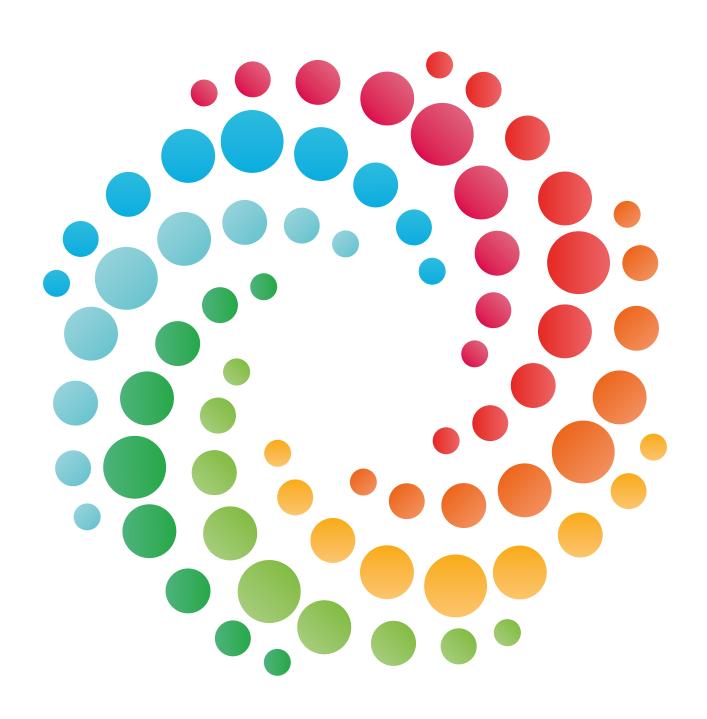


Universal Framework Review 2025

Final Report



Contents

Universal Framework Review 2025: Final Report	
1. Executive summary	2
2. Context: Universal Framework 1.0	11
3. Purpose and goals of the Universal Framework Review 2025	20
4. Findings from the review of Universal Framework 1.0	26
5. Proposed changes to Universal Framework 1.0	44
6. Development and validation of Universal Framework 2.0	56
7. Final version of Universal Framework 2.0	81
8. Conclusion and next steps	92
Appendices	95



This report should be cited as:

Ravenscroft, T., Craig, R. & Stewart, G. (2025) *Universal Framework Review 2025: Final Report*. London: Skills Builder Partnership. www.skillsbuilder.org

The authors are grateful to the Gatsby Charitable Foundation for their generous support of this Review, the Skills Builder team, and the many individuals who have contributed to this Review through advisory groups, user testing, and providing feedback. Thank you.

1. Executive summary



1. Executive summary

1.1 Introduction

Five years since the introduction of Universal Framework 1.0 in 2020, nearly 10 million individuals have used the model to understand and build their essential skills in more than twenty countries.

This report summarises the year-long review of Universal Framework 1.0 - both what is working well, and how the framework might evolve further to support its completeness; relevance; usability; consistency of interpretation; and inclusivity.

This report also introduces Universal Framework 2.0, fulfilling the opportunities set out by the review while building off everything that is already working well. It has been thoroughly tested and validated through expert advisory groups, public feedback, user testing, technical analysis and then finally external validation:

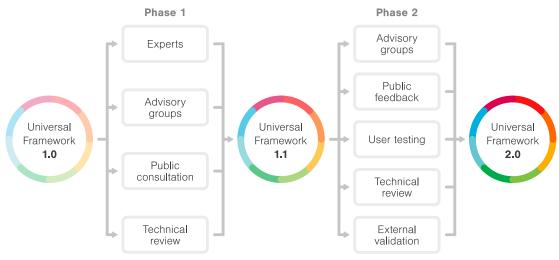


Figure 1: Overview of the 2025 Universal Review Process

The result is Universal Framework 2.0 which sets users up for the next decade through to 2035 with a model that is more complete, inclusive, usable, and internationally relevant. In short, one that will take another important step in supporting everyone to understand and build their essential skills.

1.2 Essential skills and the Universal Framework 2020-25

Essential skills are those *highly transferable skills that almost anyone needs to do almost any job and which support the application of technical skills and knowledge.* They make a real difference: evidence shows that higher levels of essential skills support better learning in school, a reduced likelihood of being out of work or training, and higher earnings, job and life satisfaction. The challenge in 2020 was that while those skills were widely recognised and seen as important, there was no consistent way of measuring or building those skills.

The Universal Framework was launched in early 2020 as a model to support the consistent identification and building of essential skills through education and employment. Developed by a group of leading organisations spanning education and employment it deliberately sought to create a model for building and measuring essential skills which could span an individual's life from their earliest time in school, through their careers, and beyond.

Since launch, the Universal Framework has been widely adopted across the UK, driven by more than 950 partners to reach almost 2 million individuals in the last year alone. Its growth has also been seen internationally, with partners using the framework in more than twenty countries.

1.3 Universal Framework Review 2025

Five years after its 2020 launch, the opportunity for reviewing the Universal Framework is an important chance to ensure that it remains current and reflects the learning generated by its widespread adoption.

Driven by advisory groups spanning education, impact organisations, employers, sector bodies and international users, the goals of this review are to evaluate and then improve the Universal Framework in five dimensions: completeness; relevance; usability; consistency of interpretation; and inclusivity.

To do so, four lenses will be used: understanding contextual changes since 2020 and their implications; the experience and feedback of Universal Framework 1.0's users; a technical evaluation using the huge amount of data that has been generated through assessments against the framework; and comparisons against international benchmarks and examples.

A year-long programme of work deliberately allowed time for a thorough review and to give space for input, guidance and evaluation in the first phase, and then for iteration and improvement in the second phase.

1.4 Key findings of the Review

Each of the four lenses from the review of Universal Framework 1.0 helped to build out a fuller evaluative understanding of the existing Framework's strengths and shortcomings in a context that had changed meaningfully from its original launch in early 2020.

Lens 1: Changing context

The first lens was exploring the changing context for education and employment. This theme was principally investigated through a series of nine roundtable discussions held with employer, education, impact organisation and policy stakeholders in April and May 2024 (*Appendix A*). It was supplemented with wider research to build a complete picture of the emerging trends.

Several key trends were identified: the continued march of technological change, particularly the rapid development of new Al tools and automation; the pandemic's effect on educational achievement and essential skills of learners; substantially increased hybrid working; climate change challenges; and a workforce facing longer careers with less stability.



Lens 2: User feedback

The second lens drew on user feedback from a public consultation. Open for users and non-users to complete, and widely promoted, we generated a helpful cross-section of respondents who had used the Framework in varied settings and over different timespans.

It was evident from feedback that much worked well in the fundamental principles and structure of Universal Framework 1.0. It was succeeding in its ambition to provide clarity on essential skills and making them tangible and teachable. Its look and feel and utility as a common language across education, employment, and impact organisations was widely recognised.

It also generated some helpful inputs for this review. Alongside feedback on individual steps, there were new questions around making the language of framework easier for individuals to understand and navigate, while increasing inclusivity further.

Lens 3: Technical review

The third lens was a technical review, looking from two perspectives:

- Analysing assessments that individuals had completed against the Universal Framework, using the Skills Builder Benchmark self-assessment tool, teacher assessments of learners through Skills Builder Hub, and research carried out with YouGov in 2022 and 2023 with a representative sample of more than 2,000 UK working-age adults.
- Evaluating the semantic similarity of its steps using Large Language Models (LLMs).

The technical review demonstrated the sequentiality of steps in the Universal Framework, with the proportion of individuals able to achieve steps decreasing as the steps got higher and more challenging. It highlighted a number of outliers which were significantly easier or harder than envisaged for closer review.

The use of Large Language Models compared steps within the Universal Framework with each other. This highlighted a small number of steps which had high semantic similarity, suggesting that they might be duplicating some core concepts. These steps were highlighted for closer review.

Lens 4: International perspectives

The fourth and final review lens was using international comparators. This was important because since its launch in 2020, international usage of the Universal Framework has grown quickly and there are now Skills Builder partners in twenty countries.

The goal was to identify, through Advisory Group input, leading international frameworks which included essential skills, were used widely, and which had a rigorous basis. Six frameworks were identified on this basis: Entrecomp framework of entrepreneurial competences (European Union); the O*Net database (USA); the Meta Skills framework (Scotland); Australian Core Skills Framework (Australia); YMCA George Williams Framework (UK, youth sector); SkillsFuture Singapore Critical Core Skills Framework (Singapore).

Large Language Models were used to identify potential gaps in the Universal Framework by identifying components of the six other frameworks that did not have a close semantic match in the Universal Framework. These were highlighted for manual review and a number of concepts were identified for incorporation into Universal Framework 2.0.

Those models were also used to identify where there was content in the Universal Framework that was not matched elsewhere, in case there was unnecessary content. Again, this was then subject to manual review.

1.5 Proposed changes to Universal Framework 1.0

The four lenses for the review enabled evaluation of the performance of Universal Framework 1.0 against the goals of ensuring: completeness; relevance; usability; consistency of interpretation; and inclusivity.

Drawing together all of the insights and questions from Section 4, a series of proposed changes were brought back to review advisory groups in September 2024 where they were refined based on feedback. These recommended changes were incorporated into a working version of the new framework which was subsequently tested and validated further in Section 6.

Ten proposed changes were put forward and approved by the advisory groups, pending testing and validation (Section 6). These included revising two of the skill names, using skill pairs to simplify navigation, changing skill stages, and making some additions and changes to the skill contents. The biggest change was simplifying the language of each step to make it easier to understand and quicker to navigate to relevant content.

1.6 Validation of Universal Framework 2.0

The development and validation of Universal Framework 2.0 took an iterative approach with each input helping to identify potential improvements which were then incorporated into the framework model which was tested next:

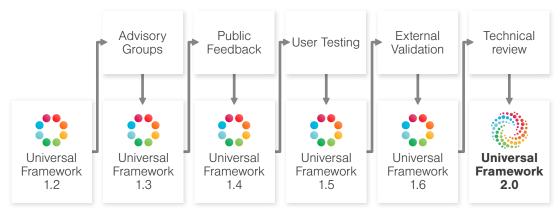


Figure 2: Phase 2 - Iterative development and testing of Universal Framework 2.0

By the end of the process, Universal Framework 2.0 had been formed and refined through repeated cycles of testing and improvement. As such, it not only built off the strong starting point of Universal Framework 1.0 but had built up a strong evidence base in its own right.

Public Feedback

Informed by feedback from the Advisory Groups, Universal Framework 1.3 was tested through public feedback, including garnering responses to the proposed changes outlined in Section 5. This helped to validate the key changes that had been proposed including changing the names of Aiming High and Staying Positive, changing how stages are used, how the numbering works, and presenting essential skills in their pairs. These changes all garnered net positive responses of between +58% to +90% demonstrating significant support.

Participants also had the opportunity to review Universal Framework 1.3 in full, and to provide feedback if they felt there were any skill steps that were unclear or missing. They also provided feedback on the extent to which that iteration of the Framework met the success criteria that we had outlined for the Review. It was good to see meaningful improvements on several dimensions, with high net positive scores of +71% to +90% for ease of use, inclusivity, comprehensiveness, relevance, and research backing.

The public feedback highlighted particular enthusiasm for the simplification of the language of the steps and the introduction of a step summary to ease finding pertinent concepts quickly. It also highlighted some key points which have been taken forward around individual skill steps which were unclear to participants or which could be better phrased or made more inclusive. These iterations were incorporated into Universal Framework 1.4.

User testing

User testing built off Universal Framework 1.4 and was designed to explore how individuals engaged with the framework when in the mode of users rather than critics. Two types of use were explored: participants reflecting on their own essential skills against the framework; or educators assessing their class of learners against the framework.

The tests showed that more than 95% of skills steps were read and accurately interpreted in a short period of time. Additionally, participants gave positive feedback on their experience, feeling that the framework had forced them to think more deeply about their essential skills. Participants who had used Universal Framework 1.0 in the past were positive about the changes, particularly the increased ease of interpreting the skill steps.

A small number of steps were highlighted as having been misunderstood by users and changes were made to ensure that the interpretation of users aligned with the intended underpinning concepts. Additionally, helpful feedback was gathered to support how Universal Framework 2.0 could be built into assessment tools in the future.

Demographically representative validation

The changes off the back of the user testing were incorporated into Universal Framework 1.5. This was then taken out for external validation through research in partnership with YouGov. This allowed for a sample of 2,000 UK working age adults to complete a full self-assessment against the Universal Framework, while also gathering information about their employment, job and life satisfaction and earnings.

Given the limited number of changes to the core underlying skill concepts in the Universal Framework, the goal was to ensure that Universal Framework 2.0 would be able to replicate the same patterns of skill levels and sequentiality that had been achieved for the original.

The validation was able to demonstrate that the updated Universal Framework had a distribution of skill scores that closely mapped that of the original. It was also able to demonstrate the sequentiality and similar gradients of how individuals progressed through the skill steps. It also highlighted a small number of anomalies which could be addressed in the final iteration of the framework.

Additionally, the validation was able to replicate very similar results to past research using Universal Framework 1.0 with regards to the interaction of higher essential skill levels and higher earnings, higher job and life satisfaction, and a reduced likelihood of being unemployed. This not only demonstrated the robustness of Universal Framework 2.0 but also highlighted once again why building essential skills is so critical.

• • • • • • •

Technical evaluation

The technical analysis replicated the approach that had been taken in evaluating Universal Framework 1.0 in sections 4.3 and 4.4. The goal was to ensure the completeness, relevance and lack of duplication of Universal Framework 2.0 when compared to other international best practice examples while minimising duplication within the framework.

Computational validation of the Universal Framework 2.0 was undertaken using LLMs and the same step matching process used to analyse version 1.0. This established quantitative measures for the three technical criteria required of a skills framework:

- Completeness: To what extent are essential skill elements from other frameworks included in the Universal Framework 2.0?
- *Relevance:* To what extent are the steps in the Universal Framework 2.0 included in other frameworks?
- Duplication: To what extent do steps in the Universal Framework 2.0 overlap?

Combining these two metrics of completeness and relevance by taking an average, the Universal Framework 2.0 scored most highly of all frameworks, with 70.31%. This is roughly a 3% improvement on version 1.0 of the Framework. The implication is that the updated version of the Framework better balances completeness and relevance than any other available framework.

	Universal Framework 1.0	Universal Framework 2.0
Universal Framework 2.0		68.66
O*Net	60.32	61.03
Entrecomp framework	57.57	60.53
YMCA George Williams Framework	51.65	52.36
Australian Core Skills Framework	51.61	52.27
SkillsFuture Singapore Critical Core Skills	47.36	49.82
Meta Skills framework	46.49	47.64
Universal Framework 1.0	55.90	

Figure 3: Comparison of Universal Framework 2.0 with other international comparators' combined duplication, completeness and relevance (average of completeness and relevance multiplied by (1-duplication%))

This picture holds true when also considering the balance of duplication. When combining all three framework measures, the Universal Framework 2.0 scores more highly than comparators.

This quantitative validation of the updated version of the Universal Framework demonstrates how the technical and qualitative review process measurably improved the Framework to ensure it provides the best possible basis for everyone to build the essential skills to succeed.

1.7 Introducing Universal Framework 2.0

Fundamentally, the structure of the Universal Framework, its skills and the underlying concepts of almost all the steps have remained the same. Where changes have been made, they have been in response to the thorough evaluation.

Ten changes have been made:

- 1) Revising two of the skill names: Aiming High is now Planning and Staying Positive is now Adapting.
- 2) We have paired the skills to make navigation easier:
 - Collaboration incorporates Teamwork and Leadership;
 - Communication incorporates Speaking and Listening;
 - Creative Problem Solving incorporates Creativity and Problem Solving;
 - Self-Management incorporates Planning and Adapting.
- 3) Changing the skill numbering from 0-15 to 1-16: for computational ease and greater clarity.
- 4) Changing skill stages: For educators, a four-step range based on ages was seen as a helpful starting point. For other audiences, skills will be organised in four stages: Getting Started (Steps 1-4); Intermediate (Steps 5-8); Advanced (Steps 9-12); Mastery (Steps 13-16).
- 5) Skill icons: The look and feel of Universal Framework 1.0 was popular and so the skills icons and colour palette will be maintained with some changes to support accessibility.
- *Presentation of the Framework:* The top level Framework will now be presented horizontally rather than vertically wherever possible, to better visualise progression.
- 7) Steps that could be adapted or replaced: Input from user consultation and technical review highlighted that there were 17 steps that could be adapted or replaced.
- 8) Additional concepts or steps: Input from user consultation and analysis of other leading international taxonomies highlighted a small number of concepts which could be perceived to be missing. 11 new steps were created, and 15 concepts were incorporated into the existing step architecture.
- 9) Steps ordering: Technical analysis highlighted two sequences of steps in Staying Positive and Leadership for re-ordering.
- **10)** Step language: Finally, user feedback suggested that the language of the steps could be simplified and each step given a short summary to make navigating the Framework easier.

The full Universal Framework 2.0 can be found in Section 7.

1.8 Conclusion and next steps

Universal Framework 2.0 is a meaningful step forwards on Universal Framework 1.0, while building on what is already working well. It will allow educators, impact organisations, employers, and individuals to better understand and build their essential skills.

Particularly, the improvements ensure that Universal Framework 2.0 is even more:

- Comprehensive: Universal Framework 2.0 is more comprehensive than ever before, incorporating the latest thinking and research about how to build essential skills effectively.
- *Inclusive*: Universal Framework 2.0 has been designed and refined with experts in inclusive practice in order to ensure that it is as open and inclusive a set of tools as possible.
- Usable: Universal Framework 2.0 incorporates 5 years of learning from the widespread use of Universal Framework 1.0 with millions of individuals to make it as usable as possible.

Given the depth and comprehensiveness of the Review, we are committing to maintaining Universal Framework 2.0 until 2035 when we will carry out the next Review.

We are grateful for the generous input of a huge number of partners and experts over the course of this twelve-month review. We hope that Universal Framework 2.0 will likewise make a big contribution to ensuring that ever more individuals are building the essential skills to thrive.

2. Context:Universal Framework 1.0



2. Context:Universal Framework 1.0

Section summary

Essential skills are those highly transferable skills that almost anyone needs to do almost any job and which support the application of technical skills and knowledge. They make a real difference: evidence shows that higher levels of essential skills support better learning in school, a reduced likelihood of being out of work or training, and higher earnings, job and life satisfaction. The challenge in 2020 was that while those skills are widely recognised and seen as important, there was no consistent way of measuring or building those skills.

Universal Framework 1.0 was launched in early 2020 as a model to support the consistent identification and building of essential skills through education and employment. Developed by a group of leading organisations spanning education and employment it deliberately sought to create a model for building and measuring essential skills which could span an individual's life from their earliest time in school through their careers and beyond.

Since launch, the Universal Framework has been widely adopted across the UK, driven by more than 950 partners to reach almost 2 million individuals in the last year alone.² Its growth has also been seen internationally, with partners using the Framework in more than twenty countries.

Five years after its launch, and having been used with around 10 million individuals in that time, the time is right to review the Framework and how it can be refined for the future.

2.1 What are essential skills?

When we think about education or employability, there are three core underpinning attributes:

- · 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

We can then dig more deeply into skills - which are myriad and can be complex to unpick. Within that world of skills, essential skills are those:

'Highly transferable skills which are needed by almost everyone to do almost any job, and which support the application of technical skills and knowledge'³

- 1. Craig & Stewart (2024) Essential Skills Tracker 2024. London: Skills Builder Partnership.
- 2. Skills Builder Partnership (2024) Impact Report 2024. At www.skillsbuilder.org/impact
- 3. Ravenscroft & Baker (2020) *Towards a Universal Framework for Essential Skills*. London: Essential Skills Taskforce.

They are known by many names, including transferable, employability, 21st century and soft skills.⁴ Indeed, it is this very confusion which makes the work that follows so important. Critically, they are distinct from technical skills which are required for specific occupations; and from basic skills of literacy and numeracy:⁵

- 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.



