Skills Builder PARTNERSHIP

Certifying Essential Skills

Opportunities for formal and informal recognition

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Introduction

The purpose of the report

Skills Builder Partnership works to ensure that everyone builds the essential skills they need to succeed. Essential skills are "those highly transferable skills which almost everyone needs to do almost any job and which support the application of technical skills and knowledge" (Ravenscroft & Baker, 2020 p.12). The Universal Framework is at the heart of this, defining and breaking down these skills so that they are able to be taught and measured in a tangible and consistent way. This framework is now used by over 800 organisations to support individuals to assess and build their essential skills.

Being able to recognise and articulate those essential skills is crucial. A question which has regularly been posed by the education institutions and impact organisations we work with is 'how do we most effectively support individuals to do that through formal and informal qualifications?'

Though a growing number of opportunities to build essential skills are being provided in schools and colleges, businesses and impact organisations, there exists a gap in how this learning is recognised. Recognising skill development effectively has the potential to increase motivation to build essential skills and therefore engagement in essential skills learning. It could also support individuals' progression in education and employment, providing an explicit demonstration of the essential skills that they have.

Therefore, the purpose of this report is to consider how both formal qualifications and informal certifications can effectively aid the recognition of essential skills. To explore this, the report has been broken down into 3 sections:

Part 1: Analysis: This is a short review of the scope of qualifications and certifications which assess and recognise essential skills in the UK. This section will not seek to list all the educational courses relating to essential skills which exist. Instead, it gives an overview of the different settings and types of education provision which explicitly teach and assess these skills.

Part 2: Informal Certifications and Digital Badges: This part of the report explores how informal certification can be used to effectively recognise informal or non-formal learning of essential skills. It also includes guidance for organisations wishing to develop informal certifications for essential skills which the Partnership would be willing to endorse.

Part 3: Formal Qualifications: The final section of this report considers formal qualifications and provides best practice guidelines for awarding bodies wishing to create essential skills qualifications, approved and endorsed by the Skills Builder Partnership.

Key Terms

The key terms that will be used throughout this report are defined below.

Essential skills: As defined above, essential skills are "those highly transferable skills which almost everyone needs to do almost any job and which support the application of technical skills and knowledge" (Ravenscroft & Baker, 2020 p.12). Other names given to these skills include: Core Skills, Key Skills, Functional Skills, Skills for life, Employability Skills, Generic Skills, Enterprise Skills, Soft Skills, Transferable Skills, Transversal Skills. The Universal Framework defines the eight essential skills which can be universally applied in work and educational settings: Listening, Speaking, Problem Solving, Creativity, Staying Positive, Aiming High, Leadership and Teamwork (Ravenscroft & Baker, 2020).

Formal qualifications: For the purposes of this report 'formal qualifications' are defined as those that are regulated by the Office for Qualifications and Examinations Regulations (OFQUAL). OFQUAL is a non-ministerial government department with responsibility for ensuring high standards and public confidence in English qualifications (OFQUAL, 2022). Only recognised awarding organisations are able to create formal qualifications, and those wishing to become recognised must apply through OFQUAL. In order to gain a formal qualification, a student must demonstrate that they have met specific learning outcomes, through examination, coursework or other assessment methods. Formal qualifications are the only qualifications eligible to be considered for public funding to be taught in state education settings. A list of regulated qualifications exists on the OFQUAL register, the data from which was analysed in 'Part 1' of this report.

Formal learning: Linked to this, 'formal learning' is, therefore, any learning that takes place in order to achieve a formal qualification.

Informal certifications: Informal certifications are ways of recognising non-formal or informal learning. Informal certifications are non-regulated, provided by a variety of organisations and can take a number of forms, e.g. digital badges, massive online open courses (MOOCs), physical badges and certificates, some of which will be discussed further in Part 2 of this paper.

Informal learning: Werquin (2007) describes informal learning as *unorganised learning that happens through experience, not intentionally pursued by the learner.* There is general consensus around this definition and it is therefore the definition which will be used for this report.

Non-Formal learning: There is less consensus on what 'non-formal' learning is, it is seen more as the middle ground between informal and formal learning (Werquin, 2007). There is, however, agreement that non-formal learning should be organised in some kind of way, and therefore the report defines non-formal learning as organised learning experiences, not leading to formal qualifications.

Vocational qualification: The term vocational education is used to describe a wide variety of different education or training courses designed to get individuals into work. It has been used to describe apprenticeships, highly specific to a job or industry, as well as more general courses, like Personal and Social Effectiveness, which teach transferable skills and competencies. For the purposes of this report, vocational qualifications will therefore be defined as any qualification which is gained from courses aimed at getting individuals into employment.

Academic qualification: Academic qualifications relate to knowledge and skills within an academic subject, rather than in relation to a specific job or career. Examples include GCSEs, A-Levels and academic degrees.

Part 1: Analysis

Introduction

The first part of this report will analyse the current market for qualifications and certifications which relate to essential skills. There is wide consensus that these skills are important (Ravenscroft & Baker, 2020) and that there is a deficit of them in the labour market (UKCES, 2009; 2016). The Universal Framework has helped to provide a consistent approach to the development of these skills and is now being used by over 800 organisations, including employers, educators and impact organisations, across the UK. Due to its recent development, there are not yet formal qualifications or informal certifications based upon the Framework which have been specifically endorsed by the Partnership. Despite this, the teaching of these skills is being increasingly implemented across a wide variety of education settings and courses, and being recognised in different ways.

