail according to context (Step 8)	80%	
	Adapts to the audience: Adapt to the audience and their reaction (Steps 9-10)	50%	
	Highly persuasive: Adapts communication to persuade (Steps 11-12)	10%	
	Communicates brilliantly: Chooses the optimal communication approach depending on circumstances (Steps 13 -15)	0%	
Aiming High: The ability to set clear, tangible goals and devise a robust route to achieving them	*Open to challenge:* Look for opportunities to take on something that might be challenging (Step 4)	50%	41%
	Open to goals: Set goals with support (Step 5)	50%	
	Sets own goals: Set own goals, at appropriate level of stretch (Step 6)	50%	
	Prioritises: Can order and prioritise tasks to achieve a goal (Step 7)	80%	
	Secures resources: Identify and ensure access to appropriate resources to achieve goal (Steps 8-9)	20%	
	Seeks self-improvement: Reflects on own skillset and finds appropriate development opportunities (Step 10)	60%	
	Embraces autonomy: Can work autonomously using SMART targets (Step 11)	20%	
	Seeks feedback: Seeks out feedback, including constructive criticism (Step 12)	30%	
	Plans effectively: Can lead a long-term piece of work using milestones and suitably responsive personal strengths and to changes (Steps 13-15)	10%	
Staying Positive:	*Stays calm:* Ability to stay calm when facing setbacks (Step 3)	40%	21%

The ability to use tactics and strategies to overcome setbacks and achieve goals	*Persists:* Persists in the face of setbacks (Step 4)	30%	
	Encourages others: Encourages others to persist in face of setbacks (Steps 5-6)	20%	
	Identifies opportunities: Can identify opportunities in setbacks or challenges (Steps 7-8)	20%	
	Focuses on positive action: Turns ideas about solutions into action (Steps 9-10)	20%	
	Manages risk: Identify and manage risks appropriately (Steps 11-12)	20%	
	Manages emotional responses: Emotional self-awareness and moderates that according to the situation (Steps 13-15)	0%	

Overall, therefore there is a good alignment of the Skills Builder essential skills in the different apprenticeships.

Some of the sub-skills above are under-represented because the skills are named so broadly in the apprenticeship standard – a point that is discussed below. When it was not possible to identify a sub-skill or set of sub-skills that were aligned then the essential skill reference was excluded. For example, 'Work effectively with colleagues'[124], taken from the Maintenance Electrician apprenticeship standard could cover any of the sub-skills of teamwork, and so has been excluded in this analysis.

(e) Additional insights: Skills Builder Steps and Apprenticeship Standards

Although a fuller dataset would be required to investigate this further, there is some supporting evidence for the hypothesis that the level of essential skills required for a role is positively associated by the overall level of the apprenticeship.

For this quick analysis, we took the minimum and maximum implied steps on the Skills Builder Framework from the gap analysis. Where there were no implied steps in an essential skill area, this was left blank and excluded from the averages.

These were then aggregated by taking the mean minimum and maximum for those apprenticeship standards at each level. Creativity was excluded due to a paucity of data.

This table highlights that in almost all cases the steps expected at different apprenticeship levels increased in line with the level.

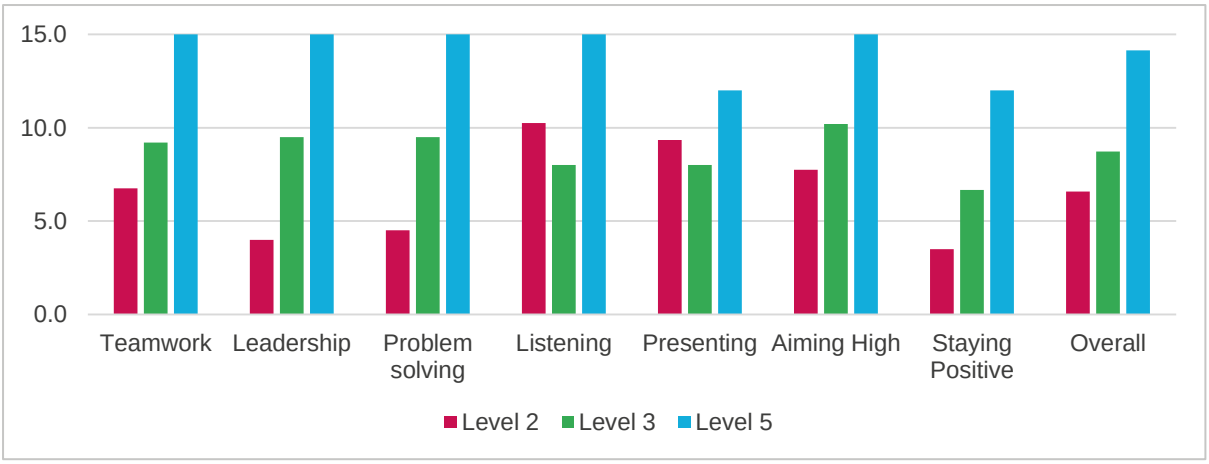
[124] Institute for Apprenticeships and Technical Education (2018) *Installation Electrician / Maintenance Electrician* Online [Accessed 20/6/19 at https://www.instituteforapprenticeships.org/apprenticeship-standards/installation-electrician-maintenance-electrician/]

Table 7: Average maximum implied skill step on Skills Builder Framework, by level of Apprenticeship

	Level 2	Level 3	Level 5
Teamwork	6.8	9.2	15.0
Leadership	4.0	9.5	15.0
Problem solving	4.5	9.5	15.0
Listening	10.3	8.0	15.0
Presenting	9.3	8.0	12.0
Aiming High	7.8	10.2	15.0
Staying Positive	3.5	6.7	12.0
Overall	**6.6**	**8.7**	**14.1**

This is captured in the chart below:

Chart 4: Average maximum implied skill step on Skills Builder Framework, by level of Apprenticeship



This data is obviously very limited but might be worth further exploration.

A similar effect can be seen by looking at those pairs of apprenticeship standards which are Level 2 and Level 3 versions of the same role. This is valuable because it controls for many more factors than the rudimentary analysis above.

Example 1: Adult Care Worker (Level 2) and Lead Adult Care Worker (Level 3)

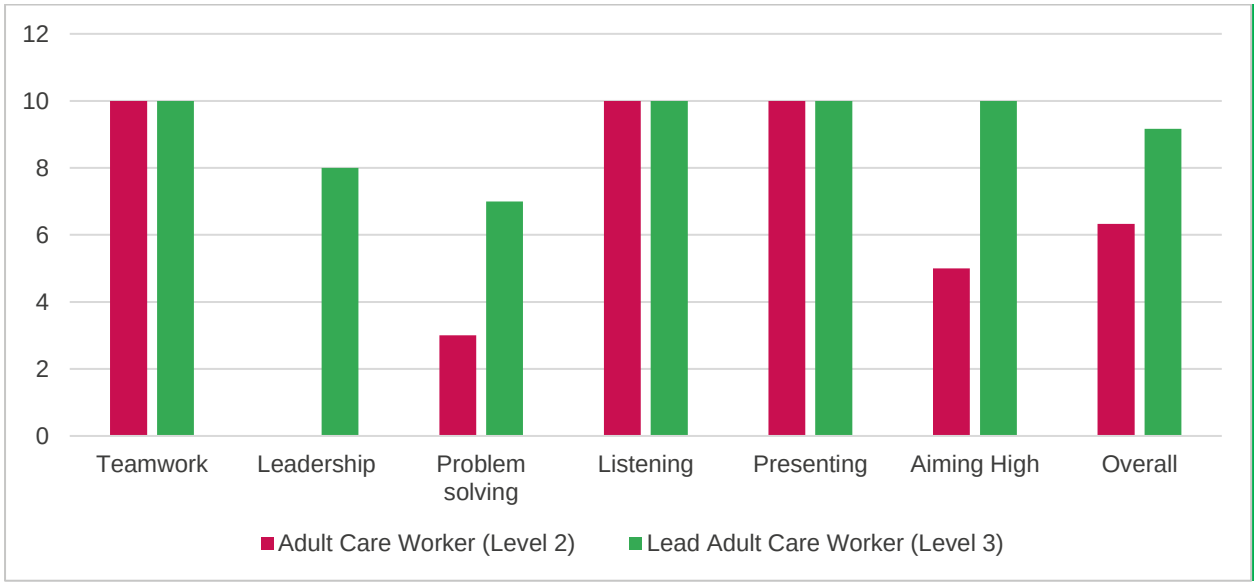
Here, we see that in every essential skill, the expected step is the same or higher in the Level 2 qualification than its Level 3 equivalent:

Table 8: Implied Skills Builder essential skill steps for Adult Care Workers at Level 2 and 3

	Adult Care Worker (Level 2)	Lead Adult Care Worker (Level 3)
Teamwork	10	10
Leadership	0	8
Problem solving	3	7
Listening	10	10
Presenting	10	10
Aiming High	5	10
Overall	**6.3**	**9.2**

This is captured in this chart:

Chart 5: Implied Skills Builder essential skill steps for Adult Care Workers at Level 2 and 3



Example 2: Team Leader (Level 3) and Operations / Departmental Manager (Level 5)

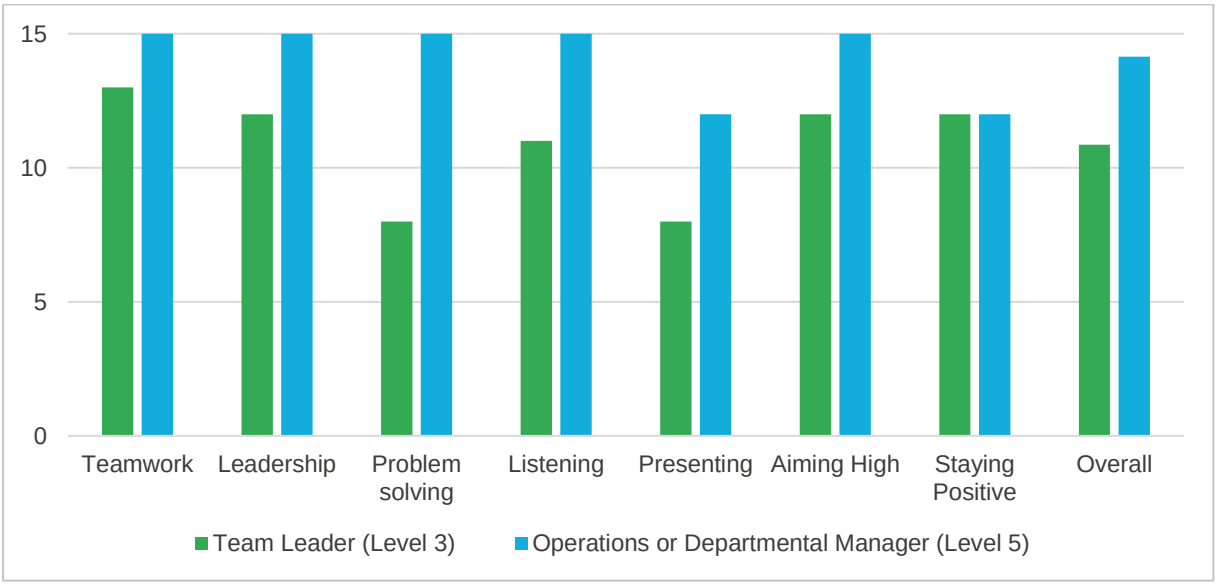
These two apprenticeship standards continue on from one another, so make a useful second comparison. Once again, we see that in every essential skill, the expected step is the same or higher in the Level 5 qualification than its Level 3 equivalent:

Table 9: Implied Skills Builder essential skill steps for Team Leaders (Level 3) and Departmental Managers (Level 5)

	Team Leader (Level 3)	Operations or Departmental Manager (Level 5)
Teamwork	13	15
Leadership	12	15
Problem solving	8	15
Listening	11	15
Presenting	8	12
Aiming High	12	15
Staying Positive	12	12
Overall	**10.9**	**14.1**

This is also captured in the chart below:

Chart 6: Implied Skills Builder essential skill steps for Team Leaders (Level 3) and Departmental Managers (Level 5)



These two examples of matched apprenticeship standards therefore add further support to the hypothesis that apprenticeship standards which are accredited at a higher level also draw on essential skills at higher steps as outlined in the Skills Builder Framework.

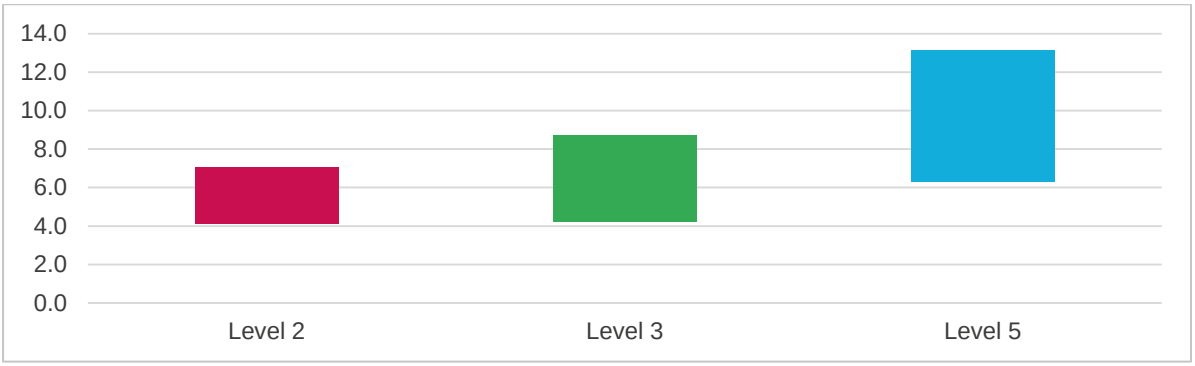
Essential skills that are implicit

Finally, it is also interesting to see the minimum Skills Builder steps which are referenced within the apprenticeship standards. Aggregating the averages, we saw that not only did the maximum implied step increase with the accreditation level of the apprenticeship standard, but the average minimum also increased.

This is an important insight because it supports the hypothesis that many of the earlier steps on the Skills Builder Framework are presumed and only those skill steps in the 'stretch zone' are included.

This is illustrated in the chart below:

Chart 7: Average minimum and maximum Skills Builder steps by Apprenticeship Standard level



(f) Further Reflections: How a universal framework could play a role

One of the challenges with this analysis is that it sought to match those essential skills which were explicitly matched into the apprenticeship standards. However, in a good many cases there were steps or sub-skills within the essential skills that the authors felt would be vital but which were not explicitly mentioned.

For example, a Customer Service Practitioner dealing with a customer complaint would need to draw on the Staying Positive skills of identifying opportunities and focusing on taking positive action. Depending on the complexity or challenge of the cases they were dealing with they would likely need to manage their emotional responses. However, there is no mention of these skills in the apprenticeship standard.

Similarly, a Departmental Manager trying to solve a problem collectively is likely to need to manage a creative process in a team to generate ideas and possible solutions, or develop new innovations. However, the language of creativity is entirely absent from this apprenticeship standard.

The existence of a universal framework in this area could therefore act as a 'checklist' to ensure that essential skills and sub-skills that were relevant could be included. Such a framework could also avoid the use of generic skill labels which are too broad to be helpful, as highlighted earlier.

(g) Conclusions and next steps

This chapter has added another helpful lens to the question of whether the Skills Builder Framework can be extended into acting as a universal framework for essential skills.

Doing so has generated three main insights:

- Firstly, that the Skills Builder Framework includes the essential skills that are present in the apprenticeship standards that have been reviewed. A small number of elements that are not drawn out in the Framework as explicitly as they could be have been captured to be

reviewed in Chapter 7, including coaching, mentoring and modelling, client care, timeliness and appropriate dress.

- Secondly, that individual apprenticeship standards vary considerably in the range of essential skills and skill steps that they cover. Some miss out entire essential skills – most often creativity or leadership – and most only have a limited range of essential skills. This might reflect that it is relatively early days for the apprenticeship standards.
- Thirdly, that although essential skills are important to do almost any job, the level to which they are required varies considerably – both by role but also the level. Whilst to form a robust conclusion would take a much larger dataset there are some indications that the higher the level of the apprenticeship, the higher the average step expectations against the Skills Builder Framework.

Finally, the absence of a common taxonomy or structure to the apprenticeship standards at present means that the authors believe that many of the key essential skills for different skills have been overlooked – potentially because they are assumed obvious. At other points the descriptors referencing essential skills in the standards are so broad as to be meaningless to a user. In both cases, a universal essential skills framework would add tremendous value in ensuring that nothing was missed and that it had a necessary level of specificity, as well as potentially supporting measurability.

Chapter 6: Essential skills and higher education

Summary:

- The goal of this part of the research was to understand the extent to which the Skills Builder Framework could be used in the context of universities and higher education.
- Universities and higher education institutions increasingly set out the broader development goals for their students through statements of outcomes known as graduate attributes.
- We will review a sample of these graduate attributes created or used by universities both in their careers departments to support employability, and those that link to success in higher education. Throughout this study the terms 'universities' and 'higher education institutions' are used interchangeably to refer to universities and colleges of higher education in the UK.
- To achieve this we initially included three reviews of graduate attributes. This included all attributes listed in reviews from the Higher Education Academy (HEA), the Confederation of British Industry (CBI), and the Quality Assurance Agency for Higher Education (QAA).
- We then reviewed eight frameworks as examples used by individual higher education institutions. These were: Aberdeen University, Bath Spa University, Cambridge University, Oxford Brookes University, Glasgow University, University of the Arts London, University of West Scotland and the University of York.
- We compared from two different perspectives:
    - *Is the Skills Builder Framework comprehensive?* That is, does it include all of the skills and sub-skills which were referenced in the graduate attributes?
    - *Is the Skills Builder Framework all relevant?* That is, to what extent are the skills and sub-skills referenced in the Skills Builder Framework also reflected in those other graduate attributes? As higher education is focused at higher levels of qualifications, we might not expect explicit mention of earlier steps.
- Overall, we found that the Skills Builder Framework is comprehensive in including those skills and sub-skills identified in the comparator graduate attribute frameworks.
- The majority of skills and sub-skills either fully or partially align: 71% (42/59) of Skills Builder sub-skills are identified in over half of the University graduate attribute frameworks. Only, 5% (3/59) are not explicitly stated.
- Some gaps in the Skills Builder Framework have been identified, most notably skills associated with management of self and task (professionalism, time management, efficiency).
- Generally, the Skills Builder Framework is more detailed than those identified in the graduate attribute frameworks. This is particularly evident across the 'Creativity' and 'Listening' skillsets which demonstrate a weaker alignment. The findings presented here should be considered with this awareness.

(a) Context of essential skills in higher education

There has been growing emphasis from universities on the importance of developing employability as a core outcome of higher education[125]. A 2008 Confederation of British Industry (CBI) survey of higher education institutions found that 'ninety-four percent of respondents agreed or agreed strongly that they had deliberately tailored their approach to teaching their students to help make themselves more employable, with 92% citing additional internally delivered programmes to help students become more employable'[126]. This has been partly driven by market changes in the higher education system[127].

Barrie (2007) defines the creation of graduate attribute frameworks as the outcome of governmental and university-led initiatives, which have attempted to characterise 'the skills, knowledge and abilities of university graduates, beyond disciplinary content knowledge, which are applicable to a range of contexts'[128].

There continues to be a debate in higher education about the balance between higher education's purpose to generate knowledge for its own sake, and the achievement of particular graduate outcomes.

According to Pukelis et al. (2007), 'there is no debating that a major responsibility for the smooth integration of graduates into professional life, and hence into society, lies with higher education institutions (HEIs)'[129]. In support of this belief the Scottish Funding Council in 2009 made the assertion that 'colleges and HEIs should explicitly take account of their learners' future employment needs (including the generic skills and abilities needed in the workplace) in developing the curriculum and in the teaching and learning methods used'[130].

Research indicates that the size and structure of the graduate labour market means increasing graduates' employability will not necessarily lead to enhanced employment opportunities as the number of graduates is not necessarily closely aligned to the number of graduate jobs[131]. For this reason there is a much greater expectation that universities should be supporting employability skills; a degree alone is not enough to ensure employment. This includes: embedding employability into the curriculum; offering extra-curricular and co-curricular opportunities for students; building links with employers; supporting students to develop core attributes; supporting students' capacity to articulate their skills; and investing in formal careers services[132].

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[125] Yorke, M., Knight, P. T. (2004) *Embedding Employability into the Curriculum*, The 'Learning and Employability' series, Available: https://www.qualityresearchinternational.com/esecttools/esectpubs/Embedding%20employability%20into%20the%20curriculum.pdf. Accessed 20/06/2019

[126] Confederation of British Industry (2009) *Future Fit: Preparing graduates for the world of work*. Available: https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2009/future-fit-preparing-graduates-for-the-world-of-work.PDF. Accessed: 12/06/2019.

[127] UK Commission for Employment and Skills. (2014) *The future of work: jobs and skills in 2030*. Available: https://www.gov.uk/government/publications/jobs-and-skills-in-2030. Accessed 12/06/2019.

[128] Barrie, C., S. (2004) *A research-based approach to generic graduate attributes policy*, Higher Education Research and Development. Vol.23 (3) pp.261-275.

[129] Pukelis, K, Pileičikienė, N, Allan, A and Dailidienė, E (2007) *European and National Level Strategies for Competency-Based Curriculum Development: summary*, HEGESCO. Available at: www.decowe.com/static/uploaded/htmlarea/finalreportshegesco/European_National_and_Universities_Strategies_-_Summary.pdf. Accessed 12/06/2019.

[130] Scottish Funding Council (2009) *Learning to Work Two - developing the Council's employability strategy: consultation outcomes, action plan and invitation to develop proposals*. Available at: www.sfc.ac.uk/web/FILES/CircularsSFC4109/sfc4109.pdf. Accessed 12/06/2019.

[131] Pericles Rospigliosi, A., Greener, S., Bourner, T., Sheehan, M. (2014) *Human capital or signalling, unpacking the graduate premium*. International Journal of Social Economics, 41 (5) 420–32.

[132] Artess, J., Hooley, T., & Mellors-Bourne, R. (2016) *Employability: A Review of the Literature 2012-16*, Higher Education Academy.

To do so, research studies were setup to identify the barriers to the inclusion of employability skills in higher education. In combination they identified the following challenges:

- Confusion, ambivalence and definitional ambiguity amongst academic staff,
- Student resistance and non-engagement,
- Difficulties associated with inter-professionalism between academics, careers and employability advisers/coordinators and education developers,
- Variety of needs employers list is not always a realistic request of the universities.