Essential Skills

Communication | Creative Problem Solving Collaboration | Self-Management

Basic Skills

Literacy | Numeracy | Basic Digital

Figure 4: A taxonomy of broad skill types

While there are many possible variations on the language possible, extensive analysis of different variations highlights four broad themes which come up consistently:⁶

- · Communication skills
- · Creative and problem solving skills
- · Collaboration skills
- Self-management skills

2.2 Why do essential skills matter?

Evidence shows essential skills help individuals thrive across their lives:

Ability to learn effectively in school: Higher levels of essential skills correlate with higher levels of achievement at the ages of 10 and 16.⁷

Effective transition into the world of work: 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 students' future success. Indeed, more than half of teachers surveyed (53%) felt that these skills were more important than academic achievements in future success.⁸

- 4. UK Commission for Employment and Skills (UKCES) (2009) *The Employability Challenge: Full Report*, UKCES
- 5. Cheese (2021) The New World of Work: Shaping a Future that Helps People, Organizations and our Societies to Thrive. London: Kogan Page
- 6. Ravenscroft & Baker (2020) *Towards a Universal Framework for Essential Skills*. London: Essential Skills Taskforce
- 7. Kashefpakdel & Ravenscroft (2021) Essential skills and their impact on educational outcomes. London: Skills Builder Partnership. [https://www.skillsbuilder.org/file/essential-skills-and-their-impact-on-education-outcomes]
- 8. 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.

Reduced likelihood of being out of work or employment: Essential Skills Tracker 2023 found that moving from the 25th percentile in essential skill levels to the 75th percentile was associated with a reduction in the likelihood of being out of work or training from 5.2% to 3.9%.⁹

Higher earnings: There is also evidence of an increase of up to 15% per year in higher earnings in the UK, comparing lowest quartile and highest quartile essential skill scores (Craig & Seymour, 2023). This finding was also borne out by separate research from NFER.¹⁰

Higher job and life satisfaction: Individuals with higher essential skill levels have higher levels of life and job satisfaction (Craig & Seymour, 2022).

2.3 Introducing Universal Framework 1.0

The *Universal Framework for Essential Skills* was developed in the UK by six organisations spanning education and employment including the Gatsby Foundation, Confederation of British Industry (CBI), Chartered Institute of Personnel and Development (CIPD), Careers & Enterprise Company (CEC) and Business in the Community.

It set out with the goal to increase the create a model for essential skills that would achieve four things:¹¹

- Ensuring alignment between education and employers in terms of the
 employability skills that employers actually need, and what schools and colleges
 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 against. Rather than recruitment processes falling back on perceptions of self-confidence or 'polish', this transparency would give a diverse range of applicants the opportunity to better 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.

^{9.} Seymour & Craig (2023) *Essential Skills Tracker 2023*. London: Skills Builder Partnership [https://www.skillsbuilder.org/file/essential-skills-tracker-2023]

^{10.} Bocock, L., Del Pozo, J. and Hillary, J. (2024). *Rethinking skills gaps and solutions. Working Paper 4 of The Skills Imperative* 2035: Essential skills for tomorrow's workforce. Slough: NFER.

^{11.} Ravenscroft & Baker (2020) *Towards a Universal Framework for Essential Skills*. London: Skills Builder Partnership.

Universal Framework 1.0 did this by defining eight essential skills:

- Listening: The receiving, retaining and processing of information or ideas.
- Speaking: The transmission of information or ideas.
- Problem Solving: The ability to find a solution to a complex situation or challenge.
- Creativity: The use of imagination and the generation of new ideas.
- Staying Positive: The ability to use tactics and strategies to overcome setbacks and achieve goals.
- · Aiming High: The ability to set clear, tangible goals and devise a robust route to achieving them.
- · Leadership: Supporting, encouraging and motivating others to achieve a shared goal.
- Teamwork: Working cooperatively with others towards achieving a shared goal.

Crucially though, it then goes much further by identifying a sequence of steps which take an individual from being an absolute beginner in essential skills through to 'mastery':



Figure 5: Conceptual illustration of the Universal Framework 1.0

The model was developed and refined over an 18-month period until it was finally launched in May 2020. During this process, which is thoroughly reported elsewhere, job advertisement data, graduate attribute statements, international examples and apprenticeship standards were all used to refine and test the model. Its refinement was driven by the goal of achieving:

- *Clarity:* It should 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.

^{12.} Ravenscroft & Baker (2020) *Towards a Universal Framework of Essential Skills*. London: Essential Skills Taskforce.

2.4 Usage of the Universal Framework

The Universal Framework has been widely used across the UK since its launch in 2020, across three broad areas:

2.4.1 Education:

In education, the Universal Framework has been widely adopted. In England, the Framework has been recommended in statutory guidance for careers education:

"In schools, each subject should support students to identify the essential skills they develop and to identify pathways to future careers... The Skills Builder Universal Framework shows how to build essential skills into the school or college curriculum." ¹³

The Framework has also been recommended for the delivery of T-Levels and in the development of apprenticeship standards.

Skills Builder Partnership has directly championed the Universal Framework with schools and colleges, using a capacity building model to support those institutions to use the framework to build the skills of their learners of all ages. More than 830 schools and colleges now hold a Skills Builder Award which demonstrates that they have effectively embedded the Universal Framework and the recommended practices.

More widely, the Careers & Enterprise Company have used the Universal Framework as a common language for supporting essential skill development. This has included tracking essential skill levels across the student population in the UK through their Future Skills Questionnaire. In 2024, this included 234,000 learner assessments and demonstrated that there are wasted opportunities for building essential skills in early secondary school where performance against age related expectations dipped, although ground is made up later on. Last year, they launched the *Careers Impact System*, which is a model for continuous improvement in the quality of careers education in schools and colleges. This model highlights the importance of developing multi-year careers plans, where building essential skills using the Universal Framework is an important thread.

2.4.2 Employers

While at an earlier stage than the work in education, there is growing use of the Universal Framework by employers. This has been enabled by its championing by infrastructure and membership organisations including the CIPD and the CBI, as well as in industry-specific organisations such as the Rail Safety Standards Board.

Employers have adopted the Universal Framework to align their outreach activities with education work, to identify the essential skills required for different job roles, and to train and develop their own staff. The model has been successfully adopted by businesses across a wide range of industries from Lloyds Banking Group to Amazon to Heathrow. Alongside businesses, the Universal Framework has also been adopted by public sector employers including NHS Business Services and the Houses of Parliament Renewal and Restoration.

- 13. Department for Education (January 2023) Careers guidance and access for education and training providers: Statutory guidance for schools and guidance for further education colleges and sixth form colleges. London: Department for Education.
- 14. The Careers & Enterprise Company (2024). *Insight briefing: Student career readiness in 2023/24.* London: The Careers & Enterprise Company.
- 15. Employer Case Studies at https://www.skillsbuilder.org/essential-skills-in-business

At the end of 2024, 99 employers were committed to using the Universal Framework as partners of Skills Builder. Programmes which had been reviewed and approved by Skills Builder were reported by employers to reach 204,600 individuals in that year.¹⁶

There is also evidence of much wider uptake. For example, the Universal Framework is recommended in the revision of apprenticeship standards by the Institute for Apprenticeships and Technical Education (IFATE)¹⁷ and is being used by employers including Amazon and A&O Shearman to support their apprentices.

At a strategic level, many of England's Local Skills Improvement Plans have included recommending widespread adoption of the Universal Framework.¹⁸

2.4.3 Impact organisations

Finally, the Universal Framework has been widely adopted across wider impact organisations too. These organisations exist alongside education institutions and employers, supporting the development of essential skills in a wide range of settings. Skills Builder partners focus on diverse themes including employability, sports, arts, volunteering, and youth work.

At the end of 2024, 237 impact organisations were committed to using the Universal Framework as partners of Skills Builder. There were 199 programmes which had achieved an impact level, recognising that a programme was aligned to the Universal Framework and would support impact. Partners reported that these programmes reached 1,340,000 individuals in that year.¹⁹

Beyond those programmes, the Universal Framework is also being scaled by its wider champions. For example, the National Citizen Service Trust has built the Universal Framework into its programme objectives and measurable outcomes while Youth UK have used it across their programmes, delivered through many other youth organisations.

There are other examples of regional adoption - for example, essential skills development has become a key thread across the Greater London Authority's work from the Violence Reduction Unit to Sport.

2.4.4 International adoption

Beyond the UK, international interest in building these skills as part of a balanced education is growing.²⁰ For example:

- Hong Kong (China): 'Generic skills' are part of the national curriculum, including collaboration, creative, self-management, and study skills (Hong Kong Government, 2024).
- *Kenya:* 'Core Competencies' are part of the national curriculum, including communication and collaboration, creativity, critical thinking, and citizenship (KNEC, 2021).
- Australia: The 'Australian Blueprint for Careers' includes building positive selfconcept, and interacting effectively with others (Australian Government, 2022).
- 16. Skills Builder Partnership (2024) Impact Report 2024 at www.skillsbuilder.org/impact
- 17. IFATE Resources Skills Builder Universal Framework at https://www.instituteforapprenticeships.org/developing-new-apprenticeships/resources/skills-builder-universal-framework/
- 18. For example, in the London Skills Improvement Plan at https://www.businessldn.co.uk/what-we-do/people/the-london-local-skills-improvement-plan
- 19. Skills Builder Impact Report 2024 at www.skillsbuilder.org/impact
- 20. Brookings Institute article https://www.brookings.edu/articles/visualizing-the-breadth-of-skills-move-ment-across-education-systems/

Although not an original part of the ambition for the Universal Framework, there are lots of examples of international adoption of the Framework. For example:

- There are examples of schools and colleges now in almost twenty countries who
 have adopted the Universal Framework and demonstrated the excellent practice
 to achieve a Skills Builder Award in recognition of that achievement.²¹
- There are 41 programmes delivered by Impact Organisations and reviewed and approved by Skills Builder which have been delivered across the world.²²
- There are examples of the Universal Framework being adopted and adapted at a national policy level for example, in Kenya.

The insights that have been garnered from this work as well as the widening enthusiasm to use the Universal Framework have informed part of the design of this Review.

2.5 Growing evidence base

Four years of impact reporting demonstrate that education institutions using the Universal Framework and applying it effectively accelerate learners' essential skills at a rate of progress of 2.7 times that of individuals not on such programmes:²³

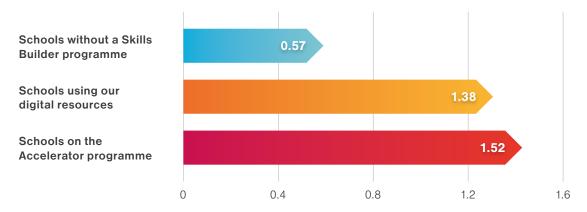


Figure 6: Rate of progress for learners using Universal Framework 2022-23 | Source: Skills Builder Impact Report 2023

^{21.} Skills Builder Showcase at www.skillsbuilder.org/showcase

^{22.} Skills Builder Impact Directory at www.skillsbuilder.org/impact-directory

^{23.} Skills Builder Partnership (2023) Impact Report 2023. London: Skills Builder Partnership

The creation of a stable Universal Framework has also been a crucial foundation for new research. The ability to quantify an individual's essential skill levels has allowed for deeper exploration of the connections between essential skills and other outcomes. For example:

- Essential Skills Tracker 2022²⁴ which demonstrated that higher levels of essential skills support individual earnings, job and life satisfaction when controlling for key variables including education levels.
- Essential Skills Tracker 2023²⁵ which reinforced the findings of Tracker 2022 on the individual effects of higher essential skills, and looked at the economy-wide impact for the UK of lower essential skill levels identifying a £22billion opportunity for annual gains by boosting essential skills.
- Essential Skills Tracker 2024 which illustrated educators' positive attitudes around building essential skills and their perceived value for individuals in education.

Other organisations including NFER and Careers & Enterprise Company have created nationally relevant research on essential skills. Other organisations including Envision, Children's University, City Year UK and many others have used the Universal Framework to evaluate the impact of their programmes in building essential skills.

2.6 Conclusion

This section has introduced essential skills, their importance and why Universal Framework 1.0 was originally launched in 2020. With the ambition of creating a shared approach and language for essential skills, the Framework has seen meaningful success over the last five years, reaching millions of individuals through 950 partners spanning education institutions, impact organisations and employers.

It has broadly demonstrated its clarity, measurability, and credibility. The open nature of the Universal Framework has made it possible for new research to be built off the back of it, demonstrating the link between essential skills and individuals' life outcomes - both driven by Skills Builder Partnership, as well as others including the Careers & Enterprise Company. It has also made an important contribution to organisations understanding the impact of their programmes and being able to improve them further as a result.

Finally, while the Universal Framework was originally designed for use in the UK, it has become clear that it makes a useful contribution much more widely, with examples of users in more than 20 further countries.

3. Purpose and goals of the Universal Framework Review 2025



3. Purpose and goals of the Universal Framework Review 2025

Section summary

Five years after its 2020 launch, the opportunity for reviewing Universal Framework 1.0 is an important chance to ensure that it remains current and reflects the learning generated by its widespread adoption.

Driven by advisory groups spanning education, impact organisations, employers, sector bodies and international users, the goals of this review are to evaluate and then improve the Universal Framework in five dimensions: completeness; relevance; usability; consistency of interpretation; and inclusivity.

To do so, four lenses will be used: understanding contextual changes since 2020 and their implications; the experience and feedback of its users; a technical evaluation using the huge amount of data that has been generated through assessments against the framework; and comparisons against international benchmarks and examples.

A 12-month programme of work deliberately allowed time for a thorough review and to give space for input, guidance and evaluation in the first phase, and then for iteration and improvement in the second phase.

3.1 Commitment to review

When it was launched, the intention was that the Universal Framework should be left untouched for the next five years to give time and space for organisations to adopt the Framework knowing that it would not be tinkered with in the meantime. However, that was balanced with wanting to ensure that the Framework did not become frozen in time. It is important that it responds to wider contextual changes and benefits from improvements and new insights. The time for that five-year review is now.

3.2 Advisory Groups

We used Advisory Groups, which spanned the different stakeholder groups for the Universal Framework to provide an external perspective as we worked through the review.

A full list of participants can be found in Appendix A, and these included:

- Education bodies like IFATE, Department for Education, the Chartered College of Teaching, Careers & Enterprise Company, subject associations and others.
- *Employer bodies* including CIPD, CBI, Institute of Directors, Business LDN, and regional Chambers of Commerce as well as professional bodies and trade associations.
- Other sector bodies which build essential skills in a wide range of other settings, including UK Youth, Young Enterprise, National Literacy Trust, STEM learning, Youth Sport Trust and others.
- International stakeholders including the Teach For All, British Council, Junior Achievement Africa, and others.
- Primary Users and non-users of the framework, including teachers, Skills Leaders, trainers, employers, and children and young people too.

3.3 Goals for the review

The goals of the 2025 Universal Framework Review were defined by our advisory groups (see *Appendix A*) as assessing and increasing the Framework's:

- Completeness: The Framework should be comprehensive in covering all of the essential skills and skill steps which fulfil the criteria of being 'those highly transferable skills which almost everyone needs to do almost any job and which support the application of technical skills and knowledge'. This means identifying and adding any missing content.
- Relevance: While incorporating all of the required skills, the Framework should
 not include content which is not relevant to that goal. This means identifying and
 removing any content which does not fulfil the definition of essential skills.
- Usability: The Universal Framework should be easy for users to understand and put into use, with minimal support. This means that it should be intuitive and easy to understand.
- Consistency of interpretation: Individuals using the Framework should interpret the step statements in a consistent manner, to support making assessments against the Framework and teaching or training against it.
- Inclusivity: To the fullest extent possible, the Universal Framework should be
 inclusive. This means enabling individuals to benefit from using the Framework at
 all stages of their education or career, in different geographies, and whether or not
 they are neurodivergent or have additional needs or disabilities. This means being
 deeply thoughtful about the universality of steps and how they are framed and
 contextualised. It does not require that every step is achieved by every individual.

If these goals are met, the resulting Framework would support great impact for users, and also drive greater usage and uptake.

3.4 Lenses for the review

In order to evaluate the existing Universal Framework, four different lenses were proposed:

- 1. Usability: We seek input as to how usable the Framework is, and whether any further calibration or refinement is required. This includes engagement with educators, impact organisations, and employers. We start with an open call for feedback and input, as well as running a series of roundtables and discussions with stakeholders to explore ideas. The key question is what is working or could be improved for users and non-users of the Framework?
- 2. Technical review: With thousands of evaluations of individuals' essential skills now completed we have greater insight into the pattern of how essential skills are built. Using this data helps us to identify those steps which are potentially unclear or disordered. After the initial refinements, these are brought back to users for feedback to ensure that they resolve any issues highlighted. The key question is how the Framework could be improved as a reliable assessment tool?
- 3. Changes in context: We consider whether there have been changes in the intervening five years which mean that there are new skills which should be considered within our definition of essential skills as 'those highly transferable skills which are needed by almost anyone for almost any job and which support the application of technical skills and knowledge'. We expect to maintain this definition unless the need to change it becomes clear through the review. The key question is whether there have been changes in context which require changes in the Framework to maintain its relevance and accuracy?
- 4. International context: Finally, one unexpected development has been the widespread international interest and examples of use in at least twenty countries since 2020. We see a value in exploring the experience of international users in case there are ways of optimising the language in the Framework to make it as widely universal as possible. This will include reviewing international skills frameworks for example, as developed in Australia or by the OECD. We will make this manageable by using the International Advisory Group to identify the most influential frameworks. The key question is, are there international examples of best practice which inform improvements to the Framework?

These lenses supported evaluating the Universal Framework against the defined success criteria:

		Success Criteria				
		Completeness	Relevance	Usability	Consistency of interpretation	Inclusivity
Lenses	Changes in context					
	User feedback					
	Technical evaluation					
	International practice					

Figure 7: How the review lenses help to achieve the success criteria

.

3.5 Timeline of review

The review was completed over a period of 12 months:

Activity	Timing	Goals
(1) Preparatory Work Agreeing the process and approach	Jan-Feb 2024	Agreeing the process; identifying the existing stakeholders to include; identifying the new stakeholders to engage
(2) Announce Review Announce the 2025 Universal Framework Review	Mar 2024	Raising awareness and sharing the process; inviting attendees in the different stakeholder groups to roundtables; reaching out to expert groups
(3) Advisory Groups 1 First meetings of the advisory groups, with a focus on shared process and early feedback	Apr 2024	Ensuring that we are able to bring together influential stakeholders to engage in the process of refining the Framework. We start with thematic groups: Employers; Educators; Impact Organisations; Researchers; Public policy; International
(4) Open Consultation Launch survey to solicit widespread feedback from partners, infrastructure organisations and the broader public	May-Jun 2024	 Drawing together direct feedback from stakeholders, covering: Overall feedback on the usefulness and usability of Universal Framework 1.0 Anything that seems to be missing or extraneous Any wording of skill steps which seems unclear or illogical Anything they would like to see change as a result of the review
(5) Technical Review Research-based review of the existing Framework	May - Jul 2024	 Covering: Technical review – insights from how individuals move through Universal Framework 1.0, and seeking to identify any duplication Changes in context – are there changes that mean we should change what is included in the definition of essential skills International best practice – what can we learn from other global settings and by comparing Universal Framework 1.0 with other international examples to check for completeness and relevance

Activity	Timing	Goals
(6) Advisory Groups 2 Initial findings from the technical review and open consultation shared with the advisory groups	Sep 2024	Sense checking the initial findings and their themes; proposing a plan of action for Framework refinements
(7) Public Feedback First iteration of revised Universal Framework for public feedback	Oct 2024	Questionnaire seeking feedback on proposed changes to the Universal Framework; sharing proposed changes for the framework's structure
(8) User Testing Second iteration of revised Universal Framework for user testing	Nov 2024	User testing to ensure that any changes are enhancements. This includes cognitive testing to ensure consistent interpretation of descriptors
(9) External Validation Third iteration of revised Universal Framework for external validation	Dec 2024	Working with YouGov to test the proposed updated Universal Framework with a representative sample of 2,000 working age UK adults, to test completion, sequentiality and links with other outcomes including earnings, employment outcomes, and job and life satisfaction
(10) Technical Evaluation Final iteration of revised Universal Framework 2.0.	Jan 2025	Reviewing the final Universal Framework 2.0 using the original criteria to test for improvements in completeness, relevance and duplication
(11) Advisory Groups 3 Share the final Universal Framework 2.0 and focus on next steps	Jan 2025	Sharing the proposed Universal Framework 2025. Focusing on how to support uptake and widespread use.
(12) Writing Handbooks and Tools Write the supporting Handbooks and materials	Jan 2025 - July 2025	The Handbooks which accompany the Universal Framework are critical for its adoption and to provide the detail and guidance for it to be properly used. Updates being made to supporting tools including the Interactive Framework, Hub, and Benchmark.