Formal Qualifications

Though essential skills do not appear on the English National Curriculum, there are a number of formal qualifications which individuals are able to do which relate to essential skills. Formal qualifications in England are categorised into one of nine difficulty levels with 'Entry Level' being the lowest level course available and Level 8 being the highest. The table below, adapted from information on the GOV.UK website, gives some examples of the qualifications that are awarded at each level.

Qualification Level	Examples
Entry Level	Entry level award/certificate/diploma
Level 1	GCSE grades 3, 2 and 1
Level 2	GCSE grades 9, 8, 7, 6, 5, 4 Intermediate apprenticeships
Level 3	A/AS Level Advanced Apprenticeship T-Level
Level 4	Certificate in Higher Education Higher Apprenticeship
Level 5	Diploma in Higher Education Foundation Degree
Level 6	Degree
Level 7	Masters Degree
Level 8	Doctorate

Natural Language Processing

Analysis was conducted on the OFQUAL register, downloaded on 3rd February 2023. The register is a database of all the formally regulated qualifications in England and their individual units of learning. The aim of this was to explore the range of qualifications offered which assess

and recognise achievement in essential skills. Analysis first focused on 'learning outcome' descriptions of the 98,380 unique units which make up the active qualifications listed in the register. In total, there were 11,772 active qualifications containing at least one unit with 'learning outcome' data.

Natural language processing was used to estimate the semantic similarity between each unit's 'learning outcome' and each of the eight essential skills, as defined by the Universal Framework. This indicated whether the content of each unit was related to any of the essential skills. The text used for scoring this included definitions for the skills taken from Ravenscroft & Baker (2020) along with any terms listed as relating to them. For example, the text used to assess semantic similarity to 'Speaking' was "Speaking: The oral transmission of information or ideas. Related to communication, speaking, talking".

Natural language processing gives a score between -0.2 and 0.8 to indicate the amount of semantic similarity between two pieces of text. For example "Understand the purpose of critical thinking and problem-solving skills, Be able to use critical thinking and problem-solving skills for a given scenario" scores 0.76 (very high) in similarity with the definition of Problem Solving in Ravenscroft & Baker (2020). Contrastingly, "Manually cast components, Know how to manually cast components" scores -0.16 in relation to Staying Positive (very low).

A score of 0.46 was used as the threshold for concluding that a learning outcome target related to an essential skill. This threshold was identified through testing and considered relatively conservative to reduce the likelihood of false positives. Some examples of learning outcome data that did not meet this threshold are listed below:

- "Be able to lead continuous improvement in practice" scores 0.45 in Leadership
- "Develop and adapt stage crafts ideas creatively" scores 0.45 in Creativity
- "Be able to take pride in the workplace" scores 0.45 in Staying Positive

Unit content relating to essential skills

The table below shows the percentage of unit learning outcomes which relate to each skill. In total, 5.1% of the units analysed met the threshold for at least one essential skill, but some skills were more prevalent than others. The skills which matched most with the unit descriptions were 'Teamwork', 'Leadership' and 'Speaking'. 'Listening' was the skill that matched with the least number of learning outcome descriptions.

Skill	Percentage of Units
Listening	1.1%
Speaking	6.8%
Problem Solving	2.4%
Creativity	4.4%
Staying Positive	5.4%
Aiming High	2.2%
Leadership	7.0%
Teamwork	12.5%

Qualifications with units relating to essential skills

By matching units to qualifications, it was found that approximately 31% of all active qualifications, 4014 in total, contained at least one unit which related to essential skills. The table below shows the percentage of qualifications with unit content semantically matched to each essential skill.

Skill	Percentage of Qualifications
Listening	3.0%
Speaking	5.1%
Problem Solving	8.0%
Creativity	3.8%
Staying Positive	12.5%
Aiming High	9.0%
Leadership	16.7%
Teamwork	22.5%

Again, Leadership and Teamwork units appeared in the highest proportion of qualifications, similar to the unit analysis. Listening and Creativity units appeared in the least number of qualifications. Surprisingly, Problem Solving, Aiming High and Staying Positive, though making up a fairly low proportion of unit content, appeared in a higher number of qualifications. This may be because these units often form part of other qualifications, so they may be spread more widely than, for example, Speaking, where the qualification might focus only on speaking and therefore include a higher number of speaking-related units.

Though a significant number of qualifications exist that assess and recognise essential skills, this analysis shows that this provision does not cover all skills equally. This may be linked to the perceived teachability of these skills, for example with Creativity. In relation to Listening, perhaps it is more a lack of understanding of how to develop the more advanced stages of this skill. It may also be perceived that qualifications with content relating to Teamwork and Leadership will be most valued by employers, and therefore more in demand.

Though it is positive that there are a significant number of qualifications relating to essential skills, it is important that qualifications provide opportunities to build and recognise all of the essential skills. It would be interesting to investigate further gaps in provision through further research. This research might analyse the skill level (as defined by the steps or developmental levels within the Universal Framework) that unit content relates to. However, these considerations fall beyond the scope of this report.