Over the last ten years, much has been done to overcome these barriers and incorporate the explicit tuition of 'skills' into higher education, culminating in a range of skill-based frameworks, many of which drawing upon the *Embedding Employability in Higher Education* framework put together by the Higher Education Academy[133].

According to Goodwin (2016) the use of an effective graduate attribute framework can:

- Make it more clear to students how they can prepare themselves to meet the needs of employers and society.
- Provide a useful framework to help students monitor their development as they go through university, perhaps actively addressing any 'gaps' if needed.
- Help to make it clearer to both academic staff and students the benefits of taught modules beyond simply meeting learning outcomes.
- Help academic staff identify any 'gaps' across groups of modules or whole courses to ensure that important developmental areas are not missed, for example to reflect sector skills needs or labour market changes.
- Provide some measure of 'learning gain' when used early on in a course and again at the end of modules or academic years.
- Give employers some reassurance that students from a particular institution will be more suitably equipped to succeed in graduate-level roles.
- Provide a light-touch way of 'embedding' employability into the curriculum[134].

Despite this progress, there has been little consensus on what these actually mean[135]. What graduate attributes are and how they are acquired and measured is an ongoing challenge for universities and graduate employers.

There is a range of interpretation as to what constitutes these graduate or employability attributes. Similar, to the variance of what 'skills' are essential for personal and career development there is disagreement as to which graduate attributes are most important[136]. The Higher Education Academy's (HEA) review of literature associated with graduate or employability attributes have formed a composite list of the most popular attributes. Through this review the HEA found that 'graduate attributes represent more than 'employability skills'. Rather they describe a range of skills, attributes, attitudes and behaviours that have a relevance to the workplace, but also frequently relevance to other contexts such as higher education, family life or citizenship'[137].

133 Higher Education Academy (2016) *Framework for Embedding Employability in Higher Education*. Available: [https://www.heacademy.ac.uk/system/files/downloads/embedding-employability-in-he.pdf]. Accessed: 14/06/2019.
134 Goodwin, J. (2016) *Graduate Attributes: The pros, the cons, the point*, in *Association of Graduate Careers Advisory Services*, 'Defining Graduate Attributes', Pp.3.
135 Reid, E. R., Manley C. (2016) *Graduate attributes: the demise of diversity* in *Association of Graduate Careers Advisory Services*, Defining Graduate Attributes, Pp. 4-5.
136 Cavanagh, J., Burston, M., Southcombe, A. and Bartram, T. (2015) *Contributing to a graduate-centred understanding of work readiness: An exploratory study of Australian undergraduate students' perceptions of their employability*. International Journal of Management Education, 13 (3) 278–88.
137 Higher Education Academy (2016) *Framework for Embedding Employability in Higher Education*.

Given the variance of attributes evident in the existing literature, it is unsurprising that higher education institutions experience confusion between which skills, capabilities, qualities and other proxies of human ability and development should be the focus of their graduate development frameworks.

A single, comprehensive, understandable and non-ambiguous skills framework for use throughout an individual's personal, academic and career development would be an invaluable tool for the institutions involved in this journey. It is with this purpose that the comparative examination of university graduate attributes and the Skills Builder framework has occurred.

(b) The higher education comparator frameworks chosen

The higher education frameworks selected for comparison can be grouped into three categories:

1) Research Formed Graduate Attributes

i. *Higher Education Academy: Employability - A review of the literature 2012-2016:* The purpose of the review was to support the HEA to maintain an up-to-date evidence base and to better understand the practices and policies that have a demonstrable positive impact on employment outcomes. This paper explores research on the subject of employability in higher education (HE). It examines 187 pieces of research published between 2012 and 2016 to describe how the subject of employability has been addressed and to draw out some of the key implications for higher education providers, academics and employability practitioners[138].

2) Higher Education General Graduate Attributes Guidance

i. *Confederation of British Industry (CBI): Future fit – Preparing graduates for the world of work:* This report from the Universities UK and CBI partnership seeks to illustrates how universities and business can work together to help equip graduates for their future working lives. The report outlines how employers value the skills and attributes that graduates develop through higher education. It examines what employers want of the graduates they employ, how businesses are helping students prepare for their careers after graduation, what universities are doing to deliver these skills, and whether students' needs are being met[139].

ii. *The Quality Assurance Agency for Higher Education (QAA): Guidance for UK Higher Education Providers Graduate Outcomes*: Created by the British Government's Chief Entrepreneurial Adviser, and used to inform international initiatives such as the Commission's EntreComp Framework. The purpose of this document is to provide a roadmap for Enterprise and Entrepreneurship Education in Higher Education. The data presented underwent consultation through UK wide case studies, QAA Quality Enhancement Network events and a selection of international colleagues who were piloting the graduate attribute framework[140].

[138] Higher Education Academy (2016) *Framework for Embedding Employability in Higher Education*. Available: [https://www.heacademy.ac.uk/system/files/downloads/embedding-employability-in-he.pdf]. Accessed: 14/06/2019.
[139] Confederation of British Industry (CBI) (2009) *Future fit – Preparing graduates for the world of work* (2009). Available: https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2009/future-fit-preparing-graduates-for-the-world-of-work.PDF. Accessed: 14/06/2019.
[140]The Quality Assurance Agency for Higher Education (QAA) (2018) *Guidance for UK Higher Education Providers Graduate Outcomes*. Available: https://www.qaa.ac.uk/docs/qaas/enhancement-and-development/enterprise-and-entrpreneurship-education-2018.pdf?sfvrsn=15f1f981_8. Accessed: 14/06/2019.

3) Higher Education Institution Frameworks:

i. Aberdeen University
ii. Bath Spa University
iii. Cambridge University
iv. Oxford Brookes University
v. University of Glasgow
vi. University of the Arts London
vii. University of West Scotland
viii. University of York

A range of University types, geography and specialism have been selected in response to Jackson's (2014) analysis of undergraduate employability skill competence: he found that graduate attributes varied by an institution's geographical origin, work placement focus, non-curricular development activities, and the quality of skills development in the learning programme[141]. The sample selection works to recognise such variance.

The graduate attributes presented for comparison in this report can be classified as non-technical skills: those required to carry out many day-to-day workplace operations[142]. In analysis of existing research literature in this area it is clear that although some employers seek specific knowledge and skills developed by universities, many were more interested in generic transferable skills and behaviours, and saw a degree as indicative of a person's capacity to learn[143].

The same approach, analysis method and limitations apply to this section of work (the comparison of Skills Builder Framework and wider graduate attribute frameworks) as outlined in Chapter 3 (employability frameworks). Attributes associated with character and knowledge (academic and industry) were considered out of scope for comparative analysis. As were, attributes that are ambiguous statements such as 'demonstrates a willingness to be a "lifelong learner"'. This is a similar approach taken by Jones (2009)[144] and Simpson (2017)[145] in their research on the usefulness of graduate attributes in higher education on the basis that these cannot all be validated until the end of a graduate's working life.

(c) Key results: Is the Skills Builder Framework comprehensive?

Before considering the alignment figures it is important to frame expectations with the recognition of graduate frameworks as being different from the employability frameworks previously discussed. Graduate attributes are embedded into the curriculum of a university to enhance graduate employability prospects and evaluate the potential of graduates to go beyond knowledge acquisition. They are tightly targeted to cater for graduates only, unlike the more generic

[141] Jackson, D. (2014c) *Testing a model of undergraduate competence in employability skills and its implications for stakeholders,* Journal of Education and Work, 27 (2) 220–42.
[142] Roepen, D. (2015) *Business graduate perceptions of the development and application of nontechnical skills within higher education and the workforce*. Edith Cowan University Research Online. Available: http://ro.ecu.edu.au/theses/1634/. Accessed: 14/06/2019.
[143] Pollard, V., Wilson, E. (2014) *The 'entrepreneurial mindset' in creative and performing arts higher education in Australia*. Artivate: A Journal of Entrepreneurship in the Arts; 3 (1) 3–22.
[144] Jones, A. (2009) *Rediscliplining generic attributes: the disciplinary context in focus*, Studies in Higher Education, issue 34(1), pp. 85-100.
[145] Simpson, E. (2017) *Can graduate attributes be taught and not simply embedded in the curriculum? An evaluation of stakeholder perspectives and implications for graduate employability*. Available: https://rke.abertay.ac.uk/ws/portalfiles/portal/15279195/Simpson_CanGraduateAttributesBeTaught_Author_2017.pdf . Accessed: 21/06/2019

employability frameworks previously analysed. For this reason there will be some variance and phrasing differences between the graduate attributes and the Skills Builder Framework. Despite this, the variance is low and data indicates that the Skills Builder Framework is comprehensive in including those comparable skills and sub-skills identified in the graduate attribute frameworks.

An overview of the % fit between graduate attribute frameworks and the Skills Builder Framework is provided in Table 10. Graduate attribute framework-specific summaries can be found in the Appendix B.

Table 10: Comparison between Graduate Attribute Frameworks and Skills Builder Framework

Framework	Skill Level Comparison			Sub-skill Level Comparison		
	Alignment (Full)	Alignment (Full + Partial)	Weak/ Gap	Alignment (Full)	Alignment (Full + Partial)	Weak / Gap
HEA Lit. Review	100%	100%	0%	80%	84%	16%
CBI Report	100%	100%	0%	93%	96%	4%
QAA Report	100%	100%	0%	87%	93%	7%
Aberdeen University	100%	100%	0%	80%	87%	13%
Bath Spa University	100%	100%	0%	91%	91%	9%
Cambridge University	100%	100%	0%	93%	100%	0%
Oxford Brookes University	100%	100%	0%	87%	87%	13%
Glasgow University	89%	89%	11%	84%	88%	12%
University of Arts (London)	100%	100%	0%	100%	100%	0%
University of West Scotland	100%	100%	0%	94%	94%	6%
University of York	100%	100%	0%	85%	92%	8%

Summary Conclusion:

The majority of skills and sub-skills referenced in the graduate attribute frameworks align with the Skills Builder skills and sub-skills, suggesting a good fit between them. The strongest alignment is evident at skill level with all except Glasgow University aligning 100%, where the inclusion of 'Ethically and Socially Aware' as a graduate attribute reduces the alignment with the Skills Builder Framework. Ethics, social responsibility and sustainability is identified in some form across most graduate attribute frameworks. For example:

An awareness and appreciation of social and cultural diversity (York University)

Consider and act upon the ethical, social and global responsibilities of their actions (Glasgow University)

Ethically minded and culturally aware (University of West Scotland)

According to Northouse (2013) ethical practice and social judgement are effective leadership competencies.[146] The Skills Builder Teamwork and Leadership skills account for these in terms of collaboratively working together and respecting other viewpoints. However, the current skill descriptors do not explicitly reference cultural diversity or ethical and sustainable approaches. Therefore, although they should not be considered significant skill-level gaps, the attributes associated with ethics, culture and social awareness have been included in scope as they highlight the potential requirement for skill re-phrasing.

Table 11 highlights the significance of this inclusion upon the statistics presented in Table 10.

Table 11: Gap Frequency Overview against graduate attributes

Summarised Gap ***(Graduate Attribute Framework Required Sub-Skills)***	**Frequency**
Ethical and cultural awareness, engagement and responsibility	7
Professionalism, time management	6
Strategy	1
Defend ideas in dialogue and challenge assumptions	1
Curious and engage in the pursuit of new knowledge and understanding	1

These gaps will be compared with insights drawn from Chapter 3, 4 and 5 and taken forward to the next part of this research (see Part 3) to explore in greater depth.

(d) Key results: Is the Skills Builder Framework relevant?

To comprehensively analyse the suitability of the existing Skills Builder Framework each skill and sub-skill was compared with those identified in the comparator graduate attribute frameworks. This level of comparison enables evaluation of the skills and sub-skills in terms of their relevance for a university specific graduate attribute framework.

Section ‘D’ demonstrates that the Skills Builder Framework includes the majority of the skills and sub-skills presented by higher education institutions. Table 13 presents the essential skills and sub-skills as laid out in the Skills Builder Framework that are relevant and not explicitly referenced in the comparator graduate attributes.

[146] Northouse, P.G. (2013). *Leadership: Theory and Practice.* Los Angeles: Sage Publications.

Table 13: Skills Builder Fit with Eleven University Graduate Attribute Frameworks

Skills	Sub-Skills	Overall sub-skill % fit with graduate attribute comparator frameworks	Overall skill % fit with graduate attribute comparator frameworks
Teamwork: Working cooperatively with others towards achieving a shared goal	*Completes tasks:* Taking responsibility for completing own tasks within a team context (Step 3)	73%	67%
	Works positively: Able to get on well with team members (Step 4)	100%	
	Supports others: Willing to support others with their tasks in a team context (Step 5)	81%	
	Contributes to discussions: Contributes to team discussions and supports others to contribute too (Steps 6-8)	64%	
	Avoids negative conflict: Identify and avoid negative conflict in teams (Steps 9-10)	55%	
	Contributes effectively: Contribute to team meetings in a measured, valuable and concise way (Step 11)	64%	
	Evaluates performance: Evaluate a team's performance and suggest or influence improvements (Steps 12-13)	18%	
	Adaptive to others: Understands the strengths and weaknesses of others in the team and actively supports them on that basis (Steps 14-15)	81%	
Leadership: Supporting, encouraging and motivating others to achieve a shared goal	*Allocates tasks:* Ensures everyone has appropriate tasks across a team (Step 3)	64%	64%
	*Takes responsibility:*Takes responsibility for ensuring team completes tasks (Step 4)	55%	
	Builds consensus: Ensures team makes collective decisions and resolves differences of opinions (Steps 5-6)	55%	
	Builds on strengths: Can identify own strengths and weaknesses, and those of the team, using these to help achieve the tasks (Steps 7-9)	64%	
	Resolves conflicts: Keeps team focused on achieving goal, resolving conflicts (Step 10)	45%	
	Motivates team: Motivates team, being thoughtful about the situation (Steps 11-12)	81%	
	Adapts leadership style: Thinks about leadership style, aware of downsides, and able to adapt to circumstances (Steps 13-15)	81%	

Creativity: The use of imagination and the generation of new ideas	*Uses imagination:* Being able to use imagination to generate new ideas (Steps 3-4)	91%	33%
	Improves on ideas: Build off existing ideas to generate new or improved ones (Step 5)	91%	
	Understands creativity: Explain how creativity links to role and wider life (Steps 6-7)	0%	
	Uses tools for creativity: Use mind-mapping, random stimuli and other tools to generate more ideas (Steps 8-9)	9%	
	Manages creativity in a group: Use multiple perspectives to generate more ideas while avoiding group think (Steps 10-11)	0%	
	Optimises creative approach: Able to reflect on use of creative tools, choosing between options (Steps 12-15)	9%	
Problem Solving: The ability to find a solution to a complex situation or challenge	*Seeks help:* Get help from others when needed (Step 2)	18%	67%
	Finds information: Find extra information as required (Step 3)	82%	
	Creates options: Come up multiple options for simple problems and choosing between those options (Steps 4-5)	100%	
	Scopes and researches: Identify complex problems and carry out research to help solve them (Steps 6-7)	82%	
	Analyses problems: Identify causes and effects (Step 8)	91%	
	Evaluates routes of action: Create multiple options for complex problems and evaluate them (Steps 9-10)	100%	
	Deploys problem-solving tools: Use tools including logic trees, testable hypotheses and deductive and inductive logic to solve problems (Steps 11-13)	36%	
	Evaluates effectiveness: Identify underpinning assumptions on approach to problem-solving, and evaluate success of solutions (Steps 14-15)	27%	
Listening: The receiving, retaining and processing of information or ideas	*Identifies and retains information:* Can identify and remember relevant information when listening (Step 5)	55%	38%
	Listens in a group context: Take part in group conversation (Step 6)	55%	
	Interprets speakers: Taking meaning from language, gesture, emphasis and apparent status (Steps 7-9)	27%	
	Checks understanding: Asks questions to check understanding (Step 10)	27%	
	Compares perspectives: Be able to take in and reconcile different points of view (Step 11)	36%	

	Listens critically: Identify themes or biases when listening to others (Steps 12-13)	64%	
	Evaluates speakers: Evaluate how a speaker can become more effective (Steps 14-15)	0%	
Presenting: The oral transmission of information or ideas	*Communicates logically:* Order points logically when communicating (Step 4)	64%	71%
	Communicates appropriately: Use appropriate tone and language (Steps 5-6)	100%	
	Uses examples effectively: Bringing in appropriate examples to reinforce points (Step 7)	9%	
	Aware of context: Adjusting language and detail according to context (Step 8)	82%	
	Adapts to the audience: Adapt to the audience and their reaction (Steps 9-10)	82%	
	Highly persuasive: Adapts communication to persuade (Steps 11-12)	64%	
	Communicates brilliantly: Chooses the optimal communication approach depending on circumstances (Steps 13 -15)	100%	
Aiming High: The ability to set clear, tangible goals and devise a robust route to achieving them	*Open to challenge:* Look for opportunities to take on something that might be challenging (Step 4)	82%	60%
	Open to goals: Set goals with support (Step 5)	18%	
	Sets own goals: Set own goals, at appropriate level of stretch (Step 6)	82%	
	Prioritises: Can order and prioritise tasks to achieve a goal (Step 7)	45%	
	Secures resources: Identify and ensure access to appropriate resources to achieve goal (Steps 8-9)	27%	
	Seeks self-improvement: Reflects on own skillset and finds appropriate development opportunities (Step 10)	73%	
	Embraces autonomy: Can work autonomously using SMART targets (Step 11)	73%	
	Seeks feedback: Seeks out feedback, including constructive criticism (Step 12)	64%	
	Plans effectively: Can lead a long-term piece of work using milestones and suitably responsive personal strengths and to changes (Steps 13-15)	73%	
Staying Positive: The ability to use tactics and strategies to	*Stays calm:* Ability to stay calm when facing setbacks (Step 3)	82%	64%
	Persists: Persists in the face of setbacks (Step 4)	91%	
	Encourages others: Encourages others to persist in face of setbacks (Steps 5-6)	9%	

overcome setbacks and achieve goals	*Identifies opportunities:* Can identify opportunities in setbacks or challenges (Steps 7-8)	82%
	Focuses on positive action: Turns ideas about solutions into action (Steps 9-10)	64%
	Manages risk: Identify and manage risks appropriately (Steps 11-12)	36%
	Manages emotional responses: Emotional self-awareness and moderates that according to the situation (Steps 13-15)	82%

Overall, the Skills Builder skills and sub-skills align well with the graduate attributes identified in the comparator higher education frameworks.

The 'Presenting' skillset represent the strongest alignment (71%), followed by Problem Solving (67%) and Teamwork (67%). The weakest alignment was with Listening (38%) and Creativity (33%) skill sets.

71% (42/59) of the sub-skills are identified in over half of the University graduate attribute frameworks and only 5% (3/59) are not explicitly stated, these include:

- Creativity: *Understands creativity:* Explain how creativity links to role and wider life (Steps 6-7)
- Creativity: *Manages creativity in a group:* Use multiple perspectives to generate more ideas while avoiding group think (Steps 10-11)
- Listening: *Evaluates speakers:* Evaluate how a speaker can become more effective (Steps 14-15).

Summary Conclusion:

The relevance of the skill and sub-skills in the existing Skills Builder Framework seems strong against the eleven comparator higher education graduate attribute frameworks.

As outlined in Chapter three a similar issue of alignment was identified during comparison of the higher education attributes. The sub-skills identified by higher education institutions are demonstrably written with less detail than the Skills Builder granular steps. For example, the skill of 'communication' identified in the HEA Review, and 'an ability to communicate effectively' by Aberdeen University is broken down into tangible stages of communication by the Skills Builder Framework:

Communicates logically: Order points logically when communicating (Step 4)

Communicates appropriately: Use appropriate tone and language (Steps 5-6)

Uses examples effectively: Bringing in appropriate examples to reinforce points (Step 7)

Aware of context: Adjusting language and detail according to context (Step 8)

Adapts to the audience: Adapt to the audience and their reaction (Steps 9-10)

Highly persuasive: Adapts communication to persuade (Steps 11-12)

Communicates brilliantly: Chooses the optimal communication approach depending on circumstances (Steps 13 -15)

It is therefore likely that alignment between the comparator Frameworks and the Skills Builder Framework is diffused and appearing to be a lower percentage alignment than reality.

(e) Next steps

In addition to the employability and apprenticeship comparisons outlined in previous chapters, we have been able to further test the Skills Builder Framework for its *comprehensiveness* and *relevance* across eleven higher institution graduate attribute frameworks.

Collectively, the data demonstrates the strength of fit between Skills Builder skills and sub-skills and those required by employers. Those areas which were identified as potential gaps and those that were potentially irrelevant will be discussed in higher education roundtables for deeper exploration. Through this process further understanding will be sought to refine the Skills Builder Framework and the tools required to make it usable in a higher education institution.

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Chapter 7: Key insights from Phase 1

Chapter Summary

- Overall, the work so far has given greater confidence that the Skills Builder Framework has the potential to be extended for use into employment and to act as a universal framework for essential skills.
- One of the critical changes that will need to be made is to broaden the language so that it is relevant beyond the educational context and that it resonates in other settings.
- In terms of relevance, we found that although creativity and leadership were less well represented through the different lenses that we applied they were still present. As such we will not be looking to remove any parts of the current Skills Builder Framework.
- Beyond the skills themselves, we also found that there were calls for earlier steps in employment than we had originally hypothesised. As such, the universal framework should be for the full range of skill steps.
- In terms of comprehensiveness, the terms that were missing from each area have been aggregated and an approach to addressing these is discussed in the next chapter.
- Overall, the Skills Builder Framework is close to being able to act as a universal framework, and with these additional changes we should be able to now take it to employers and higher education professionals for further feedback.

(a) Universality: Key changes

We will look into the specifics of the insights that have been generated by looking at the relevance and comprehensiveness of the Skills Builder Framework through the four different lenses. Before that though, there are a couple of key reflections that are critical.

The first is that the language of how the Framework is currently presented is designed for those working with children and young people, generally in a classroom setting. In order that this should not be a barrier to making the comparisons in Chapters 3 – 6 we compared in terms of themes. This allowed for the focus to be on content rather than specific language.