Conclusion

This section has provided an overview of the approach to the Universal Framework Review, which gives an opportunity after 5 years of widespread adoption to evaluate the Framework and to propose future improvements.

Driven by representative advisory groups, the evaluation considers five important dimensions of the Universal Framework: completeness; relevance; usability; consistency of interpretation; and inclusivity.

It answers these questions through four lenses: changes in context; user feedback; technical review; and international comparisons. The results of these are where we turn next.

4. Findings from the review of Universal Framework 1.0



4. Findings from the review of Universal Framework 1.0

Section summary

Each of the four lenses from the review of Universal Framework 1.0 helped to build out a fuller evaluative understanding of the existing framework's strengths and scope for improvement in a context that had changed meaningfully from the time of its original launch in early 2020.

Lens 1: Changing context

The first lens was exploring the changing context for education and employment. This theme was principally investigated through a series of nine roundtable discussions held with employer, education, impact organisation, and policy stakeholders in April and May 2024. It was supplemented with wider research to build a complete picture of the emerging trends.

There were several key trends identified: the continued march of technological change, particularly the rapid development of new Al tools and automation; the pandemic's effect on educational achievement and essential skills of learners; substantially increased hybrid working; climate change challenges; and a workforce facing longer careers with less stability.

Lens 2: User feedback

The second lens drew on user feedback from a public consultation. Open for users and non-users to complete, and widely promoted, we generated a helpful cross-section of respondents who had used the Framework in varied settings and over different timespans.

It was evident from feedback that much worked well in the fundamental principles and structure of Universal Framework 1.0. It was succeeding in its ambition to provide clarity on essential skills and making them tangible and teachable. Its look and feel and utility as a common language across education, employment, and impact organisations was widely recognised.

It also generated some helpful inputs for this review. Alongside feedback on individual steps, there were new questions around making the language of framework easier for individuals to understand and navigate, while increasing inclusivity further.

Lens 3: Technical review

The third lens was a technical review, looking from two perspectives:

- Analysing assessments that individuals had completed against the Universal Framework, using the Skills Builder Benchmark self-assessment tool, teacher assessments of learners through Skills Builder Hub, and research carried out with YouGov in 2022 and 2023 with a representative sample of more than 2,000 UK working-age adults.
- Evaluating the semantic similarity of its steps using Large Language Models (LLMs).

The technical review demonstrated the sequentiality of steps in the Universal Framework, with the proportion of individuals able to achieve steps decreasing as the steps got higher and more challenging. It highlighted a number of outliers which were significantly easier or harder than envisaged for closer review.

• • • • • • •

The use of Large Language Models compared steps within the Universal Framework with each other. This highlighted a small number of steps which had high semantic similarity, suggesting that they might be duplicating some core concepts. These steps were highlighted for closer review.

Lens 4: International perspectives

The fourth and final review lens was using international comparators. This was important because since its launch in 2020, international usage of the Universal Framework has grown quickly and there are now Skills Builder partners in twenty countries.

The goal was to identify, through Advisory Group input, leading international frameworks which included essential skills, were used widely, and which had a rigorous basis. Six frameworks were identified on this basis: Entrecomp framework of entrepreneurial competences (European Union); the O*Net database (USA); the Meta Skills framework (Scotland); Australian Core Skills Framework (Australia); YMCA George Williams Framework (UK, youth sector); SkillsFuture Singapore Critical Core Skills Framework (Singapore).

Large Language Models were used to identify potential gaps in the Universal Framework by identifying components of the six other frameworks that did not have a close semantic match. These were highlighted for manual review and a number of concepts were identified for incorporation into Universal Framework 2.0.

Those models were also used to identify where there was content in the Universal Framework that was not matched elsewhere, in case there was unnecessary content. Again, this was then subject to manual review.

4.1 Lens 1: Changes in context

4.1.1 Methodology

Before evaluating Universal Framework 1.0 directly, it was necessary to build up a picture of the changing context in which the Framework was operating. Two different methods were used here:

- Firstly, a series of roundtable discussions were run incorporating a cross-section of existing partners and other Universal Framework stakeholders (*Appendix A*). Over April and May 2024, a series of nine roundtable discussions were run, incorporating perspectives from employers, educators, impact organisations and policy makers. Around 120 individuals were part of these discussions, with the driving question of 'What do you consider the most important contextual changes that we should consider in reviewing the Framework?'
- Secondly, a literature review was conducted around the themes of changing large-scale trends in education and employment since 2020. Where ideas had been generated in the roundtable discussions, these ideas were explored and either validated or challenged by this subsequent research.

••••••

This section now turns to the key themes that emerged:

4.1.2 AI & Automation

While automation and the technological changes under the broad umbrella of 'Artificial Intelligence' (AI) were underway while Universal Framework 1.0 was being developed, the consensus is that these technologies have developed quickly, and certainly have started to have a greater impact on practice. One strong theme that emerged was the rate at which new technologies are encroaching on occupations including legal work, accountancy, research, design, and consultancy.²⁶

In response, the World Economic Forum (WEF) and others promote 'human skills' as harder to automate - interpersonal, creative problem solving, and communication skills.²⁷

This resonates with the experience of roundtable participants - for employers particularly, there is a sense that this automation is reducing the longevity of specific technical skills and therefore making it more important that individuals are consciously honing their essential skills. The argument is that this will better support them to transfer from their current roles and tasks to others in the organisations. For example, one retailer talked about the reducing need for staff on tills but an increased need for warehouse and delivery operatives.

Work from NFER has demonstrated that those jobs which are being created, on average, require higher levels of essential skills than those which they are replacing.²⁸ This extends a long-term UK trend, but international roundtable participants emphasised similar themes and developments in their regions too.

4.1.3 Post-Covid education

One of the most obvious changes in context since the early 2020 launch of Universal Framework 1.0 was the Covid-19 pandemic, which resulted in widespread school closures, home learning and in some cases more digital learning - although this was not possible in many international settings.

Roundtable participants with an education background were clear that they could see the direct impact of this on their learners - both in terms of lost learning time and weaker subject knowledge acquisition and literacy and numeracy, and also an adverse impact on essential skills development.

Indeed, the OECD (2023) argued that lockdowns during the Covid pandemic have driven 'an unprecedented drop in [educational] performance across the OECD'.²⁹ They highlight the development of social and emotional (essential) skills as being particularly affected.

- 26. Cheese, P. (2021) The New World of Work: Shaping a Future that Helps People, Organizations and our Societies to Thrive. London: Kogan Page
- 27. World Economic Forum (2023) *Future of Jobs Report 2023*. Geneva: World Economic Forum [https://www3.weforum.org/docs/WEF_Future_of_Jobs_2023.pdf]
- 28. NFER (2024) Shifting sands: anticipating changes in the future labour market and supporting the workers at greatest risk. https://www.nfer.ac.uk/publications/the-skills-imperative-2035-shifting-sands-anticipating-changes-in-the-future-labour-market-and-supporting-the-workers-at-greatest-risk/
- 29. OECD (2023), PISA 2022 Results (Volume II): Learning During and From Disruption, PISA, Paris: OECD Publishing [https://doi.org/10.1787/a97db61c-en] (p3)

• • • • • • •

4.1.4 Hybrid working

Another of the more sustained changes in working since 2020 has been the increase in hybrid working. In the UK, 44% of individuals now work at least partly from home - an increase from 12% pre-pandemic.³⁰ This is also a global trend: McKinsey (2023) highlights office attendance as 30% down on pre-2020 levels.³¹

Roundtable participants who worked in businesses or were otherwise employers highlighted that this had substantially changed the nature of the work that individuals were doing and required that individuals were drawing more substantially on some of their wider skills - noting communication, teamwork and leadership skills particularly. However, it was not simply a case of drawing on these essential skills more but also having to adapt and contextualise them *differently*.

For example, speaking and listening when using virtual meeting software is different from those interactions when meeting in-person. Similarly, dispersed teams who are rarely (if ever) physically present together need to take different, deliberate approaches to building teamwork and interpersonal relationships.

4.1.5 Green transition

While the need for greater progress to address and mitigate the effects of climate change has been longstanding, since 2020 there has been a renewed prioritisation of this enormous challenge. Roundtable participants emphasised that while there is growing conversation about 'green skills' that these can be broadly categorised in two ways:

The first is technical skills around particular new technologies - for example, installing and maintaining wind turbines, retrofitting for improved energy efficiency, or building out infrastructure required for greener energy. In these cases, the role of essential skills remains being those skills which support the application of technical skills and knowledge.

The second is broader, recognising that climate change will present meaningful challenges across the economy and individuals' lives. In these cases, the emphasis is on how to ensure that individuals have the ability to adapt, to transfer their knowledge and skills into new scenarios, and to innovate to respond to those challenges.

Indeed, the World Economic Forum has highlighted the importance of deploying creativity and adaptability to meet the challenges of the transition towards more environmentally sustainable technologies and ways of working.

4.1.6 Ageing workforce

Finally, a theme which also came up was recognition of individuals' increasingly long careers and general trends in many parts of the world towards an ageing workforce, although this is certainly not universal. Gratton & Scott (2016) emphasise the need to retrain and transfer skills between different domains and sectors over a longer 50+ years of working life.³²

- 30. Office for National Statistics (2023) Characteristics of homeworkers, Great Britain: September 2022 to January 2023. London: Office for National Statistics, UK. [https://www.ons.gov.uk/employmentand-labourmarket/peopleinwork/employmentandemployeetypes/articles/characteristicsofhomeworkers-greatbritain/september2022tojanuary2023]
- 31. McKinsey Global Institute (2023) How hybrid work has changed the way people work, live, and shop.

 McKinsey Global Institute. [https://www.mckinsey.com/mgi/our-research/empty-spaces-and-hybrid-places-chapter-1]
- 32. Gratton, L. & Scott, A. (2016) The 100 Year Life, London: Bloomsbury

Employers in the roundtables talked about the importance of supporting their employees to continue to build and hone their skills over their working lives. This was reinforced by research from Skills Builder that demonstrated that without deliberate opportunities to build essential skills across a working life, then average essential skill levels fall. However, with consistent, deliberate opportunities, individuals' can continue to boost these skills across their working lives:³³

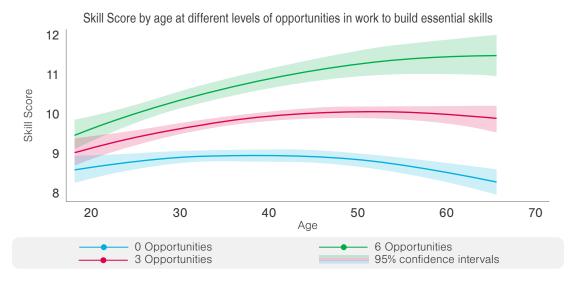


Figure 8: Essential skill score by age with different levels of opportunities to build essential skills (Essential Skills Tracker 2023)

4.1.7 Conclusion

This section has explored some of the driving trends and contextual changes since the launch of Universal Framework 1.0 in early 2020. There have certainly been substantial changes - the most dramatic being the Covid-19 pandemic with its implications for education and employment, as well as continued changes in technology including AI and automation. However, other trends are also significant, including the green transition and ageing workforce.

Together, there are two conclusions. Firstly, there are meaningful changes in context which should be reflected in how the Universal Framework presents essential skills and how they might be applied, particularly at the level of the Handbook and detailed guidance for learners and practitioners. Secondly, these changes only make the development of these highly transferable skills more important.

4.2 Lens 2: User feedback

4.2.1 Methodology

The public consultation was designed to ensure that there was an opportunity for users and non-users to have their say about their experience of using Universal Framework 1.0 or to share what had stopped them from engaging.

^{33.} Craig, R. & Seymour, W. (2023) *Essential Skills Tracker 2023*. London: KPMG, Edge Foundation, & Skills Builder Partnership [Accessed on 03/01/2024 at https://www.skillsbuilder.org/file/essential-skills-tracker-2023]

The consultation enabled participants to respond to give their overall perspectives on Universal Framework 1.0 and then to give much more detailed feedback down to the level of individual steps if they wished to - allowing them to flag and provide feedback on steps that they felt were either unnecessary or difficult to understand. Participants could also share additional themes or concepts that they felt were missing from the Framework.

The consultation was made available for anyone to complete it. It was promoted to stakeholders through the Partnership newsletter, advisory group attendees, as well as through communications to partners and was available to complete throughout June 2024.

In total, 90 responses were received. Of which:

- 90% were from the United Kingdom
- 94% used the Universal Framework in English

There was a good spread in terms of the length of time that respondents had been engaged with using the Framework, including some who had never used the Framework or were lapsed users:

I have never used the Framework	13%	15%
I have used the Framework in the past but I don't use it now	4%	5%
1 year	32%	37%
2 years	14%	16%
3 years	10%	12%
4 years	13%	15%

There was also a good blend of use cases of the Universal Framework. This was important because the widespread use of the Universal Framework across different sectors is one of its key purposes:

Current main use of the framework is...

as a teacher	18%	21%
as a Skills Leader in an educational institution	19%	22%
as an employer	7%	8%
for a social impact programme	24%	28%
as a youth leader	3%	3%
for my own development	2%	2%
Other	8%	9%
not applicable	5%	6%

4.2.2 General feedback on using Universal Framework 1.0

Respondents were asked to give feedback on their perceptions of the Universal Framework. This included both users and non-users. They were asked for their perceptions of the extent to which the Universal Framework achieves the following (providing answers on a scale from Strongly Agree to Strongly Disagree):

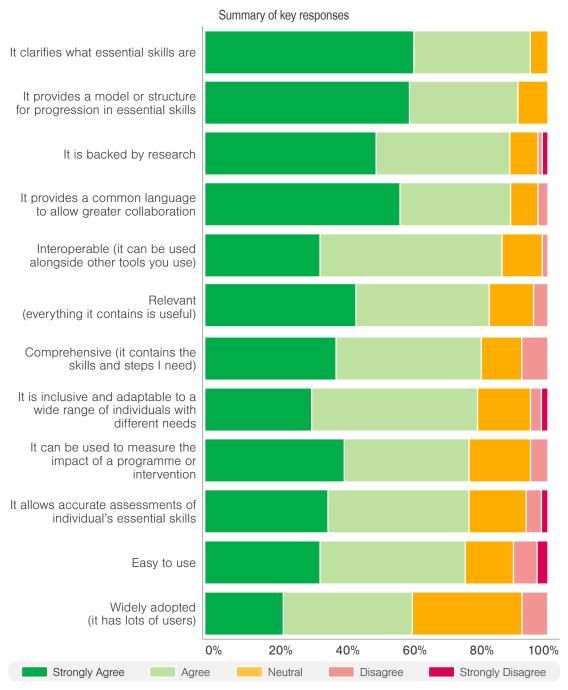


Figure 9: Summary of key results from public consultation

At a top level, this evidenced that the Universal Framework was achieving many of its initial goals, including clarifying what essential skills are (95%), providing a model for progression (92%) with good scores for relevance (83%), comprehensiveness (81%), and inclusivity (79%). It also flagged potential for improvements to ease of use, impact measurement capabilities, and a desire to see more widespread uptake and usage of the Framework.

• • • • • • • •

4.2.3 Feedback on areas of strength

In written comments, users highlighted these areas as being particular areas of strength of Universal Framework 1.0:

- The right skills: It was felt that the eight skills are the right ones that they are comprehensive and cover the right ground
- Tangibility: Universal Framework 1.0 makes it much clearer what the skills really look like and how they can be built and measured
- Flexibility: Although there is guidance about where to start, there is also space to target the skill steps which are the real priority for learners
- Look and feel: The icons and colours are engaging and draw people in. They seem to work for a wide range of ages although perhaps less with the most senior individuals.
- Common language: The widespread use of Universal Framework 1.0 in so many different settings is evidence that it resonates widely.
- Simplicity: It is clear to users that progression is possible across the Framework through the sequencing of the steps

4.2.4 Areas flagged for review

Users were also asked where there were particular areas for review, and the following areas were highlighted for consideration:

- *Inclusion:* How to increase accessibility and to ensure that we are not making assumptions about what is 'typical'?
- Accessibility of language: How can we ensure that the language is accessible for children, young people, teachers and non-teachers?
 Particularly, this is about making it clearer what each step contains.
- Length of the Framework: It can be a lot to take in when first encountered are there ways of making it more intuitive to first navigate and find the areas of focus faster?
- *Driving even more widespread adoption:* Are there ways to see the Framework reflected in qualifications and the wider curriculum in schools, or in apprenticeship standards?
- *Clarifying step content:* Are there ways of more quickly being able to orientate to popular content, which can sometimes be a bit lost in the skill descriptors?

4.2.5 Other insights

Respondents to the survey also had the opportunity to provide feedback on individual steps to flag those that were seen as being potentially out of sequence with other steps, having content that was not relevant to the skills, or content that was duplicative or unclear. These flags and comments were taken forward alongside the findings of the technical review and other international framework comparisons (see Section 5).

There were also insights generated around the tools that Skills Builder Partnership had created to support individuals and organisations to implement the Universal Framework in their settings.

This demonstrated that respondents who use the tools were generally positive about them:

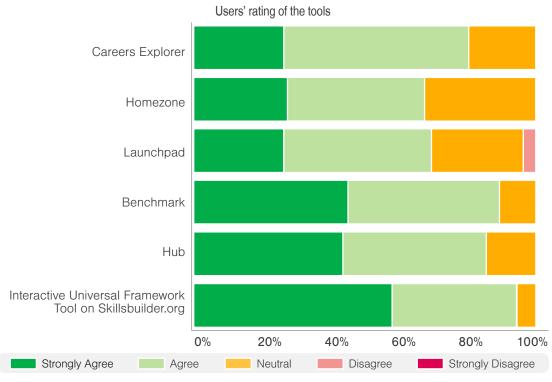


Figure 10: Users' rating of tools supporting Universal Framework 1.0

Comments and feedback also provided some helpful insights into how the Skills Builder Partnership team could use the Universal Framework Review as an opportunity to review the content and structure of these wider tools to support implementation of Universal Framework 2.0.

4.2.6 Conclusion

The public consultation generated important insights into user and non-user perceptions of Universal Framework 1.0. It was evident that there was considerable enthusiasm around the framework and many areas of strength - fundamentally, that it was fulfilling its role as envisaged in helping to define and organise essential skills. There was also strongly positive feedback for many of the Framework's attributes, including its tangibility, flexibility, look and feel and the common language that it enabled.

Feedback made clear that there were also opportunities through the review to fine tune individual steps, and more widely to explore making the language of the steps easier to understand and to navigate for a less experienced user.

4.3 Lens 3: Technical review

A technical review of the Universal Framework 1.0 was undertaken by analysing skills assessments using the framework as well as evaluating the semantic similarity of its steps using Large Language Models (LLMs).

The aims of the technical review were to identify:

- User data outliers, to see if any steps were seen as significantly easier or harder than initially envisaged.
- Duplicated steps within Universal Framework 1.0.
- Semantic outliers, by finding steps that were semantically very similar or different to adjacent steps.