Types of Qualifications relating to essential skills

Qualifications with units relating to any of the essential skills were most likely to be vocational, occupational, general or life skills qualifications, confirming the perceived importance of these skills in getting into employment (see the table below). The lack of units relating to essential skills in academic qualifications, however, suggests that these skills are seen by educators as distinct from academic learning. The exception to this is Speaking, which appears within GCSE qualifications, possibly within English or Modern Foreign Languages GCSEs.

Qualification Type	Qualification #	Lis*	Spe*	Pr-S*	Cre*	St-P*	Ai-H*	Lea*	Tea*
English For Speakers of Other Languages	360	6	14	0	0	0	0	0	0
Functional Skills	96	0	2	2	0	0	0	0	0
GCE A/AS Level	355	0	0	0	0	0	0	1	0
GCSE (9 to 1)	137	0	0	0	0	0	0	0	0
GCSE (A* to G)	41	0	10	0	0	0	0	0	0
Occupational	3593	0	1	4	2	10	7	14	27
Other General	460	0	2	3	6	7	6	6	7
Other Life Skills	1487	11	13	23	6	30	23	30	31
Other Vocational	828	4	7	5	3	6	5	9	14
Performing Arts Graded Examination	633	0	4	0	0	0	0	0	0
Vocationally-Related	6457	2	4	7	4	9	6	14	17

**Abbreviations stand for: Listening, Speaking, Problem Solving, Creativity, Staying Positive, Aiming High, Leadership and Teamwork*

It's important to note that this analysis is simply based on primary learning outcomes of units, so it does not necessarily follow that essential skills are not built as part of these qualifications. For example, it would be very difficult to pass a Maths GCSE without some level of problem solving, or an English A-level without the ability to communicate effectively. Despite this, no units relating to these skills were found in these qualifications, suggesting that these skills might be expected to be picked up implicitly or through other learning experiences.

Levels of Qualifications relating to essential skills

When looking at the levels of the qualifications containing essential skills (see the table below), it is clear to see that the majority of these qualifications are at Level 2 or below. Many of these are likely to be 'Personal, Social and Employability' (PSE) qualifications, which seek to formally assess transferable skills and competencies. These types of qualifications are offered to those "with low or no prior attainment, including adults furthest from the labour market" to help them to "re-engag[e] with education and training" (Department for Education, 2022).

The essential skills, therefore, seem to be seen not only as separate but possibly as secondary, or a back-up, to academic qualifications. Something that is offered to those who have not or are unlikely to succeed academically. As such, these skills appear less in qualifications from Levels 3 to 8, with the exception of Leadership and Teamwork.

In fact, the majority of qualifications at Level 8 include units relating to Leadership or Teamwork or both. It's hard to draw conclusions from such a small sample size but it's interesting that 4 out of 5 of the Level 8 qualifications offered have units which relate to Leadership. Perhaps this is because of expectations of employment, where, as you move up into more senior roles, it is your ability to manage people and relationships which help you to be successful, more so than your technical skills. Further research would be needed to support this conclusion.

Qualification Type	Number	Lis*	Spe*	Pr-S*	Cre*	St-P*	Ai-H*	Lea*	Tea*
Entry Level	1596	11	14	18	5	27	22	27	29
Level 1	2017	5	9	12	5	15	10	16	20
Level 1/Level 2	344	0	1	0	0	0	0	0	0
Level 2	4333	1	3	5	2	8	6	11	20
Level 3	4825	0	1	3	2	5	2	8	10
Level 4	1403	1	2	3	3	5	3	10	16
Level 5	662	1	0	2	2	10	8	21	20
Level 6	275	0	0	0	1	4	3	9	11
Level 7	187	0	0	2	4	5	5	32	12
Level 8	5	0	0	0	0	0	0	80	60

**Abbreviations stand for: Listening, Speaking, Problem Solving, Creativity, Staying Positive, Aiming High, Leadership and Teamwork*

It is encouraging that these skills appear in a significant proportion of qualifications, however, it is unfortunate that the majority are confined to the lower-level qualifications. Alignment of the Universal Framework with employability and graduate attributes frameworks demonstrates that these skills are valued at higher levels and are not just appropriate for those with low academic achievement.

Quality of qualification provision relating to essential skills

In the past there has also been some questioning of the quality and efficacy of lower-level qualifications, such as PSE qualifications, designed to get individuals into work (Wolf, 2011; Atkin, 2013). Atkin (2013) suggests that these types of qualifications do not decrease unemployment but instead create a cycle of low-skilled, low-paid, often transitory work leading back to unemployment and back into these types of qualifications. Atkin found that the learning content leading to these qualifications often focused on practical ways to gain employment, rather than giving students a critical understanding of the nature of work, or the skills which will help them to be successful once in their role. In England there has been a lack of national standards and core content guiding the creation of these types of qualification, as well as an absence of consistent definitions of the skills needed for employment. It has therefore been up to the individual awarding bodies creating the qualifications to decide what content should be included which, invariably, has led to a lack of consistency in their content and quality.

This lack of clarity may have also led to a low value being placed on these qualifications. For example, in the Wolf report (2011) it was found that vocational qualifications, including those relating to employability, were not associated with higher career progression or increased earnings. In addition, students and training providers did not expect these types of qualifications to hold any value in the labour market. This was partly because employers were unsure about what the qualification signalled about the individual, and so would not be able to use it to make a judgement about their fitness for a role.