However, beyond this point it will be necessary to address the limitations of language. For example:

- Removing the language of teachers and learners
- Changing the explanation that sits alongside the Framework itself which is currently talking about progression in terms of learning to use the skills and instead to focus it on what it looks like in use beyond the school context

Later on in this research a decision will need to be made about how much variation around the Framework there can be.

The second is that one of the biggest changes in looking to make the Skills Builder Framework able to work as a universal framework is that the range of contexts that it will have to be used in are much broader.

One approach to addressing this would be to have a much larger number of skills or skills steps to reflect being able to do things in different settings or with different individuals. For example, ‘I can

identify and analyse different points of view of others' could be in the context of a debate, customer service incident, or disagreement between colleagues.

Critically, we are building off the idea that these skills are highly transferable, in line with our definition of essential skills as:

> *Those highly transferable skills that everyone needs to do almost any job, which support the application of specialist knowledge and technical skills*

As such, working cooperatively with others uses the same underpinning essential skills whether that other person is a colleague, peer, customer or student. That it might manifest itself differently is a function of the context and the technical skills or knowledge that are being deployed alongside.

Exploring some of the differences in these contexts will therefore be left to the supporting materials.

(b) The relevance of the Skills Builder Framework

The relevance of the Skills Builder Framework was observed using four different lenses – employability frameworks, job advertisements, apprenticeship standards and graduate attributes. This enabled us to go beyond its current primary usage as a framework for building essential skills in 3-18 year-olds in schools and colleges.

The aggregation of this exercise can be seen in Table 14 below:

Table 14: Relevance of Skills Builder Skills in other frameworks reviewed

Skills Builder Skills	Skills Builder Sub-Skills	Proportion referencing each Skills Builder sub-skill		
		Employability Frameworks (Chapter 3)	Apprenticeship Standards (Chapter 5)	Graduate Attributes (Chapter 6)
Teamwork: Working cooperatively with others towards achieving a shared goal	*Completes tasks:* Taking responsibility for completing own tasks within a team context (Step 3)	100%	50%	73%
	Works positively: Able to get on well with team members (Step 4)	100%	70%	100%
	Supports others: Willing to support others with their tasks in a team context (Step 5)	100%	70%	81%
	Contributes to discussions: Contributes to team discussions and supports others to contribute too (Steps 6-8)	100%	40%	64%
	Avoids negative conflict: Identify and avoid negative conflict in teams (Steps 9-10)	100%	50%	55%
	Contributes effectively: Contribute to team meetings in a measured, valuable and concise way (Step 11)	100%	10%	64%
	Evaluates performance: Evaluate a team's performance and suggest or influence improvements (Steps 12-13)	100%	30%	18%

	Adaptive to others: Understands the strengths and weaknesses of others in the team and actively supports them on that basis (Steps 14-15)	100%	10%	81%
Leadership: Supporting, encouraging and motivating others to achieve a shared goal	*Allocates tasks:* Ensures everyone has appropriate tasks across a team (Step 3)	100%	40%	64%
	Takes responsibility: Takes responsibility for ensuring team completes tasks (Step 4)	100%	40%	55%
	Builds consensus: Ensures team makes collective decisions and resolves differences of opinions (Steps 5-6)	90%	40%	55%
	Builds on strengths: Can identify own strengths and weaknesses, and those of the team, using these to help achieve the tasks (Steps 7-9)	100%	30%	64%
	Resolves conflicts: Keeps team focused on achieving goal, resolving conflicts (Step 10)	90%	30%	45%
	Motivates team: Motivates team, being thoughtful about the situation (Steps 11-12)	90%	30%	81%
	Adapts leadership style: Thinks about leadership style, aware of downsides, and able to adapt to circumstances (Steps 13-15)	70%	10%	81%
Creativity: The use of imagination and the generation of new ideas	*Uses imagination:* Being able to use imagination to generate new ideas (Steps 3-4)	90%	20%	91%
	Improves on ideas: Build off existing ideas to generate new or improved ones (Step 5)	100%	20%	91%
	Understands creativity: Explain how creativity links to role and wider life (Steps 6-7)	30%	0%	0%
	Uses tools for creativity: Use mind-mapping, random stimuli and other tools to generate more ideas (Steps 8-9)	50%	0%	9%
	Manages creativity in a group: Use multiple perspectives to generate more ideas while avoiding group think (Steps 10-11)	60%	0%	0%
	Optimises creative approach: Able to reflect on use of creative tools, choosing between options (Steps 12-15)	50%	0%	9%
Problem Solving: The ability to find a solution to a complex situation or challenge	*Seeks help:* Get help from others when needed (Step 2)	80%	60%	18%
	Finds information: Find extra information as required (Step 3)	90%	80%	82%
	Creates options: Come up multiple options for simple problems and choosing between those options (Steps 4-5)	100%	70%	100%
	Scopes and researches: Identify complex problems and carry out research to help solve them (Steps 6-7)	100%	40%	82%

	Analyses problems: Identify causes and effects (Step 8)	100%	40%	91%
	Evaluates routes of action: Create multiple options for complex problems and evaluate them (Steps 9-10)	100%	30%	100%
	Deploys problem-solving tools: Use tools including logic trees, testable hypotheses and deductive and inductive logic to solve problems (Steps 11-13)	70%	20%	36%
	Evaluates effectiveness: Identify underpinning assumptions on approach to problem-solving, and evaluate success of solutions (Steps 14-15)	80%	10%	27%
Listening: The receiving, retaining and processing of information or ideas	*Identifies and retains information:* Can identify and remember relevant information when listening (Step 5)	70%	50%	55%
	Listens in a group context: Take part in group conversation (Step 6)	70%	20%	55%
	Interprets speakers: Taking meaning from language, gesture, emphasis and apparent status (Steps 7-9)	70%	30%	27%
	Checks understanding: Asks questions to check understanding (Step 10)	70%	70%	27%
	Compares perspectives: Be able to take in and reconcile different points of view (Step 11)	60%	30%	36%
	Listens critically: Identify themes or biases when listening to others (Steps 12-13)	50%	10%	64%
	Evaluates speakers: Evaluate how a speaker can become more effective (Steps 14-15)	20%	10%	0%
Presenting: The oral transmission of information or ideas	*Communicates logically:* Order points logically when communicating (Step 4)	90%	70%	64%
	Communicates appropriately: Use appropriate tone and language (Steps 5-6)	100%	50%	100%
	Uses examples effectively: Bringing in appropriate examples to reinforce points (Step 7)	60%	30%	9%
	Aware of context: Adjusting language and detail according to context (Step 8)	90%	80%	82%
	Adapts to the audience: Adapt to the audience and their reaction (Steps 9-10)	90%	50%	82%
	Highly persuasive: Adapts communication to persuade (Steps 11-12)	100%	10%	64%
	Communicates brilliantly: Chooses the optimal communication approach depending on circumstances (Steps 13 -15)	90%	0%	100%
Aiming High: The ability to set clear, tangible goals and devise	*Open to challenge:* Look for opportunities to take on something that might be challenging (Step 4)	80%	50%	82%
	Open to goals: Set goals with support (Step 5)	80%	50%	18%

a robust route to achieving them	*Sets own goals:* Set own goals, at appropriate level of stretch (Step 6)	100%	50%	82%
	Prioritises: Can order and prioritise tasks to achieve a goal (Step 7)	90%	80%	45%
	Secures resources: Identify and ensure access to appropriate resources to achieve goal (Steps 8-9)	60%	20%	27%
	Seeks self-improvement: Reflects on own skillset and finds appropriate development opportunities (Step 10)	90%	60%	73%
	Embraces autonomy: Can work autonomously using SMART targets (Step 11)	100%	20%	73%
	Seeks feedback: Seeks out feedback, including constructive criticism (Step 12)	90%	30%	64%
	Plans effectively: Can lead a long-term piece of work using milestones and suitably responsive personal strengths and to changes (Steps 13-15)	70%	10%	73%
Staying Positive: The ability to use tactics and strategies to overcome setbacks and achieve goals	*Stays calm:* Ability to stay calm when facing setbacks (Step 3)	80%	40%	82%
	Persists: Persists in the face of setbacks (Step 4)	90%	30%	91%
	Encourages others: Encourages others to persist in face of setbacks (Steps 5-6)	80%	20%	9%
	Identifies opportunities: Can identify opportunities in setbacks or challenges (Steps 7-8)	100%	20%	82%
	Focuses on positive action: Turns ideas about solutions into action (Steps 9-10)	60%	20%	64%
	Manages risk: Identify and manage risks appropriately (Steps 11-12)	90%	20%	36%
	Manages emotional responses: Emotional self-awareness and moderates that according to the situation (Steps 13-15)	90%	0%	82%

The key insights from reviewing the Skills Builder Framework in this way is that:

- We should not assume that the early steps of the Framework will not be relevant in the context of employment. Particularly some of the work that we did looking at apprenticeships highlighted that early skill steps were explicitly called for.
- Although creativity and leadership are less frequently called for, there is evidence that the abilities linked to both are still widely called for.

Overall, therefore, there is no need to remove any elements of the Skills Builder Framework in order for it to act as a universal framework for essential skills.

(c) The comprehensiveness of the Skills Builder Framework

The question of comprehensiveness is an important one – any universal framework must be able to include essential skills that are called for in different settings.

At the top level, the eight skills that are laid out in the Skills Builder Framework appear to be near comprehensive, with partial matches being reflective of differences in wording or combining essential skills in different ways.

Table 15: Aggregated Skills Comparison from Chapters 3-6

Framework	Skill Level Comparison		
	Alignment (Full)	Alignment (Full + Partial)	Weak / Gap
General Employability Frameworks (Chapter 3)			
O*NET	43%	100%	0%
UKCES	80%	100%	0%
PLTS	100%	100%	0%
CBI	100%	100%	0%
Deloitte	67%	100%	0%
EntreComp	14%	93%	7%
Specific Examples of Employability Frameworks (Chapter 3)			
CGMA	0%	67%	33%
OECD	100%	100%	0%
UK Civil Service	100%	100%	0%
KPMG	56%	100%	0%
Burning Glass Job Advertisement Analysis (Chapter 4)			
Burning Glass taxonomy	94%	100%	0%
General Graduate Attribute Frameworks (Chapter 6)			
HEA Lit. Review	100%	100%	0%
CBI Report	100%	100%	0%
QAA Report	100%	100%	0%
Specific Examples of Graduate Attribute Frameworks (Chapter 6)			
Aberdeen University	100%	100%	0%
Bath Spa University	100%	100%	0%
Cambridge University	100%	100%	0%
Oxford Brookes University	100%	100%	0%
Glasgow University	89%	89%	11%
University of Arts (London)	100%	100%	0%
University of West Scotland	100%	100%	0%
University of York	100%	100%	0%

There is also a strong evidence that the sub-skills are also comprehensive with some exceptions which are drawn out separately:

Table 16: Aggregated Sub-Skills Comparison from Chapters 3-6

Framework	Sub-skill Level Comparison		
	Alignment (Full)	Alignment (Full + Partial)	Weak / Gap
Generic Employability Frameworks (Chapter 3)			
O*NET	84%	92%	8%
UKCES	91%	91%	9%
PLTS	100%	100%	0%
CBI	100%	100%	0%
Deloitte	93%	97%	3%
EntreComp	63%	83%	17%
Specific Employability Frameworks (Chapter 3)			
CGMA	50%	64%	36%
OECD	53%	80%	20%
UK Civil Service	22%	78%	22%
KPMG	82%	86%	14%
Apprenticeship Standards (Chapter 5)			
Team Leader / Supervisor (Level 3)	100%	100%	0%
Adult Care Worker (Level 2)	90%	100%	0%
Lead Adult Care Worker (Level 3)	86%	100%	0%
Customer Service Practitioner (Level 2)	100%	100%	0%
Operations or Departmental Manager (Level 5)	88%	96%	4%
Hair Professional (Level 2)	75%	100%	0%
Hospitality Team Member (Level 2)	92%	8%	0%
Installation Electrician or Maintenance Electrician (Level 3)	100%	100%	0%
Assistant Accountant (Level 3)	92%	92%	8%
Business Administrator (Level 3)	95%	95%	5%
General Graduate Attribute Frameworks (Chapter 6)			
HEA Literature Review	80%	84%	16%
CBI Report	93%	96%	4%
QAA Report	87%	93%	7%
Specific Examples of Graduate Attribute Frameworks (Chapter 6)			
Aberdeen University	80%	87%	13%
Bath Spa University	91%	91%	9%
Cambridge University	93%	100%	0%
Oxford Brookes University	87%	87%	13%
Glasgow University	84%	88%	12%
University of Arts (London)	100%	100%	0%
University of West Scotland	94%	94%	6%
University of York	85%	92%	8%

(d) Gaps identified

One of the things that feels most valuable from the approach we have taken of using multiple lenses towards a universal framework is that each analysis has demonstrated differences in which parts of the Skills Builder Framework are emphasised.

Below, we have taken the gaps that were identified in chapters 3 to 6 and aggregated them into themes which can then be linked back to the Framework.

Table 17: Aggregated gaps identified in Chapters 3-6

Summarised Gap *(From all areas)*	**Frequency**
Linked to interpersonal skills	
Dress code, and appropriate behaviour in the setting	8
Punctuality and time management	9
Cultural awareness in dealing with others	8
Building new relationships through networking, both internal and external to the organisation	5
Customer and client care, and working with others outside the organisation	6
Mentoring others and acting as a role model	3
Coaching others	2
Linked to creativity and problem solving	
Curious and engaged with pursuing solutions to difficult problems	2
Being aware of ethical and sustainable concerns	2
Linked to self-management	
Attention to detail and accuracy	2
Strategic thinking (organisation level & financial)	5
Risk management (at an individual and wider level)	1
Linked to communication skills	
Ensuring the environmental barriers to communication managed	1
Use of different media	1
Defend ideas in dialogue and challenge assumptions	1
Negotiation and influencing	1

In Chapter 8 we will propose an improved version of the Framework which incorporates these gaps through a combination of changing or expanding the language, or in some cases replacing steps.

(e) Other reflections

It has become clear through this work that there is no alternative universal framework that is already in existence. The Skills Builder Framework differed substantially from those others that were analysed, whether the general frameworks or specific examples on several counts:

- *The breadth:* Most frameworks were specific to their particular purpose – for example, in the context of a university, completing an apprenticeship or achieving a first job. There was little that captured the continuity of essential skills between these different settings.
- *The granularity:* The frameworks that were analysed varied considerably in their level of detail. Some talked at a very top level about 'effective communication' or 'good interpersonal skills'. Others were more specific, but with the exception of the EntreComp none broke down the skills into their component parts with a high level of detail.
- *The measurability:* Many of the other frameworks that were reviewed combined knowledge, skills and behaviours. Most of them did not differentiate between technical and essential skills. The differentiation that the Skills Builder Framework makes allows for greater measurability because the steps are more tangible and observable that broader attributes or behaviours.

It is vital that these positive characteristics are preserved in the process of further refinement.

(f) Conclusion and next steps

We saw through this work that the Skills Builder Framework has the potential to act as a universal framework for essential skills. The steps all seem to be relevant and at the full range of steps so there is nothing that needs to be removed from the Framework.

There are some gaps though which will need to be addressed if the Framework is to be usable in the different cases that we anticipate. These will be reviewed in the next chapter.

Finally, the substantial detailed reviews of other frameworks which have been a critical component part of this work have highlighted three differentiating factors that are encouraging for its wider use: its breadth, granularity and scope for measurability.

Chapter 8: Proposed approach and next steps

Chapter Summary

- In light of the gaps or omissions that have been highlighted, there were four possible approaches to resolve these: deciding they were not material; adding a new skill alongside the current eight in the Skills Builder Framework; creating additional skill steps; changing or expanding some of the steps to fill these gaps
- For some of the omissions, it was felt that broadening the language and examples that were given in the Framework would fill the gaps.
- The ideas of adding an additional skill or additional skill steps were discussed but dismissed.
- Instead, the decision was made to adapt the existing Framework through changing some of the wording in the steps and replacing a couple of them so that all the gaps were explicitly filled.
- At the end of this process, we have an expanded version of the Skills Builder Framework with the potential to be used universally
- The next phases of engaging directly with employer and higher education professionals will be critical to further refine the Framework and develop the tools to make it practically useful.

(a) Proposed changes to Skills Builder Framework

As discussed in the previous chapter, there are no proposed deletions from the Skills Builder Framework, but there are some additions and adaptations. These have been chosen to ensure the right balance between maintaining the consistency between what is already tried and tested within the education system and ensuring that there are no gaps remaining.

There are four possible approaches to dealing with each of the gaps and omissions

- Decide that these gaps or omissions were not material and therefore not worth adapting the Framework for.
- Add a new skill alongside the eight in the Skills Builder Framework
- Create additional steps into the Skills Builder Framework
- Change or expand the language of steps to fill those gaps

Were gaps or omissions material?

The gaps that had been highlighted in the previous analysis were reviewed to check whether they were material. In some cases it was felt that the omission was simply that the current language of the Skills Builder Framework was too narrow, and that making the language broader would resolve that challenge.

A key example of this was consideration of client or customer care. This came up in some places but there was some debate about whether this really matched with our definition of essential skills as *those highly transferable skills that everyone needs to do almost any job, which support the application of specialist knowledge and technical skills*. It was felt that client or customer care was a combination of effective communication as well as the ability to creatively solve problems. Beyond that, dealing with customers or clients was much more specific to the organisation or role, and so would need specific technical skills.

As a result, for this example, rather than try to incorporate client or customer care as an additional skill or set of steps the proposal was to adapt the language in the teamwork skill to make it clear that working cooperatively could expand to those outside the organisation as well as within it.

Elsewhere, it was felt that the gaps did not merit an additional discrete skill or skills step but could be better incorporated into existing skills.

One such example was the consideration of ethical or sustainable concerns. There was some debate as to whether this was a skill in its own right, or whether it was about choices and therefore driven by behaviour. Ultimately, it was decided to recognise this area through adapting some of the language in the additional notes that these concerns could be factored into decision-making as part of the problem solving skill.

Adding a new skill

There was discussion about whether there would be value in introducing an additional skill alongside the eight that were well established in the Skills Builder Framework.

Broadly, this could be described as Professionalism and incorporate some of the themes that emerged about navigating employment. For example, starting with being appropriately dressed, understanding and conforming to an organisational culture and norms and then being able to coach or mentor others.

There were some strong arguments for this approach, not least that it meant that the established parts of the Skills Builder Framework could be left intact. It was also possible to construct a hypothetical model that could be tested to incorporate all of those gaps.

However, ultimately it was felt that introducing a further skill would undermine the universality of the framework if it was only for the employment context. It was possible to incorporate all the other skill gaps elsewhere without the need to create a new skill, and this was seen as the preferable solution.

Add in additional steps

A further approach that could have been taken would be add further steps to the Skills Builder Framework beyond step 15. Indeed, one initial hypothesis was that this might be necessary in order to make the Framework universal.

However, in reviewing the gaps there was no sense that these were necessarily more sophisticated than, or therefore sequential to, the skill steps already in place. For example, punctuality and time management are really fundamental at all career points and job levels – as are appropriate behaviour and following a dress code.

As such, the decision was made to maintain the simplicity and consistency of 15 steps and to make revisions within that structure.

Change or expand the language of the steps

In most cases, the decision was made to expand or improve the wording of individual steps to ensure that they explicitly incorporated those elements highlighted by the gap analysis.

For example, negotiating and influencing was highlighted in one of the frameworks reviewed, but is not explicitly mentioned in the Skills Builder Framework. However Step 11 of Presenting is ‘I can

anticipate different responses from the audience and plan for them'. Therefore, this can be modified to more explicitly incorporate negotiation.

In other cases it was felt that a skill step could be replaced without losing the theme in the Framework. For example, Step 11 about contributing to team meetings was specific whereas it would be a better fir for building productive relationships more broadly.

Combined approach

On this basis, the aggregated gaps were reviewed against the Skills Builder Framework and recommendations made for how each could be reflected in the updated Framework:

Summarised Gap *(From all areas)*	**Frequency**	**Suggested approach**
Linked to interpersonal skills		
Basics of appropriate behaviour – dress code, and appropriate behaviour in the setting	8	Replace Teamwork Step 1
Punctuality and time management	9	Replace Teamwork Step 2
Cultural awareness in dealing with others	8	Broaden language in Teamwork Step 7
Building new relationships through networking, both internal and external to the organisation	5	Replace Teamwork – Step 11
Customer and client care, and working with others outside the organisation	6	Broaden language in Teamwork to more explicitly refer to those outside the organisation
Mentoring others and acting as a role model	3	Replace Leadership Step 10
Coaching others	2	Replace Leadership Step 11
Linked to creativity and problem solving		
Curious and engaged with pursuing solutions to difficult problems	2	Rephrase Problem Solving Step 7
Being aware of ethical and sustainable concerns	2	Broaden language in Problem Solving to reflect
Linked to self-management		
Attention to detail and accuracy	2	Revise Aiming High Step 2
Strategic thinking (organisation level & financial)	5	Expand Aiming High Step 13
Risk management (at an individual and wider level)	1	Rephrase Staying Positive Step 11
Linked to communication skills		
Ensuring the environmental barriers to communication managed	1	Expanding Presenting Step 1
Use of different media	1	Expand Presenting Step 14
Defend ideas in dialogue and challenge assumptions	1	Broaden language in Presenting
Negotiation and influencing	1	Broaden Presenting Step 11

(b) Updated Framework

The updated Framework can be found in *Appendix C*.

(c) Next steps

The next phase of research is to get direct feedback from employers and higher education professionals into the refinement of the Skills Builder Framework. There are several key questions to answer in this stage:

- Are these the skills that you would consider as essential skills?
- How do expectations against these skills vary at different career stages?
- How would the extended Skills Builder Framework be useful?

There will be two key approaches to answer these questions:

- Work with key individuals who have particular insights, and who might subsequently be key ambassadors for the approach.
- Facilitated roundtables to gather the responses of a group of employers.

This part of the research will subsequently be written up and compared with the insights obtained in the first part of the research, to generate any proposed changes or adaptions to the Framework. It will also help to inform the development of the materials required to be developed in the third stage of this work, for piloting in the fourth and final stage.

The third stage of work which is developing the collateral materials to support the Framework will be important for ensuring the usability of what is produced. Through this involved process of refining and developing supporting materials anything that needs to be clarified further will become clear.