4.3.1 User Data

This analysis benefited from one of the largest collections of essential skills assessments against a framework. We looked at data from three different sources:

- 1. Teacher assessments of their classes on Skills Builder Hub
- 2. Individual self-assessments on Skills Builder Benchmark
- 3. Individual self-assessments from two UK nationally representative samples via YouGov

More information about each dataset can be found in Appendix B.

From each dataset we were able to calculate the average score for each skill step, and the gradient of these responses across steps for each skill. We collect responses via a Likert scale and convert these into numeric equivalents. In this scale 0 is 'almost never' and 1 is 'almost always'. Skill steps with an average score closer to 1 might therefore be considered "easier".

Universal Framework 1.0 is designed to be progressive, so we expect that later steps in a skill are viewed as more difficult than earlier steps and hence will have a lower average score. Therefore when looking at gradients, a decreasing gradient shows that individuals are finding these later steps more difficult than the earlier steps.

The gradients for all three datasets showed that there was a typically decreasing trend in response score as the skill step progressed. In the Hub dataset we saw a significant decrease in score from the initial steps to the later steps, due to the Hub being used for teacher assessment of a whole class in school or college.



Figure 11: Essential Skills Tracker 2023 average response for each step

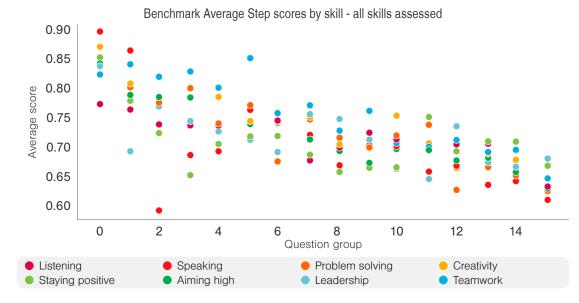


Figure 12: Skills Builder Benchmark average response for each step



Figure 13: Skills Builder Hub average response for each step

4.3.2 Identifying Anomalies

The analysis of average responses for skill steps enabled us to identify steps that were potential anomalies. Using Large Language Models (LLMs) enabled us to then look into how semantically similar the step was to other steps within the framework.

To identify outliers we compared the average scores of skill steps across skills and also compared the gradients of skill progression. For each outlier, we then looked at its semantic similarity to other skill steps to provide further data on why the step was an outlier. This data was analysed to provide recommendations for whether the underlying contents of the step should be considered for further review.

We identified the following anomalies:

Skill	Step	Data source	Anomaly type	Average score	Semantic similarity	Recommendation
Speaking	1	Benchmark	Too easy	0.86	Comparatively high semantic similarity to Speaking step 0, suggesting some duplication	Recommended for review based on high average score and high similarity score compared to its preceding step
Teamwork	2	Benchmark	Too easy	0.81 (B) 0.82 (T)	Comparatively high similarity when compared to Teamwork step 3, suggesting some duplication.	Recommended for review based on high average score and similarity to Teamwork step 3.
Teamwork	3	Benchmark	Too easy	0.82	Comparatively high similarity when compared to Teamwork step 2, suggesting some duplication.	Recommended for review based on high average score and similarity to Teamwork step 2.
Teamwork	5	Benchmark	Too easy	0.84	No concerns with similarity to other steps.	Recommended for review as Teamwork step 5 had the highest average score within the skill.
Listening	0	Benchmark	Too Difficult	0.77	No concerns with similarity to other steps.	Not recommended for review as even though it was flagged as an anomaly based on comparisons to other step 0's, it has the highest average score for Listening suggesting its placement is correct.
Speaking	2	Benchmark & Tracker	Too Difficult	0.59 (B) 0.60 (T)	No concerns with similarity to other steps.	Recommended for review due to being the most difficult step within the skill, based on average scores.
Speaking	3	Benchmark	Too Difficult	0.68	Comparatively high similarity to Speaking step 13.	Recommended for review based on similarity to Speaking step 13, and the comparatively high score.



Skill	Step	Data source	Anomaly type	Average score	Semantic similarity	Recommendation
Staying Positive	3	Benchmark	Too Difficult	0.65	No concerns with similarity to other steps.	Analysis of this step highlighted that sequential steps were decreasing in difficulty, based on responses. Recommended that the order of this and its sequential steps is reviewed.
Leadership	1	Benchmark	Too Difficult	0.69	No concerns with similarity to other steps.	Although a low average score for step 1's, it is still one of the 'easiest' steps of the skill. Therefore this is not recommended for review.
Creativity	2	Tracker	Too Difficult	0.60	No concerns with similarity to other steps.	Although anomalous when compared to other step 2's, the average score is not concerning within the skill. Therefore this is not recommended for review.
Creativity	8	Tracker	Too Difficult	0.46	No concerns with similarity to other steps.	Recommended for review due to Creativity step 8 having the lowest average score of all skill steps in the data.
Leadership	5	Tracker	Too Difficult	0.59	Comparatively low semantic similarity from previous step.	Recommended for review, especially in terms of its placement within the skill and stages.

4.3.3 Duplication

To identify steps that were potential duplicates of other steps within the Universal Framework, the semantic similarity of all steps within the framework was compared using an LLM.

A threshold of similarity was calculated by using the upper quartile of similarity scores and any step pairs that had a similarity score above this threshold were flagged as potential duplicates. 22 skill steps were identified in this analysis and were referred for manual expert review.

4.3.4 Conclusion

By using different datasets as well as different analytical approaches, this work exhaustively identified skill step anomalies and duplicates, providing directional guidance on how the Framework could be improved and optimised.

These identified steps were then able to be further analysed manually and in the context of the wider review lenses. This is explored further in Section 5 and beyond.

.

4.4 Lens 4: International context

4.4.1 Context

When Universal Framework 1.0 was launched in early 2020, it was primarily informed by the context in the UK and its four constituent nations.

However, since then it has been encouraging to see that the framework has been seen to have international relevance, and has been adopted by partners in more than twenty countries. In some cases, the top level skill names have been adapted to fit in with terminology that is already embedded in the national curriculum, assessment frameworks or in widespread usage. In other cases, the Framework has been translated in order to make it accessible. In all of these cases though, the underpinning methodology and step content has remained consistent demonstrating a higher level of universality in the approach than the Framework's authors initially imagined.

The countries where partners are using Universal Framework 1.0 are diverse, spanning the Czech Republic, Malaysia, Hong Kong (China), Australia, India, Uganda, Kenya and many more. In many cases the application of the Framework in these settings has generated new insights and learning. For example, in Kenya, the Universal Framework is being used to support teachers to build and assess the core competencies at secondary school level through an initiative led by the Kenyan National Examinations Council and supported by the British Council and Skills Builder Partnership. In the Czech Republic and Hong Kong (China), national NGOs have taken the lead in using the Framework to train and support teachers to implement the approach in their classrooms. In others, Skills Builder has been directly supporting schools and colleges through their Global Accelerator programme.

Critically, by taking this global view, we were able to analyse skills frameworks developed across the world and use that analysis to inform improvements of the Universal Framework.

4.4.2 International framework comparisons

Across the globe, many organisations and countries have recognised the importance of clear descriptions of essential skills. Sometimes, this is for the primary purpose of labour market statistics, such as O*NET. In other instances, such as Scotland's Meta-skills and Singapore's Core Skills frameworks, the primary use case is to drive the acquisition of the skills.

This research focuses on those skills frameworks that meet the following criteria and were validated by our reference groups:

- They contain essential skills. For example, there are frameworks that cover primarily or exclusively technical or basic skills that are not relevant to the Universal Framework.
- Skills are broken down into component parts or steps. There are a number of skills
 frameworks that consist solely of a set of skill names, or skill names with a descriptor
 for that skill. This paper necessarily requires deeper analysis of all of the components
 of skills and so only includes frameworks that go into this level of detail.
- Usage and rigour. Our analysis focuses on frameworks with meaningful adoption, or that have backing and adoption from respectable institutions.

These criteria, with reference to our expert advisory groups, revealed 6 skills frameworks that could be compared against each other as well as against the Universal Framework:

- EntreComp: The entrepreneurship competence framework (European Union)
- O*NET (USA)
- Meta-skills Progression Framework (Scotland)
- Australian Core Skills Framework (Australia)
- YMCA George Williams Framework (UK, youth sector specific)
- SkillsFuture Singapore Critical Core Skills Framework (Singapore)

4.4.3 Missing steps

Using a Large Language Model (LLM), we were able to semantically compare all of the steps in the Universal Framework 1.0 to all of the steps of these other leading skills frameworks from across the globe.

Framework A	Framework B	Framework C
Missing step 1	Missing step 1	Missing step 1
Missing step 2	Missing step 2	Missing step 2
Missing step	Missing step	Missing step

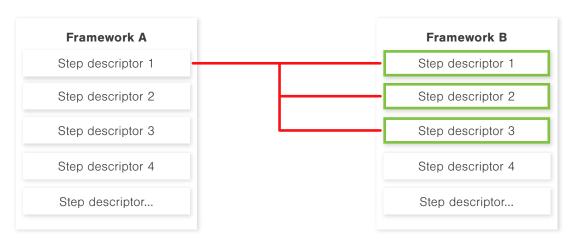
Manual review



Figure 14: representation of the "missing step" approach

For each step in other frameworks, the closest matching step in the Universal Framework 1.0 was found. A similarity score was generated for each step by first calculating the cosine similarity between all steps in the others frameworks to get a ranking of the top 3 most similar steps. Then a cross-encoder model was used to refine the similarity score. See *Appendix B* for further details of the methodology.

Step 1: Cosine similarity



Step 2: cross-encoder

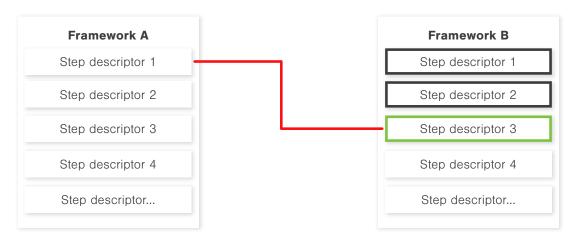


Figure 15: representation of LLM semantic matching process

Steps in other frameworks that did not have a match with a step in the Universal Framework (with a similarity score above our threshold) were flagged as 'missing' from the Universal Framework. In total there were 426 such steps that were then referred to manual expert review. Given the nature of the various frameworks, some of these steps were not essential skills (for example many related to literacy, numeracy and digital skills).

The manual review highlighted steps that could be included within the new version of the Framework.

4.4.4 Unnecessary steps

We reversed the approach taken above to highlight steps within the Universal Framework 1.0 that did not match semantically to any of the other leading Frameworks used globally. We classed a skill step as having no matches to other Frameworks if none of its closest semantic matches to the other global frameworks had a score above a minimum threshold.

The basis of this approach was to highlight the steps that the Universal Framework 1.0 included that weren't standard across other frameworks and as such were potentially not vital components of essential skills. We deemed the 3 steps returned by this analysis as potentially 'unnecessary' steps. Similar to the 'missing' steps, these steps were then referred for manual expert review.

4.4.5 Conclusion

This research used mixed methods both to improve version 1.0 of the Universal Framework relative to international comparators, and then to assess and validate those comparators alongside both versions 1.0 and 2.0.

Lens 3, the Technical Review in section 4.3 of this paper set out the formative technical analysis. The primary purpose of using other frameworks to identify both 'missing' and 'unnecessary' steps in Universal Framework 1.0 was to improve the framework, optimising it for building and measuring the parts of essential skills that people need. However, the result of this process is not only that Universal Framework 2.0 is optimised for essential skills, but also that it is done so in a way that has global relevance.

Similarly, the validation research later in this paper in section 6.4 shows not only the relevance and completeness of Universal Framework 2.0 when it comes to essential skills, but does so in an international context.

As discussed in section 4.3, we conducted these comparisons using Large Language Models (LLMs) to compare the semantic similarities between the contents of the frameworks on the equivalent of a step basis. Taking each individual descriptor the LLMs compared each descriptor within one framework to all other descriptors within the other. We focused on comparing frameworks to the Universal Framework, but we were also able to look at how these frameworks compared to each other, further gaining insights into how much overlap there is between frameworks.

5. Proposed changes to Universal Framework 1.0



5. Proposed changes to Universal Framework 1.0

Section summary

The four lenses for the review enabled evaluation of the performance of Universal Framework 1.0 against the goals of ensuring: completeness; relevance; usability; consistency of interpretation; and inclusivity.

Drawing together all of the insights and questions from Section 4, a series of proposed changes were brought back to review advisory groups in September 2024 where they were adapted based on feedback (*Appendix A*). These recommended changes were incorporated into a working version of the new framework which was subsequently tested and validated further in *Section 6*.

Ten proposed changes were put forward and approved by the advisory groups, pending testing and validation (Section 6):

- 1) Revising two of the skill names: those of Aiming High and Staying Positive
- 2) Making more of the skill pairs to ease the navigation of the eight essential skills: where:
 - Collaboration could incorporate Teamwork and Leadership;
 - Communication could incorporate Speaking and Listening;
 - Creative Problem Solving could incorporate Creativity and Problem Solving;
 - Self-Management could incorporate Aiming High and Staying Positive (however renamed).
- 3) Changing the skill numbering from 0-15 to 1-16: for computational ease and greater clarity.
- A) Removing the skill stages: These were seen as helpful for employers and impact organisations but less so for educators. Where they will continue to exist, they will be in four stages:
 - Getting Started (Steps 1-4);
 - Intermediate (Steps 5-8);
 - Advanced (Steps 9-12);
 - Mastery (Steps 13-16).

For educators, a four-step range based on ages was recommended as preferable.

- 5) Skill icons: The look and feel of the Framework was generally popular and so the proposal is that the skills icons and colour palette will be maintained with some changes to support accessibility.
- *Presentation of the Framework:* The top level Framework would be presented horizontally rather than vertically wherever possible, to better visualise progression.
- 7) Steps that could be adapted or replaced: Input from user consultation and technical review highlighted that there were 17 steps that seemed to be duplicative or could be otherwise adapted or replaced.

-
- 8) Additional concepts or steps: Input from user consultation and analysis of other leading international taxonomies highlighted a small number of concepts which could be perceived to be missing. 11 new steps were created, and 15 concepts were incorporated into the existing step architecture.
- 9) Steps ordering: Technical analysis highlighted two sequences of steps in Staying Positive and Leadership which were misordered and proposed re-ordering.
- Step language: Finally, user feedback suggested that the language of the steps could be more accessible. After testing several alternatives, it was proposed that the language of the steps should be simplified and made more navigable through the introduction of one or two word summaries for each step. The loss of 'flow' through the steps was deemed to be less important than the increased ease of being able to take each step on its own merits without needing to reference the rest of the Universal Framework.

Each of these proposed changes is discussed in greater depth in this section:

5.1 Skill names

Generally, respondents to the user feedback were happy with the names of the skill names and felt that they reflected the definitions of those names. The two exceptions were:

- Staying Positive: The ability to use tactics and strategies to overcome setbacks and achieve goals.
- · Aiming High: The ability to set clear, tangible goals and devise a robust route to achieving them.

The criticism of 'Staying Positive' generally focused on concepts of 'toxic positivity' and whether the name Staying Positive suggested forcing an emotional response which would not be appropriate in all settings. 'Aiming High' was popular with educators but employers and impact organisations felt that it often sounded too junior or educational and did not resonate with their employees or beneficiaries.

It was resolved to test alternatives to these two names with the goal of seeing whether a consensus existed for an alternative.



5.2 Introducing Skills Pairs

One of the challenges that was brought up in user feedback was that having eight essential skills could be hard to remember and navigate. The proposal was made that more could be made of the eight skills existing in four pairs:

Skill pair	Essential skills
Communication	Listening: The receiving, retaining and processing of information or ideas.
Communication	Speaking: The transmission of information or ideas.
Creative problem	Problem Solving: The ability to find a solution to a complex situation or challenge.
solving	Creativity: The use of imagination and the generation of new ideas.
Oalf Management	Staying Positive: The ability to use tactics and strategies to overcome setbacks and achieve goals.
Self Management	Aiming High: The ability to set clear, tangible goals and devise a robust route to achieving them.
Oallahawakkan	Leadership: Supporting, encouraging and motivating others to achieve a shared goal.
Collaboration	Teamwork: Working cooperatively with others towards achieving a shared goal.

This proposal was popular with the advisory groups, and was therefore taken through to testing in Section 6.

5.3 Skill numbering

When Universal Framework 1.0 was launched, the decision was made to number its sixteen steps from 0-15, to reflect that Step 0 would be a target for Foundation / Kindergarten learners in mainstream settings.

However, it was proposed that this should now change for a number of reasons:

- Recognising that a single target for an age group is too narrow, and to reflect the wider range of essential skill steps that individuals of the same age are likely to be working on.
- The negative consequences of having some individuals with a skill score of -1 if they are not yet able to implement Step 0.
- The computational challenges of incorporating Step 0.

The proposal was universally welcomed by the advisory groups, along with the proposed '4-step model' to help teachers in mainstream schools to set broad age-related expectations:

	Below Expectations	Approaching Expectations	Meeting Expectations	Exceeding Expectations
General formula	Year Group -2	Year Group -1	Year Group	Year Group +1
Example: Year 3	Step 1	Step 2	Step 3	Step 4
Example: Year 11	Step 9	Step 10	Step 11	Step 12

5.4 Skill Stages

After Universal Framework 1.0 was launched, skill stages were introduced as a means of helping users to identify the core themes of the steps, and to navigate the Framework. Because these stages were not originally envisaged when Universal Framework 1.0 was designed, they varied in size (from 3 to 6 steps) and were not aligned between the different essential skills.

While some roundtable and user feedback respondents found stages helpful, the majority found that they were not frequently used and that the varying sizes of the stages could be confusing. Others felt that maintaining stages was artificially forcing skill steps to be interpreted in ways that were unhelpful because they were less closely linked than the stages and language used in the step descriptors suggested.

As such, it was proposed that stages should not be universally introduced for Universal Framework 2.0. For educators, the four-step model above should be the main approach. For employer or impact organisation users, four stages could be maintained but they should be of equal size:

- Getting Started (Steps 1-4)
- Intermediate (Steps 5-8)
- Advanced (Steps 9-12)
- Mastery (Steps 13-16)

5.5 Skills icons

The feedback from users was that they were happy with the look and feel of Universal Framework 1.0 and that they were keen to ensure consistency between that and Universal Framework 2.0. Particularly, that would help users and beneficiaries to better navigate between the two versions.