More recently, through a consultation with the DfE (2023), 90% of respondents agreed that national standards should be developed in relation to PSE qualifications and set broad core content for Level 1 and entry level PSE qualifications. Though employers did report that they recognised ‘employability’ qualifications, they felt that national standards would improve the perception of them and their value. There are now plans to reform these types of qualifications, by providing standards and guidance on content (DfE, 2023).

Conclusions

Though qualifications do already exist in relation to essential skills, this analysis has highlighted gaps which exist in this provision, relating to some of the skills, and qualifications at Levels 3 and above. Qualifications which recognise essential skills are and will continue to be important. The constant evolution of technology and the impact that this has on the labour market mean that skills that can be applied in any role, such as essential skills, are vital. In 2011 this was recognised in the Wolf report and it continues to be true today.

Use of the Universal Framework to inform the creation of qualifications could help to resolve some of the issues highlighted, by providing clear definitions, levels of progression and learning content for each skill. Part 3 of this report provides guidance on how to create high-quality qualifications which recognise essential skills using the Framework.

Apprenticeships

Apprenticeships are a fast growing route to employment for school leavers and those wishing to advance or change their careers. Apprenticeships provide a route into specific occupations, combining on-the-job and off-the-job training. They conform to a set of occupational standards which set out the knowledge, skills and behaviours (KSBs) required to be successful in a particular occupation. These standards form the learning outcomes which the student needs to achieve to be awarded the qualification. They are created by employers but regulated and overseen by the Institute for Apprenticeships and Technical Education (IfATE).

The Universal Framework was developed to be used across education and employment contexts including apprenticeships. Previous analysis has shown that the steps of the Framework account for all the skills listed in the 10 most used apprenticeship standards (Ravenscroft & Baker, 2020), confirming its utility within this space. The Universal Framework is now referenced and linked within the guidance for developing occupational standards, specifically in relation to deciding on the knowledge, skills and behaviours: “It can be used by trailblazer groups as a tool to think through the skills and behaviours and what level they are needed at in different standards. It can also be used by providers to think through the steps towards building the skills and behaviours individuals need to achieve their apprenticeships” (IfATE, 2023).

This shows that within these types of qualifications, there is some teaching and assessment of the essential skills. Although the essential skills are identifiable in these apprenticeship standards, the links to the Framework are not made explicit and therefore training providers may not be guided to use the Framework to teach and assess these skills. In addition, KSBs are all described only in relation to a specific role, and often combine essential skills with job-specific technical skills. Therefore teaching and assessment of these skills is highly likely to vary from one apprenticeship to another. This has two implications. Firstly, the way that the essential skills are taught and assessed will be specific to the job or industry and therefore may not support the transferability of these skills. Secondly, apprenticeship qualifications may lack the ability to explicitly indicate the level of essential skills that an individual has.

T-Levels

T-Levels are different to apprenticeships in that students spend a higher proportion of their time in the classroom. In apprenticeships the ratio of classroom time to on-the-job training is 20:80, whereas in T-levels this is switched to 80:20. T-Level qualifications are also much broader in their scope, focusing on an industry rather than a specific occupation. For this reason, a cluster of occupational standards that are produced for apprenticeships are used to create the content which makes up the Technical Qualification (classroom based) part of the T-level.

Much like with apprenticeships, students on T-level courses are, therefore, experiencing teaching and assessment of the essential skills. Similarly to apprenticeships, however, it is unlikely that there is much consistency in the approach to development of students' essential skills, as the knowledge, skills and behaviours are different for each occupation.

In addition to delivering content of the Technical Qualification aspect of the T-Level, providers are also responsible for ensuring that students are prepared for their placement, as many will not have any previous work experience. The Universal Framework is referenced as a way for students to assess and develop their skills. Despite this, the preparation of students for placement may not include explicit teaching of essential skills as defined by the Framework. Guidance is provided with regards to core content which is mostly geared towards more practical aspects of employability like CV writing and interview preparation. Course providers can also choose for their students to complete formal qualifications, like those described in the first section, to prepare them for the world of work.

Though there is this crossover, similar issues exist to those of formal qualifications, mentioned earlier, in the ability of apprenticeships and T-levels to indicate the essential skill level of the learner. In addition, because the occupational standards upon which these qualifications are designed are specific to jobs and industries, the skills may not be taught in a way which supports their transferability across different industries.

Universities & Higher Education Institutions (HEIs)

HEIs are focusing on the employability of their graduates

There is no statutory requirement for Higher Education Institutions (HEIs) to deliver teaching on employability skills. There are, however, many who are now investing more resources into their employability and careers services. There is a growing expectation that universities should produce graduates fully equipped with all the knowledge and skills needed to enter the labour market (Standage, 2018). It is no longer believed that a degree alone is sufficient to provide a route into employment (Oliver, 2016; Ravenscroft & Baker, 2020) and the majority of Higher Education Institutions (HEIs) are now attempting to tailor their approach to make their graduates more employable (Standage, 2018).

In a 2009 survey carried out by the Confederation of British Industry (CBI), 92% of Higher Education Institutions stated that they use additional programmes delivered internally in order to achieve this. Other ways that universities have attempted to increase students' employability include embedding employability into the curriculum, developing students' core attributes and supporting their capacity for articulating their skills. Many HEIs now include employability as a compulsory component of their curriculum in order to ensure students engage (Standage, 2018) but, as will be shown below, the skills and attributes that students can expect to learn as a part of this differs widely depending on the institution.

