

# Better prepared

**Essential skills and employment** outcomes for young people

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## **Contents**

| 1. | Foreword from Sam Butters                                       | 3  |
|----|---|----|
| 2. | Foreword from Peter Cheese                                      | 4  |
| 3. | Executive Summary   | 5  |
| 4. | Chapter 1: Introduction and research context                    | 8  |
| 5. | Chapter 2: The survey and our methodology                       | 13 |
| 6. | Chapter 3: The relationship between essential skills levels and |    |
|    | young people's socio-economic background                        | 19 |
| 7. | Chapter 4: How essential skills are being built, and the impact |    |
|    | they have for young people                                      | 24 |
| 8. | Chapter 5: How essential skills support young people's          |    |
|    | employment outcomes   | 31 |
| 9. | Chapter 6: Discussion   | 36 |
| 10 | . <u>Bibliography</u>   | 43 |
| 11 | . Appendix 1: The Skills Builder Universal Framework            | 44 |





The findings of this report are timely, hard-hitting and require immediate attention and action from us all.

The message is clear on the link between essential skills and inequality. A lack of essential skills determines employment opportunities in later life, and, at the same time, there is a strong correlation between greater social advantage and higher skills scores.

For anyone serious about tackling inequality, this reinforces, like never before, the importance of \*every\* child and young person having the chance to build these skills, to level the playing field and ensure no child's success is limited by their background.

Unlike many research reports, this also comes backed up by an answer to the question 'So What?'. In the Skills Builder framework, we have at our fingertips a practical, teachable way for all children and young people to build these skills regardless of their background.

Longstanding inequalities in educational outcomes and in wider society have been exacerbated and exposed even further by the pandemic and events of recent years. The need to address this has never been more urgent.

Many hundreds of organisations, thousands of individuals and successive policy agendas state their commitment to tackling inequalities. Yet, root causes of inequality are complex. Frustratingly, debate continues to rage over the relative importance of equipping young people with knowledge or skills through education to provide every child the best start in life. For many, the answer to this debate has long been 'both are important' and this important research provides critical evidence to support this view.

The Fair Education Alliance, a collective of 200 organisations working together to tackle educational inequality, believes that to make education fair we need an education system which develops the 'whole child' – equipping young people with knowledge, skills and the social and emotional competencies they need to succeed. By applying Skills Builder across the system – in schools and colleges, youth settings, and workplaces - we have a way to do that for every child. What are we waiting for?





**Foreword from Peter Cheese** *CEO, CIPD* 

The world of work is changing at pace, impacting not only how and where we work but also the skills individuals and organisations need to thrive.

As jobs and roles change, it is becoming clearer that there needs to be a better collective understanding of what are the essential and transferable skills we all have. The enduring skills that are needed, however technology may impact the specific job or technical skills required.

They are the profoundly human skills such as problem solving, listening, communication and teamwork. It is these highly transferable skills that enable us to work effectively together, that provide the building blocks for further skills development, and that help us progress in work or shift careers. The COVID-19 pandemic and economic uncertainty has brought the importance of these skills into focus even more.

Organisations everywhere are recognising that it is these essential skills they most need to understand, and many talk now of hiring on attitude and training for skills – in other words, hire for essential skills and then the job specific skills will have to be developed, efficiently and effectively, in the workplace.

It is vital therefore that we move to a better understanding and shared definition of these essential skills. That is why, working together with the Skills Builder Partnership, the CIPD as the professional body for HR and people development, along with a number of important and influential organisations including Business in the Community, the Careers and Enterprise Company, the Gatsby Foundation, and EY Foundation, came together two years ago as the Essential Skills Taskforce. The purpose was to champion a united approach in developing a clear, measurable and authoritative universal framework and common language to define essential skills, and to provide individuals and employers with the tools they need to succeed in the future workplace.

The research by the Skills Builder Partnership described in this report sought to understand how these essential skills are being developed within young people's education. It became clear that the opportunities to build them while in education are not evenly distributed, holding individuals back and hampering efforts to improve social mobility. And as this research clearly demonstrates, the case for action is profound. Young people who are able to build and deploy these skills benefit from improved academic performance, resilience, and employment opportunities.

Yet action at the level of schools and colleges alone is not sufficient. With 45% of young people reporting that they lack opportunities to build these skills at work, employers clearly need to step up too.

As UK businesses and educators look to reshape and adapt to the changing world around them, they will need to ensure they are not only addressing the challenges at hand but preparing for those that society will face in the future. Recognising and developing essential skills will be central to the UK's recovery, and will be key in helping us all build back better.