As such, the proposal was to maintain the existing look and feel, particularly that of the icons and the colour palette. Minor changes to the icons have been proposed to make them more accessible, particularly ensuring that there is not white writing on a coloured background which can be more challenging to read:



Figure 16: Proposed updates to skills icons from Universal Framework 1.0 to Universal Framework 2.0

5.6 Presentation of Universal Framework 2.0

While users generally appreciated the structure of Universal Framework 2.0, there was feedback that some users found it counterintuitive that getting better at the essential skills was presented as going 'down' the ladder:



Figure 17: Illustration of Universal Framework 1.0

• • • • • •

As such it was proposed that wherever possible, Universal Framework 2.0 would be presented horizontally to recognise progression from left to right. This would obviously be reversed in translation in countries where the norm of reading was from right to left instead:

LISTENING				
()))	Step 1	Step 2	Step 3	Step 4
SPEAKING				
	Step 1	Step 2	Step 3	Step 4
aLEM SO				
OBLEM SOLL Z	Step 1	Step 2	Step 3	Step 4
CREATIVIAL				
	Step 1	Step 2	Step 3	Step 4
ADAPTING.				
	Step 1	Step 2	Step 3	Step 4
8/VNNNO				
	Step 1	Step 2	Step 3	Step 4
EADERSAIL				
	Step 1	Step 2	Step 3	Step 4
LEAMWORK.				
	Step 1	Step 2	Step 3	Step 4

Figure 18: Illustration of Universal Framework 2.0

5.7 Steps that could be adapted or replaced

A key part of this review was to identify those steps which are potentially unnecessary. Input from user consultation and technical review highlighted that there were a small number of steps that seemed to be duplicative or unnecessary and could be adapted or replaced:

Skill Name	Step	Original Skill Steps
Speaking	9	I speak engagingly by using tone, expression and gesture to engage listeners
Speaking	13	I speak influentially by changing the structure of my points to best persuade the listeners
Problem Solving	9	I create solutions for complex problems by generating a range of options
Problem Solving	10	I create solutions for complex problems by evaluating the positive and negative effects of a range of options
Creativity	6	I use creativity in the context of work
Creativity	7	I use creativity in the context of my wider life
Creativity	8	I develop ideas by using mind mapping
Creativity	11	I innovate effectively when working in a group
Creativity	12	I innovate effectively by seeking out varied experiences and stimuli
Creativity	13	I support others to innovate by sharing a range of tools
Staying Positive	7	I look for opportunities in difficult situations
Staying Positive	8	I look for opportunities in difficult situations, and share these with others
Staying Positive	9	I look for opportunities in difficult situations, and adapt plans to use these opportunities
Aiming High	13	I develop long-term strategies taking into account strengths, weaknesses, opportunities and threats
Leadership	13	I reflect on my own leadership style and its effect on others
Teamwork	5	I work well with others by understanding and respecting diversity of others' cultures, beliefs and backgrounds
Teamwork	15	I support the team by bringing in external expertise and relationships

These changes were built into the next iteration of the Universal Framework for testing in the next stage of the review (see Section 6). In many cases, these were seen as too specific, duplicative, or reflecting values or attitudes that should be imbued in the framework as a whole rather than drawn out as separate steps.

5.8 Additional concepts or steps

Ensuring the *completeness* of the Universal Framework was another core goal of this review. The context review (Section 4.1) user feedback (Section 4.2), technical review (Section 4.3) and international comparisons (Section 4.4) highlighted some potential concepts that were not currently incorporated in the Universal Framework. A long list was reviewed, with the overwhelming majority found to be incorporated within the skill step content, albeit with slightly different language.

A shorter list of steps were found to be worth including more explicitly - for 11 concepts these were deemed worthy of inclusion as new steps. For 15 concepts, it was felt that these could be incorporated by more explicitly making them part of existing steps:

Identified gaps	Proposed solution
Aiming high - learning to learn / ways of working (could add to "I set goals and secure the things or environment I need to complete")	Incorporate into Aiming High Step 8
Aiming high - reflect on needs / aspirations / wants	Incorporate into Aiming High Step 5
Aiming High / Planning - Identifying and filling own training needs	Incorporate into Aiming High Step 10
Creativity - Identifies and adapts ideas from similar contexts	Incorporate into Creativity Step 5
Creativity - Identifies concepts and principles which may apply in other settings	Incorporate into Creativity Step 5
Creativity - Incubates and develops ideas	Replacing Creativity Step 12
Creativity - Proactively asks if this is the best way	Incorporate into Creativity Step 9
Creativity – prototyping	Replacing Creativity Step 11
Creativity - Sees patterns of recurring problems as a potential space for innovation	Incorporate into Creativity Step 6
Creativity - thinks about barriers to an innovation's success	Replacing Creativity Step 12
Creativity - Using 'formal lateral thinking techniques'	Replacing Creativity Step 8
Creativity - Willing to look beyond current approaches	Incorporate into Creativity Step 4
Creativity - Keeps abreast of innovations and good practice beyond own context borrowing adapting combining and redesigning for own purposes or using as a provocation to rethink current approaches	Replacing Creativity Step 13
Leadership - sets aside time for self-reflection	Incorporate into Leadership Step 5

Identified gaps	Proposed solution
Problem solving - distilling information, drawing conclusions, summarising	Incorporate into Problem Solving Step 7
Problem solving - identifying / understanding rules	Replacing Problem Solving Step 9
Problem solving - identifying the problem	Incorporate into Problem Solving Step 2
Problem solving - incorporating new information (e.g. bayesian style) - different to feedback loop	Incorporate into Problem Solving Step 15
Problem solving - pattern recognition / categorisation etc	Replacing Problem Solving Step 9
Problem solving - systems thinking	Replacing Problem Solving Step 10
Speaking - clear on the purpose of their communication	Incorporate into Speaking Step 3
Staying positive - able to undertake routines which support wellbeing	New Staying Positive Step 7
Staying positive – curiosity	Incorporate into Creativity Step 13
Staying positive - failure, perseverance	Incorporate into Staying Positive Step 6
Staying positive - pays close attention to work-life balance; pro-actively manages demands on time; pushes back where necessary	New Staying Positive Step 8
Staying positive - self awareness of own blind spots / weaknesses in own work	New Staying Positive Step 9

These changes were also built into the next iteration of the Universal Framework for testing in the next stage of the review (see Section 6).

5.9 Step ordering

The technical analysis of assessments completed against the Universal Framework demonstrated that in almost all cases the sequencing of the steps was logical and suggested escalating complexity as individuals progress through the steps.

There were two exceptions to this that were identified. Firstly, there were a small number of steps which were not in the correct order for Staying Positive where Steps 11 and 12 were perceived to be easier to achieve than Steps 7-10:

Staying Positive	7	I look for opportunities in difficult situations
Staying Positive	8	I look for opportunities in difficult situations, and share these with others
Staying Positive	9	I look for opportunities in difficult situations, and adapt plans to use these opportunities
Staying Positive	10	I look for opportunities in difficult situations, and create new plans to use these opportunities
Staying Positive	11	I identify risks and gains in opportunities
Staying Positive	12	I identify risks and gains in opportunities, and make plans to manage them

Secondly, a small number of steps were flagged to be re-ordered for Leadership where 8 and 9 were easier than 5-7:

Leadership	5	I manage group discussions to reach shared decisions
Leadership	6	I manage disagreements to reach shared solutions
Leadership	7	I recognise my own strengths and weaknesses as a leader
Leadership	8	I recognise the strengths and weaknesses of others in my team
Leadership	9	I recognise the strengths and weaknesses of others in my team, and use this to allocate roles accordingly

These changes were also incorporated into the next iteration of the Universal Framework for testing in the next stage of the review (see Section 6).

5.10 Step language

Finally, feedback from the advisory groups and user feedback (Section 4.2) suggested that there might be scope to simplify the language with which the steps were written. This would particularly support in making Universal Framework 2.0 more accessible and inclusive, as well as making it easier for new users to navigate. This was seen to be particularly important given the number of children and young people using the model and the growing range of international users.

A range of different approaches were experimented with, rewriting the step descriptors without changing the underlying concepts of the skill step. For example:

	Model 1: Existing Language	Model 2: Thematic summary	Model 3: Learner accessible
Listening Step 8	I show I am listening by summarising or rephrasing what I have heard	Summarising: Learners can repeat back or summarise what was said to confirm understanding.	I can summarise and rephrase something that someone has told me
Teamwork Step 3	I work well with others by taking responsibility for completing my tasks	Responsibility-taking: Learners can take responsibility for completing tasks	In a team, I can be relied upon to complete the tasks that have been assigned to me
Staying Positive Step 6	I keep trying when something goes wrong, and encourage others to keep trying too	Encouraging others: Learners can encourage others to stick at challenges	I encourage others to stick at challenges

When shared with users and with advisory groups for feedback, there was a strong positive response to the introduction of the step summaries of one or two words to help make clearer what the contents of the step were.

It was felt that the current way that the step descriptors were written to emphasise the progression between steps sometimes made it harder to understand what was included in the step itself. This also led to compounding of concepts in the step descriptors which added complexity.

There was also helpful debate about whether steps should be written in 'I do' or 'I can' language. Ultimately, it was felt that while the language of 'I can' could be seen as purer in seeing skill as a capability, what really mattered was what individuals *did* rather than had the *potential to do*. As such, as far as makes sense, the language of 'I do' was used.

Given the widespread support for the proposed model of rewriting the step descriptors at this stage, the decision was made to propose that Universal Framework 2.0 should incorporate this model, for testing in Section 6.

Conclusion

This section has shared the proposed changes to Universal Framework 1.0 to create Universal Framework 2.0. These should maintain and further capitalise on its advantages, while responding to changes in context and to user feedback and technical insights. These proposed changes were incorporated into a model for iterative testing and this is explored in the next section.

6. Development and validation of Universal Framework 2.0



6. Development and validation of Universal Framework 2.0

Section summary

The development and validation of Universal Framework 2.0 took an iterative approach with each input helping to identify potential improvements which were then incorporated into the framework model which was tested next:

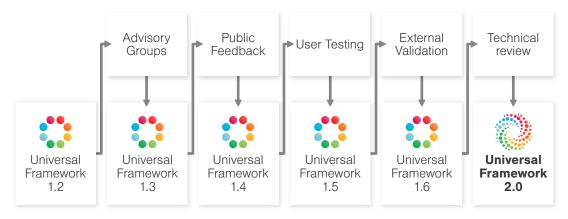


Figure 19: Phase 2 - Iterative development and testing of Universal Framework 2.0

By the end of the process, Universal Framework 2.0 had been formed and refined through repeated cycles of testing and improvement. As such, it not only built off the strong starting point of Universal Framework 1.0 but had built up a strong evidence base in its own right.

Public Feedback

Informed by feedback from the Advisory Groups, Universal Framework 1.3 was tested through public feedback, including outlining the proposed changes that were outlined in Section 5. This helped to validate the key changes that had been proposed including changes to the names of Aiming High and Staying Positive, changing how stages are used, how the numbering works and presenting essential skills in their pairs. These changes all garnered net positive responses that they were seen as improvements of between +37% to +90% demonstrating significant support.

Participants also had the opportunity to review Universal Framework 1.3 in full, and to provide feedback if they felt there were any skill steps that were unclear or missing. They also provided feedback on the extent to which that iteration of the Framework met the success criteria that we had outlined for the Review and it was good to see meaningful improvements on several dimensions, with high net positive scores of +71% to +90% for ease of use, inclusivity, comprehensiveness, relevance, and being grounded in research.

The public feedback highlighted particular enthusiasm for the simplification of the language of the steps and the introduction of a step summary to make it easier to find concepts quickly. It also highlighted some key points which have been taken forward around individual skill steps which were unclear to participants or which could be better phrased or made more inclusive. These iterations were incorporated into Universal Framework 1.4.

• • • • • • •

User testing

User testing built off Universal Framework 1.4 and was designed to explore how individuals engaged with the framework when in the mode of users rather than critics. Two types of use were explored: participants reflecting on their own essential skills against the framework; or educators assessing their class of learners against the framework.

The tests showed that more than 95% of skills steps were read and accurately interpreted in the target time period. Additionally, participants gave positive feedback on their experience, feeling that the framework had forced them to think more deeply about their essential skills. Participants who had used Universal Framework 1.0 in the past were positive about the changes, particularly the ease of interpreting the skill steps.

A small number of steps were highlighted as having been misunderstood by users and changes were made to ensure that the interpretation of users aligned with the intended underpinning concepts. Additionally, helpful feedback was gathered to support how Universal Framework 2.0 could be built into assessment tools in the future.

Demographically representative validation

The changes off the back of the user testing were incorporated into Universal Framework 1.5. This was then taken out for external validation through research in partnership with YouGov. This allowed for a sample of 2,000 UK working age adults to complete a full self-assessment against the Universal Framework, while also gathering information about their employment, job and life satisfaction and earnings.

Given the limited number of changes to the core underlying skill concepts in the Universal Framework, the goal was to ensure that Universal Framework 2.0 would be able to replicate the same patterns of skill levels and sequentiality that had been achieved for the original.

The validation was able to demonstrate that the updated Universal Framework had a distribution of skill scores that closely mapped that of the original. It was also able to demonstrate the sequentiality and similar gradients of how individuals progressed through the skill steps. It also highlighted a small number of anomalies which could be addressed in the final iteration of the framework.

Additionally, the validation was able to replicate very similar results to past research using Universal Framework 1.0 with regards to the interaction of higher essential skill levels and higher earnings, higher job and life satisfaction, and a reduced likelihood of being unemployed. This not only demonstrated the robustness of Universal Framework 2.0 but also highlighted once again why building essential skills is so critical.

Technical evaluation

The technical analysis replicated the approach that had been taken in evaluating Universal Framework 1.0 in sections 4.3 and 4.4. The goal was to ensure the completeness, relevance and lack of duplication of Universal Framework 2.0 when compared to other international best practice examples while minimising duplication within the framework.

Computational validation of the Universal Framework 2.0 was undertaken using LLMs and the same step matching process used to analyse version 1.0. This established quantitative measures for the three technical criteria required of a skills framework:

- Completeness: To what extent are essential skill elements from other frameworks included in the Universal Framework 2.0?
- Relevance: To what extent are the steps in the Universal Framework 2.0 included in other frameworks?
- Duplication: To what extent do steps in the Universal Framework 2.0 overlap?

Combining these two metrics of completeness and relevance by taking an average, the Universal Framework 2.0 scored most highly of all frameworks, with 70.31%. This is roughly a 3% improvement on version 1.0 of the Framework. The implication is that the updated version of the Framework better balances completeness and relevance than any other available framework.

	Universal Framework 1.0	Universal Framework 2.0
Universal Framework 2.0		68.66
O*Net	60.32	61.03
Entrecomp framework	57.57	60.53
YMCA George Williams Framework	51.65	52.36
Australian Core Skills Framework	51.61	52.27
SkillsFuture Singapore Critical Core Skills	47.36	49.82
Meta Skills framework	46.49	47.64
Universal Framework 1.0	55.90	

Figure 20: Comparison of Universal Framework 2.0 with other frameworks' combined duplication, completeness and relevance (average of completeness and relevance multiplied by (1-duplication%))

This picture holds true when also considering the balance of duplication. When combining all three framework measures, the Universal Framework 2.0 scores more highly than comparators.

This quantitative validation of the updated version of the Universal Framework demonstrates how the technical and qualitative review process measurably improved the Framework to ensure it provides the best possible basis for everyone to build the essential skills to succeed.

6.1 Public feedback

6.1.1 Methodology

A public feedback questionnaire was created to share the proposed changes to Universal Framework 1.0 and their rationale, as set out in Section 5. The questionnaire was particularly promoted to existing Skills Builder partners but was publicised more widely, giving a wide range of individuals to provide feedback.

There were 54 respondents to the questionnaire, although not every individual completed every question. Respondents included a full range of individuals who had used the existing Universal Framework 1.0 for up to four years, and across a full range of education, employer, and impact organisation settings. In line with usage, most respondents had used the Universal Framework 1.0 in the UK but five other countries were also represented in the feedback. Individual names, organisations and email addresses were not required for completion of the questionnaire.

6.1.2 Skill name changes

Analysis and feedback have demonstrated a high level of support for the existing skill names with two exceptions for which we are proposing alternatives:

(a) Staying Positive

Defined as: The ability to use tactics and strategies to overcome setbacks and achieve goals

Based on feedback in Advisory Groups and efforts to create alignment with external parties it was proposed that Staying Positive should be renamed as *Adapting* to align with the definition provided. Respondents were asked to what extent they thought the options best captured this skill? (Strongly Disagree to Strongly Agree)

Option	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Net Positive
Staying Positive	13%	40%	15%	21%	11%	+21%
Adapting	30%	38%	21%	8%	4%	+56%

Overall, therefore, it was clear that there was a strong majority for the *Staying Positive* skill being renamed as *Adapting*.

(b) Aiming High

Defined as: The ability to set clear, tangible goals and devise a robust route to achieving them.

Based on feedback in Advisory Groups and efforts to create alignment with external parties it was proposed that Aiming High should be renamed as *Planning* to align with the definition provided. Respondents were asked to what extent they thought the options best captured this skill? (Strongly Agree to Strongly Disagree)

Option	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Net Positive
Aiming High	23%	21%	28%	15%	13%	+16%
Planning	20%	39%	19%	15%	7%	+37%

Overall, therefore, it was clear that there was a majority for the *Aiming High* skill being renamed as *Planning*.

6.1.3 Skill pairs

We received feedback that navigating eight skills can feel like a lot when first used. In response we will be presenting the skills in pairs, to help individuals to navigate the Universal Framework 2.0.

There will be four pairs:

Communication: Speaking & Listening

Creative Problem Solving: Creativity & Problem Solving

Self Management: Planning & Adapting

Collaboration: Teamwork & Leadership

Respondents were asked, 'Will this make it easier for you to use the Framework?'

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Net Positive
Will the introduction of Skill Pairs make it easier for you to use the Framework?	45%	36%	13%	6%	0%	+86%

With overwhelming backing and a net positive score of +86%, we decided to proceed with this change.

6.1.4 Skill numbering

We will be changing the numbering of the Steps in the Universal Framework from the current 0-15 to 1-16 to make their use and computation easier.

Respondents were asked, 'Will this make it easier for you to use the Framework?'

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Net Positive
Will the introduction of Skill Pairs make it easier for you to use the Framework?	43%	26%	26%	4%	2%	+63%

While a greater proportion of respondents here were neutral on the changes, the 69% positive was considerably greater than the 6% who were negative about the changes with a net positive of +63%, so it was decided to proceed with this change.

6.1.5 Skill stages

Based on feedback, we will be organising Skill Steps into four stages of equal size to help adults to navigate the Universal Framework more easily.

For schools and youth settings, we will be suggesting a range of steps which might be appropriate for different ages, while giving flexibility for adjustments according to learners' needs.

This will be a change from the previous approach of putting steps into stages of varying sizes according to themes within the steps, because we had feedback that the themes sometimes felt artificial to users.

Respondents were asked, 'Will this make it easier for you to use the Framework?'

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Net Positive
Will proposed changes to stages for adults and their removal for others make it easier to use the Framework?	34%	42%	19%	4%	2%	+70%

With a net positive response of +70% to the change, we decided to proceed with this change.

6.1.6 Step summaries

Analysis and feedback suggested that adding a one or two word summary for each step will make the steps easier to navigate and understand.

For example, Teamwork Step 3 would change from: "I work well with others by taking responsibility for completing my tasks" to "Taking Responsibility: I take responsibility for completing tasks".

As another example, Listening Step 2 would change from "I listen to others and can ask questions if I don't understand" to "Clarifying: I ask questions if I don't understand".

Respondents were asked, 'Will this make it easier for you to use the Framework?'

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Net Positive
Will the addition of step summaries make it easier for you to use the Framework?	55%	34%	4%	8%	0%	+81%

This was another resoundingly popular proposed change with a net positive score of +81% and strongly agree of 55%. As such, it was decided to take forward the introduction of step summaries.

6.1.7 Step changes: overall feedback by essential skill

Through this analysis and more, we proposed a series of improvements to the Universal Framework.

Respondents were then given the opportunity to view the proposed updated version of the Universal Framework. They were then asked whether they thought that version was:

- Comprehensive (it contains all the skills and steps I need)
- Relevant (everything it contains is useful)
- Interoperable (it can be used alongside other tools you use)
- Easy to use

Respondents were able to respond on a five-point Likert scale from Strongly Agree to Strongly Disagree. The Net Positive score was taken as the percentage responding Strongly Agree or Agree for an answer, minus the percentage responding Strong Disagree or Disagree. These calculated scores are shared here:

		Net Positive Scores	
Essential skill	Comprehensive	Relevant	Easy to use
Listening	+94%	+94%	+86%
Speaking	+90%	+92%	+79%
Problem Solving	+88%	+94%	+75%
Creativity	+76%	+80%	+67%
Staying Positive*	+85%	+75%	+79%
Aiming High*	+88%	+84%	+77%
Leadership	+85%	+89%	+80%
Teamwork	+86%	+90%	+89%

Overall, therefore, it is clear that the proposed Universal Framework has been well received by respondents to the public feedback. Feedback on individual skills were then reviewed to identify where minor further improvements might be possible.

Essential skill	Number of pieces of feedback
Listening	37
Speaking	49
Problem Solving	38
Creativity	48
Adapting	37
Planning	23
Leadership	29
Teamwork	26

6.1.8 Individual skill step feedback

Respondents were also given the opportunity to give feedback on individual skill steps. These pieces of feedback were analysed as the Framework was further iterated.