Graduate attributes

HEIs now often set out the non-subject specific learning outcomes that they intend students to achieve in their time spent at the institution, which have become known as 'graduate attributes'. Goodwin (2016, p3, in Ravenscroft & Baker, 2020) set out what an affective graduate attribute framework can achieve including; "mak[ing] it clear to students how they can prepare themselves to meet the needs of employers and society", "provid[ing] a useful framework to help students monitor their development as they go through university, perhaps actively addressing any gaps if necessary" and "[giving] employers some assurance that students from a particular institution will be more suitably equipped to succeed in graduate-level roles".

After reviewing the literature on employability, the Higher Education Academy (2016) made a list of 34 attributes most important for employability, which many universities now use as guidance. Other frameworks that are likely to influence graduate attributes come from a report by the CBI, which identifies 8 "employability skills" (CBI, 2009, p.8) and the Entrepreneurship Competence framework which lists 15 competencies (Bacigalupo, Kampylis, Punie & Van den Brande, 2016). Because there is no consistent framework and language around the skills and attributes that are important for employability, the graduate attributes vary from institution to institution (Osmani et al, 2015). There is also limited evidence that graduate attributes are consistently and systematically developed in UK universities. Often the development of frameworks are driven by senior leaders or marketing teams rather than the teaching staff (Wong et al, 2022).

Despite the variation in graduate attributes, the Universal Framework is comprehensive in accounting for the skills and subskills included within graduate attribute frameworks (Ravenscroft & Baker, 2020). The Framework is aligned with all the frameworks mentioned above, and is comprehensive of the graduate attributes listed for eight individual universities. With the use of the Framework in the employability space increasing, it may be a useful tool for universities in improving their approach to developing and assessing graduate attributes.

To sum up, due to the influence of graduate attributes frameworks, qualifications from HEIs do give some indication of essential skills. However, as there is also no unified approach that is taken to increasing students' employability, the quality and type of essential skills education received by university students very much depends on the institution to which they apply.

Informal Qualifications

In addition to the teaching and recognition of these skills in formal education settings, there are a growing number of informal courses and certifications offered which also relate to essential skills.

Massive Online Open Courses

Sites such as Coursera and Edx give individuals access to massive online open courses (MOOCs); self-paced, online training courses from across the globe which will help to build skills (UNESCO, 2018). Many of these training sessions are free but a fee is attached if learners would like some kind of certification of the skills they have learnt. Due to their ability to recognise non-academic learning, there is a high number of courses and certifications which relate to the 8 essential skills on these sites. A search for 'teamwork' on Coursera returns 137 results, 556 for 'speaking'.

These courses are often offered by universities but most do not carry degree-level course credits, and may be very specific to an industry rather than general, depending on the instructor. Some MOOCs do carry formal course credits and can be stacked or combined to earn formal qualifications such as degrees. Due to the variety in providers of these courses, the content inevitably varies, as does what constitutes the categories of 'Beginner', 'Intermediate' and 'Advanced' which are used to indicate skill level. For individuals looking to find a course to improve their essential skills, it must be difficult to identify which course is most suitable for them. For employers, without a good idea of what the course entailed, it would be impossible to judge the quality and level of the course, and therefore the skill level of the candidate who has completed it.

Digital Badges

Digital badges are also growing in popularity as a way to demonstrate and recognise skills. These are digital visual badges which can be issued to people for some kind of achievement or experience. Information (called metadata) is contained within the badge and can be accessed once clicked. This gives an idea of how the badge was earned, who earned it and who issued it. The second part of this report goes into more depth about digital badges and the context in which they have gained popularity in recent years.

UNESCO (2018) highlights the capacity of digital badges to demonstrate "generic skills" such as essential skills. A thorough analysis of all the available badges was not possible to carry out for this report, however, searches on platforms such as Credly and Navigatr show that there are many digital badges available which relate to one or more of the essential skills described in the Universal Framework. These badges may be free to earn or earnt through paid-for experiences or courses. Similar to MOOCs there are a variety of providers issuing these badges, and what is required to gain the badge also varies, as well as the detail of the metadata within it. This, again, must be confusing both for the individuals who are looking to earn an essential skills badge, and for the employers who might see these badges on the CVs of potential employees. Part 2 of this report looks more closely at the potential of digital badges to effectively demonstrate essential skills development, and gives guidance on how this is best achieved.

The scope of qualifications and certifications relating to essential skills

It is clear from the above analysis that building essential skills is seen as important by various education providers and individuals. The increased uptake and use of the Universal Framework across educators and employers presents an opportunity to tackle the fragmented approach that has been taken to skills development which is, at best, confusing and inconsistent, and at worst deepening the already large skills gap between the most advantaged and the most underserved individuals within society (Atkins, 2013). Use of the Universal Framework to inform the content of such courses could serve to increase consistency and quality of such learning experiences, and potentially their value within the labour market.

Conversations with various partners and literature (UNESCO, 2018) demonstrate that there is an increasing interest and want for a way to recognise essential skills either through informal or formal qualifications. The most important aspect of this is that, whatever type of qualification or certification, what individuals gain from it is the ability to demonstrate and articulate the skills that they have and how they have applied them. The following sections seek to provide guidance on how to create high-quality qualifications and certifications which are trusted by employers, and effectively indicate the skill level of the individual who has them.