(d) Future research

It is the nature of research like this that exploring the questions raised opens up further ones, and that new avenues of interest open up.

One particular area which the authors consider worth further investigation were apprenticeship standards. In Chapter 5 we saw that these were a potentially rich source of insight about what essential skills were required at different apprenticeship levels and in different sectors. Currently, because the standards are unstructured data it is difficult to generate clear insights beyond a margin of error. However, this might be a rich source of future insights.

(e) Summary

In this final chapter, we reviewed different approaches to addressing the gaps and omissions that were highlighted. Ultimately, we sought to achieve a balance between ensuring that those gaps were addressed and maintaining the integrity of the Skills Builder Framework, recognising the extent to which it has already been tried and tested over four years in the education sector.

While there is much more work to do in the next phases, the updated Framework proposed has the potential to fulfil the criteria of clarity, measurability and authority. As such, it supports the case for a universal framework of essential skills.

Research Phase 2: Synthesis and testing with employers

The final part of this report focuses on the testing and refinement of the updated version of the Skills Builder Framework, which was the output of the first research phase (*Appendix C*). The goal of this second phase is to ensure that not only is the final framework intellectually coherent and robust, but that it is practically useful and usable too.

- **Chapter 9: Testing with Employers**
  A series of five roundtables were convened with employers in different roles and across different sectors. These roundtables were focused on generating specific critique from participants to further hone and refine the framework, particularly focusing on language. Discussions also explored what value a universal framework could have for their work. This generated a series of possible use cases and, finally, some recommendations in terms of the supporting materials that would need to be produced to realise the potential of the framework itself.

- **Chapter 10: A universal framework for essential skills**
  Using the insights generated from the engagement with employers through the roundtables, a final series of adaptations and changes to the framework were proposed. The most significant of these being to refocus the language on what the individual actually does and demonstrates and away from the perspective of potential (what someone *can* do). As a result we are able to present a final universal version of the Skills Builder Framework.

- **Chapter 11: Conclusions and next steps**
  The final chapter reflects on the lessons that have been learned over the course of this research project. It examines the extent to which we have been able to achieve our initial aspirations, and sets out what needs to happen next to achieve the potential of this universal framework.

Chapter 9: Testing with employers

Chapter Summary

- At the end of the first research phase, an updated version of the Skills Builder Framework was produced. It incorporated additions suggested by the comparative exercises carried out, and included adapted language to ensure that it was appropriate to non-educational settings.
- Our working definition of essential skills for this report was *those highly transferable skills that everyone needs to do almost any job, which support the application of specialist knowledge and technical skills*. As such, one of the critical user groups for the universal version of the Skills Builder Framework will be employers.
- We engaged with thirty HR professionals and managers through a series of roundtables held over the summer of 2019 across London, Birmingham, Leeds and Bristol.
- Each roundtable was structured around several key questions:
    - What works well out of the Framework as presented?
    - Is the Framework comprehensive and relevant?
    - Is the language in the Framework appropriate and accessible?
    - What is the pattern of expectation around the level of competence in essential skills according to role or seniority?
    - How do you currently assess and develop essential skills?
    - How could the Skills Builder Framework be useful to you?
- Overall, we found that participants regarded the proposed Framework as able to provide clear guidance on how to build the eight essential skills step by step.
- The proposed Framework was celebrated as a catalyst to 'level the playing field' for candidates and employees from disadvantaged backgrounds throughout all phases of employment.
- Generally, the language used in the Framework aligned with employers expectations for apprentice, graduate and entry-level roles. Variances in terminology and the linear progression of some skills were discussed in depth and several recommendations were made.
- For senior leadership and management roles the latter steps for each skill were deemed appropriate, with some potential changes to language.
- Fifteen potential use cases were identified, spanning recruitment, skill assessment and professional learning and development. Suggestions were made about some of the accompanying tools that could help realise the potential of the Framework.

(a) Introduction to Phase 2 of the research

The purpose of this second phase of the research is to test and extend the updated Skills Builder Framework to ensure continuity from its use in education into the world of work. While the first phase of research had been focused on ensuring the rigour of the Framework, this second phase was about ensuring its usefulness for practitioners.

To do so, a series of roundtables were organised by Business in the Community and Skills Builder Partnership to engage employers in open dialogue on the use of the Framework in a range of

different employment contexts. We gathered the experiences and perspectives of a range of stakeholders working in recruitment, talent, people development and senior leadership.

We had three goals from this phase of the research:

- Understanding whether the Framework is simple and comprehensive enough to be useful in a range of different employment contexts.
- Exploring whether the Framework is suitable to reliably understand and measure the skill set of individuals.
- Determining the appetite for such a skills framework of essential skills and associated tools and resources.

Methodological Approach

Roundtables are an effective research method that encourage participants to contribute valuable insights in a 'collaborative and active way'[147]. We recognised that an inclusive environment to gather the participants' insights and perspectives was critical for the success of this phase. Roundtables create a collective sense of 'working with people'[148]. Using this method to capture employer insights fostered a sense of collaboration between the Essential Skills Taskforce and employers. This was particularly important as the implementation of a universal framework would naturally be a collective endeavour[149].

Roundtables can provide richer data than individual interviews. Discussions between participants can reveal 'unarticulated norms and normative assumptions'[150]. Additionally, roundtables can facilitate honest discussion between attendees with differing first-hand experiences and points of view. This proved to be useful in our critical reflection of the Framework and its alignment with the values, language and expression the participants were familiar with in their different workplaces.

Practically, the roundtable setup was able to provide 'large quantities of material from a relatively large number of people in a relatively short time'[151]. The thirty participants were purposefully sampled[152] by Business in the Community and Skills Builder Partnership to include representatives from different sectors. Participants came from a diverse range of backgrounds and roles, all of which held an interest in the development of a skills-based Framework to support employers.

For example, attendees included HR professionals, apprenticeship specialists, middle and senior managers, recruiters, trainers and corporate responsibility specialists. A wide range of sectors were represented, including construction, leisure, education, consultancy, transport, legal and IT. The full break down of attendees can be found in *Appendix D*.

(b) The Framework: What works well

We opened each roundtable by asking attendees for their views on what they felt worked well in the updated version of the Skills Builder Framework, which had been shared with them in advance. Although specific detail regarding comprehensiveness, relevance and gaps are explored later, three

[147] Zhang, M (2013) Fishbowl to Roundtable Discussions, College Teaching, vol. 61: 39.
[148] Barbour, R. S., Kitzinger, J. (1999) Developing focus group research: Politics, theory and practice. Thousand Oaks, CA, Sage Publications.
[149] Denzin, N, K., Yvonna S. L. (2005) The Sage Handbook of Qualitative Research. Thousand Oaks: Sage Publications.
[150] Ibid.
[151] Ibid.
[152] Silverman D (2010) Doing Qualitative Research, A Practical Handbook. London: Sage.

perspectives linked with *equality of opportunity*, *skill gaps* and *increasing transparency* are worth considering.

Equality of opportunity

Participants contextualised their general support for the Framework with recognition that recruitment and progression opportunities are often skewed in favour of those from most privileged backgrounds. Several participants celebrated the Framework as a move towards 'levelling the playing field' for candidates and employees through the use of a common language and expectation of skill requirements.

In particular it was felt the Framework would be useful to help young people articulate their expertise and skills with the same 'polish' often demonstrated by more privileged candidates and employees. This is particularly important in light of poorer writing skills evident in the job applications received by many of the participants.

Highlighting skills gaps

A common theme was participants feeling that young people were not adequately prepared leaving schools or colleges with the essential skills necessary in the workplace. It was felt endorsement and use of the Framework by employers would encourage schools and colleges to incorporate the explicit teaching of essential skills into their education provision.

One participant emphasised the need for this endorsement of the Framework by employers to be practical and meaningful – that is, that employers were really putting it to use. Participants involved in this discussion agreed this is something they would support and be able to practically apply in the workplace, due to the close alignment of the Skills Builder Framework with their own skill measurement and development approaches.

Additionally, some of the participants spoke about how they were already using the education-focused version of the Skills Builder Framework to help align their employability outreach activities in schools and colleges. For example, HS2 is using the Framework to enhance its work experience offer. Similarly, KPMG have been using the approach to underpin the employability work they have been doing in schools.

Increasing transparency

Participants celebrated the potential for the Framework to encourage greater transparency around essential skill expectations. One hiring manager explained that often applicants indicate strong technical skills and knowledge in applications (mainly through presenting formal qualifications), which gets them an interview, but fail to get the job when they are unable to demonstrate essential skills.

It was agreed by all that the skills presented in the Framework are what recruiters look for – alongside the character and knowledge attributes highlighted in Chapter 1. Participants reflected that the Framework could inform candidates of skill requirements in an understandable way.

Beyond that interview stage, the transparent use of such a Framework could also provide a detailed pathway for individuals to see how they can progress through the organisation.

Such a pathway, it was suggested, could demonstrate to an employee that an organisation is willing to invest in their progression and have a plan to do so. This may support retention of staff as they can see they will be invested in.

(c) The Framework: Comprehensiveness and relevance

A key focus of Research Phase 1 was around the comprehensiveness and relevance of the Framework. In Chapters 7 and 8 we explored some of the insights that came out of the analysis and outlined the adaptions that were made to incorporate areas which were either absent from the original Skills Builder Framework, or were implicit and could be made clearer. As such, it was important to explore whether the updated Framework incorporated everything that employers would expect to see.

Reflections on relevance

The extent to which the Framework could be applied universally across all roles in an organisation was discussed in depth. Several discussion points highlighted the need for organisations to view the Framework with contextual insight and flexibility.

> *'All of the essential skills are drawn on in roles across our organisation, but there is considerable variation in which skills are needed at different levels' Participant (London)*

There was shared recognition across the roundtables that some skills take precedence over others for specific roles. Participants agreed that although the skills are transferable and comprehensive, the degree to which they were needed in different jobs would vary. Interestingly, skills such as Teamwork and Staying Positive were considered relevant for all sectors and roles. However, for the remaining essential skills the level of mastery required depended upon the role. For example, although Presenting is considered important for jobs in Capgemini, some technical roles may not require employees to present very often and therefore recruitment and progression would not focus on the latter skill steps.

There was recognition in the Birmingham and Leeds roundtable sessions that not all individuals need to achieve (or want to pursue) the highest steps in all eight of the essential skills. Two scenarios were shared in separate roundtable discussions:

1) Not all employees want to progress to more senior roles and therefore would not need to pursue the skill steps once they were recruited into their roles
2) Within teams, there is more scope for the strengths of some team members to be able to compensate for areas of relative weakness of others

It was therefore felt that while having the whole Framework was illustratively useful, employers were likely to focus on specific skills and steps relevant for the role or seniority. This would be particularly the case for employers seeking to recruit and develop technical experts or other specialist roles.

Lengthy conversations regarding the notion of a universal Framework emphasised that the proposed Framework should not be considered as an all-or-nothing prescriptive tool. This is in line with how we have seen the Framework used elsewhere. With that caveat, participants agreed that the Framework is universal enough to cater for the contextual needs of an employer.

Reflections on completeness

Overall, there were no individual items which were felt to be missing by all attendees. Across all roundtable sessions there was agreement that the proposed Framework covered the essential skills required in roles across the organisations represented. It was agreed by participants that the Essential Skills are transferable and relevant, regardless of sector.

> *'I have great confidence that the framework has been well strategized and would fit very well in my organization' Participant (Leeds)*

The majority of participants expressed the potential for the Framework to underpin their organisational approach as they could see the direct link between the skills they expect and value, and those expressed in the Framework. One participant from suggested they would be keen to use the Framework to support their education and work experience programmes due to the comprehensiveness of the skills and their tangible associated steps. There was consensus that the skills and steps align with current recruitment expectations and development of staff within an organisation.

Across the five roundtables, specific jobs were cross-checked by participants with the Framework to test comprehensiveness and relevance. The majority of role profiles aligned neatly with the Framework. Discussion focused on the following themes which required deeper conversation to identify their links with the skills and their descriptors as laid out in the Skills Builder Framework:

- Customer Service
- Commercial awareness or business acumen
- Emotional Intelligence
- Resilience
- Diversity and awareness of others' cultures, beliefs and backgrounds
- Strategy

Through enquiry, the notion of how these different assets were formed were discussed. It was noted that there might be some particular terms employers might be seeking, or expecting to find. Often these reflected the language or internal emphasis of that employer. It was recognised that there are often terms or concepts which are high on the agenda at a particular point in time. It was cautioned by several participants that the Framework could not constantly flex to incorporate these as these priorities and the language around them change frequently.

Furthermore, once these themes were probed further it was found in every case that their component parts could be found in the Framework, or that perceived gaps were actually driven by language differences alone. For example, Customer Service is built up from some of the following elements:

- Teamwork, Step 4: 'I can get on well with others and find ways to resolve a disagreement'
- Problem Solving, Step 4: 'I can come up with different ways to solve a simple problem'
- Problem Solving Step 7: 'I can carry out research to better understand complex problems'
- Listening, Step 2: 'I can listen to others and ask questions to check my understanding'

The flexible nature of the facilitation of the roundtable meant that these expectations could be explored and discussed at the time, with clarity provided by the facilitators who are experts in the proposed Framework. However, this degree of discussion would not necessarily take place when an employer is using the Framework independently. For this reason, it was suggested that a 'Quick

Reference Matrix' would be useful to accompany the Framework and assure employers that such broad themes are supported by the Framework. The following grid helps to explore how these different elements could be broken down into knowledge, character attributes and skills (*for illustrative purposes only*):

	Listening	Presenting (Speaking)	Problem Solving	Creativity	Staying Positive	Aiming High	Leadership	Teamwork
Customer Service	Steps 0-5	Steps 0-6 Step 10	Step 0-5	Steps 3-5	Steps 0-15	Steps 0-3		Steps 0-15
Commercial Awareness	Steps 0-5					Steps 0-15	Steps 0-15	Steps 0-15
Emotional Intelligence	Steps 0-15	Steps 6-11		Step 7	Steps 0-15		Steps 0-15	Steps 4-11

Further ways in which the Framework can be used by employers are explored at the end of this chapter.

Ultimately, attendees agreed that as long as the skill step descriptors can be interpreted and contextualised by the organisation then the Framework would be a useful source of guidance for any business or organisation.

(d) The Framework: Language

One of the most significant changes that was made to the original Skills Builder Framework was the revision of language to make it appropriate for use in non-educational settings. At the simplest level this included removing references to teachers, learners, children and any other age-related language. As such, it was important to directly question roundtable participants as to whether the language was now appropriate.

Although some variance in opinion was expressed, regarding the language and structure of the individual skill frameworks, participants felt the language was sufficiently neutral to be comfortably used in the setting of employment.

> *'Ultimately, we are never going to reach a complete consensus on language: the real question is whether the language in the Framework is going to alienate anyone or which is inappropriate – and it certainly doesn't do either of those things. Beyond that, is just personal preferences' Participant (London)*

Particular points of discussion and recommendation, associated with the language of the proposed Framework is outlined next, grouped by skill-set:

Self-Management Skills (Aiming High, Staying Positive)

Several participants who attended the roundtable in Leeds regarded the skill Aiming High to be a particularly important element of all recruitment and employee development. It was noted that the

skill steps, particularly those linked with goals, milestones and prioritisation of tasks, may help recruit the type of proactive individual that is more likely to stay in a company. Among other examples, KPMG recognised the importance of this skill for their graduate programmes, the Cooperative for the apprenticeship scheme and Jacobs for their coaching programmes.

The terms 'motivation' and 'initiative' were flagged as key words which resonate with IBM's own values. The progression through this skill was thought effective, with a logical stepping and the highest steps being relevant to senior managers. The importance of separating the notion of 'Aiming High' from just seeking promotion was emphasised.

In one roundtable (London), the extent the skill *names* of Aiming High and Staying Positive were relevant in the workplace was debated in more depth. It was argued by some that these names are more frequently referred to as 'robustness' or 'resilience' by employers. Although these terms were recognised by some participants as important in their organisations it was equally felt that the steps associated with the proposed self-management skills did cater for this variance and provided tangible ways in which resilience can be developed as a characteristic.

There was conversely concern at another roundtable that the term 'resilience' had developed negative connotations because it was linked to persevering through a persistently difficult work context.

When digging into the steps of Aiming High one participant suggested the term 'assertiveness' should be included. Aiming High, Step 7 was used to illustrate her point with a suggested amendment to read: 'I can act assertively to order and prioritise different tasks to help me achieve a goal'. The purpose of this addition is to demonstrate the need for employees to assess workload and sometimes push back on non-priority tasks which are requested by others.

At a different roundtable in London, the inclusion of risk in the Aiming High steps was challenged as the participant perceived this to be more closely tied to Problem Solving. In discussion, it was suggested that the steps be clarified to more explicitly emphasise personal risk and opportunity in the pursuit of goals.

Interpersonal Skills (Teamwork, Leadership)

Across all roundtables particular reference was made to the steps associated with Teamwork as being '*relevant across all sectors, roles and levels*' (Participant, Leeds).

The most significant discussion surrounding the interpersonal skills centred on the theme of 'networking' – the forming of relationships internal and external to an organisation. There is some reference to this in Step 11 of Teamwork does reference networking: *'I can form new relationships: Individuals can use networking and other approaches to build new positive relationships'.* However, it was felt by some participants that this did not adequately prepare candidates or employees for the networking requirements of a successful business or organisation.

In particular, one participant argued that the forming of relationships is more than networking. It was recommended that any reference to networking in the Framework should '*cater for the formation, maintenance and utilisation of networks throughout one's career*' (Participant, Birmingham). It was agreed by fellow participants of the Birmingham roundtable that this is something which can be taught, therefore a feasible element of the interpersonal skills.

In the Leeds and Birmingham roundtables, Teamwork Step 0 (*'I can work alongside others'*) and Step 7 (*'I recognise the value of others' ideas although they might be different to mine*') sparked debate on the extent they catered for equality and diversity in the workplace.

Participants from three other roundtables suggested similar amendments to these steps to explicitly include '*diversity and tolerance of others' cultures, beliefs and backgrounds'*. It was agreed by participants that explicit reference to '*culture'* in the context of cultural diversity was required in the steps and associated descriptors.

The skill Leadership was accepted as relevant for roles within all businesses and organisations: although not all individuals will perceive themselves to be 'leaders', the empathetic foundation was relevant for many roles – particularly those that are customer-facing or require a high degree of collaboration. It was suggested by some participants that this empathetic foundation could feature more explicitly in the Steps, or in some of the guidance notes accompanying the Framework.

One participant suggested the inclusion of '*management of others and resources*' within the relevant Leadership steps. He outlined the importance of being able to manage a budget, information and material asset as of similar importance to people-management. It was suggested that a greater emphasis was placed on also managing resources. However, conversations clarified that many of the other tools of effectively managing an organisation, particularly in a senior role, were actually based on technical skills and knowledge. As such, they would fall beyond the scope of this framework.

Creative Problem Solving Skills (Creativity, Problem Solving)

The skills of Creativity and Problem Solving was considered by some as intertwined rather than separate entities. One participant asserted that within their own workplace they '*would not separate creativity and problem-solving'* (Participant, London). However, they were comfortable with the explanation provided that creativity in the definition provided was the creation of as many divergent possibilities as possible, with problem solving then about converging on the optimal solution.

In two roundtables the term 'Creativity' was challenged as a term in the workplace. In both Birmingham and Bristol participants stated the term 'innovation' would be better suited to the skill. One participant in the Bristol roundtable questioned whether the steps associated with 'Creativity' were also relevant for 'Innovation'. Initial speculation on whether the steps would adequately cater for industry took place, with one participant suggesting digital creativity tools would need to be referenced. There was debate about whether these digital creativity tools were broad enough to be generally useful or whether they were likely to be applicable to a particular role or task, in which case they would be technical skills.

The skill Problem Solving received the least debate as participants felt this skill aligned well with the majority of roles in a business and organisation. The suggestion was made that more could be done to integrate the terms like analytical thinking, strategic thinking or strategy.

Communication Skills (Presenting, Listening)

The communication skills (presenting and listening) provoked lengthy discussion.

A significant number of participants felt the term 'Presenting' needed to be replaced. Although no consensus on an appropriate term was agreed in the Bristol roundtable, a similar discussion took place in London. It was suggested that the word 'Presenting' was too narrow and instead the term 'Speaking' would better align with the skill steps. For example, being able to '*speak clearly to someone I know*' or '*make points in an order that makes sense*' do not necessarily need to be considered as 'presenting' but instead speaking to others in a conversation or negotiation.

Participants attending the Bristol roundtable felt the name 'Presenting', and its associated description, '*the oral transmission of information or ideas*', did not fully encompass the steps. For example, Steps 12 to 15 could allude to wider forms of communication in a non-verbal manner such as digital or written communication.

There was some support for the idea of broadening the 'Presenting' skill to encompass other modes of non-verbal communication. Across these roundtables significant discussion took place regarding the scope of 'Presenting' and whether a focus on verbal communication was sufficient for the workplace. Some argued that the 'Presenting' skill should include non-verbal forms of communication and media alongside verbal. However, ultimately it was felt that written communication was captured in literacy as a basic skill (see *Chapter 1*) and so although vital for employability was out of scope for this framework.

The inclusion of Listening was greeted enthusiastically, as something which was all too often overlooked. A small addition to Listening Step 0 was suggested by one participant based upon his experience of communication skills across graduate, apprentice and direct entry roles: '*the ability to listen without interrupting'*. This was agreed by two other participants as worthy of further consideration.

Although the Presenting and Listening steps were recognised by participants as relevant to communication, a small number felt the linear progression of the steps did not accurately reflect the general progression needs of a business or organisation. For example, references to body language (Listening Step 7, Presenting Step 9) were identified as a feature of communication required earlier in the Framework. In contrast, others felt it was less important for roles in their workplace.

In large part, this was a reflection of the level of interaction with customers and colleagues required by the role. Suggestions were also made to place greater emphasis on the characteristics of active listening, including verbal and non-verbal cues. These include eye contact, nodding, and checking understanding.

Overall

In totality, there were about fifteen suggestions that were made for changes and adaptations that could be made to the language or content of the Framework to make it better align with the expectations of employers. These are explored further in *Chapter 10*.

Overall though, there was a strong sense that this was very close to being ready for employers to use in their own work.