• • • • • • •

6.1.9 Overall feedback on the changes

Finally, respondents were given the opportunity to feedback on their overall perceptions of the proposed new version of the Universal Framework.

Respondents were asked, 'Having viewed the proposed updated Universal Framework and the changes, do you feel that the proposed version is: (Strongly Disagree - Strongly Agree)

- Comprehensive (it contains all the skills and steps I need)
- Relevant (everything it contains is useful)
- Interoperable (it can be used alongside other tools you use)
- · Easy to use'

Their responses were:

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Net Positive
Comprehensive (it contains all the skills and steps I need)	30%	62%	6%	2%	0%	+90%
Relevant (everything it contains is useful)	44%	40%	12%	4%	0%	+80%
Interoperable (it can be used alongside other tools you use)	38%	46%	15%	2%	0%	+81%
Easy to use	42%	38%	18%	2%	0%	+78%

Respondents were then asked, 'Would you agree that the revised Universal Framework:

- Is backed by research
- Clarifies what essential skills are
- Provides a model or structure for progression in essential skills
- · Allows accurate assessments of individuals' essential skills
- Is inclusive and adaptable to a wide range of individuals with different needs'

Their responses were:

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Net Positive
Is backed by research	38%	42%	17%	2%	0%	+79%
Clarifies what essential skills are	48%	50%	2%	0%	0%	+98%
Provides a model or structure for progression in essential skills	57%	43%	0%	0%	0%	+100%
Allows accurate assessments of individuals' essential skills	33%	57%	6%	4%	0%	+86%
Is inclusive and adaptable to a wide range of individuals with different needs	29%	46%	21%	4%	0%	+71%

Respondents were given space to share anything they particularly liked from the new version of the Framework, as well as any further comments and feedback.

The themes that emerged on what respondents particularly liked included:

- Step summaries: These were widely cited as a useful addition to the Framework, supporting its use and navigability.
- Step descriptors: The simplified language of the steps was appreciated, and seen to support making assessments easier as well as being more accessible for learners.
- Navigability: The clarity around skill pairs and step numbering were seen to make it easier to navigate the Framework.
- Openness: Some respondents appreciated the ability for the Framework to be used in a wide range of settings and felt that the language translated well between those.
- New content: Some respondents highlighted particular new content that they appreciated for example, on wellbeing or improving a team culture.
- Starting from Step 1: One respondent highlighted how starting from Step 1 would reduce the risk of the Framework being interpreted incorrectly as a deficit model.

Areas for further work during the final iteration of the Universal Framework or to bear in mind when producing final tools and resources included:

• Recognising diversity of achievement levels: One respondent highlighted the need to be cautious about linking levels to rough ages in any documentation as for those working with SEND students, those for whom English is not their first language and those using different communication styles as it would be discouraging to be reminded of the gaps and also some neuro diverse individuals with spiky profiles may not be considered for the higher ones even if they are appropriate.

- Focus on inclusion: One respondent highlighted that there exist significant gaps in individuals' access to training in these skills, and when Universal Framework 2.0 comes to be rolled out, trying to work with organisations focused on access would be valuable.
- Recognition of digital changes: One respondent highlighted the changing nature
 of work as a result of technological change. It was suggested that even if there
 are not specific skill steps focused on this, recognising this context would be
 important for how the steps are applied and the training put around them.
- Providing context that not all skill progress will be linear: When the Universal Framework
 is shared, the toolkits and other training should highlight that while the steps are in a
 logical order, individuals will likely not move in lockstep through these steps, and need
 to be comfortable that they might progress at different rates in different areas.
- Recognising that the context where skills are used matters: In accompanying documentation it should be made clear that we all fluctuate in our skills depending on the scenario.

6.1.10 Public feedback conclusion

The public feedback has been a powerful opportunity to test and validate many of the changes that are proposed for the Universal Framework as we move to this second version. Alongside the overall feedback on some of the dimensions, the detailed feedback on individual steps and their interpretation supported making further tweaks and improvements which was of great value.

The feedback also helped to highlight both what respondents valued about the changes and gave some important pointers about how to best support the framing and sharing of Universal Framework 2.0 when it is launched.

6.2 User testing

6.2.1 Methodology

The user testing was intended to test the next iteration of the Universal Framework (by this stage, Version 1.4) to gain insights as to how users interpreted those skills steps. While the public feedback (Section 6.1) elicited useful insights, the user testing was an opportunity to see the Universal Framework being put to use.

The goal was to explore how individuals actually interpret the Universal Framework steps when they engage with them as a user, rather than as a critic. We sought to identify where there were skill steps which were unclear or open to misinterpretation.

Users were asked to take part in one of two variants:

- Self-reflection interviews: Where they were reflecting on their own
 essential skills and assessing how frequently they demonstrate the steps of the
 Universal Framework, from almost never to almost always. This was used for
 non-educators, including children and young people as well as adults.
- **Group assessment interviews:** Where educators of all stages were reflecting on the essential skills of a group of learners they taught and determining how many learners are able to demonstrate the steps of the Universal Framework, from none to all.

Of the user testing participants, 20 people completed self-reflection interviews and 12 educators completed group assessment interviews. Of these 32 participants, 24 people were not partners of Skills Builder Partnership and had not seen the Universal Framework before, while 8 were existing users of Universal Framework 1.0.

Users completed the exercise with two skills each, so that each skill had at least seven users completing a test on it.

During the test, facilitators asked participants to provide a commentary of their thinking as they completed a reflection against each step in turn. While encouraging participants to share their thinking as fully as possible, the facilitators did not provide guidance on what responses should be made. Facilitators recorded the accuracy of participants' interpretation of the steps, the time taken for them to respond, and any other feedback that participants provided on how they thought the steps could be improved.

6.2.2 Overall findings

Overall, the results of the user testing were positive: 95% of responses illustrated that users were able to accurately interpret the skill steps and assess themselves or their group of learners accordingly.

In the vast majority of cases, users found the language of the steps simple, easy to interpret and accessible. For example, one user noted that the new structure of the skill steps, with a summary followed by a descriptor, adds clarity to the steps. For the most part, users also found the steps to be relatable to their own lives, whether they were in full-time education, facilitating work experiences or working as a senior professional. While users showed that each skill step provides enough flexibility to apply in a range of contexts, they also commented that they liked the specificity of the steps and most enjoyed the opportunity to self-reflect.

People in work noted that the framework was very applicable to their job, supporting the universality of the Framework. For example, one participant reflected, "It does make you think about how you listen to people and engage with perspectives at work - it makes you think, could I be doing this better?" Another participant noted that they appreciated the increasing challenge of the skill steps as it prompts you to think more deeply about your skills.

Educators also appreciated the specificity of the Universal Framework. One educator said that the incremental steps will allow them to see progression in the classroom. Another participant said that reflecting on the skills reminded them of what it is important for learners to be able to do: "I think the communication questions are really useful in terms of making me reflect on how the students communicate, because it reminds me of what is important for students to be able to do."

.

6.2.3 Issues flagged

The user testing was able to flag some challenges in the iteration of the Universal Framework that was being tested. In some cases, the best response was to make changes to the Framework and in some cases it was felt that providing clear definitions around the Universal Framework would be a better fit:

Skill Step in Universal Framework 1.4	Why flagged	Change in Universal Framework 1.5
Speaking Step 4: Organising thoughts: I order my points to be clear	'Clear' usually refers to how you are speaking rather than what you are saying, especially for younger learners.	Speaking Step 4: Organising thoughts: I order my points to be understood
Speaking Step 7: Expressing Self: I use tone, expression and gesture to support my communication Speaking Step 12: Adaptive communication: I adapt my tone and structure to communicate effectively	Steps 7 and 12 felt repetitive to some people because they reference tone and gesture, and speaking engagingly. The nuance isn't immediately obvious to a first-time reader.	Speaking Step 7: Expressing self: I use tone, expression and gesture to be understood Speaking Step 12: Adaptive communication: I adapt my communication depending on audience reactions
Problem Solving Step 3: Sharing problems: I share problems to get support	Some people saw this as too similar to the previous step, and found it difficult to ascertain the difference between seeking help and sharing a problem.	Problem Solving Step 3: Sharing problems: I describe problems to others
Problem Solving Step 9: Exploring causality: I analyse causes and effects	'Causality' caused issues because participants sometimes read it as 'casuality' [sic] and did not understand what it means.	Problem Solving Step 9: Exploring causation: I analyse causes and effects
Problem Solving Step 10: Recognising patterns: I identify patterns and principles	People asked for clarification on the word 'principles'. The summary only mentions patterns so does not feel like a direct summary of the step.	Problem Solving Step 10: Recognising patterns: I identify patterns to gain insight
Problem Solving Step 11	Some people were unsure of the meaning of 'systems thinking'.	'Systems thinking' needs to be explained in the Handbook and Interactive Framework.
Problem Solving Steps 14, 15 & 16	People are unsure as to what strategic plans are.	'Strategic plans' requires definition in the Handbook and Interactive Framework

Planning Step 1: Sensing safety: I know when something is unsafe	There were very varied interpretations of this and examples mentioned were not always linked to planning. Also, one user was able to demonstrate this less often than higher steps, which seems counterintuitive.	Planning Step 1: Sensing difficulty: I know when something is too difficult	
Leadership Step 1: Understanding reactions: I tell how an idea makes me feel	People stumbled on this one a lot because they didn't understand if 'tell' meant 'say' or 'know / understand'.	Leadership Step 1: Understanding reactions: I know how an idea makes me feel	
Leadership Step 5: Managing resources: I manage time and resources to complete tasks	Is this team time or own time? It could be both and so potentially needs to be clarified.	Leadership Step 5: Managing resources: I manage team time and resources to complete tasks	
Leadership Step 9: Facilitating discussions - I facilitate group discussions	People questioned whether this meant taking part in a group discussion or leading it.	Leadership Step 9: Facilitating discussions - I structure group discussions	

These changes were built into a new iteration of the Universal Framework (Version 1.5) to be taken forward for the technical analysis and external validation exercises.

6.2.4 Reflections and recommendations

There were some further recommendations and insights from the user testing which can be carried forward to the development of the tools that support implementation of the Universal Framework:

- **Define key words:** Some words were not familiar to participants and might benefit from a description for example, strategic plans. This could be a simple hover state on the interactive Framework so people can easily clarify whether their own interpretation is in line with the intended one.
- Provide examples: People frequently said that examples of the skill steps in action would be very helpful. These should be context-specific, whether in the classroom, workplace, or personal life. For example, what could building a prototype look like in the classroom, work, or personal life? People not in work or education often found the skills more challenging to relate to, so contextual examples would be particularly helpful here if they are a focus group moving forward.
- **Giving an overview:** Having an overview of all the steps is really useful before completing the reflection on individual steps because people can then see how the steps relate to one another.
- Supporting getting started: People often reflected that the second step was easier to complete than the first, likely because they had warmed up and felt in the flow. It's interesting to note that people need time to adjust to a reflective mindset.
- **Ensuring focus:** If there's multiple themes in a clause, people tend to focus on the first, not the second.
- Age-related expectations: Age-related expectations would be helpful in
 presenting the Framework so that educators only need to look at the relevant steps
 for the learners that they teach. (During this user testing, users were deliberately
 not told that the steps may become too challenging for their learners.)
- Recognising non-linearity: One specialist educator who had not seen the Framework before said they were second guessing themselves when they knew that their answers were not showing linear progression. It is useful to make people aware that skills progress doesn't need to be linear and that individual learners' profiles might be 'spiky'.

6.3 Demographically representative YouGov validation

To complete the validation of the updated version of the Universal Framework, a nationally representative sample of UK working adults assessed themselves against it via an online YouGov survey.

As version 1.0 of the Framework had been used in nationally representative research, there is a rich dataset with which to compare version 2.0 to understand both how it is similar and how it differs when used at scale in this way. We used the same fieldwork methods and analytical approaches to ensure that the findings between versions of the Framework are directly comparable.

The research concerned validation of three guestions:

- *Distribution.* How similar is the distribution of skills in the UK using the Universal Framework 2.0 relative to the previous version and other skill distributions?
- Sequentiality. To what extent are steps in the Universal Framework 2.0 ordered from easiest to hardest?
- Outcomes. To what extent does a higher skill score using version 2.0 of the Framework predict earnings, job and life satisfaction?

6.3.1 Distribution

The Universal Framework for essential skills covers expected ability from early childhood through to adulthood. Typically, essential skills improve through childhood and into employment, before dipping in older age.

For a sample of working age adults, a left-skew distribution of essential skill score is therefore expected when using the Universal Framework. This is because most adults should be able to consistently perform earlier skill steps.

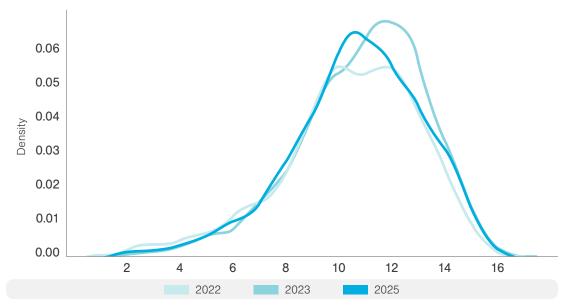


Figure 21: Distribution of average skill scores for UK adults aged 18-65 using Universal Framework 1.0 from Essential Skills Tracker 2022 and 2023 compared to Universal Framework 2.0

The distribution of skill scores are very similar between versions 2.0 and 1.0 of the Framework. The Universal Framework 2.0 maintains the expected left-skew while revealing a slightly lower median skill score than that found in 2023 using version 1.0 (10.7 vs 11), but very similar to the data from 2022 (10.6) that used version 1.0.

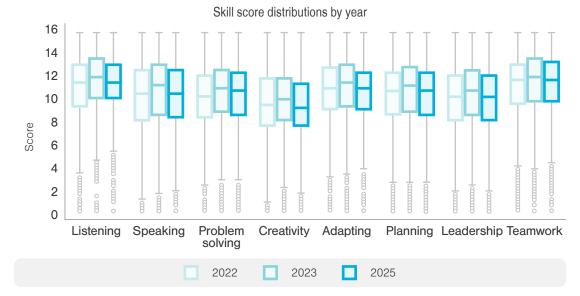


Figure 22: Distribution of skill scores for UK adults aged 18-65 using Universal Framework 2.0 2025, Universal Framework 1.0 in 2022 and Universal Framework 1.0 in 2023

The similarity of skill score distribution is also very close between the two versions of the Framework when broken down into individual skills. For example, listening and teamwork remain the highest scoring skills, while creativity remains the lowest scoring.

6.3.2 Sequentiality

As set out in Section 4.3 of this report, the Framework is designed to be progressive, and as such we expect that later steps in a skill are viewed as more difficult than earlier steps and hence will have a lower average score. Therefore when looking at gradients of mean skill score across skill steps, a decreasing gradient shows that individuals are finding these later steps more difficult than the earlier steps.

In this research, the order of the skill steps was randomised, meaning that there was no structural bias towards respondents assessing later skills to be harder.

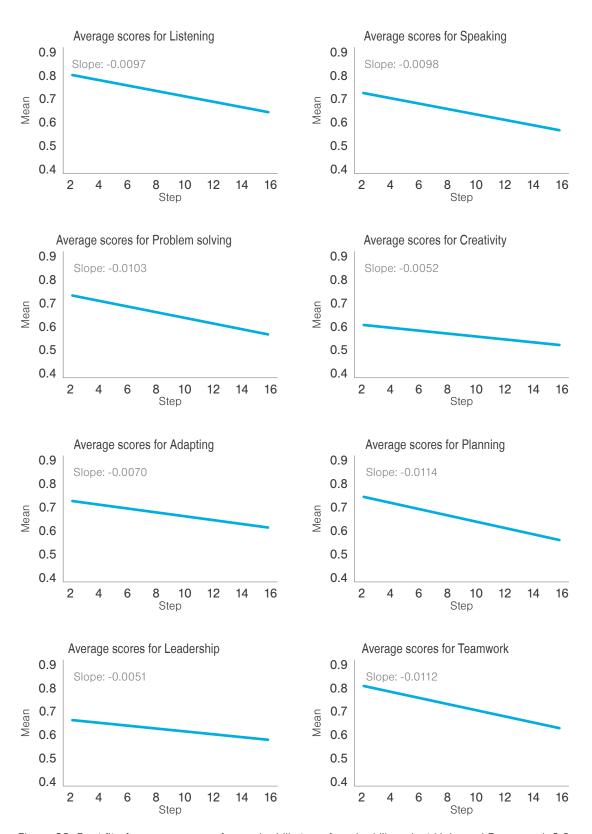


Figure 23: Best fit of average scores for each skill step of each skill against Universal Framework 2.0

Analysis shows that both overall and for each specific skill, there is implied sequentiality of steps in Universal Framework 2.0. Gradients were very similar compared to version 1.0, with an average gradient change for each skill of -0.00016.



6.3.3 Outcomes

Higher levels of essential skills as measured using the Universal Framework 1.0 were found to be associated with higher levels of income, job satisfaction, life satisfaction and social mobility. The same methodology and analysis of a nationally representative dataset of UK workers was applied to version 2.0 of the Framework.

6.3.3.1 Higher employment rates

Moving from the lower to upper quartile of essential skill score on the Universal Framework 2.0 is associated with a 1.3% reduction in the likelihood of being unemployed (from 3.6% to 2.5%), which is the same found using version 1.0 (from 5.2% to 3.9% in 2023). The population sample using Universal Framework 1.0 in 2022 and 2023 had an unemployment rate of 4.6% compared with 3.7% in 2025, which explains the shift in ranges despite the change attributable to higher levels of essential skills remaining the same.

The reduction in the likelihood of being out of employment or education - associated with moving from the lower to upper quartile of essential skill score on the Universal Framework 2.0 - also drops by 3.8%, which was the same using version 1.0 of the Framework (from 9.9% to 6.1% compared to the previous fall from 11.4% to 7.6%, which also reflects the higher employment rate in the most recent data).

6.3.3.2 Increased income

Moving from the lower quartile essential skill score to the upper quartile essential skill score is associated with a wage premium of between 8.9% and 14.6%. This is comparable to the 9.4% to 12% range found for version 1.0 of the Framework reported in Essential Skills Tracker 2023.

6.3.3.3 Higher Job Satisfaction

Multivariate regression shows that a one standard deviation increase in essential skill score using the Universal Framework 2.0 (or 2.3 steps) is associated with an increase in job satisfaction of 0.17 standard deviations (or 4% on the ONS scale).

Higher levels of job satisfaction for those with higher levels of essential skills are comparable to those measured using the Universal Framework 1.0, where a one standard deviation increase in skill score was associated with an increase in job satisfaction of 5%.

6.3.3.4 Higher Life Satisfaction

When controlling for work status, age, gender, income, education level, and health we find that a 1 standard deviation increase in essential skill score is associated with a 0.18 to 0.23 standard deviation increase in positive response to life satisfaction measures. This compares to a 0.17 to 0.22 standard deviation increase as measured using version 1.0 of the Framework.

To put that into perspective, a 2.3 step increase in essential skill score measured by the Universal Framework 2.0 is associated with a 5.6% increase in life satisfaction on the ONS scale.

6.4 Technical evaluation

Computational validation of the Universal Framework 2.0 was undertaken using LLMs and the same step matching process used to analyse version 1.0. This established quantitative measures for the three technical criteria required of a skills framework:

- Completeness: To what extent are essential skill elements from other frameworks included in the Universal Framework 2.0?
- Relevance: To what extent are the steps in the Universal Framework 2.0 included in other frameworks?
- Duplication: To what extent do steps in the Universal Framework 2.0 overlap?