Part 2: Informal Certifications and Digital Badges

Introduction

This part of the report focuses on informal certification, and specifically digital badges, a relatively new addition to the education space. The first section describes the role that informal certifications and digital badges can have in recognising essential skills, whilst also noting their limitations. The second section provides guidance for those wishing to create digital badges recognising essential skills and when the Skills Builder Partnership would be prepared to endorse such badges.

Education for Sustainable Development

One of the things that has brought informal learning and certification to the forefront of educational debate is the fourth sustainable development goal set in the United Nations (UN) 2030 Agenda for Sustainable Development to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" (UN, 2015). Advances in technology have created new ways to learn and recognise achievements, giving individuals an alternative to undertaking formal qualifications and courses. Much of the literature links these advances to an 'open education movement', which aims to provide greater access to learning opportunities and ways to demonstrate skills (UNESCO, 2018). One major part of this movement, digital badges, are discussed in more detail below.

Digital Badges

The 'open education/learning movement' encompasses not only a move towards openness of educational resources, but also the use of open technologies to recognise learning and skills development outside of formal learning institutions. Digital badges are a relatively new method of recognition, based upon the open badge technology developed and shared by Mozilla. A digital badge is a visual "token of achievement" created and shared digitally to recognise participation in learning and other experiences (UNESCO, 2018, p15). Because they are 'open', any person is able to create and issue a badge through a certified issuing platform. This means that providers of informal/non-formal learning experiences have a way of recognising and rewarding individuals' participation in these experiences.

There is more to these badges than just the visual token. As mentioned, they also include metadata hidden behind the icon which can be accessed when it is clicked. As well as including information about how the badge was earned, they often contain information relating to the skills and competencies of the earner. The creator of the badge can use 'skills tags' to list the skills that the person has shown or developed to receive the badge. These can be used to create pathways of learning, linking a selection of badges to potential jobs or experiences.

Digital Badges and Essential Skills

Because of their openness and flexibility, digital badges have been posed as an effective way to support the recognition and demonstration of non-academic skills such as essential skills. As mentioned previously, these skills are often reported as lacking in the workforce, likely due to the fact that there is no statutory requirement to teach them within formal education institutions. As such, these skills are often developed informally, within extra-curricular clubs or programmes.

For those who have access to these programmes and are able to develop their skills, it is important that there is some kind of recognition of this development. Without this recognition, it may be hard for some to identify the skills they have built through these experiences because they do not have the support to do so. This is what Tomasson, Goodwin, Verkoeyen & Lithgow (2019) call the 'Articulation of Skills Gap', where individuals have the skills desired by employers but are unable to talk about them effectively.

Digital credentials and badges therefore have a number of strengths when it comes to recognising essential skills.

Strengths

Recognition of informal learning
One strength is the ability of badges to recognise informal learning. Though it does create some problems in the badging space, the technology used to create and issue badges is open to everyone. This gives greater flexibility in the types of skills and experiences that can be recognised. Specifically they can provide recognition of skills which are not usually included in formal qualification frameworks, like essential skills.

Granularity
Secondly, these credentials are granular in that they enable a person to demonstrate their level of mastery in specific skills in a way that formal qualifications such as degrees do not. A set of badges, therefore, have the ability to give a much more personalised picture of the skills and competencies that an individual has. Specifically in relation to essential skills, a badge could demonstrate the step or stage of a skill from the Universal Framework that an individual is working at. Giving individuals a detailed picture of their skills and skill level will also help them to find and apply for appropriate career or training opportunities (Davis & Singh, 2018). It may also help employers in selecting appropriate candidates for a role.

Stackability
Digital badges are able to be stacked so that a number of smaller learning experiences can be combined to form a larger certification, or in some cases a formal qualification. This stackability can help to make learning pathways towards larger goals more explicit (more on this below), and may increase engagement and motivation towards that goal.

Explicit Learning Pathways
Another benefit is that badges can help make explicit to individuals their own learning pathways, linking up learning across different contexts. Badges not only can signal an individual's past achievements, but also indicate where they might go next. For example, someone who has started to build their Speaking skills could look for badged experiences and opportunities to advance these further. This is the aim of the Region of Learning community on the navigatr.app platform where individuals are able to find learning pathways made up of a series of digital badges. These pathways may be work-related, leading to something like a job, apprenticeship or work experience, or education-related, leading to formal qualification, informal certification or further learning. Skills tags on these badges are drawn from the Lightcast skills taxonomy, which links with live labour market information available through Navigatr. The platform also contains wellbeing, interest and self-development pathways. The work and education pathways help to bridge the skills gap between individuals capabilities on one hand, and expectations from employers or training providers on the other hand.

Articulation of Skills
A further strength is how the metadata can support individuals not only to recognise their skills but also to articulate them effectively, targeting the 'Articulation of Skills Gap'. A well designed badge with clear metadata can make explicit the skills an individual has developed as part of an experience. Within interviews, candidates are often asked to give examples of where they have developed or demonstrated essential skills, and digital badges could support them in preparation for this.