(e) The Steps: Expectations

Format expectations

One of the unique features of the Skills Builder Framework is that it breaks the essential skills down into steps which then allow for measurability. We wanted to review whether the Framework structure of 15 steps to success per a skill was intuitive to roundtable participants.

General discussion surrounding the format of the Framework ensued in the Birmingham roundtable. Overall, roundtable participants agreed that the Framework in its proposed form could easily be used to guide the career pathway of someone who is starting a new role or seeking promotion. It was felt that the individual skill steps could clearly inform an employee of the elements that a business or organisation require for progression to management level.

Although most participants appreciated the layout of the individual skill frameworks, some questioned the extent they should be interpreted in their rigid linear progression form. In discussion with the authors, it was clarified that not all individuals would take that linear path, but that the ordering of the steps was a best fit and based on the work that Skills Builder had already carried out to determine the most logical progression through them (see *Chapter 2*).

It was felt by a minority of participants that businesses and organisations would be more receptive to the Framework if it was presented as a check-list of component skill parts rather than a stepped progression to mastery. This checklist would allow employers to pick which skills and steps are relevant for each role, rather than feel restricted by the linear model. However, others argued that while the checklist approach was helpful in using the Framework to support job design, for personal development the laddered approach was more helpful.

These are helpful insights to help inform how the Framework is presented, particularly to clarify some of the ways that supporting materials can be used to help employers put it into use. Consensus was achieved that any training and resources supporting the use of the Framework should recognise that employers will need flexibility in their use and interpretation of the Framework. This recognition should be balanced with best practice guidance on the Framework's suitable application in a workplace environment.

Role Expectations

In separate discussions we sought to test the hypothesis that had emerged, particularly from *Chapter 5*, around how the essential skill expectations for different roles varied by role level or sector.

The first point that emerged quickly, and was consistent between different roundtable groups, was that the hypothesis we developed in Phase 1 of the research was correct: that almost all roles draw on all eight of the essential skills, but the profile of the steps required for different roles would vary depending on the role type and sector. Therefore, more senior roles would require increasingly high steps in the skills.

There was enthusiasm from the roundtable participants on the usefulness of the Framework for apprentice, graduate and entry-level and a strong sense of synergy with their own processes. It became clear that participants could see the value of the Framework to support recruitment decisions at all levels. For example, during candidate selection the Framework could help employers identify candidate skill gaps and assess whether they had the capacity to develop the candidate in that area.

However, discussion regarding the Framework's use in senior-level recruitment and development divided roundtable opinion, further details of which are outlined shortly.

Supporting Apprenticeships

There was a sense that the Framework would be particularly useful for apprenticeship programmes. In the Leeds and Bristol roundtables participants agreed the Framework would be a useful addition to the existing apprenticeship standards used by employers and colleges. In particular, the Framework would help employers communicate to apprentices their areas of development and measure their progression.

'The Framework could be a useful way to measure progression through an apprenticeship, particularly if it can be used in combination with existing assessment tools.' Participant (Leeds)

Individual discussions revealed some disparity between employer needs and college services for apprentices. It was suggested that the Framework could facilitate a coordinated approach between the employer and college provider to ensure the successful development of essential skills for apprentices. To maximise the impact of the Framework, colleges *and* employers should be incorporating the Framework into their apprentice training programmes and communicating this with each other.

Graduate programmes

Similarly, participants thought the Framework would be useful to measure skill capability for graduates. Participants agreed that the Framework could adequately guide a graduate through the early stages of their career, informing them of their progression pathway to management. In particular, the steps associated with Aiming High were highlighted as important for this journey – supporting navigation of a workplace and encouraging realism in the pursuit of promotion.

'Sometimes we get graduates in and they think they're ready for promotion after a couple of months. The Aiming High steps will support our conversations with these people to help them understand their own personal development needs – it could certainly make these conversations easier.' Participant (Bristol)

In the London roundtable, similar discussion developed with some participants expressing that the Framework could support individuals to realistically assess their promotion readiness and needs. One participant expressed their frustration that some employees inflate their skill capability while others lack confidence to recognise their skill level. It was felt the Framework could support both types of individual, which in turn will help employers ensure they are developing the best-suited individuals. With this perspective, participants from Bristol and London thought the Framework could be a useful asset for graduates to manage their own career aspirations and upwardly manage their progression.

Entry Level: Non-management

Generally, participants identified the potential for the Framework to support recruitment of non-management entry level jobs, in similar ways to apprentice and graduate recruitment and development. In Bristol, one participant outlined the benefits of the Framework in terms of scoring individuals for entry-level recruitment selection – so long as the recruiter can focus on the specific skills and steps required for the sector or role they are recruiting for.

Management and Senior Leadership

Overall, the Framework was seen to be general enough to be drawn on at different stages of careers. In particular the upper steps of Leadership and Teamwork were identified as relevant to the majority of management and senior-level roles.

It consistently became clear across the roundtables that participants felt that recruitment and development of managers and senior leaders was less focused on essential skills and more upon an individual's role and organisational requirements. This led some to question the extent to which

recruitment and progression of senior-level roles focus on the essential skills outlined in the proposed Framework. Two themes emerged:

- At the most senior levels, recruitment and development focuses less on essential skills as an individual is expected to have secured those skill steps as a pre-requisite. Therefore recruitment of such individuals does not centre on the skill-sets outlined in the Framework as there is an implicit assumption that the skills required for the role have already been mastered.
- At higher seniority, the recruitment process focuses on what those individuals can bring to the role in terms of experience, technical skills and professional network. This was described as finding individuals to 'get the job done'. In some cases, there is greater acceptance of gaps in essential skills as there are greater resources to compensate for any gaps or greater flexibility to adapt the role around an individual's particular expertise (Birmingham, London and Bristol roundtables).

Others challenged these ideas, stating instead that the Framework steps are transferable to senior level roles, but the language associated with the steps may change. For example, the inclusion of words such as: strategic, analytical, driven, ambitious would be expected for senior roles and pathways but not necessarily associated as relevant for junior positions.

In particular, participants in Leeds and Birmingham roundtables felt the Framework required the inclusion of 'strategy' to ensure relevance for senior-level roles. One participant suggested that Leadership steps 14-15 were altered to focus on the realisation and application of leadership styles (Step 14) and the strategic outlook required of senior leaders (step 15). These reflections are picked up in the next chapter.

(f) Current approaches to essential skills

Discussion with participants then turned to the question of the current approaches that their organisations take for the assessment and development of essential skills.

Recruitment

At the recruitment stage, several different approaches were highlighted:

- *Competency-based measurement* of skills during recruitment was a popular approach across the roundtables. Skills-based online tests, interviews and assessment centre activities (role play, business case scenarios) were a common recruitment process for the business participants. Often these activities linked the technical and essential skill requirements of a particular role. For example, the Police Force test skills through a long competency-based process which consists of several online tests, interviews and assessment centre. The competencies the Police Force use are framed around the values of the organisation and the nature of the role; although these reference skills they are not primarily focused on isolated skill competency.
- For others, such as Capgemini, KPMG and Coventry Building Society *the measurement of potential* rather than current skill competency has become increasingly important. Participants felt this is increasingly the case for larger businesses which have the resources to train employees in specific competencies and skills and can therefore tolerate an element of recruitment risk. Capgemini confirmed the value of the Framework in this scenario as the move away from focusing on skills at the interview stage meant there was a need to subsequently focus on measuring and building those skills later on. Another participant explained that the high calibre of candidate applying to their business meant they had to focus on potential and values alongside current skill competency to differentiate one candidate from another. Additionally, the

Springboard Charity outlined their own approach in measuring such 'potential' through their use of value-based interviews, with candidates questioned about their favourite book, film and leisure activities, to assess organisational 'fit'.

When it came to making decisions, the 'gut-instinct' of managers was seen as being highly influential. There was animated discussion about this at the Birmingham roundtable. Some felt, managers often ignore guidance of recruitment and performance measurement and instead refer to their 'gut feeling'. A 'gut feeling' was cited as being grounded in the experience of the hiring manager or their awareness and desire to replace a previous employee they valued. In this case, the overall presence, presentation and 'polish' of the candidate takes precedence over skill competency.

One participant stated he had witnessed this in his previous recruitment jobs and felt the *'personal preferences and sometimes prejudice of the hiring managers or team lead'* prevents consistent, fair measurement of an individual's skill competency. There was enthusiasm that the Framework could help to provide a more consistent, tangible way of assessing and comparing the skills of applicants in a more transparent way.

Particularly in light of challenges of ensuring greater equality through the recruitment process, it was felt that this was the right time to explore ways to reduce the subjectivity of skill measurement, and considered the proposed Framework as a step in the right direction. This could be particularly useful to support employers in their ability to assess the skills of new joiners who may have very limited experience.

Internal progression

In terms of internal progression and development some participants stated their organisation had no universal framework that individuals must climb or prove competency in. In those cases, progression and suggestions for development are often at the discretion of the Human Resources professionals or team leader based on organisation needs and role requirements. In response, one participant suggested the Framework could potentially reduce this level of subjectivity if a manager had to justify their recruitment and progression measurement against pre-selected skill requirements.

The measurement of skills through the observation by colleagues was identified as an additional way to measure the success of an employee in their role. For example, during annual reviews, Burges Salmon employees are required to collate feedback from six people, focusing upon the skills the employee needs for their role. The feedback provides evidence to demonstrate the success of an employee against their workplace objectives which are based upon the 'what' (empirical measurement indicator) and 'how' (values and skills applied in process).

When asked to evaluate the success of these approaches, most participants were satisfied with the approach of their organisation. However, those participants responsible for Human Resources were enthusiastic about the support the Framework would offer to develop these structures.

(h) Use cases of the Skills Builder Framework

Near the end of each roundtable, participants were asked how the Framework could be useful to their organisations. Participants identified these uses:

(1) Recruitment: Measurement of skills

- Designing role descriptions and ensuring their consistency
- Communicating the specific skills that would be required to applicants before and through the interview process
- Illustrating where there would be opportunities for individuals to build their skills as part of the role or working in that organisation
- Increasing external and internal transparency of the recruitment process.
- Ensuring a consistent recruitment process, with clear guidance for recruitment leads in the role requirements and candidate assessment criteria.
- Measuring candidate suitability for specific roles in an objective manner.
- Supporting providing feedback to applicants through the provision of tangible examples of applicant development needs

(2) Learning and Development: Progression of skills

- Providing a progression pathway for apprentice, graduate and entry-level roles through the Framework skill development steps.
- Helping individuals self-evaluate their own skill level and development needs.
- Supporting internal progression conversations and employee objective setting (within professional, mentoring and coaching relationships).
- Identifying organisational skills gaps through a workplace audit based upon the Framework.
- Guiding staff training activities (courses, certifications) based on individual, team, sector or organisation skill-gaps.
- Using the Framework as a set of learning outcomes that can inform the design of training.

(3) Other areas:

- Supporting individuals to be pro-active about their professional wellbeing (Staying Positive and Aiming High self-management).
- Structuring employability outreach programmes to support the development of skills in young people.
- Promoting corporate citizenship and other opportunities for employees to participate as a way to develop their skillset.

(i) Putting the Skills Builder Framework to work

Finally, participants were also asked to think about what additional tools or materials they would need if they were going to be able to put the Skills Builder Framework into action in the ways discussed. Seven suggestions were made, often by multiple participants across different roundtables:

(1) Employer Handbook:

Participants felt employers would benefit from a source of guidance to more explicitly explore how the skills look in different contexts, how to identify steps, and how to build those skill steps. Bringing

together the thoughts of several participants, the handbook should provide support for recruitment and the further development of employee skills. It could do so in the following ways:

- *Recruitment:* skill definitions; examples of competency questions and scenarios to be used in the assessment of the skill or specific skills step; a quick reference matrix to identify which skills are relevant for specific jobs (e.g. customer service, business analysis, contract negotiation).
- *Professional Development:* skill definitions; case studies of how employers have applied the skill in the workplace; training suggestions; additional reading for employees to pro-actively develop their own skill understanding and competency.

(2) Recruitment Checklist:

Two participants who had previously worked for a recruitment agency, outlined the benefits of a skill checklist (based upon the Framework steps) for employers to complete prior to candidate recruitment. A conversational guide between employers and their recruitment agency would ensure consistency between the employer's needs and the recruitment agency's search. As a result, the subjectivity of candidate selection may be reduced and the likelihood of selecting a good-fit candidate is increased.

(3) Candidate Application Support:

An information source for candidates, outlining the Framework and which skills are required for specific roles, sectors or levels was suggested by participants as a way to reduce the barriers experienced by disadvantaged applicants. An online area to support candidates with their application preparations and CV creation was suggested in the Leeds and Bristol roundtables. It was envisaged that applicants could review the general skills associated with particular roles and use this to prepare their own examples. Potentially, a skills-based CV could be modelled to demonstrate a good example or a template provided.

(4) Interview Guidance Tool:

To support employers in their recruitment, an online tool to source skill-focused interview questions, assessment scenarios and case studies would be useful. The online tool would need to incorporate skill-level and role-level filters. Potentially, the online tool could be used during assessment centres to display scenarios (verbal, written and video animated) if it was setup in a way that a business could incorporate their own branding alongside.

Some participants felt the tool could also support 'live-interview' providing recruiters with questions and the facility to record candidate responses. Ideally, the programme would reduce the work effort of a hiring manager by automatically levelling the applicant's skill capability based on their responses.

(5) 360 Feedback Incorporation:

Participants who used 360 feedback processes internally, stated the benefits of using the Framework to frame colleague feedback points. For example, 'Can you think of a time your colleague has achieved a simple goal' or 'Can you think of a time your colleague has taken responsibility for others completing their jobs on time'.

(6) Workplace Fit-Gap Analysis Tool:

An online tool to support team leads in their analysis of team skillset(s) was suggested by those participants with a background in team leadership. A team lead would use the online tool to complete thorough analysis of the existing and required skills of their team to easily identify skill gaps. Recommendations could be given at this point, to support the team lead in their decision to either resolve these gaps through training or further recruitment.

(7) Self-assessment Tool:

To support current employees an online self-assessment tool would help focus objective setting, personal development and realism in terms of promotion readiness and needs. Some participants felt this would be most useful if it was setup as a collaboration tool, with capability for employees, employers, mentors or coaches to interact with the skill data stored. This would help conversations between employees and their managers and help individuals make decisions regarding their own professional development needs, goals and milestones.

In the Birmingham roundtable one participant suggested this tool would be useful if businesses could update and include alongside the associated skill level, recommended training (online or in-person) that the employee could proactively sign-up for.

Overall, there was strong enthusiasm from employers that with the right tools and support, the Skills Builder Framework would be able to add real value in their work.

(i) Chapter conclusion

We set out to stress-test the proposed Skills Builder Framework with employers from a range of organisations. The perspectives outlined in this chapter have enabled us to conclude that the proposed Framework covers the essential skills required by employers, and is written in a way that is generalizable enough for a range of sectors and roles. Participants positively regarded the proposed Framework as able to provide clear guidance on how to build the eight essential skills step by step.

Through the process, the feedback from the roundtable participants helped to highlight a small number of particular amendments to the Framework. In most cases, these were minor adjustments to the language or phrasing of particular steps.

Participants identified the benefit of the Framework in its own right as a progression pathway but also in its potential to be merged with existing learning and development approaches. The challenge of combining the Framework with existing approaches lies in the capacity of the employer to maintain the integrity and best-practice character of the Framework. The suggested tools and resources go some way in resolving this challenge as they can support businesses and organisations with their pursuit of best-practice skill measurement and development.

Although most participants felt their businesses and organisations had elements of the Framework in place, none had a universal approach that was applicable to the measurement of an employee's skillset throughout their career. Participants appreciated the capacity of the Framework to facilitate

consistency and transparency across their existing recruitment and people development approaches.

It was heartening to see the level of enthusiasm from participants to take part in the next phase of the project, and put the universal framework into action.

Chapter 10: A universal framework

Chapter Summary

- Over the course of this research project, we have worked to stress-test and refine the Skills Builder Framework, so that it could be used to define and build essential skills beyond education.
- In the first phase, we benefitted from comparing the Framework with other sets of employability skills, graduate attribute statements, apprenticeship standards, and language used in recruitment advertisements.
- In the second phase, a series of roundtables with employers focused on ensuring that the Framework reflected their practical needs, explored from a range of perspectives.
- This second phase has presented fifteen recommendations for further changes which are addressed here. Most relate to language changes, although there are some minor additions which have also be made.
- In combination, we are now able to propose a final universal version of the Skills Builder Framework which is shared here.

(a) Introduction

Through this piece of work, the goal was to create a universal framework of essential skills. The absence of such a framework has long undermined efforts to build these skills through education[153]. This need is exacerbated by evidence of increasing demand for these skills in the economy.

The Skills Builder Framework has built up a strong track record in the education sector. Developed over a period of four years, tried and tested with more than 200,000 learners and used in more than 800 organisations at the time of writing it was a natural starting point for the effort to create such a universal framework.

Through this process, we wanted to ensure that we kept the best of the Skills Builder Framework – the scope for measurability, the clarity and the authority that it has developed in the education sphere. And we wanted to be rigorous in stress-testing and refining it to be an effective tool beyond compulsory education – for higher education, for apprenticeships and in the world of work.

By dividing the research into two phases we sought the best of both worlds: to ensure that the final framework was intellectually robust through the first phase; and then that it was practically usable in the second phase.

At the end of this second phase we are pleased to have developed a clear view of the enormous potential of the Framework. We have also developed some clear indicators of additional changes to make to the working framework to produce the final Universal Framework.

[153] *For example, CBI* (2012) *First steps: a new approach for our schools.* London: CBI *and* Taylor, M. (2017) *Good Work: The Taylor Review of Modern Working (explored in greater depth in Chapter 1)*

(b) Final changes incorporated

Through the course of this second phase of research a number of suggestions and recommendations were made. These suggestions and how they have been addressed are explained here:

Recommendations for changes	Approach taken
Listening & Presenting	
Presenting is too narrow a part of oral communication, and does not reflect the breadth of the skill as described in the definition nor the skill steps	• Changed the skill name to *Speaking* • Updated an appropriate corresponding icon
Bringing in the use of media to support communication earlier	• Step 8 of Presenting now incorporates bringing in supporting media; continue to include in Step 14 at a higher level
Recognition of the importance of being able to listen without interruption	• Step 0 of Listening updated to reflect being able to listen without interruption
Need for a greater emphasis on active listening and how that is demonstrated	• Step 7 of Listening rephrased to focus on giving verbal and non-verbal cues to demonstrate active listening. • Step 8 of Listening refocused on repeating and rephrasing what is being heard to demonstrate understanding.
Creativity & Problem Solving	
Creativity is often linked to innovation in employment, so these links should be made more explicit	• The creativity steps were reviewed and more links were included to improving processes, generating new ideas or innovations. • Where appropriate, innovation was introduced as part of the descriptor alongside creativity.
Greater emphasis of strategy and strategic thinking	• Problem Solving Step 13 revised to focus on the development of strategies to address a complex problem • Problem Solving Step 14 revised to focus on learning as a strategy is implemented • Problem Solving Step 15 revised to focus on evaluating the success of a strategy • Creation of detailed business strategies seen as a technical skill (and not relevant in many contexts) so out of scope
Aiming High & Staying Positive	

Introduce the idea of assertiveness because in taking ownership over tasks and goals, that would sometimes require clarifying expectations with managers or others	• Assertiveness emphasised in Aiming High Step 7
Some of the discussion of risk in Aiming High feels that it should be better linked to problem solving.	• Phrasing of Aiming High Step 11 to emphasise evaluating the balance of risk and opportunity • Phrasing of Aiming High Step 12 to emphasis managing risks of personal goals
Teamwork & Leadership	
Expand on relationship building, beyond networking	• Teamwork Step 0 rephrased to focus on building positive relations with others • Teamwork Steps 4 & 5 focused on building positive working relationships within the organisation
Cater for the formation, maintenance and utilisation of networks throughout one's career	• Teamwork Step 11 rephrased to place a greater emphasis on building and maintaining relationships outside the organisation • Teamwork Step 15 makes more of reciprocal professional relationships outside the organisation
Greater incorporation of appreciating diversity and tolerance of others' cultures, beliefs and backgrounds	• Teamwork Step 5 rewritten to explicitly focus on this, with some updates to other relevant notes alongside the step descriptors
More explicit reference to managing resources as well as people, as part of leadership	• Leadership Steps 3 & 4 rewritten to include a greater emphasis on having the right resources to complete tasks
More explicit reference to empathy, as an underpinning aspect of leadership	• Leadership Steps 0, 1 & 2 rewritten to have a greater emphasis on articulating the feelings of the individual and others
General suggestions	
Be clear in the guidance that the steps give a logical flow to building the skills, and that they are best built in order – but that there might well be gaps even though someone appears to have secured some of the higher steps.	• This will be captured in the Toolkit, which is the user-facing version of the finalised Framework

(c) I can or I do?

Finally, attendees were pushed on a final question of language: should the language in the framework continue to be focused around the 'I can' statement, or would it be better focused on 'I do'.

This is a bigger question that it might initially appear: the 'I can' statement is about the ability to do something, whether or not this is a routine feature of an individual's behaviour. Conversely, an 'I do' statement is more reflective of an attribute – that is, the combination of the ability to do something and the choice to actually do it.

In *Chapter 2*, we explored the rationale behind maintaining a clear focus on 'I can' as part of the statements. Briefly, the key argument is that this separation is much more pedagogically effective because it enables a focus on building the skill rather than just observing its deployment. It is also a more testable proposition to see where in a particular scenario an individual is able to demonstrate the ability to use that skill.

However, the authors had a sense that in the context of employment, or wider use beyond the classroom, that it was how the skill was *deployed* that was actually the most critical thing: there is a limited value in knowing that a colleague is able to defuse conflict if their behaviour is actually to stoke it. In this context, the balance tilts away from the purity of isolating the skill so that it can be taught and towards whether, and how, it is actually used.

This was opened up to debate in the final roundtable. Speaking in turn, there was strong agreement between the participants that they were strongly in favour of using 'I do' statements, rather than 'I can' statements. The key arguments were that making the change:

- Supports the ability to make assessments more objectively because it is focused on what is actually happening rather than what an individual could hypothetically do.
- Encourages individuals to actually deploy their skills
- Makes the statements themselves simpler and removes any remaining ambiguity

Therefore, on balance it was decided to accept the recommendation of the group that the language in the statements in the framework should be modified in order to focus on 'I do' rather than 'I can'.