These three variables are interrelated, with completeness and relevance being particularly closely linked. To demonstrate this, imagine a framework with 1,000,000 skill steps. Assuming they were sensible, that framework should have very high *completeness*, because it is able to include every component of skills in other frameworks. But such a high number of steps would likely mean that there was both a lot of duplication, and that many of the matches would be weaker - implying lower relevance. So the test for any skills framework is to balance these three variables, achieving completeness (i.e. coverage of all relevant skill components) without containing steps that are of low relevance or duplicate themselves.

This analysis also enables comparisons between the different frameworks analysed for the three criteria of completeness, relevance and duplication.

For a full discussion and details of the methodology, please see *Appendix B*.

6.4.1 Completeness

Two metrics demonstrate how complete the Universal Framework 2.0 is in comparison to other leading Frameworks:

- Quantity. How many skill steps in other frameworks matched to a skill step in the Universal Framework 2.0?
- Quality. How strong are the matches, based on the average similarity score of the matches for each Framework?

We ran this analysis both with the Universal Framework 1.0 and again with the Universal Framework 2.0 to see a comparison, with the aim of improving both the quantity and quality of matches. The graphs below show how many skill steps from alternative frameworks have a high quality match to a skill step within the Universal Framework versions.

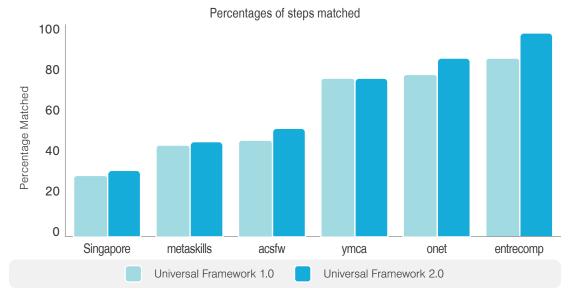


Figure 24: The percentage of steps in other frameworks with a match in the Universal Framework 1.0

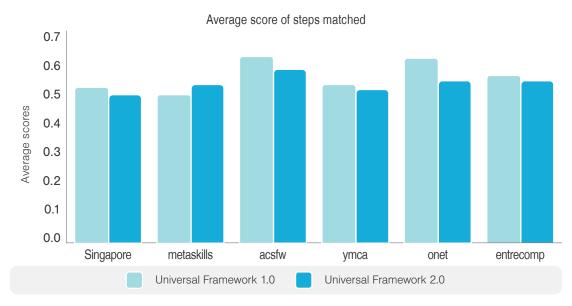


Figure 25: The average similarity score of steps in other frameworks with a match in the Universal Framework

The quantity of matches improved from Universal Framework 1.0 to Universal Framework 2.0. For example, there was a 13% increase in the number of Entrecomp Framework steps that matched a skill step the Universal Framework, increasing from 83% of Entrecomp's 190 steps to 96% of steps. The average percentage increase was 5.2% across the six other frameworks.

This analysis shows that the work on 'missing steps' set out in section 4.4.3 of this paper was successful: by identifying steps in other frameworks that were 'missing' from Universal Framework 1.0 and adding their concepts into version 2.0, we increased the Framework's comprehensive cover of essential skills.

6.4.2 Relevance

Given the improvement in completeness from version 1.0 to 2.0 of the Universal Framework, it was vital that this did not meaningfully reduce the Framework's relevance. The similarity score between matched steps in other frameworks revealed that Universal Framework 2.0 managed to maintain its high level of relevance.

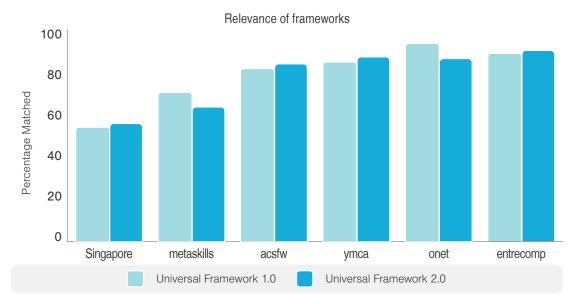


Figure 26: Proportion of Universal Framework 1.0 and 2.0 steps matched in other frameworks

We can see that the 'relevance' of the framework has decreased slightly by around less than 1%. This means the Universal Framework 2.0 remains the second most relevant framework despite a significant increase in comprehensiveness. This indicates the success of reducing 'unnecessary' step components as set out in section 4.4.4.

6.4.3 Duplication

Duplication can imply ineffective overlap in components of skills, making frameworks unnecessarily long and leading to a poor user experience.

As discussed in section 4.4, a step is considered to be duplicated within a framework if that step had a match to another step in the framework above a similarity score threshold. We used the same threshold across the frameworks - calculated by using an average upper quartile similarity - to ensure comparisons across frameworks were reliable. As such the number of duplicates returned by this analysis for the Universal Framework 1.0 differs slightly from the analysis conducted for identifying potential duplicates earlier in our review.

This analysis shows that the Universal Framework 1.0 had 21 skill steps above threshold, which could be considered semantically duplicative of other skill steps. Version 2.0 of the Framework successfully reduced this to only 3 skill steps above threshold, equivalent to 2.3% of the framework.

Framework	Number of steps in framework	Duplicate count	Percentage duplicates	Average duplication similarity score
O*Net	35	0	0	
SkillsFuture Singapore Critical Core Skills	342	6	1.75%	0.92
Universal Framework 2.0	128	3	2.34%	0.89
Australian Core Skills Framework	361	18	4.99%	0.91
Meta Skills Framework	268	23	8.58%	0.94
Entrecomp framework	190	19	10.00%	0.89
YMCA George Williams Framework	18	2	11.11%	0.87
Universal Framework 1.0	128	21	16.41%	0.89

Figure 27: Count of duplicates by framework

This significant reduction in duplication is representative of having increased the comprehensiveness of the framework in version 2.0 without increasing the number of skill steps. In other words, steps that were duplicative in version 1.0 have been successfully repurposed in order to cover more aspects of essential skills.

6.4.4 Comparative evaluation

The measures of completeness, relevance and duplication allow us to score all of the comparison frameworks against each other. Central to the value of the Universal Framework 2.0 is not only that it improves on the previous version, but that it demonstrably performs highly relative to the leading global frameworks.

Framework ->	Australian Core Skills Framework	Entrecomp framework	Meta Skills framework	O*Net	SkillsFuture Singapore Critical Core Skills	Universal Framework 1.0	Universal Framework 2.0	YMCA George Williams Framework	Average relevance (including Universal Framework 1)	Average relevance (including Universal Framework 2)
Australian Core Skills Framework		33.8	49.31	41.27	52.08	40.72	46.81	30.19	41.23	42.24
Entrecomp framework	83.68		84.21	56.33	83.68	82.63	95.26	49.47	73.33	75.44
Meta Skills framework	33.96	27.99		33.96	42.16	38.43	39.93	27.24	33.96	34.21
O*Net	85.71	74.29	71.43		85.71	74.29	82.86	42.86	72.38	73.81
SkillsFuture Singapore Critical Core Skills	25.44	25.44	25.15	26.61		23.1	25.44	15.79	23.59	23.98
Universal Framework 1.0	81.25	88.28	92.97	70.31	84.38			53.91	78.52	
Universal Framework 2.0	83.59	89.84	85.94	63.28	86.72			55.47		77.47
YMCA George Williams Framework	94.44	77.78	83.33	61.11	88.89	72.22	72.22		79.63	79.63
Average Completeness (including Universal Framework 1)	67.41	54.60	67.73	48.27	72.82	55.23		36.58		
Average Completeness (including Universal Framework 2)	67.80	59.07	70.01	48.26	77.43		63.14	38.17		

Figure 28: The percentage of steps matched in each framework and similarity of those matches to provide average 'completeness' and 'relevance' scores, using both versions 1.0 and 2.0 of the Framework

For completeness, the Universal Framework 2.0 scored 4th, with 63.14%. This was a significant increase of roughly 8% on version 1.0. Given the fact that some other frameworks also cover elements of literacy, numeracy, digital and technical skills that don't fit within the definition of essential skills, the Universal Framework is not expected to score most highly on this single metric. However, it had the second highest relevance of all the frameworks, with 77.47.

		•	•

	Universal Framework 1.0	Universal Framework 2.0
Universal Framework 2.0		70.31
Entrecomp framework	63.97	67.25
O*Net	60.32	61.03
YMCA George Williams Framework	58.10	58.90
Australian Core Skills Framework	54.32	55.02
Meta Skills framework	50.85	52.11
SkillsFuture Singapore Critical Core Skills	48.20	50.71
Universal Framework 1.0	66.87	

Figure 29: Universal Framework 2.0 compared to other frameworks' combined (average) completeness and relevance, with a set for each version of the Universal Framework

Combining these two metrics of completeness and relevance by taking an average, the Universal Framework 2.0 scored most highly of all frameworks, with 70.31%. This is roughly a 3% improvement on version 1.0 of the Framework. The implication is that the updated version of the Framework better balances completeness and relevance than any other available framework.

	Universal Framework 1.0	Universal Framework 2.0
Universal Framework 2.0		68.66
O*Net	60.32	61.03
Entrecomp framework	57.57	60.53
YMCA George Williams Framework	51.65	52.36
Australian Core Skills Framework	51.61	52.27
SkillsFuture Singapore Critical Core Skills	47.36	49.82
Meta Skills framework	46.49	47.64
Universal Framework 1.0	55.90	

Figure 30: Framework comparison of combined duplication, completeness and relevance (average of completeness and relevance multiplied by (1-duplication%))

This picture holds true when also considering the balance of duplication. When combining all three framework measures, the Universal Framework 2.0 scores more highly than comparators.

This quantitative validation of the updated version of the Universal Framework demonstrates how the technical and qualitative review process measurably improved the Framework to ensure it provides the best possible basis for everyone to build the essential skills to succeed.

6.5 Conclusion

The intention of this stage of the Universal Framework Review was to work iterate and test towards an improved Version 2.0, building on the learning and insights generated from the evaluation of Version 1.0.

• • • • • • • •

The public feedback was an important stage of validating the proposed changes that had been devised with the advisory groups in response to the evaluation of Universal Framework 1.0. It validated many of the proposed changes, while also highlighting potential improvements to individual steps which was invaluable.

The user testing was an important stage of understanding how users really interpreted and understood the revised skill steps. It further confirmed that the direction of proposed changes was the right one, while further highlighting individual skill steps that could benefit from greater refinement.

Technical validation of Universal Framework 2.0 revealed that the changes made maintained its integrity. Both the distribution of skill scores and their implied sequentiality were comparable to the previous version. Critically, higher levels of essential skills as measured using version 2.0 remain a strong predictor of life outcomes including earnings, job satisfaction and wellbeing.

By identifying in the technical review 'missing', 'unnecessary' and duplicative skill steps and correcting for these, we significantly improved the Universal Framework's completeness and duplication while maintaining relevance. This means that version 2.0 of the Framework scores quantitatively more highly than any other comparator.

7. Final version of Universal Framework 2.0



7. Final version of Universal Framework 2.0

7.1 Journey to the final iteration

The final version of Universal Framework 2.0 reflects the full journey of this Review. It builds from the evaluation of Universal Framework 1.0 and the insights generated from expert roundtables, user feedback, technical review, and comparison with international best practice.

In the second phase, the Framework went through a series of tests and iterations to refine and improve the model, drawing on insights from advisory groups, public feedback (6.1), user testing (6.2), external validation (6.3), and final technical evaluation (6.4):

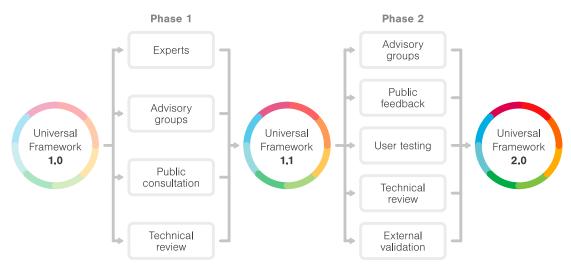


Figure 31: Summary of the Universal Framework Review 2025 Process

7.2 Ten key changes

Fundamentally, the structure of the Universal Framework, its skills and the underlying concepts of almost all the steps have remained the same. Where changes have been made, they have been in response to the thorough evaluation.

Ten changes have been made:

- 1) Revising two of the skill names: Aiming High is now Planning and Staying Positive is now Adapting.
- 2) We have paired the skills to make navigation easier:
 - Collaboration incorporates Teamwork and Leadership;
 - Communication incorporates Speaking and Listening;
 - Creative Problem Solving incorporates Creativity and Problem Solving;
 - Self-Management incorporates Planning and Adapting.

- - 3) Changing the skill numbering from 0-15 to 1-16: for computational ease and greater clarity.
 - 4) Changing skill stages: For educators, a four-step range based on ages was seen as a helpful starting point. For other audiences, skills will be organised in four stages:
 - Getting Started (Steps 1-4);
 - Intermediate (Steps 5-8);
 - Advanced (Steps 9-12);
 - Mastery (Steps 13-16).
 - 5) Skill icons: The look and feel of Universal Framework 1.0 was popular and so the skills icons and colour palette will be maintained with some changes to support accessibility.
 - *Presentation of the Framework:* The top level Framework will now be presented horizontally rather than vertically wherever possible, to better visualise progression.
 - 7) Steps that could be adapted or replaced: Input from user consultation and technical review highlighted that there were 17 steps that could be adapted or replaced.
 - 8) Additional concepts or steps: Input from user consultation and analysis of other leading international taxonomies highlighted a small number of concepts which could be perceived to be missing. 11 new steps were created, and 15 concepts were incorporated into the existing step architecture.
 - 9) Steps ordering: Technical analysis highlighted two sequences of steps in Staying Positive and Leadership for re-ordering.
 - Step language: Finally, user feedback suggested that the language of the steps could be simplified and each step given a short summary to make navigating the Framework easier.

7.3 Validated improvements

All of the changes were made because they helped to better to fulfil the goals of the Universal Framework, including to ensure the Framework's:

- Completeness
- Relevance
- Usability
- · Consistency of interpretation
- Inclusivity

Section 6.1 demonstrates the widespread support for these changes while the user testing, technical review and external validation all demonstrate the efficacy of the changes too. For example, pairing the steps received a net positive response of +86%, the introduction of summaries of the steps received a net positive response of +81%.



Universal Framework 2.0: Listening / Communication

Receiving, retaining and processing information

	Step Number	Step Summary and Descriptor
[Step 1	Focusing I can listen for at least a short time
Getting started	Step 2	Recalling I remember simple instructions
Getting	Step 3	Checking I ask questions if I don't understand
Ĺ	Step 4	Retelling I pass on information accurately
ſ	Step 5	Recognising purpose I know why someone is communicating with me
ediate	Step 6	Note-taking I record important information
Intermediate	Step 7	Active listening I show I am paying attention
L	Step 8	Questioning I ask open questions to understand more
ſ	Step 9	Summarising I rephrase or summarise what I learnt
Advanced _	Step 10	Recognising tone I recognise tone of communication
- Adva	Step 11	Identifying influence I recognise when someone is trying to influence me
	Step 12	Comparing views I compare different points of view
ſ	Step 13	Analysing views I explore why different views might come about
Mastery	Step 14	Investigating bias I analyse where bias is shown
Mas –	Step 15	Strategic questioning I use questions to challenge perspectives
	Step 16	Evaluating perspectives I objectively evaluate and integrate different perspectives



Universal Framework 2.0: Speaking / Communication

Transmitting information or ideas

	Step Number	Step Summary and Descriptor
Γ	Step 1	Sharing clearly I communicate clearly with someone I know
Getting started	Step 2	Discussing together I communicate clearly in a small group
Getting	Step 3	Meeting others I communicate with new people when I need to
ĺ	Step 4	Organising thoughts I order my points to be understood
ſ	Step 5	Knowing the audience I adapt my communication to what my audience already know
ediate	Step 6	Choosing language I choose appropriate language for the situation
Intermediate	Step 7	Expressing self I use tone, expression and gesture to be understood
Ĺ	Step 8	Using facts I use facts and examples to support my communication
ſ	Step 9	Sharing visuals I use images, charts or diagrams when it helps my communication
Advanced _	Step 10	Communicating sensitively I talk about difficult or sensitive topics effectively
_ Adva	Step 11	Speaking engagingly I communicate in a way that is engaging for my audience
	Step 12	Adaptive communicating I adapt my communication depending on audience reactions
ſ	Step 13	Negotiating I manage discussions effectively to reach an agreement
Mastery	Step 14	Constructive communicating I maintain clear and constructive communication in challenging situations
_ Mas	Step 15	Presenting I present to an audience when required
	Step 16	Inspiring others I communicate a vision persuasively



Universal Framework 2.0: Problem Solving / Creative Problem Solving

Finding solutions to challenges

	Step Number	Step Summary and Descriptor
Γ	Step 1	Following instructions I follow instructions
started	Step 2	Seeking support I find help from someone if needed
Getting	Step 3	Sharing problems I describe problems to others
Ĺ	Step 4	Finding information I find information to complete a task
ſ	Step 5	Creating options I create different possible solutions to a problem
Intermediate	Step 6	Analysing options I identify advantages and disadvantages of potential solutions
Interm	Step 7	Evaluating options I choose between possible solutions based on success criteria
Ĺ	Step 8	Researching I research to build my understanding
ſ	Step 9	Exploring causation I analyse causes and effects
Advanced _	Step 10	Recognising patterns I identify patterns to gain insight
- Adva	Step 11	Systems thinking I identify how parts of a system impact each other
	Step 12	Logical reasoning I use logical reasoning to structure problems
ſ	Step 13	Hypothesis testing I structure ideas so that I can test them
Mastery	Step 14	Strategic planning I develop strategic plans to address complex problems
_ Mas	Step 15	Evaluating approaches I evaluate the success of strategic plans
	Step 16	Continual learning I improve strategic plans based on new insights



Universal Framework 2.0: Creativity / Creative Problem Solving

Using imagination and generating new ideas

	Step Number	Step Summary and Descriptor
Γ	Step 1	Imagining I imagine different things
started	Step 2	Sharing imagination I share what I imagine with someone
Getting	Step 3	Expressing imagination I share what I imagine in different ways
Ĺ	Step 4	Generating ideas I create ideas to solve a problem
ſ	Step 5	Suggesting improvements I create ideas to make something better
ediate	Step 6	Combining concepts I can combine ideas to make new ones
Intermediate	Step 7	Identifying opportunities I identify opportunities for innovation
L	Step 8	Defining success I set out success criteria for creating new ideas
ſ	Step 9	Flexible thinking I challenge my assumptions about ideas
Advanced _	Step 10	Reflecting critically I question my own ideas to improve them
– Adva	Step 11	Seeking perspectives I seek different perspectives to develop my ideas
	Step 12	Prototyping I create quick tests of an idea
ſ	Step 13	Incubating ideas I give ideas time and attention to evolve
Mastery _	Step 14	Using curiosity I seek new concepts and ideas to innovate from
Mas	Step 15	Facilitating creativity I share creative tools for collective innovation
	Step 16	Championing creativity I nurture cultures of creativity and innovation



Universal Framework 2.0: Adapting / Self-Management

Using tactics and strategies to overcome setbacks and achieve goals

	Step Number	Step Summary and Descriptor
_[Step 1	Identifying emotions I can tell how I am feeling
Getting started	Step 2	Recognising emotions I can tell how others are feeling
Setting	Step 3	Persisting I keep going when faced with challenges
Ĺ	Step 4	Managing reactions I respond calmly when faced with challenges
ſ	Step 5	Reflective learning I reflect and learn from challenges
ediate	Step 6	Supporting others I help others face challenges
Intermediate	Step 7	Encouraging others I encourage others to keep going
Ĺ	Step 8	Managing wellbeing I have routines to manage my wellbeing
ſ	Step 9	Balancing workload I manage my workload effectively
Advanced _	Step 10	Improving performance I seek opportunities to grow my experience and expertise
- Adva	Step 11	Practising resilience I look for opportunities when faced with challenges
	Step 12	Supporting resilience I help others see opportunities when faced with challenges
ſ	Step 13	Adapting plans I change plans to work through setbacks
Mastery	Step 14	Identifying risks I identify potential risks and gains
Mas	Step 15	Managing risk I actively manage risks
	Step 16	Being enterprising I capitalise on opportunities