Limitations

Lack of quality assurance

Despite these strengths, there are still some limitations of digital badges. The aforementioned strength that badges can be awarded by anyone also presents a limitation. This is because there is a risk of mass-awarding of badges without any kind of quality assurance process or regulatory body, like there is for formal qualifications. This means that a high amount of interpretive work must be done on the part of the person reading the digital badge with regards to its credibility (Davis & Singh, 2018).

Lack of consistency and familiarity

Because digital badges are a relatively new technology, the majority of employers are not familiar enough with them to be able to judge their value effectively (Perkins and Pryor, 2021). There are currently no universally accepted standards in the creation of a badge, i.e. what it should look like, the level of detail within the metadata, and so there is huge variation in the badges that are being produced, causing further confusion. Stakeholders agree that badges have the potential to increase opportunities, but *only if* understanding and familiarity with them becomes more widespread (Davis & Singh, 2018; Perkins & Pryor, 2021).

Encouragingly, there have been some developments in this space, with the RSA creating a badging standard, in which badged experiences can be categorised into one of 4 layers, helping the reader and earner to understand what the badge relates to. Badge Nation also supports organisations to write high-quality digital badges using standardised templates and consistent skills taxonomies for the skills tags within the metadata.

Lack of understanding around usability

This lack of familiarity and understanding is also a problem for the individuals receiving digital badges. Without a good understanding of what badges are and how to use them effectively, individuals will be unable to unlock their full potential. In order for a badge to increase the opportunities available to the earner it is therefore not sufficient to simply issue the badge (Davis & Singh, 2018). Individuals would require support or training in these areas: what they can do with the badge, how to use the skills tags to identify their own skills and appropriate career/ training opportunities, and how to use the information in the metadata to help them articulate their skills to employers.

Security

Security of badges is also a concern, due to the ease at which people can forge things online (UNESCO, 2018). If badges are seen as easily forged and therefore hard to verify, this will lower their value in the labour market for employers.

Conclusions

Digital badges have the potential to influence the qualifications space by providing recognition for skills outside of academic education. This will, however, only work in practice if key stakeholders are convinced of their value and understand how to use them effectively. The quality of the badge and the badged experience is of utmost importance in achieving this. Clear metadata and endorsement by organisations, with expertise in the area the badge is awarded for, will help to distinguish high-quality badges and badged experiences.

Guidance on Digital Badges and Informal Certifications

With the growing reputation of the Partnership as a leader and expert on essential skills, our endorsement is likely to be influential on badges relating to these skills. We have the potential to provide a marker of the quality of an essential skills badge, increasing its value within the labour market.

In order to do this effectively we must create systems of endorsement that ensure any badges endorsed by the Partnership *are* of the highest quality, both in the experience leading to them and the badge itself. What follows is guidance on the situations in which we would be willing to endorse badges relating to essential skills.

This guidance is designed for developing informal certifications, i.e. ways of recognising participation in programmes which aim to develop individuals' essential skills. Part 3 gives guidance on the development of formal qualifications, which can be used to recognise and indicate an individual's skill level.

Criteria for Endorsement by the Partnership of Digital Badges/Informal Certifications

1. **The digital badge/certification must relate to a programme which has received an Impact Level 4.**

In order for the Skills Builder Partnership to endorse a digital badge or informal certification we would need to be able to ensure the quality of skills teaching and learning which has led to certification. Our Impact Levels are awarded to programmes which demonstrate best practice in skills development and can be achieved at four levels.

Level 1: Raising awareness of essential skills

Level 2: Reflecting on essential skills

Level 3: Practising essential skills

Level 4: Progressing in essential skills

The highest-quality programmes in relation to essential skills, which achieve Impact Level 4, are specifically designed to support individuals to make progress in one or more of the skills, focusing on specific steps of the Universal Framework. They give individuals the opportunity to reflect on their skill level at various points so they can see their progress. To ensure the high quality of the learning experiences leading to informal certification the Skills Builder Partnership will therefore only endorse those relating to programmes who have achieved Impact Level 4.

2. **The digital badge/certification will be awarded to individuals who have successfully completed an Impact Level 4 programme.**

The Partnership would be happy to endorse badges given to individuals on the successful completion of an Impact Level 4 programme which has been designed to allow them to build and demonstrate their essential skills.

3. **It will be up to the programme providers to decide what successful completion looks like.**

The programmes that have achieved Impact Level 4 are varied in the way they are delivered. For some, successful completion may involve students completing an assessment or creating a portfolio; for others it may simply be engaging fully with the activities and experiences. Though we will not be prescriptive with regards to this, it is important that it is made clear within the metadata how the badge was earned. The following two points provide more guidance on this.

4. **Any metadata within the digital badge/certification must include the skills and steps which the individual has had a chance to develop and demonstrate as part of the programme, with links to the Universal Framework.**

This will help make it clear to individuals, the skills that they have been working on and at which level, helping them to articulate their skills. This clarity will also be useful for when the badge is shared with a potential employer or training provider. Skills tags can be used to indicate the essential skills that the programme focused on, but the text should also detail the specific developmental level and/or step that it aimed to develop.

5. **Any metadata within the digital badge/certification must also include full detail of what completion of the programme entailed.**

This will help individuals and potential employers and training providers to understand the activities the earner took part in which allowed them to develop and demonstrate the skills/ steps that the programme was focused on. This should include that the individual was given the chance to reflect, practise and progress in their essential skills as part of an Impact Level 4 programme. It should also include all the activities the earner took part in to build these skills.