(d) The Skills Builder Universal Framework

On the following pages.

Skill: Listening

The receiving, retaining and processing of information or ideas

Step	Statement
0	I listen to others without interrupting
1	I listen to others and can remember short instructions
2	I listen to others and can ask questions if I don't understand
3	I listen to others and can tell someone else what it was about
4	I listen to others and can tell why they are communicating with me
5	I listen to others and record important information as I do
6	I show I am listening by how I use eye contact and body language
7	I show I am listening by using open questions to deepen my understanding
8	I show I am listening by summarising or rephrasing what I have heard
9	I am aware of how a speaker is influencing me through their tone
10	I am aware of how a speaker is influencing me through their language
11	I listen critically and compare different perspectives
12	I listen critically and think about where differences in perspectives come from
13	I listen critically and identify potential bias in different perspectives
14	I listen critically and use questioning to evaluate different perspectives
15	I listen critically and look beyond the way speakers speak or act to objectively evaluate different perspectives

Skill: Speaking

The oral transmission of information or ideas

Step	Statement
0	I speak clearly to someone I know
1	I speak clearly to small groups of people I know
2	I speak clearly to individuals and small groups I do not know
3	I speak effectively by making points in a logical order
4	I speak effectively by thinking about what my listeners already know
5	I speak effectively by using appropriate language
6	I speak effectively by using appropriate tone, expression and gesture
7	I speak engagingly by using facts and examples to support my points
8	I speak engagingly by using visual aids to support my points
9	I speak engagingly by using tone, expression and gesture to engage listeners
10	I speak adaptively by changing my language, tone and expression depending on the response of listeners
11	I speak adaptively by planning for different possible responses of listeners
12	I speak adaptively by changing my content depending on the response of listeners
13	I speak influentially by changing the structure of my points to best persuade the listeners
14	I speak influentially by changing the examples and facts I use to best persuade the listeners
15	I speak influentially by articulating a compelling vision that persuades the listeners

Skill: Problem solving

The ability to find a solution to a situation or challenge

Step	Statement
0	I complete tasks by following instructions
1	I complete tasks by finding someone to help if I need them
2	I complete tasks by explaining problems to someone for advice if I need
3	I complete tasks by finding information I need myself
4	I explore problems by creating different possible solutions
5	I explore problems by thinking about the pros and cons of possible solutions
6	I explore complex problems by identifying when there are no simple technical solutions
7	I explore complex problems by building my understanding through research
8	I explore complex problems by analysing the causes and effects
9	I create solutions for complex problems by generating a range of options
10	I create solutions for complex problems by evaluating the positive and negative effects of a range of options
11	I analyse complex problems by using logical reasoning
12	I analyse complex problems by creating and testing hypotheses
13	I implement strategic plans to solve complex problems
14	I implement strategic plans to solve complex problems and assess their success
15	I implement strategic plans to solve complex problems and draw out learning to refine those plans over time

Skill: Creativity

The use of imagination and the generation of new ideas

Step	Statement
0	I imagine different situations
1	I imagine different situations and can say what I imagine
2	I imagine different situations and can bring them to life in different ways
3	I generate ideas when I've been given a clear brief
4	I generate ideas to improve something
5	I generate ideas by combining different concepts
6	I use creativity in the context of work
7	I use creativity in the context of my wider life
8	I develop ideas by using mind mapping
9	I develop ideas by asking myself questions
10	I develop ideas by considering different perspectives
11	I innovate effectively when working in a group
12	I innovate effectively by seeking out varied experiences and stimuli
13	I support others to innovate by sharing a range of tools
14	I support others to innovate by evaluating the right creative tools for different situations
15	I support others to innovate by coaching them to be more creative

Skill: Staying Positive

The ability to use tactics and strategies to overcome setbacks and achieve goals

Step	Statement
0	I can tell when I feel positive or negative
1	I can tell when others feel positive or negative
2	I keep trying when something goes wrong
3	I keep trying and stay calm when something goes wrong
4	I keep trying when something goes wrong, and think about what happened
5	I keep trying when something goes wrong and help cheer others up
6	I keep trying when something goes wrong and encourage others to keep trying too
7	I look for opportunities in difficult situations
8	I look for opportunities in difficult situations, and share these with others
9	I look for opportunities in difficult situations, and adapt plans to use these opportunities
10	I look for opportunities in difficult situations, and create new plans to use these opportunities
11	I identify risks and gains in opportunities
12	I identify risks and gains in opportunities, and make plans to manage them
13	I support others to stay positive, by managing my own responses
14	I support others to stay positive, by helping others to see opportunities
15	I support others to stay positive, by helping others to see opportunities and creating plans to achieve them

Skill: Aiming High

The ability to set clear, tangible goals and devise a robust route to achieving them

Step	Statement
0	I know when I am finding something too difficult
1	I know what doing well looks like for me
2	I work with care and attention to detail
3	I work with pride when I am being successful
4	I work with a positive approach to new challenges
5	I set goals for myself
6	I set goals informed by an understanding of what is needed
7	I set goals, ordering and prioritise tasks to achieve them
8	I set goals and secure the right resources to achieve them
9	I set goals and plan to involve others in the best way
10	I create plans that are informed by my skill set and that of others
11	I create plans that include clear targets to make progress tangible
12	I create plans that are informed by external views, including constructive criticism
13	I develop long-term strategies taking into account strengths, weaknesses, opportunities and threats
14	I develop long-term strategies that use regular milestones to keep everything on track
15	I develop long-term strategies that include feedback loops to support flexibility and adaptability

Skill: Leadership

Supporting, encouraging and developing others to achieve a shared goal

Step	Statement
0	I know how I am feeling about something
1	I know how to explain my feelings about something to my team
2	I know how to recognise others' feelings about something
3	I manage dividing up tasks between others in a fair way
4	I manage time and share resources to support completing tasks
5	I manage group discussions to reach shared decisions
6	I manage disagreements to reach shared solutions
7	I recognise my own strengths and weaknesses as a leader
8	I recognise the strengths and weaknesses of others in my team
9	I recognise the strengths and weaknesses of others in my team, and use this to allocate roles accordingly
10	I support others through mentorship
11	I support others through coaching
12	I support others through motivating them
13	I reflect on my own leadership style and its effect on others
14	I reflect on my own leadership style, and build on my strengths and mitigate my weaknesses
15	I reflect on my own leadership style, and adapt my approach according to the situation

Skill: Teamwork

Working cooperatively with others towards achieving a shared goal

Step	Statement
0	I work with others in a positive way
1	I work well with others by behaving appropriately
2	I work well with others by being on time and reliable
3	I work well with others by taking responsibility for completing my tasks
4	I work well with others by supporting them if I can do so
5	I work well with others by understanding and respecting diversity of others' cultures, beliefs and backgrounds
6	I contribute to group decision making
7	I contribute to group decision making, whilst recognising the value of others' ideas
8	I contribute to group decision making, encouraging others to contribute
9	I improve the team by not creating unhelpful conflicts
10	I improve the team by resolving unhelpful conflicts
11	I improve the team by building relationships beyond my immediate team
12	I influence the team by reflecting on progress and suggesting improvements
13	I influence the team by evaluating successes and failures and sharing lessons
14	I support the team by evaluating others' strengths and weaknesses, and supporting them accordingly
15	I support the team by bringing in external expertise and relationships

Chapter 11: Conclusions and next steps

Chapter Summary

- At the outset of this project, we had the ambitious goal of seeking to create a universal framework for essential skills.
- These skills are widely called for across education, employment and entrepreneurship but efforts to build them have frequently been held back by challenges around common definition and language.
- The Skills Builder Framework was taken as a starting point as it had been developed to solve exactly this challenge in the context of education and had been robustly developed and refined in that setting.
- Over the course of this research project we learnt a great deal and have been able to create a final Universal Framework that achieves two of the three objectives that we set out:
    - *Clarity:* The Framework must be easily understood and usable in different settings
    - *Measurability:* The Framework must allow for easy understanding of the current skills of individuals and scope for growth
- The Universal Framework certainly has the potential to achieve the third objective too: that of ensuring that it has *Authority*, not least because of the engagement and backing of the organisations in the Essential Skills Task Force: the CIPD; the CBI; the Gatsby Foundation; Business in the Community; the Careers & Enterprise Company; the EY Foundation; and the Skills Builder Partnership.
- To fully achieve that potential though will require a lot more work to build up a growing group of employers and higher education providers, to build the framework into standards and policy definitions, and to, over time, build individual awareness of their own skills through the lens the framework offers.
- There is much to be done, but the Universal Framework gives us the foundation we need to do it – and to ensure everyone builds the essential skills to thrive.

(a) Progress that has been made

At the outset of this project, we had an ambition to explore whether it would be possible to create a universal Framework for essential skills. We were driven to do so because such a Framework could address a real gap. We believed that it could prove its worth in:

- **Ensuring alignment between education and employers** in terms of the employability skills that employers actually need, and what schools understand and are equipped to build. This alignment can then be naturally extended into T-Levels, Apprenticeships and graduate qualifications.
- **Supporting the process of recruitment** through increased transparency of skills. This would help employers to assess more accurately the competences of new recruits, who would have clarity on what they are being assessed. Rather than recruitment processes falling back on perceptions of self-confidence or ‘polish’, transparency would give a diverse range of applicants the opportunity to display their competences.
- **Facilitating upskilling and reskilling within the workplace** by increasing the clarity of what progression looks like in these foundational skills.
- **Creating a common vocabulary** for schools, colleges, universities, employers and employees to use when discussing skills with one another.

What has become clear through the second phase of this work is that there is strong demand for a framework for exactly these use cases from employers. However, there were additional benefits cited that we had not anticipated.

These include the need to ensure fair, consistent expectations within an organisation when designing job roles and clarifying expectations. There were also benefits of supporting organisations to retain staff by increasing the clarity of what progression looked like, and the opportunity to use the framework to ensure greater alignment between those development needs and the training opportunities available.

Others believed that being able to focus more on building skills internally would liberate them to focus on potential at the recruitment stage, which in turn might better support them to achieve their goals to support social mobility and a more diverse workforce.

We saw in Chapter 1 that such a Framework has been called for on a number of occasions, including the CBI's 2012 landmark report and the Taylor Review of working practices in 2017.

We started with the Skills Builder Framework that had been developed for education. We did so because we felt that this Framework was most likely to fulfil the three criteria that we had set ourselves:

- *Clarity:* It must be simple enough to be useful in a range of different contexts and to be used by individuals who are not experts. It must not be easily misunderstood or misinterpreted.
- *Measurability:* It should be possible to use the Framework to reliably understand the existing skillset of individuals, and to measure growth.
- *Credibility:* The Framework should be backed by organisations who give it credibility, authority and permanence.

The first phase of research established, with some adaptations and improvements, the relevance and comprehensiveness of the adapted Skills Builder Framework. A key learning was that the same Framework could be contextualised to be useful across compulsory education, higher education, and into apprenticeships and employment. This is an important component of ensuring the *clarity* of the Framework.

The second phase of the research helped to refine further for this criteria. Through the roundtables we were able to further unpick areas which were less clear or well-structured. We took away a series of recommendations around language and refinements to content which further improved the level of *clarity* that we offered.

This phase also focused on ensuring *measurability*. We wanted to ensure that from the perspective of employers that they felt that they would be able to make stable and justifiable assessments of the existing skill levels and development areas of individuals. We knew from the existing work on the Skills Builder Framework that such decisions are possible in the context of education and wanted to extend this into employment.

The big change to make this more easily achievable was to change the language of the Framework to focus on whether and how the skill was used in practice (I do) rather than the more hypothetical capacity captured in an 'I can' statement. Although not anticipated at the start of this project, the authors consider this a significant improvement.

The final criteria for success set at the start of the project was that the final Framework should have *authority*. The foundations for this are strong. Firstly, the existing Skills Builder Framework already benefits from widespread uptake being used by more than 800 organisations at the time of writing to support the development of essential skills of children and young people across the country. This partnership includes schools and colleges serving students of all backgrounds, large and small employers, and youth organisations. It also benefits from the backing of national organisations including the CBI, National Citizen Service, Careers & Enterprise Company and many others.

Secondly, the Essential Skills Task Force that backed this work includes organisations whose expertise and insights also boost the opportunity to make a success of the Skills Builder Universal Framework. The CIPD; the CBI; the Gatsby Foundation; Business in the Community; the Careers & Enterprise Company; the EY Foundation; and the Skills Builder Partnership all bring different perspectives and sector networks.

However, to really reach a tipping point where the framework has the opportunity to be truly universal will require a lot more work.

(b) What needs to happen next

This is only another step in that work. To ensure that the Universal Framework can achieve its potential there are further steps that will need to be taken.

The critical next step was to move ahead with the creation of the additional tools and resources that were called for by employers in the roundtables (see the end of *Chapter 9*). Some of these assets include:

- A *toolkit* with the Universal Framework and sufficient contextualisation around it so that it is something that employers can pick up and quickly put to use.
- An *employer handbook* to provide greater detail about how the skill steps can be built and assessed through the processes of recruitment and professional development.
- *Practical, modelled ways to support the recruitment process* including candidate application tools, modelled interview questions
- *Tools and models to support personal development* including ways of building the Framework into 360 feedback, self-assessment and reflection tools, and guidance on how to build the skills for line managers and individuals

With these in place, the next steps will be to support the implementation of the Framework and supporting tools in practice, working with trailblazing employers and other organisations who see the value in adopting the approach. This will undoubtedly create new learning and insights, and provide models that can be adopted by other organisations.

There will continue to be a need to build awareness and capacity in the system for a while. Ultimately, the aspiration would be that individual organisations take hold of the Framework and then innovate to create the tools that are most effective for their work and needs.

The core of a successful approach must be two-fold: to maintain and protect the integrity of the Framework so as not to undermine the opportunity for alignment; and to be open to innovation and adaptation of the materials that surround the Framework.

In the longer term there are also policy changes that would support the widespread adoption of the approach – for example, building the Framework into the design of new apprenticeship standards, into official definitions of employability or other national programmes.

The tipping point will come when the language and definitions of essential skills have become the norm.

(c) Final reflections

This process has reinforced three important points:

- That there is a growing need for individuals to have the essential skills to achieve employment and to succeed in their education and wider lives
- That the need for greater clarity and alignment in this space that has been expressed in several key reports is reflected by the experience of those on the frontline
- That with the adaptations that have been made through this work, this Universal Skills Builder Framework is able to play that role

If we can fulfil the potential of this Framework, we can support everyone to build the essential skills to thrive.

Bibliography

- Adler, L (2016) *The essential guide for hiring and getting hired.* [Accessed 21/6/19 at https://www.linkedin.com/pulse/new-survey-reveals-85-all-jobs-filled-via-networking-lou-adler]
- Allen, G. (2011) *Early Intervention: The Next Steps*, H.M. Government
- Artess, J., Hooley, T., & Mellors-Bourne, R. (2016) *Employability: A Review of the Literature 2012-16*, Higher Education Academy.
- Bakhshi, H., Downing, J.M., Osborne, M.A. & Schneider, P. (2017) *The Future of Skills: Employment in 2030*, London: Pearson and Nesta
- Barbour, R. S., Kitzinger, J. (1999) *Developing focus group research: Politics, theory and practice*. Thousand Oaks, CA, Sage Publications
- Barrie, C., S. (2004) A research-based approach to generic graduate attributes policy, *Higher Education Research and Development.* Vol.23 (3)
- BITC, Prudential & CBI (2016) *Principles and Practice for Primary Engagement* BITC. [Accessed 20/6/19 at https://www.bitc.org.uk/sites/default/files/primary_education_engagement_toolkit.pdf]
- Burning Glass Technologies (2019) *About Us* [Accessed 20/6/19 at https://www.burning-glass.com/uk/]
- Careers & Enterprise Company (2018) *Primary Fund Prospectus,* Careers & Enterprise Company
- Careers & Enterprise Company (2019) *Our Impact Measurement Tool*, Careers & Enterprise Company [Accessed 20/6/19 at https://www.careersandenterprise.co.uk/schools-colleges/our-impact-measurement-tool]
- Cavanagh, J., Burston, M., Southcombe, A. and Bartram, T. (2015) *Contributing to a graduate-centred understanding of work readiness: An exploratory study of Australian undergraduate students' perceptions of their employability*. International Journal of Management Education, 13 (3)
- Chartered Global Management Accountant (2019) *CGMA Competency Framework*, [Accessed 28/05/2019 at https://www.cgma.org/resources/tools/cgma-competency-framework.html]
- Confederation of British Industry (2007) *Time Well Spent: Embedding Employability in Work Experience – Employment Competencies for Students*. [Accessed 29/05/2019 at https://www.educationandemployers.org/wp-content/uploads/2014/06/time-well-spent-cbi.pdf]
- Confederation of British Industry (2008) *Taking stock: CBI education and skills survey 2008*, CBI
- Confederation of British Industry (2009) *Future Fit: Preparing graduates for the world of work*. [Accessed 12/06/2019 at https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2009/future-fit-preparing-graduates-for-the-world-of-work.pdf]
- Confederation of British Industry (2012) *First steps: a new approach for our schools*, CBI
- Confederation of British Industry (2018) *Educating for the Modern World: CBI / Pearson Education and Skills Annual Report 2018,* CBI
- Confederation of British Industry (2019) *Getting Apprenticeships Right: Next Steps,* CBI
- Cullinane, C. & Montacute, R. (2017) *Life Lessons: Improving essential life skills for young people*, The Sutton Trust. [Accessed 20/6/2019 at https://www.suttontrust.com/wp-content/uploads/2017/10/Life-Lessons-Report_FINAL.pdf].

- Davies, H. (2002) *A Review of Enterprise and the Economy in Education*, Norwich: HM Stationery Office
- Day, C., Sammons, P. (2016) *Successful School Leadership,* Education Development Trust, Nottingham University.
- De Vaus, D. (2001) *Research Design in Social Research*. Sage, Thousand Oaks: CA.
- Deloitte (2018) *Power Up: UK Skills – Recognising Transferable Skills*. [Accessed 16/04/2019 at https://www2.deloitte.com/uk/en/pages/innovation/articles/power-up-uk-skills.html]
- Deloitte (Date unknown) *Power Up: UK skills* London: Deloitte [Accessed 20/6/2019 at https://www2.deloitte.com/uk/en/pages/innovation/articles/power-up-uk-skills.html]
- Deming, D.J. (2017) *The Growing Importance of Social Skills in the Labor Market*, Harvard University and NBER [Accessed 20/6/2019 at https://scholar.harvard.edu/files/ddeming/files/deming_socialskills_aug16.pdf]
- Denzin, N, K., Yvonna S. L. (2005) *The Sage Handbook of Qualitative Research*. Thousand Oaks: Sage Publications.
- Department for Education (2014) *Assessment Principles*, Department for Education
- Department for Education (2018) *Careers guidance and access for education and training providers: Statutory guidance for governing bodies, school leaders and school staff,* Department for Education
- Department for Education (2018) *Essential Digital Skills Framework*, Department for Education [Accessed on 20/6/19 at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/738922/Essential_digital_skills_framework.pdf]
- Department for Education (2019) *Public sector apprenticeship target reporting: research brief*. [Accessed 21/06/2019 at https://www.gov.uk/government/publications/public-sector-apprenticeship-target-reporting-research-brief]
- Development Economics (2015) *The value of soft skills to the UK economy*, McDonald's UK.
- Djumalieva, J. & Sleeman, C. (2018) *An Open and Data-driven Taxonomy of Skills Extracted from Online Job Adverts.* London: ESCoE
- Early Education (2012) *Development Matters in the Early Years Foundation Stage (EYFS)*, British Association for Early Childhood Education [Accessed 20/6/2019 at www.foundationyears.org.uk/files/2012/03/Development-Matters-FINAL-PRINT-AMENDED.pdf]
- Ericsson. A, (2016) *Peak: Secrets from the New Science of Expertise*, Eamon Dolan/Houghton
- EY Foundation (2016) *An Age of Uncertainty: Young people's views on the challenges of getting into work in 21st century Britain*, EY Foundation & Chartered Management Institute
- Fair Education Alliance (2016) *Report Card 2016*, Fair Education Alliance
- House of Commons, Work and Pensions Committee (March 2017) *Employment opportunities for young people. Ninth Report of Session 2016-17*
- Goodwin, J. (2016) *Graduate Attributes: The pros, the cons, the point*, in *Association of Graduate Careers Advisory Services*, 'Defining Graduate Attributes'
- Gronn, P. (2007) *Interviewing Leaders: Penetrating the Romance*, in Briggs, A. R. J., Coleman, M., Morrison, M. (eds.) *Research methods in educational leadership and management* (3rd ed.), London, SAGE.
- Haskel et al (2005) *Skills, human capital and the plant productivity gap: UK evidence from matched plant, worker and workforce data*
- Higher Education Academy (2016) *Framework for Embedding Employability in Higher Education* [Accessed 14/06/2019 at https://www.heacademy.ac.uk/system/files/downloads/embedding-employability-in-he.pdf]

- Hillage, J. and Pollard, E. (1998) *Employability: Developing a Framework for Policy Analysis*, Research Brief RR85, Nottingham: Department for Education and Employment.
- Hinds, D. (2019) *Education Secretary sets out vision for character and resilience* Department for Education [Accessed 20/6/19 at https://www.gov.uk/government/news/education-secretary-sets-out-vision-for-character-and-resilience]
- HM Government (2017) *Apprenticeship frameworks and standards* [Accessed 20/6/19 at https://apprenticeships.blog.gov.uk/2017/08/01/apprenticeship-frameworks-and-standards-the-main-differences/]
- House of Commons Library (February 2019) *Briefing Paper Number 06113: Apprenticeship Statistics: England*, London: House of Commons Library
- House of Commons Library (January 2019) *Briefing Paper Number CBP 03052: Apprenticeships and skills policy in England* London: House of Commons Library
- Humphrey, N., Lendrum, A. and Wigelsworth, M. (2010) *Social and emotional aspects of learning (SEAL) programme in secondary schools: National evaluation*, Department for Education
- Institute for Apprenticeships & Technical Education (Date Unknown) *What is a quality apprenticeship* [Accessed 20/6/2019 at https://www.instituteforapprenticeships.org/quality/what-is-a-quality-apprenticeship/]
- Institute for Apprenticeships and Technical Education (2018) *Customer Service Practitioner* Online [Accessed 20/6/19 at https://www.instituteforapprenticeships.org/apprenticeship-standards/customer-service-practitioner/]
- Institute for Apprenticeships and Technical Education (2018) *Installation Electrician / Maintenance Electrician* Online [Accessed 20/6/19 at https://www.instituteforapprenticeships.org/apprenticeship-standards/installation-electrician-maintenance-electrician/]
- Institute for Apprenticeships and Technical Education (2018) *Lead Adult Care Worker* Online [Accessed 20/6/19 at https://www.instituteforapprenticeships.org/apprenticeship-standards/lead-adult-care-worker/]
- Institute of Student Employers (ISE) (2018) *ISE 2018 Development Survey: Trends, benchmarks and insights*
- Jackson, D. (2014c) Testing a model of undergraduate competence in employability skills and its implications for stakeholders, *Journal of Education and Work*, 27 (2)
- Jackson, D., W. & Sirianni, N., J. (2009) Building the bottom line by developing the frontline: Career development for service employees. *Business Horizons*, vol. 52(3)
- Joint Research Centre (JRC) of the European Commission (2016) The Entrepreneurship Competence Framework (EntreComp). [Accessed 16/05/2019 at http://publications.jrc.ec.europa.eu/repository/bitstream/JRC101581/lfna27939enn.pdf]
- Jones, A. (2009) Redisciplining generic attributes: the disciplinary context in focus, *Studies*
- KPMG (2019) *Behavioural capabilities*. [Accessed 31/05/2019 at https://www.kpmgcareers.co.uk/graduates/how-to-apply/behavioural-capabilities]
- Kuczera, M. & Field, S. (2018) *OECD Reviews of Vocational Education and Learning: Apprenticeship in England, United Kingdom*, OECD
- Lucas & Hanson (2015) *Learning to be Employable: Practical lessons from research into developing character*, London: City & Guilds
- McDonald's UK (2015) *Backing soft skills: a plan for recognising, developing and measuring soft skills at every stage of education and work*,
- McLarty, L., Highley, H. and Alderson, S. (2010) *Evaluation of Enterprise Education in England,* London: Department for Education
- Millard, W., Menzies, L. and Baar, S. (2017) *Enterprise Skills: Teachability, Measurability and Next Steps*, LKMCo.