Universal Framework 2.0: Planning / Self-Management

Setting clear, tangible goals and devising a robust route to achieving them

	Step Number	Step Summary and Descriptor
[Step 1	Sensing difficulty I know when something is too difficult
started	Step 2	Identifying successes I know what doing well looks like for me
Getting started	Step 3	Working carefully I work with care and attention
Ĺ	Step 4	Recognising strengths I recognise what I am good at
ſ	Step 5	Facing challenges I take a positive approach to new challenges
Intermediate	Step 6	Setting goals I set achievable goals for myself
Interm	Step 7	Thinking ahead I think about routes to achieve a goal
	Step 8	Prioritising I order and prioritise tasks to achieve goals
	Step 9	Resourcing I secure the resources I need to achieve goals
Advanced _	Step 10	Involving others I engage others to achieve goals
_ Adva	Step 11	Using skills I plan how to use and build my skills to achieve goals
	Step 12	Target setting I create plans with clear targets to measure success
	Step 13	Seeking feedback I seek out a range of views to improve plans
Mastery	Step 14	Project planning I use planning tools to organise complex projects
Mas –	Step 15	Adaptive planning I use data to evaluate progress and make adaptations
	Step 16	Agile planning I work flexibly and responsively to improve my plans



Universal Framework 2.0: Leadership / Collaboration

Supporting, encouraging and motivating others to achieve a shared goal

	Step Number	Step Summary and Descriptor
[Step 1	Understanding reactions I know how an idea makes me feel
Getting started	Step 2	Sharing reactions I explain how an idea makes me feel when appropriate
Getting	Step 3	Recognising reactions I know when others have strong feelings about something
Ĺ	Step 4	Organising tasks I divide up tasks in a fair way
ſ	Step 5	Managing resources I manage team time and resources to complete tasks
ediate	Step 6	Mentoring I use my experience to support others
Intermediate	Step 7	Self-awareness I recognise how others see my strengths and weaknesses
	Step 8	Evaluating others I identify others' strengths and weaknesses
ſ	Step 9	Allocating roles I allocate roles based on strengths and weaknesses
Advanced _	Step 10	Facilitating discussions I structure group discussions
- Adva	Step 11	Managing disagreements I support shared decision making
	Step 12	Coaching I use structured questioning to help others
ſ	Step 13	Motivating others I use a range of approaches to motivate others
Mastery	Step 14	Emotional intelligence I respond to others' emotions to lead effectively
Mas	Step 15	Leading thoughtfully I recognise my leadership style and its impact on others
	Step 16	Leading adaptively I adapt my leadership style to the situation



Universal Framework 2.0: Teamwork / Collaboration

Working cooperatively with others towards achieving a shared goal

	Step Number	Step Summary and Descriptor
Getting started	Step 1	Working together I work with others when appropriate
	Step 2	Adjusting behaviour I behave in a way that fits the setting
Setting	Step 3	Time keeping I keep to time reliably
Ĺ	Step 4	Taking responsibility I take responsibility for completing tasks
ſ	Step 5	Supporting others I help others as much as I can
Intermediate	Step 6	Being accountable I am accountable for my goals
Interm	Step 7	Contributing I contribute to group activity
Ĺ	Step 8	Valuing others I recognise the value of others' ideas
ſ	Step 9	Being inclusive I support others to thrive in a group
Advanced _	Step 10	Being diplomatic I avoid creating unhelpful conflicts
- Adva	Step 11	Resolving conflicts I work collaboratively to resolve unhelpful conflicts
	Step 12	Networking I build helpful relationships beyond my team
ſ	Step 13	Reflecting collectively I reflect on progress and suggest improvements
tery _	Step 14	Learning collectively I evaluate successes and failures and share lessons
Mastery	Step 15	Developing others I support my peers to develop
	Step 16	Improving culture I improve the team culture

8. Conclusion and next steps



8. Conclusion and next steps

Section summary

Universal Framework 2.0 is a meaningful step forwards on Universal Framework 1.0, while building on what is already working well. It will allow educators, impact organisations, employers, and individuals to better understand and build their essential skills.

Particularly, the improvements ensure that Universal Framework 2.0 is even more:

- Comprehensive: Universal Framework 2.0 is more comprehensive than ever before, incorporating the latest thinking and research about how to build essential skills effectively.
- *Inclusive*: Universal Framework 2.0 has been designed and refined with experts in inclusive practice in order to ensure that it is as open and inclusive a set of tools as possible.
- *Usable:* Universal Framework 2.0 incorporates 5 years of learning from the widespread use of Universal Framework 1.0 with millions of individuals to make it as usable as possible.

Given the depth and comprehensiveness of the Review, we are committing to maintaining Universal Framework 2.0 until 2035 when we will carry out the next Review.

We are grateful for the generous input of a huge number of partners and experts over the course of this twelve-month review. We hope that Universal Framework 2.0 will likewise make a big contribution to ensuring that ever more individuals are building the essential skills to thrive.

8.1 Putting Universal Framework 2.0 to use

This report has captured the journey of evaluating Universal Framework 1.0 after five years of implementation at scale and then iterating and testing improvements to create Universal Framework 2.0. We hope that it has demonstrated the primary commitment to creating a tool which enables individuals to systematically understand and build their essential skills.

Ultimately though, Universal Framework 2.0 will only have an impact if it is used widely. One of the big advantages of Universal Framework 1.0 has been its widespread uptake across education, impact organisations and employers as well as adoption by governments and policy makers.

As Universal Framework 2.0 is taken up, we hope to accelerate that uptake and usage even further. With more governments committing to building essential skills (however named) as a core outcome of a good education, Universal Framework 2.0 can play a crucial role in turning those ambitions into real change in practice in classrooms, the wider youth sector, and the employment and skills sectors.

The next wave of innovation will come from partners and users bringing the framework to life in application - whether in the classroom, through sports, arts, volunteering, or in the workplace. Universal Framework 2.0 provides a common language and a shared set of outcomes but there are many routes to achieving them - indeed, the transferability of the skills is enabled by their deliberate practice and application in diverse settings and the explicit understanding of what changes and what remains the same when that happens.

8.2 Driving inclusivity

One of our key goals in the Universal Framework Review 2025 was to ensure that the framework was as inclusive as possible. This is vital as part of our mission to ensure that one day, everyone builds the essential skills to thrive.

To do so, our approach included:

- Advisory Groups: Within the groups who attended the Advisory Group sessions, we were keen
 to ensure there were organisations, employers and educators with particular expertise and
 insights on inclusion and accessibility. This included specific areas including Neurodivergence
 and Disability, as well as ensuring a focus on underserved groups and those furthest from
 education and employment. The organisations invited to be involved in the conversation included
 Mencap, BASE, DFN Project Search, National Youth Agency, and National Literacy Trust.
- Expert Advisors: Alongside the Advisory Group sessions, we also held individual
 meetings with some key stakeholders and influential voices to ensure detailed insight
 around specific areas of focus. These expert advisors responded to the same question
 prompts but were also given the platform to share wider observations, feedback and
 advice from their networks. The advisors also included those with lived experience.
- User Testing: As part of the User Testing process for the framework revisions, we have also ensured that the feedback we gather comes from individuals from a range of groups and backgrounds, and has inclusion and accessibility as a particular focus.

As the content and format of Universal Framework 2.0 was finalised, our attention turned to ensuring that this is designed and presented in a way that is accessible and inclusive. We have also created an Expanded Version of Universal Framework 2.0 with more increments between the steps to support progression.

We renew our commitment that this should be as open and inclusive a framework for everyone to build their essential skills.

8.3 Next Review: 2035

Having built in so much learning over the last five years, we are not proposing to change the Universal Framework until 2035 - that is, in a decade's time. We may update the Handbook in 2030 if technological or other changes mean that the explanation for applying that skill step has meaningfully changed. However, the top level skill descriptors will not be reviewed until 2035.

We hope that this will ensure the consistency and stability of the Universal Framework to allow partners to use it confidently and effectively

8.4 Thanks

This Review has drawn hugely on the expertise and experience of a wide range of individuals. This has included educators, impact organisation partners, youth practitioners, academics, learning and development professionals, policy makers, business leaders and many others.

We are hugely grateful for them sharing their time and insights so generously and openly. We share Universal Framework 2.0 in the same spirit of openness and with the ambition and belief that it will further support our shared mission that one day, everyone builds the essential skills to thrive.

Appendices



APPENDIX A: ADVISORY GROUPS

This work has benefited hugely from the generous support and expertise of a wide range of stakeholders and partners. Through Advisory Groups and individual conversations, the report authors have been able to improve the Universal Framework across the span of the Universal Framework Review. We would like to thank the following individuals for their contributions to this Review:

Alan Teece, Director, Morrisby Organisation

Alex Kelly, Co Founder, Unifrog

Alexandra Hall-Chen, Senior Policy Advisor, Institute of Directors

Ali Bain, Learning Consultant, Cabinet Office

Alison Peacock, CEO, Chartered College of Teaching

Andrew Berry, Head of Impact and Insights, Young Enterprise

Andrew Law, Director of Innovation, Open University

Andy Carpenter, Head of Foundation, Harlequins Foundation

Anna Morrison, Director, Amazing Apprenticeships

Anna Trethewey, Executive Director Corporate Affairs and Strategy, AQA

Anne Bamford, Non Executive Director

Anne Teravainen-Goff, Senior Evaluation Manager, National Literacy Trust

Bethia McNeil, CEO, YMCA George Williams

Bill Lucas, Professor, University of Winchester

Brett Wigdortz, CEO, Tiney

Cate Kalson, Chief People Officer, Opencast

Ceri Saunders, STEM Ambassadors Innovation Manager, STEM Learning

Chris Hatherall, Principal, UTC Warrington

Chris Thompson, Programme Lead, JISC

Chris Wright, Head of Wellbeing, Youth Sport Trust

Christina Hicks, Director of Employability & Creative Programmes, Catch 22

Claire Cookson, CEO, DFN Project SEARCH

Claire Maton, Head of Employability Programmes, Sutton Trust

Claire Robinson, HR Director, Amey

Clare Heald, CEO, CAT trust

Coralie Colmez, Co founder, Unifrog

Craig Eastwood, Career Project Manager, Australian Centre for Careers Education

Daniel Sandford Smith, Director, Gatsby Foundation

Dave Payne, Head of Access and Volunteer Programmes, Institute of Chartered Accountants for England & Wales (ICAEW)

David Marsden, Group Head of Talent, Lloyds Banking Group

David Morgan, Chief Executive, Careers Development Institute

Diana DeRubeis, Head of Development, Mencap

Dominic Nolan, Associate Director, Corporate Social Responsibility UK/I, Kyndryl

Egle Havrdová, Director, Schola Empirica

Ellen Whitter, Head of Strategy, Impact and Data, Duke of Edinburgh

Elnaz Kashefpakdel, Director of Policy, Research and Impact, Speakers for Schools

Emily Evans, CEO, Economist Educational Foundation

Emily Tanner, Programme Head (Post-14 Education & Skills), Nuffield

Emma Austin, Web Content Manager, Barclays Life Skills

Fiona Evans, CEO, IntoFilm

Fiona Fletcher, Programme & Projects Coordinator - Careers & Employability, Sheffield City Council

Frank Bowley, Head of the Unit for Future Skills, Department for Education

George Kearney-Bambridge, Director of People and Partnerships & Deputy CEO, Envision

Ginny Page, Director of Education, Gatsby

Hannah Russell, CEO, British Science Association

Hannah Stoddard, Director of Strategy & Impact, NCS

Helen Reynolds, Senior Relationship Manager, Heathrow Airport

Holly Papworth, Head of Policy, Edge

Honor Wilson Fletcher, CEO, British Exploring Society

Ian Davis, Director, Skills Builder Partnership

Ivana Hokešová, Project Coordinator, Schola Empirica

Jacqui O'Hanlan, Director of Learning & National Partnerships, Royal Shakespeare Company

James Zuccollo, Director for School Workforce, Education Policy Institute (EPI)

Jane Fernandes, Collective Action Manager, Fair Education Alliance

Jennifer South, Head of L&D, Oliver Bonas

Jo Egan, Head of Youth Programmes, The Scouts

Jo Malone, Director, Foundation for Education Development (FED)

Jo Owen, Leadership Partnership

John Yarham, Deputy CEO, Careers & Enterprise Company

Jon Baggaley, CEO, PSHE Association

Jonathan Mitchell, Deputy Director, Future Skills and Innovation, Institute for Apprenticeships & Technical Education (IFATE)

Julia Cleverdon, Vice Patron, Business in the Community

Kate Paradine, CEO, Voice 21

Kate Roberts, Head of Careers, Learning Curve Group

Katharine Horler, Chief Executive, Careers England

Katherine Crisp, Founder & CEO, Social Innovation for All

Laura Davis, CEO, BASE (British Association for Supported Employment)

Lauren Mistry, Deputy CEO, Youth Employment UK

Leigh Middleton, CEO, National Youth Agency (NYA)

Lesley Thain, Head of Education, Careers & Enterprise Company

Liam Nolan, Head of Communications and Stakeholder Engagement, Children's University

Lindsey Wright, Head of Impact, The King's Trust

Liz Moorse, Chief Executive, Association of Citizenship Teaching

Liz Robinson, CEO, Big Education

Lizzie Jones, Programme Manager, National Literacy Trust

Lorna Beard, Strategic Director of Education, NASEN

Lucy Supperstone, Director Innovation and Standards, Leadership Skills Foundation

Lynda Gratton, Professor, London Business School

Mahad Ali, Executive Director, Commercial Education Trust (CET)

Marc Leckie, Chief Executive, Tottenham Hotspur Foundation

Marco Shek, Executive Director, Ednovators

Mark Hilton, Membership Director, BusinessLDN

Mel Simmonds, Employment Consultant, Hidden Gem Services

Neil Bachelor, Founder & Director, Omnifolio

Ola Kolade, Director of Education & Skills, Business in the Community

Oli de Botton, CEO, Careers & Enterprise Company

Oscar Bingham, Strategic Change Lead: Director of Youth Sector Innovation, UK Youth

Paola Fatur, CEO, Teach a Man to Fish

Paul Burke, Head of the ICRS Secretariat, Institute of Corporate Responsibility & Sustainability

Peter Cheese, CEO, CIPD

Peter Estlin, Non Executive Director

Phil Avery, Director of Education, Bohunt Education Trust

Phil Holton, Senior Strategy Manager, Pearson

Rachael Skews, Founder, Cognus Coach

Rebecca Healy, Careers Inspiration Manager, Engineering UK

Robert West, Director of Education & Skills, CBI

Romana Šloufová, Project Manager, Schola Empirica

Rosie Clayton, Head of Rethinking Assessment, Rethinking Assessment

Ruth Tawiah, Programmes and M&E office, JA Africa

Sally Dicketts, Non Executive Director

Samantha Butters, Co-CEO, Fair Education Alliance

Sherry Coutu, Non Executive Director

Steph Matthews, National Manager – Leadership, Youth Sport Trust

Stephen Isherwood, Co-CEO, Institute of Student Employers

Susan Douglas, Senior Advisor, British Council

Susie Kendall, Curriculum Design Manager for Careers Leader Programme, Teach First

Tarek Chedri, Future of Work Lead, Teach For All

Tom Richmond, Founder and Director, EDSK

Tony Ryan, CEO, Design & Technology Association

Tristram Hooley, Professor, University of Derby

Vikas Plakkot, Director, Teach For All

Zoe Bullock, Head of People, Oliver Bonas

APPENDIX B: TECHNICAL ANALYSIS

Datasets

Dataset 1a: Nationally Representative Survey Data 2021, 2022

Two nationally representative online surveys were conducted for individuals to assess themselves against Universal Framework 1.0. Fieldwork was conducted in November 2021 and November 2022. Collectively the surveys received 4,790 responses. Figures were weighted and are representative of all UK adults at the time of collection.

More information about the data collection and modelling can be found in Essential Skills Tracker 2023.

Dataset 1b: Nationally Representative Survey Data 2025

A nationally representative survey for individuals to assess themselves against all 128 steps of the updated Universal Framework was conducted in January 2025. Individuals were given the 128 steps in a randomised order. Fieldwork was undertaken by YouGov Plc via an online survey and received responses from 2,114 respondents. Figures were weighted and are representative of all UK adults.

Dataset 2: Skills Builder Benchmark Data

Skills Builder Benchmark is a tool for self-assessment across all eight skills. Individuals using Benchmark can assess between one and eight skills. Two data validation methods were considered, the first method included responses from all users who had assessed at least one skill and had greater than 0 variance in their answers. This validation method resulted in over 5.9 million skill step responses from 50,389 users, but created an imbalance of responses for skills, with some skills having 300,000 more responses.

The second method looked at only including responses from those who had assessed all eight skills, with greater than 0 variance in their answers. Although this reduced the sample size to being over 4.8 million skill steps from 31,529 users, this ensured that there was a more equal balance of responses per skill and therefore a more accurate analysis and comparison across skills.

Dataset 3: Skills Builder Hub Data

Skills Builder Hub is a platform where teachers can assess their learners' essential skills as a group. Groups are typically learners under the age of 18. The collective skill assessments of 18,189 such groups were analysed. No significant outliers were found from the analysis of this dataset.

Large Language Models:

In the technical analysis, Large Language Models (LLM's) were used to assess the semantic similarity between texts. This similarity is measured two ways: a cosine similarity score and a similarity score generated by a cross-encoder. These are reached in slightly different ways and using different models. The cross-encoder was found to be more accurate than the cosine similarity score, particularly in cases with directionality in a sentence (e.g. "I can listen to others without interrupting" vs "I can not listen to others without interrupting).

When looking at similarity values, the closer the value is to 1, the more semantically similar the two sentences are. With Cosine similarity, vectors are created using the LLM. These embedding vectors represent the semantics of the sentence, and then the cosine similarity is calculated by flattening the vectors to a two dimensional vector and calculating the cosine of the angle between the vectors. For the Roberta similarity score, this is calculated by the model directly.

Although more accurate, the cross-encoder model (we used RoBERTa) is computationally much slower. For whole framework comparisons, cosine similarity scores were used to identify top matches by embedding our tokenised strings (the steps) as vectors. The cross-encoder was then used to find the best match pair of steps from these. The similarity scores referenced within the technical analysis refer to the score generated by the cross-encoder.

Nationally representative survey 2025 regression model parameters

This section contains the specifications of the major models used in the analysis of the 2025 nationally representative survey.

Wage premium

Variable	Model
Mean Skill Score	0.0697***
Age	0.835***
Education Level	0.588***
Gender	-0.139***
Parental Education	0.0514
Constant	10.0587***
Observations	640

^{***} p<0.01, ** p<0.05, * p<0.1

Life satisfaction

Variable	Model "Overall, how satisfied are you with your life nowadays?"	Model "Overall, to what extent do you feel that the things you do in your life are worthwhile?"
Mean Skill Score	0.179***	0.229***
Part time (8-29 hours a week)	0.112	0.162*
Part time (<8 hours a week)	-0.128	0.0831
Full time student	-0.0553	-0.0187
Retired	0.307***	0.0898
Unemployed	-0.638***	-0.690***
Not working	-0.643***	-0.587***
Gender	0.109**	0.121**
Age	0.354	0.123**
Income centre	0.00000602***	0.00000408***
Education level	0.138	0.0337
Constant	-0.342***	-0.249***
Observations	1294	1294

^{***} p<0.01, ** p<0.05, * p<0.1

Unemployment

Raw logistic regression between skill score and unemployment

Variable	Model
Mean Skill Score	-0.085**
Constant	-2.52***
Observations	2,114

^{***} p<0.01, ** p<0.05, * p<0.1

Raw logistic regression between skill score and being out of work or education

Variable	Model
Mean Skill Score	-0.123***
Constant	-1.15***
Observations	2,114

^{***} p<0.01, ** p<0.05, * p<0.1