Example:

> *The earner of this badge has been given the chance to reflect, practise and progress their Listening skills at the Advanced stage, as defined by the Skills Builder Universal Framework, by taking part in a programme awarded an Impact Level 4 by the Skills Builder Partnership. This programme specifically focused on step 9, being aware of how a speaker is influencing them through their tone, and step 10, being aware of how a speaker is influencing them through their language.*
>
> *As part of the programme the earner was required to...*

6. **The digital badge/certification cannot use the Skills Builder Partnership logo or Essential Skill Icons.**

Skills Builder Partnership are happy to endorse badges/certification given to individuals upon the successful completion of an Impact Level 4 accredited programme. Organisations can use the Impact Level badge and link out to their tile on the Impact Directory, but organisations cannot use the Skills Builder Partnership logo, or Essential Skill logos on the digital badge. The language of the essential skills and steps can be used in the meta data as explained above.

7. **Badges can demonstrate that they are endorsed through the metadata**

Rather than using the Skills Builder icons and logos, digital badges can instead demonstrate that they are endorsed by the Skills Builder Partnership within the metadata. 'Endorsements' are a type of metadata that can be added to a badge to demonstrate that the badge is endorsed by a reputable third party. The Skills Builder Partnership can be listed under 'Endorsements', with a link to the skillsbuilder.org website.

Part 3: Formal Qualifications

Introduction

A number of partners have expressed an interest in guidance for creating formal qualifications which relate to essential skills. This guidance is for formal qualifications that seek to capture an individual's essential skill level, not programmes that simply aim to build essential skills. The Partnership sees qualifications as providing a type of time-stamp, an assurance that an individual was able to do certain things at a certain time, in this case demonstrating a certain step level of an essential skill.

Guidance

The following guidance is designed to support awarding bodies to create high-quality essential skills qualifications which the Partnership will be happy to endorse.

Learner Outcomes

High-quality qualifications will have clear learner outcomes which signal to the individual what they have to be able to do to gain the qualification, and to an employer what the individual was able to do to achieve it. One of the problems with formal qualifications relating to 'employability skills' such as PSE qualifications, is a lack of clarity as to what the key skills for employability are and how to develop them.

The reason for the creation of the Universal Framework was to target this, by providing some clarity around the definitions of essential skills that individuals need to build for employment and education, as well as the different levels (or steps) at which an individual can demonstrate a skill. In order to clearly signal the level of skills that the learner has, learner outcomes must indicate the step level at which they have been able to demonstrate a skill.

Identification of appropriate skill steps

The difficulty of qualifications in England is normally signalled by the numerical level (in part 1 the different levels of formal qualifications were listed, with examples). The Universal Framework and the steps included were not, however, developed to map directly onto existing qualification levels. The reason for this is that the skill levels required to be successful in a specific role vary considerably depending on that role and the industry it sits within. When developing qualifications relating to essential skills, awarding bodies should consider the industry the qualification relates to, and the type of roles that those with the qualification normally go into.

The newly launched Careers Explorer tool can provide valuable support with this. This tool allows you to find the average, minimum and maximum skill level required to be successful in 1,367 different jobs. This would, therefore, be a good place to start for those considering the skill steps most appropriate to include within the learner outcomes of qualifications.

Assessment

Essential skills must be assessed by a teacher or other trusted person of authority who has a good understanding of the skill and step level which they are assessing. Awarding bodies must choose assessment methods that allow them to objectively observe students in opportunities where they can demonstrate their essential skills.

One way this may be done is through direct observation, in much the same way as a swimming teacher will observe their students demonstrating skills at a particular badge level. Reflective essays, journals and portfolios, which are also used within the qualifications space, could support high-quality assessment of essential skills.

There may also be use and opportunity to test some of the knowledge around the step level being assessed, as set out in the Universal Framework, through an externally-assessed written exam or professional conversation.

It will ultimately be up to the awarding body to decide on the most appropriate methods for assessing whether learners have mastered a particular skill step.

Conclusion

This report has given a summary on the different ways that essential skills are recognised in England, both through formal qualifications and informal certifications. Though many different methods of recognition exist, there is inconsistency in the way that skills are taught and developed. With regards to formal qualifications, there were also gaps found in provision for certain skills and qualification levels. The Universal Framework was identified as a way to resolve inconsistencies in teaching and to improve the clarity of what skill (and level) a qualification/certification recognises.

The second section provided further information on Digital Badges, in addition to guidance on creating Digital Badges relating to essential skills, which the Partnership would endorse. In order to ensure the high quality of the experience leading to the badge, the Partnership would only be willing to endorse badges which are earned on programmes with an Impact Level 4. The guidance also included that information about how the badge was achieved, and the skills and steps which the programme was designed to build, should be included within the metadata.

The final section provided guidance for awarding bodies with regards to developing new qualifications relating to essential skills, which would be endorsed by the Partnership. This included that learner outcomes must relate to specific skill steps, making it clear what the learner was able to do to receive the qualification. It was also stated that the steps included in the learner outcomes should be appropriate for the industry or job role that the qualification relates to. Some assessment methods were proposed to allow the objective measurement of skill steps, but it was recognised that awarding bodies are best placed to decide on the most appropriate way to assess.

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