- Morgan, N. (2015) *Winners of the Character Awards announced*, Department for Education [Accessed 20/6/19 at www.gov.uk/government/news/winners-of-the-character-awards-announced]
- Morrison, M. (2007) 'Validity in Research', in Briggs, A. R. J., Coleman, M., Morrison, M. (eds.) *Research Methods in Educational Leadership and Management* (3rd ed.), London, Sage.
- Mourshed, M., Patel, J., & Suder, K. (2014) *Education to Employment: Getting Europe's Youth to Work*, Washington DC: McKinsey Center for Government
- Nesta (2019) *Transferable Skills in the Workplace: Key findings from a survey of UK Employers*, London: City of London Corporation
- Nicholson, B. (1989) *Towards a Skills Revolution: Report of the CBI Vocational Education and Training Taskforce*, CBI
- Northouse, P.G. (2013). *Leadership: Theory and Practice.* Los Angeles: Sage Publications.
- Ofsted (2016) *Getting Ready for Work: How secondary schools prepare young people for work*, Ofsted
- Ofsted (2019) *The Education Inspection Framework,* Ofsted.
- Organisation for Economic Co-operation and Development (2014) *Learn, Perform, Succeed: OECD Competency Framework*. OECD [Accessed 28/05/2019 at https://www.oecd.org/careers/competency_framework_en.pdf]
- Patton MQ (2001) Qualitative evaluation and research methods. 3rd ed. Newbury Park, CA: Sage Publications.
- Pericles Rospigliosi, A., Greener, S., Bourner, T., Sheehan, M. (2014) *Human capital or signalling, unpacking the graduate premium.* International Journal of Social Economics, 41 (5)
- Pollard, V., Wilson, E. (2014) *The 'entrepreneurial mindset' in creative and performing arts higher education in Australia*. Artivate: A Journal of Entrepreneurship in the Arts; 3 (1)
- Pukelis, K, Pileičikienė, N, Allan, A and Dailidienė, E (2007) *European and National Level Strategies for Competency-Based Curriculum Development: summary, HEGESCO. [Accessed 12/06/2019 at www.decowe.com/static/uploaded/htmlarea/finalreportshegesco/European_National_and_Universities_Strategies_-_Summary.pdf]*
- Qualifications and Curriculum Authority, *Personal Learning & Thinking Skills*. [Accessed 25/03/2019 at https://dera.ioe.ac.uk/7268/3/PLTS_framework_v2_tcm8-936-1.pdf]
- Ravenscroft, T. (2017) *The Missing Piece: The Essential Skills that Education Forgot,* John Catt Publishing
- Reid, E. R., Manley C. (2016) *Graduate attributes: the demise of diversity* in *Association of Graduate Careers Advisory Services*, 'Defining Graduate Attributes'
- Roepen, D. (2015) *Business graduate perceptions of the development and application of nontechnical skills within higher education and the workforce*. Edith Cowan University Research Online. [Accessed 14/06/2019 at http://ro.ecu.edu.au/theses/1634/]
- Rose, T. (2016) *The End of Average: How We Succeed in a World That Values Sameness*. HarperOne
- Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H., Jinksm, C. (2018) *Saturation in qualitative research: exploring its conceptualization and operationalization*. Quality and Quantity, Vol.52, no.4.
- Schmidt, S., W. (2007) *The relationship between satisfaction with workplace training and overall job satisfaction.* Human Resource Development Quarterly.
- Scott, A. & Gratton, L. (2016) *The 100 Year Life,* Bloomsbury
- Scottish Funding Council (2009) *Learning to Work Two - developing the Council's employability strategy: consultation outcomes, action plan and invitation to develop*

proposals. [Accessed 12/06/2019 at www.sfc.ac.uk/web/FILES/CircularsSFC4109/sfc4109.pdf]
- Silverman D (2010) *Doing Qualitative Research, A Practical Handbook*. London: Sage
- Skills Builder Partnership (2018) *Toolkit: The Framework and Principles for building essential skills*, London: Enabling Enterprise [Accessed 20/6/19 at http://www.skillsbuilder.org/toolkit]
- Stewart, D. W., Kamins, M. A. (1993) *Secondary Research: Information Sources and Methods*. Sage, Newbury Park: CA.
- Strongin, S., Lawson, S., Banerjee, S., Hinds, M., Maxwell, K. and Shan, H (2016) *Narrowing the Jobs Gap: Overcoming Impediments to Investing in People*, Goldman Sachs.
- Taylor, M. (2017) *Good Work: The Taylor Review of Modern Working Practices*
- The Occupational Information Network (O*NET) (2019) *The Occupational Information Network (O*NET) database*. [Accessed 08/05/2019 at https://www.onetonline.org/find/descriptor/browse/Skills/]
- The Quality Assurance Agency for Higher Education (QAA) (2018) *Guidance for UK Higher Education Providers Graduate Outcomes* [Accessed 14/06/2019 at https://www.qaa.ac.uk/docs/qaas/enhancement-and-development/enterprise-and-entrpreneurship-education-2018.pdf]
- Tomlinson, M. (2004) *14-19 Qualifications and Curriculum Reform: Final Report of the Working Group on 14-19 Reform,* Department for Education and Skills
- University of Cambridge (2017) *Key skills for undergraduates* [Accessed 20/6/2019 at www.transkills.admin.cam.ac.uk/skills-portal/key-skills-undergraduates]
- UK Civil Service Human Resources (2017) *Civil Service Competency Framework*. [Accessed 31/05/2019 at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/436073/cscf_fulla4potrait_2013-2017_v2d.pdf]
- UK Commission for Employment and Skills (2009) *The Employability Challenge*. [Accessed 25/03/2019 at https://www.educationandemployers.org/wp-content/uploads/2014/06/the-employability-challenge-ukces.pdf]
- UK Commission for Employment and Skills (2014) *The future of work: jobs and skills in 2030*. [Accessed 12/06/2019 at https://www.gov.uk/government/publications/jobs-and-skills-in-2030]
- UK Commission for Employment and Skills (2016) *Employer Skills Survey 2015: UK Results – Evidence Report 97,* London: UKCES
- Weeks, A. (2019) *Competence and Competency Frameworks: The Chartered Institute of Personnel Development*. [Accessed 5/6/2019 at https://www.cipd.co.uk/knowledge/fundamentals/people/performance/competency-factsheet]
- Whitehurst, G.J. (2016) *Grading Soft Skills: The Brookings Soft Skills Report Card*, Education Next [Accessed 20/06/2019 at www.educationnext.org/grading-soft-skills-the-brookings-soft-skills-report-card/]
- Willingham, D. (2010) *Why Don't Students Like School?*, American Educator: Spring 2009
- Yochum, C. (2019) *Conducting A Gap Analysis: A Four-Step Template*. [Accessed 07/06/2019 at https://www.clearpointstrategy.com/gap-analysis-template/]
- Yorke, M. & Knight, P. (2006) *Embedding employability into the curriculum*. York: Higher Education Academy
- Zhang, M (2013) *Fishbowl to Roundtable Discussions*, College Teaching, vol. 61: 39.

Appendix A: Skills Builder Framework

Listening

The receiving, retaining and processing of information or ideas.

NOT FINAL FRAMEWORK

Only for reference

The first few steps are about listening and responding to one person at a time Learners then move to develop their listening in different contexts and use information or ideas they have heard in their own responses. The next stage is focused on the analysis of why a speaker is engaging, being able to explain why they have made particular language or presentational choices.

Step	Learner Descriptor	Teacher Explanation
Step 0	I can listen to others for a short time.	Learners listen with enjoyment and respond appropriately to stories.
Step 1	I can listen to adults, follow instructions and tell you what I heard.	Learners can listen to an adult, such as a teacher or teaching assistant, and recall and follow simple instructions.
Step 2	I can listen to others and ask questions about what I heard.	Learners are able to listen to peers and ask relevant questions based on what they heard.
Step 3	I can follow a conversation and tell somebody else what it was about.	Learners are able to listen to multiple speakers, retain the information and give a basic account.
Step 4	I can explain that there are different purposes to speech and how to identify them.	Learners are aware that there are different reasons why people communicate (e.g. to ask a question, give instructions, provide information or persuade) and identify some simple language features of each one.
Step 5	I can listen to extended talk and identify the key information I need.	Learners can listen to and respond to extended talk, identifying the key information they need and retain it.
Step 6	I can take part and respond in a group discussion.	Learners are able to follow and take part in a group discussion and express opinions when called upon.
Step 7	I can analyse how a speaker uses language and gesture to engage the audience.	Learners can analyse how a speaker engages an audience through language and gesture.
Step 8	I can analyse how a speaker adapts language for different purposes.	Learners can analyse how and why a speaker adapts their language to suit different purposes such as to persuade, entertain and instruct.
Step 9	I can analyse the tone, emphasis and status of the speaker and their effect.	Learners can recognise the tone, emphasis and status of a speaker and consider their effect.
Step 10	I can ask probing and relevant questions to check and build my understanding.	Learners are able to follow a speaker and create their own meaningful, probing questions to check and deepen their own understanding.
Step 11	I can identify and analyse different points of views of speakers.	Learners can identify and analyse different points of views they hear in a discussion and explain how they are different.
Step 12	I can identify underlying themes, implications and issues when listening.	Learners can identify themes, implications and issues in what is being said.
Step 13	I can analyse bias when listening, through a speaker's language, omissions or ambiguity.	Learners can analyse bias through language, omission and ambiguity.
Step 14	I can explain a speaker's techniques and approaches in different contexts.	Learners understand a speaker's intentions and techniques and how they use a range of different approaches in different contexts.
Step 15	I can evaluate how a speaker can become an outstanding speaker.	Learners can evaluate a speaker's use of language, gesture, tone, emphasis, bias and the plausibility and validity of their point of view to make suggestions for improvement.

Presenting

The oral transmission of information or ideas.

The first few steps are about learners speaking clearly and logically, to communicate their ideas. The next stage is about being able to make appropriate language choices, considering their audience and why they are presenting. nce they have mastered this, learners move on to how to create engaging presentations by thinking about gesture, expression and tone.

Step	Learner Descriptor	Teacher Explanation
Step 0	I can speak clearly to someone I know.	Learners can convey simple ideas of immediate interest to one other person.
Step 1	I can speak clearly to a small group of people I know.	Learners can convey simple answers or thoughts to a wider group, for example in a group discussion.
Step 2	I can speak clearly and explain my ideas to a group of people.	Learners can share a narrative or extended answer while speaking to a group.
Step 3	I make points in an order that makes sense when I am speaking.	Learners can explain ideas in a clear order with relevant detail, using conjunctions to structure their speech.
Step 4	I choose an order for my points so that the audience can best understand me.	Learners are able to logically order information in a way that could be understood by an audience. Learners begin to engage the audience with some presentational techniques.
Step 5	I can use formal language, tone and expression when I am presenting.	Learners are able to use standard English when presenting to a group, avoiding inappropriate language or slang.
Step 6	I can change my language depending on the purpose and audience.	Learners use appropriate language based on their understanding of the presentation's purpose and audience.
Step 7	I can structure my language in a way that makes my communication clear and engaging, and use examples for my points.	Learners use appropriate structure and vocabulary, and also bring in examples to illustrate their key points.
Step 8	I can vary my language and level of detail to make my presentation interesting according to the context.	Learners can vary the level of detail and the language they use when presenting to make it appropriate to the audience and their brief.
Step 9	I can adapt my language, structure and gesture to engage my audience.	Learners can use appropriate language, structure and gesture for the context they are presenting in.
Step 10	I am able to modify my language, tone and expression according to the listeners' reaction and response.	Learners are able to modify language, tone and expression according to the listeners' reaction and response to increase the audience's engagement.
Step 11	I can anticipate different responses from the audience and plan for them.	Learners are also able to anticipate different responses from the audience and are able to plan accordingly. For example, by varying the mood to elicit different emotional responses.
Step 12	I can be flexible in my style during the presentation to better engage the audience. This might include changes to content and style of delivery.	Learners can adapt their presentation during its delivery to better engage the audience.
Step 13	I explore different styles of presenting and consider their effectiveness.	Learners begin to develop a personal presenting style, adapting the content, structure, language and non-verbal features to the audience and purpose of the talk.
Step 14	I reflect on the effectiveness of different styles of presenting and choose the best style for me.	Learners can reflect and develop their personal presenting style and evaluate the effectiveness of their approach.
Step 15	I can deliver effective presentations in a personal style, adapted to the situation, and reflect on why they were effective.	Learners are able to creatively adapt the content, structure and style of presentation to the purpose, audience and tone of the talk with distinct personal style and flair.

Problem Solving

The ability to find a solution to a complex situation or challenge.

The initial stages are about learners being able to explain a simple problem they may have and recognise they may need help. Once learners are able to identify problems, they begin learning how to use strategies to solve simple problems. The next stage focuses on being able to identify complex problems and break them down before suggesting a range of possible solutions.

Step	Learner Descriptor	Teacher Explanation
Step 0	I can follow instructions to solve a problem.	Learners can follow adult instructions to solve a problem.
Step 1	I can ask for help when I need it.	Learners can identify when they require adult support in overcoming difficulties and will seek a suitable adult for help with this.
Step 2	I can explain a simple problem that I might have and get someone to help me with it.	Learners can identify simple problems and ask for adult support to scaffold possible solutions.
Step 3	I can find extra information with help from others to help me solve a simple problem.	Learners can identify when they need extra information to solve a simple problem and can find that information with help from an adult or peers.
Step 4	I can come up with different ways to solve a simple problem.	Learners appreciate that there are frequently different ways to solve a problem and can explain different options in a given situation.
Step 5	I can use pros and cons to pick the best way of solving a simple problem.	Learners can articulate a problem and evaluate different potential solutions to choose the option they think will be most effective (with adult support).
Step 6	I can explain the difference between simple and complex problems.	Learners can identify complex problems (e.g. I can't decide on a secondary school) and explain how these differ from simple problems (e.g. what I need to pack for holiday). They can explain why different approaches might be needed.
Step 7	I can carry out research to better understand complex problems.	Learners can seek additional information to build their understanding of a complex problem.
Step 8	I can look at the causes and effects of complex problems, including carrying out research.	Learners can identify extra information they need in order to consider the causes and effects of a problem and seek out that information independently.
Step 9	I can create a range of possible solutions for complex problems and identify the pros and cons of each.	Learners can create a range of possible solutions, identifying the pros and cons of each approach.
Step 10	I can evaluate different solutions for a complex problem to pick the best one.	Learners can choose between the options that they've created and use some justifiable method to do so – such as scoring and weighting outcomes.
Step 11	I can use logic trees to help solve complex problems.	Learners can create simple logic trees to think through problems where there are different outcomes.
Step 12	I can use hypotheses to help solve complex problems.	Learners are able to generate hypotheses in answer to complex problems, and suggest how they could test these hypotheses.
Step 13	I can explain deductive and inductive logic and how they can be used in problem-solving.	Learners have a basic understanding of deductive and inductive logic and understand how these can be applied effectively to problems.
Step 14	I can identify assumptions that may be made about a problem and possible solutions, and think about how this might impact my approach.	Learners can explain what assumptions might have been made in the process of solving a problem and developing solutions, and consider how understanding these assumptions will affect the approach they take.
Step 15	I can evaluate the success of solutions I have used to attempt to solve a complex problem.	Learners can effectively evaluate different results from their attempted solutions to complex problems and adapt their approach if required.

Creativity

The use of imagination and the generation of new ideas.

The first stage is about learners recognising and using their imagination to express themselves. The next few steps focus on the learner's confidence to use their imagination to develop new ideas using guidance or existing ideas. From Step 6, learners are able to explain how creativity is useful to help in different areas of life. The next stage is about learners using different strategies for creativity, both when working alone and in groups.

Step	Learner Descriptor	Teacher Explanation
Step 0	I can use my imagination in role-play.	Learners feel comfortable with the idea of using their imagination. They might do this in the context of familiar, real-world settings.
Step 1	I can talk about when I use my imagination.	Learners can talk about using imagination and when they use their imagination.
Step 2	I can share what I imagine through writing, drawing or acting it out.	Learners can express and share what they are imagining through writing, drawing or other forms of expression.
Step 3	I can use my imagination to come up with ideas when I've been given success criteria to help me.	Learners can produce ideas when they are given a simple brief, some success criteria or broad guidelines as support.
Step 4	I can use my imagination to come up ideas linked to a starting point.	Learners can generate multiple ideas when they are given a stimulus or initial idea as a starting point.
Step 5	I can combine ideas or concepts to create new ones.	Learners can merge simple ideas to create new ones and can identify that ideas have different components.
Step 6	I can explain what creativity is and how it is used in different settings.	Learners can explain what creativity is, how it might be seen in different settings (the arts, design or day-to-day situations) and how it is used by different groups of people.
Step 7	I can explain how I use creativity in different areas of my life.	Learners can reflect on the role creativity plays in different aspects of their life: in different lessons, during extra-curricular activities and at home.
Step 8	I can use mind mapping as a creative tool to help me generate ideas.	Learners can use mind mapping as a creative tool to support how they generate, develop and link ideas.
Step 9	I can outline how introducing something seemingly random can support creativity.	Learners can describe how a random stimulus (e.g. word, image or even sound) can spark creativity and support how they generate ideas.
Step 10	I can explain how considering different perspectives can support creativity.	Learners can explain ways to take alternative perspectives into account and how this impacts creativity.
Step 11	I can explain how to maximise creativity when working collaboratively.	Learners can explain ways to overcome 'groupthink', which is the tendency for consensus in groups leading to a lack of diversity in ideas.
Step 12	I can reflect on how I have used creative tools.	Learners can reflect on how different creative tools work and the different contexts in which they have used creative tools.
Step 13	I can select the most effective creative tools for my way of working and explain why.	Learners can reflect on how they approach creative tasks and evaluate the effectiveness of creative tools for themselves.
Step 14	I can suggest multiple creative tools that would be appropriate for a given situation.	Learners can identify the requirements of a given situation and justify more than one creative tool that would be suitable.
Step 15	I can select the most effective creative tool for a given situation and explain why.	Learners can evaluate the effectiveness of creative tools with respect to the requirements of the situation and choose the most effective one.

Staying Positive

The ability to use tactics and strategies to overcome setback and achieve goals.

It starts with learners being able to recognise simple emotions and suggest why people feel these. The next stage is about developing learners' capacity to keep trying when things go wrong. Once learners have mastered this, they move on to being able to identify the positives in difficult situations, and sharing this with others. The next stage is about recognising the advantages of risk taking and knowing when it may be appropriate to take a risk. The final steps are focused on learners managing their emotions in challenging contexts and choosing positive action.

Step	Learner Descriptor	Teacher Explanation
Step 0	I can say why people might be happy or sad.	Learners can articulate basic emotions and understand that other people will have changing emotions too.
Step 1	I can say when things go wrong and why people can get angry or upset.	Learners can see that people might get angry or upset when things go wrong and see how this links to their own experiences.
Step 2	I can explain why giving up when something goes wrong does not help.	Learners can articulate why it is important to manage negative emotions when they face setbacks. They might not always be able to put this into practice.
Step 3	I try to stay calm when something goes wrong.	Learners can respond to setbacks calmly.
Step 4	I keep trying when something goes wrong, and think about what happened.	Learners can be seen to respond positively to setbacks but also try to understand why the problem occurred and overcome that.
Step 5	I keep trying when something goes wrong and help cheer other people up.	Learners continue to make an effort, even when they face setbacks, and can also cheer up their peers.
Step 6	I keep trying and encourage others to keep trying, even when things are difficult.	Learners keep trying and are effective in encouraging others to maintain their level of effort in the face of setbacks.
Step 7	I can look on the bright side in difficult situations and focus on that.	Learners can evaluate a situation to identify positive outcomes and focus on those rather than the negative side of a situation.
Step 8	I can explain the positive side of a difficult situation to others.	Learners can articulate a positive perspective to their peers and, while acknowledging challenges, explore them in a positive way.
Step 9	I can come up with ideas for changing difficult situations into positive opportunities.	Learners can actively seek ways to turn challenging or difficult situations into more positive ones.
Step 10	In difficult situations, I choose the best way to move forward instead of giving up.	Learners can evaluate the challenges in a situation and then continue to make progress in their tasks rather than giving up.
Step 11	I'm not afraid to take risks where I might make mistakes as I can say how I might learn from them.	Learners can confidently approach risks where they might make mistakes because they know and can explain that they will learn from them.
Step 12	I can assess and manage risks appropriately.	Learners can approach situations that involve risks, and assess and manage those risks appropriately.
Step 13	I can effectively recognise and assess my own negative emotions and take positive actions.	Learners can recognise and assess their emotions and choose an appropriate positive course of action.
Step 14	I can choose appropriate positive actions based on the context and impact they will have on others, when I am feeling negative emotions.	Learners demonstrate awareness of how their emotions and actions impact on others, and choose the best response for different contexts.
Step 15	I can choose appropriate positive actions when I am feeling negative emotions, in unfamiliar contexts, and reflect on the effect of this.	Learners can choose appropriate positive actions for an unfamiliar context, while acknowledging that they are feeling negative emotions.

Aiming High

The ability to set clear, tangible goals and devise a robust route to achieving them.

The first few steps are about effort: learners knowing why it is important to make an effort and what that might look like for them. In the next stage, learners move into goal planning: being able to set their goals and break down what and how they will achieve them. The next progression is learners reflecting and using feedback from others to support achievement of their goals.

Moving towards the top end, learners are able to create long-term goals and track progress.

Step	Learner Descriptor	Teacher Explanation
Step 0	I can say when I find something difficult.	Learners will need to identify when something they are doing is difficult and articulate this to an adult.
Step 1	I can tell someone what 'trying my best' means.	Learners can explain what 'trying my best' looks like in the context of their own work.
Step 2	I can explain why it is important to try my best if I'm going to get better.	Learners show pride in their higher achievements and can articulate how it links to effort.
Step 3	I can try my best and feel proud when I do.	Learners are aware of when they are working at their best, and find this a rewarding experience that they can take pride in.
Step 4	I look for chances to do something that I might find difficult and ask an adult to set me extra challenges.	Learners can seek out opportunities to give themselves extra challenge to increase their achievements. Teachers will provide learners with an achievable challenge.
Step 5	I can choose goals with some help from my teacher or another adult.	Learners can set a simple goal that is appropriate and achievable, with the support of a teacher or another adult.
Step 6	I can set my own goal that gives me a chance to try something I might find difficult.	Learners are able to approximately gauge what a stretching goal looks like and define that for themselves.
Step 7	I can order and prioritise different tasks to help me achieve my goal.	Learners can break down simple goals into steps and prioritise those steps to achieve the goal.
Step 8	I can identify and ensure access to appropriate resources to achieve my goals.	Learners understand that they might need other resources (people, funds, tools) to achieve their goals and can identify those needed to achieve a simple goal.
Step 9	I can create a plan to achieve a simple goal, breaking down tasks and securing resources, independently.	Learners can create a simple plan by setting a goal, prioritising tasks and securing resources.
Step 10	I can reflect on my skill set with accuracy and identify opportunities to improve further.	Learners can analyse and justify their own strengths and weaknesses, and come up with sensible ways of developing themselves further.
Step 11	I can motivate myself to work autonomously to fulfil my plans and to achieve SMART targets to reach my goal.	Learners are able to set SMART targets and apply themselves to seeing through their plans over a period of time.
Step 12	I seek out feedback, including constructive criticism, to support me in achieving my goals.	Learners seek wider input to achieve their goals and to chart their own progress against their plans, including both compliments and constructive criticism.
Step 13	I can create long term goals, taking into account my own strengths and weaknesses.	Learners can evaluate their longer term plans in terms of their own strengths, weaknesses and ambitions.
Step 14	I can set regular milestones to help me reach my long term goals and keep me on track.	Learners can break down their longer-term plans into steps with milestones that keep them on track to achieve their goals.
Step 15	I can modify my milestones and actions to respond to changes.	Learners are able to incorporate setbacks or changing circumstances into forward planning and make appropriate adaptations to keep them on track for success.

Leadership

Supporting, encouraging and motivating others to achieve a shared goal.

The first few steps are about developing empathy: learners can first describe their own feelings and then those of others. At the next stage, learners develop their ability to support in decision making and ensuring tasks are completed. From Step 8, learners focus on being able to identify the strengths and interests of the people they are leading, before applying their understanding to effectively motivate their team.

Step	Learner Descriptor	Teacher Explanation
Step 0	I can sometimes describe how I feel.	Learners can sometimes articulate their feelings, in simple terms to a trusted adult.
Step 1	I can describe how I am feeling to my team.	Learners are able to articulate and explain their feelings in a group situation, working with others.
Step 2	I can describe how my team mates are feeling.	Learners can articulate how other members of their team are feeling, demonstrating a basic level of empathy and perception of others.
Step 3	I can make sure that everyone has a job and can help team mates when they need me.	Learners can allocate tasks between different team members and are able to identify when their peers might need support or assistance.
Step 4	I take responsibility for my team mates completing their jobs on time.	Learners can take a leadership role that requires them to divide roles between their peers, and encourage them to complete the tasks effectively.
Step 5	I can help my team come to a decision that most people are happy with and finish the task.	Learners can contribute to team discussion to reach a consensus on what actions should be undertaken. Learners are able to then see a simple task through to completion.
Step 6	I can make decisions to resolve disagreements between team mates.	Learners can resolve disagreements between their peers when they are in a leadership position e.g. by voting.
Step 7	I can explain my own strengths and weaknesses and how to make my best contribution.	Learners have developed the self-awareness to identify their own strengths and weaknesses, and how they can make their best contribution to the group.
Step 8	I can explain my team mates' strengths and interests.	Learners are able to identify and articulate the strengths and interests of others in their teams.
Step 9	I use my understanding of my team mates' strengths to help achieve team goals.	Learners are able to apply, in a basic way, their understanding of peers' strengths and interests to allocate tasks in a justifiable way between them.
Step 10	I can see when disagreements are developing, and can use strategies to resolve these.	Learners can perceive when disagreements might be developing and can use some basic approaches to resolve these through structured discussion.
Step 11	I can explain some different ways to motivate my team.	Learners understand the role of motivation in leadership and can explain some basic approaches to motivating their teams.
Step 12	I can adapt the way I motivate my team, depending on the situation.	Learners are able to judge the appropriate approach to motivating their teams in different situations.
Step 13	I can describe different leadership styles and share which style I think I use and why.	Learners understand that there are different styles of leadership and are able to judge what type of leadership they tend towards e.g. autocratic; democratic etc.
Step 14	I can explain positive and negative aspects of different leadership styles and am aware of the limitations of the leadership style I tend towards.	Learners understand that leadership styles have positive and negative aspects to them and can outline the negative aspects of their leadership style.
Step 15	I can adapt my leadership style depending on the situation I am in and who I am working with.	Learners can assess a situation, identify which leadership style is most appropriate and adopt that style.

Teamwork

Working cooperatively with others towards achieving a shared goal.

The initial steps are about understanding why we work in teams before moving to the next stage which explores how learners can become effective team members. The next stage is all about being a supportive and inclusive team member, focused on how learners can ensure everyone's ideas are valued. From Step 9, the developments are about understanding and managing team dynamics to help avoid negative conflict. Finally, learners look at how they can evaluate team performance to help make improvements.

Step	Learner Descriptor	Teacher Explanation
Step 0	I am happy to take turns with other children.	Learners are able and willing to take turns with their peers.
Step 1	I can work with other children to do something together.	Learners are able to make a contribution towards a bigger task as part of a group.
Step 2	I can explain why teams are sometimes better than working by myself.	Learners are able to articulate why teamwork can be more effective than individual work in some situations.
Step 3	I help with different jobs in my team and take responsibility for finishing my job.	Learners can take on different jobs in their team to complete the team task.
Step 4	I can get on well with my team and find ways to resolve a disagreement.	Learners are able to address disagreements and disputes in an effective way, and generally work well with others.
Step 5	When I finish my task, I can help others complete their tasks on time too.	Learners can think beyond their own part of a task and actively try to support other team members to complete their jobs.
Step 6	I help my team make decisions and I make my own suggestions.	Learners can contribute to the decision-making process and are willing to put forward their own ideas.
Step 7	I recognise the value of others' ideas and make useful contributions myself.	Learners can see that their peers will also contribute valuable ideas, and will be willing to compromise to reach a joint decision.
Step 8	I include all team mates in group discussions and encourage them to contribute.	Learners can see the importance of including all team members in discussions and actively encourage contributions from their peers in their team.
Step 9	I can spot when I might be getting into an argument and take steps to avoid it.	Learners are able to perceive when conflict with their peers might be negative for the team and take steps to avoid it.
Step 10	I can spot when others might be getting into an argument and make suggestions to avoid it.	Learners demonstrate an awareness of the wider team dynamics and work to avoid negative conflict in the team.
Step 11	I can contribute to team meetings in a measured, valuable and concise way.	Learners can make a valuable contribution to team discussions which builds on previous conversations and addresses the particular challenge the team faces.
Step 12	I can reflect on the team's progress and make suggestions for improvements.	Learners can accurately analyse the performance of the team and suggest improvements.
Step 13	I can reflect and evaluate on the team's approaches to tasks and carefully influence to get better results.	Learners can evaluate a team's approach, and use their influence to improve a team's performance and the outcomes of a task.
Step 14	I can evaluate the team leader's strengths and weaknesses and actively support them when they need me.	Learners can evaluate the performance of a team leader, and actively engage to support the performance of the leader, improving the outcomes for the team.
Step 15	I can identify the skills of my team members and explain how we can support each other to improve.	Learners can identify the skills of other team members and are able to give and receive peer feedback focused on improving team performance.

Appendix B: Detailed comparisons of Frameworks

For brevity, the detailed comparisons for different frameworks are not reproduced here, but are freely available at www.skillsbuilder.org

Appendix C: Interim Framework used for Phase 2 Research

For avoidance of confusion, the interim version of the framework is not reproduced here.

Appendix D: Logistics of Roundtables

The second phase of the research focused on gathering practical feedback on the updated Framework (see *Appendix C*) by employers.

Four roundtable events were organised by Business in the Community and facilitated by the authors of this report. One further roundtable event was organised by Skills Builder Partnership, which was also attended by a representative of Business in the Community. Table 1 outlines the roundtable dates, location and attendee profiles

Table 1: Roundtable Attendees

Event	Industries	Businesses	Attendees (Role)
Leeds 15/07/2019	• Leisure • Construction • Transport • Retailers • Education • Consultancy • IT	• IBM • HS2 • EY • Co-Op Lincolnshire • Continuum • Henry Boot plc • Asda • City and Guilds Group	• Head of HR • Resourcing Manager • Apprentice & Learning Advisor • Head of Skills and Employment • Senior Manager - Functional Capability • Senior Instructional Designer • Head of Innovation and School to Work Lead • Education Programme Manager • Global Admin Manager • Corporate Citizenship Manager
Birmingham 05/09/2019	• Public sector • Legal • Retailers • Consultancy • Financial	• KPMG • DWF • Central England Co-Op • Coventry Building Society • Police and Crime Commissioner (West Midlands) • Shakespeare Martineau LLP	• Partner • Corporate Responsibility Manager • Talent Acquisition Manager • Emerging Talent Specialist • Resourcing Manager
London 11/09/2019	• Third sector • IT • Legal • Transport • Consultancy	• British Airways • DWF • Ricoh • Springboard Charity • Enterprise Rent A Car • Capgemini	• Work Experience Executive • Talent Acquisition Specialist • Careers & Education Manager • L&D Specialist • Head of Engagement & Projects • Director Schools Outreach
Bristol 18/09/2019	• Third sector • Legal • Engineering	• Jacobs • Burges Salmon • Springboard Charity	• Growth Director • Head of South West • Head of CR

London 04/10/2019	• Financial • Construction • Oil & Gas • Housing • Transport • IT and Consulting	• Brewin Dolphin • Wates Group • Bouygues • BP • Clarion Housing • Network Rail • Accenture	• Learning & Development Manager • Community Investment Advisor • Head of Learning & Development • UK Schools Education Manager • Apprenticeship Development Manager • Apprenticeship and Employability Advisor • Acting Apprentice Development Manager

Roundtable structure

To ensure the roundtables were productive, Business in the Community provided timely and clear communication with attendees before the roundtables took place. Agendas and the updated version of the Skills Builder Framework were circulated the week beforehand and attendees were requested to read the Framework in advance.

Each roundtable session lasted approximately 2.5 hours and was structured in a way to allow formal roundtable discussion and informal break-out conversation to take place. The roundtable was accompanied by a presentation, which the facilitators used to outline session objectives, introduce the Essential Skills Taskforce and manage subsequent roundtable discussion. Before the roundtable formally commenced each participant was invited to briefly introduce themselves so connections could be identified and the exchange of ideas encouraged between those in attendance.

Questions asked

To focus discussion, the following key questions and sub-questions were asked of all roundtable participants:

1. How do the eight skill areas fit with the skills you prioritise in your business?
    - *What are the greatest synergies?*
    - *Are there any core areas missing?*
    - *Are there any changes to language that would be needed?*

2. How do expectations of essential skills vary by seniority?
    - *What steps would you expect to see in the eight skills:*
        - *For entry level roles (including school and college leavers)*
        - *For apprentices*
        - *For new graduates*
        - *For managers*

3. How do you currently measure these skills?
    - *How to you currently measure or assess these skills?*
    - *How satisfied are you with this approach?*
    - *Could the Skills Builder Framework add value here?*

4. How might this Framework be useful in your business?
    - *Could you make use of the Framework to support:*
        - *Recruitment*
        - *Assessment*
        - *Development?*
    - *What other tools or materials would be needed to support this?*

Although key questions were used to direct discussion, the facilitator of the roundtable did ask relevant, supplementary questions to gain clarification for points made. The freedom of a facilitator to do this is common practice in group-based research as it enables the exploration and clarification of different perspectives in depth[154].

Each question section was allocated a maximum of 30 minutes discussion time. To increase quality discussion, participants were separated into smaller working groups to share ideas and gather thoughts before returning to the table for collective discussion. This process was repeated for all four question sections. At the end of each question section the facilitator summarised the main points made, highlighting points of agreement and disagreement to further ensure accuracy of interpretation.

Capturing responses

Two sets of notes were taken at each roundtable session, one by Business in the Community and one by Skills Builder. Having two written records of the roundtable has increased data accuracy, limited misinterpretation and ensured comprehensiveness through the cross-referencing of notes. Live notes were taken during the roundtable and were then sense-checked and categorised into the four main questions within a 48 hour period – once again increasing accuracy of data collection. Any additional points made during refreshments or informal conversation were added after the roundtable, and included in data analysis.

The findings presented in Chapter 9 are the outcome of common thematic codification and analysis. Contributions that were repeatedly made by different participants are explored in most detail, but not to the exclusion of single perspectives and relevant statements[155]. Drawing on data from the participants, the dataset supporting the findings comprises of 30 pages of roundtable notes.

In the interest of maintaining confidentiality and anonymity, participant names have not been included in this report. When quotes have been paraphrased and used in this report, the participant's roundtable has been included.

[154] Silverman D (2010) *Doing Qualitative Research, A Practical Handbook*. London: Sage.
[155] Patton MQ (2001) *Qualitative evaluation and research methods. 3rd ed.* Newbury Park, CA: Sage Publications.

Appendix E: Universal Skills Builder Framework

Version: Final, May 2020

Skill: Listening

The receiving, retaining and processing of information or ideas

Step	Statement
0	I listen to others without interrupting
1	I listen to others and can remember short instructions
2	I listen to others and can ask questions if I don't understand
3	I listen to others and can tell someone else what it was about
4	I listen to others and can tell why they are communicating with me
5	I listen to others and record important information as I do
6	I show I am listening by how I use eye contact and body language
7	I show I am listening by using open questions to deepen my understanding
8	I show I am listening by summarising or rephrasing what I have heard
9	I am aware of how a speaker is influencing me through their tone
10	I am aware of how a speaker is influencing me through their language
11	I listen critically and compare different perspectives
12	I listen critically and think about where differences in perspectives come from
13	I listen critically and identify potential bias in different perspectives
14	I listen critically and use questioning to evaluate different perspectives
15	I listen critically and look beyond the way speakers speak or act to objectively evaluate different perspectives

Skill: Speaking

The oral transmission of information or ideas

Step	Statement
0	I speak clearly to someone I know
1	I speak clearly to small groups of people I know
2	I speak clearly to individuals and small groups I do not know
3	I speak effectively by making points in a logical order
4	I speak effectively by thinking about what my listeners already know
5	I speak effectively by using appropriate language
6	I speak effectively by using appropriate tone, expression and gesture
7	I speak engagingly by using facts and examples to support my points
8	I speak engagingly by using visual aids to support my points
9	I speak engagingly by using tone, expression and gesture to engage listeners
10	I speak adaptively by changing my language, tone and expression depending on the response of listeners
11	I speak adaptively by planning for different possible responses of listeners
12	I speak adaptively by changing my content depending on the response of listeners
13	I speak influentially by changing the structure of my points to best persuade the listeners
14	I speak influentially by changing the examples and facts I use to best persuade the listeners
15	I speak influentially by articulating a compelling vision that persuades the listeners

Skill: Problem solving

The ability to find a solution to a situation or challenge

Step	Statement
0	I complete tasks by following instructions
1	I complete tasks by finding someone to help if I need them
2	I complete tasks by explaining problems to someone for advice if I need
3	I complete tasks by finding information I need myself
4	I explore problems by creating different possible solutions
5	I explore problems by thinking about the pros and cons of possible solutions
6	I explore complex problems by identifying when there are no simple technical solutions
7	I explore complex problems by building my understanding through research
8	I explore complex problems by analysing the causes and effects
9	I create solutions for complex problems by generating a range of options
10	I create solutions for complex problems by evaluating the positive and negative effects of a range of options
11	I analyse complex problems by using logical reasoning
12	I analyse complex problems by creating and testing hypotheses
13	I implement strategic plans to solve complex problems
14	I implement strategic plans to solve complex problems and assess their success
15	I implement strategic plans to solve complex problems and draw out learning to refine those plans over time

Skill: Creativity

The use of imagination and the generation of new ideas

Step	Statement
0	I imagine different situations
1	I imagine different situations and can say what I imagine
2	I imagine different situations and can bring them to life in different ways
3	I generate ideas when I've been given a clear brief
4	I generate ideas to improve something
5	I generate ideas by combining different concepts
6	I use creativity in the context of work
7	I use creativity in the context of my wider life
8	I develop ideas by using mind mapping
9	I develop ideas by asking myself questions
10	I develop ideas by considering different perspectives
11	I innovate effectively when working in a group
12	I innovate effectively by seeking out varied experiences and stimuli
13	I support others to innovate by sharing a range of tools
14	I support others to innovate by evaluating the right creative tools for different situations
15	I support others to innovate by coaching them to be more creative

Skill: Staying Positive

The ability to use tactics and strategies to overcome setbacks and achieve goals

Step	Statement
0	I can tell when I feel positive or negative
1	I can tell when others feel positive or negative
2	I keep trying when something goes wrong
3	I keep trying and stay calm when something goes wrong
4	I keep trying when something goes wrong, and think about what happened
5	I keep trying when something goes wrong and help cheer others up
6	I keep trying when something goes wrong and encourage others to keep trying too
7	I look for opportunities in difficult situations
8	I look for opportunities in difficult situations, and share these with others
9	I look for opportunities in difficult situations, and adapt plans to use these opportunities
10	I look for opportunities in difficult situations, and create new plans to use these opportunities
11	I identify risks and gains in opportunities
12	I identify risks and gains in opportunities, and make plans to manage them
13	I support others to stay positive, by managing my own responses
14	I support others to stay positive, by helping others to see opportunities
15	I support others to stay positive, by helping others to see opportunities and creating plans to achieve them

Skill: Aiming High

The ability to set clear, tangible goals and devise a robust route to achieving them

Step	Statement
0	I know when I am finding something too difficult
1	I know what doing well looks like for me
2	I work with care and attention to detail
3	I work with pride when I am being successful
4	I work with a positive approach to new challenges
5	I set goals for myself
6	I set goals informed by an understanding of what is needed
7	I set goals, ordering and prioritise tasks to achieve them
8	I set goals and secure the right resources to achieve them
9	I set goals and plan to involve others in the best way
10	I create plans that are informed by my skill set and that of others
11	I create plans that include clear targets to make progress tangible
12	I create plans that are informed by external views, including constructive criticism
13	I develop long-term strategies taking into account strengths, weaknesses, opportunities and threats
14	I develop long-term strategies that use regular milestones to keep everything on track
15	I develop long-term strategies that include feedback loops to support flexibility and adaptability

Skill: Leadership

Supporting, encouraging and developing others to achieve a shared goal

Step	Statement
0	I know how I am feeling about something
1	I know how to explain my feelings about something to my team
2	I know how to recognise others' feelings about something
3	I manage dividing up tasks between others in a fair way
4	I manage time and share resources to support completing tasks
5	I manage group discussions to reach shared decisions
6	I manage disagreements to reach shared solutions
7	I recognise my own strengths and weaknesses as a leader
8	I recognise the strengths and weaknesses of others in my team
9	I recognise the strengths and weaknesses of others in my team, and use this to allocate roles accordingly
10	I support others through mentorship
11	I support others through coaching
12	I support others through motivating them
13	I reflect on my own leadership style and its effect on others
14	I reflect on my own leadership style, and build on my strengths and mitigate my weaknesses
15	I reflect on my own leadership style, and adapt my approach according to the situation

Skill: Teamwork

Working cooperatively with others towards achieving a shared goal

Step	Statement
0	I work with others in a positive way
1	I work well with others by behaving appropriately
2	I work well with others by being on time and reliable
3	I work well with others by taking responsibility for completing my tasks
4	I work well with others by supporting them if I can do so
5	I work well with others by understanding and respecting diversity of others' cultures, beliefs and backgrounds
6	I contribute to group decision making
7	I contribute to group decision making, whilst recognising the value of others' ideas
8	I contribute to group decision making, encouraging others to contribute
9	I improve the team by not creating unhelpful conflicts
10	I improve the team by resolving unhelpful conflicts
11	I improve the team by building relationships beyond my immediate team
12	I influence the team by reflecting on progress and suggesting improvements
13	I influence the team by evaluating successes and failures and sharing lessons
14	I support the team by evaluating others' strengths and weaknesses, and supporting them accordingly
15	I support the team by bringing in external expertise and relationships