## **Executive summary**

#### Context for the research

The transition of young people from education into employment between the ages of 16 and 25 is always a challenging one.

The pandemic has once again had a disproportionate impact on young people – both through disruption to education, and the oversized damage to the retail and hospitality industries that often act as a critical bridge for young people into employment. This has placed further emphasis on essential skills and their critical importance to supporting an effective transition into the world of work – a relevance increasingly echoed by both educators and employers.

While there is some evidence that essential skills support effective transitions and workplace progression, the emergence of the Skills Builder Universal Framework as a shared approach to defining essential skills and quantifying progress provides a new opportunity.

This research sets out to use new data gathered with YouGov to explore three questions:

- Who has essential skills, and how does this vary by socio-economic background?
- How young people build essential skills, and what are their attitudes to them?
- What is the impact of essential skills on earnings and qualifications level?

#### How the research was conducted

This report builds off a snapshot of 3,016 individuals aged 16-25 in summer 2020, using a questionnaire administered by polling company YouGov.

Participants completed an essential skills self-assessment, based on the Skills Builder Universal Framework, covering teamwork, leadership, listening, speaking, problem solving, creativity, aiming high, and staying positive. In doing so, they reflected on the step descriptors within the eight skills that they felt they usually met.

The questionnaire also gathered wider socio-economic data about participants, including age, gender, ethnicity, type of school attended pre-16, Free School Meals (FSM) eligibility, parents' and carers' engagement with education, geographical region, and any additional educational needs. Data about employment outcomes were also gathered, including earnings when in full-time employment.

#### Who has built their essential skills?

Gathering socio-economic data alongside a quantitative measure of essential skills score allows us to build a clearer picture for the first time about how levels of essential skills vary by different characteristics. We found:

- Social advantage: Greater social advantage was correlated with higher skills scores for essential skills, using both FSM and social grade.
- Gender: Females had statistically significantly higher skills scores than males.



- *Geography:* There was no statistically significant difference in geography within the UK and essential skill scores.
- Parental engagement: Individuals who reported that their parents were significantly involved
  in their education reported higher essential skills scores than those who did not, at a
  statistically significant level.
- School type: Individuals who attended an Alternative Provision setting had significantly lower essential skills scores than peers who attended any other educational setting.

#### How young people value essential skills, and how they build them?

The survey also explored the value that young people perceive in essential skills, where they have opportunities to build them, and how they link to wider attitudes and aspirations.

Overwhelmingly, young people see the value of essential skills across key aspects of their lives for transition, including academic performance (78%), university entrance (66%), successful recruitment (91%), progression in employment (91%), and overcoming wider life challenges (89%).

There is strong agreement from young people that these skills should be taught through the education system (90%), and many felt that they had those opportunities – primarily through extra-curricular provision, but many also referred to dedicated learning time and through broader subject teaching too.

In employment though, young people felt that only 46% had opportunities to regularly build their essential skills, while 45% did not. There is some evidence that individuals who reported higher levels of essential skills both have clearer career ambitions, and have found them easier to work towards.

Finally, there are strong links between higher essential skill scores and self-efficacy and perseverance of effort. These further support the case for the positive impact of building these skills.

#### What is the impact of essential skills on income and qualifications?

Finally, we turn to establishing the value of essential skills in supporting young people's employment outcomes. There is evidence of a wage premium of around 15% or £3,400 per year for full-time workers aged over 19 moving from the 1<sup>st</sup> percentile of skills score up to the median.

This wage premium is substantially increased in cases where young people report confidence in applying their essential skills in a range of scenarios. In this case, the wage premium for those individuals rises to £10,200.

We have also seen that higher levels of essential skills are correlated with higher qualification levels.



#### Where next?

This report gives us important new insights from the three key questions that have framed this research. These drive several important implications for all those working to support individuals to build essential skills.

- The considerable variation in essential scores mean that educators need to think about the needs of individual students, whilst employers need to think about essential skills in a more nuanced and granular way.
- Social disadvantage and school type are strongly correlated with lower essential skills, and so educators and employers should think about where they target their efforts to boost equity.
- Parental engagement matters and so educators should think about how they can engage
  parents better, whilst employers could consider how to raise awareness of essential skills
  among their employees who are parents.
- Young people themselves see the role of essential skills vividly in supporting their academic performance, employment opportunities and overcoming adversity in their lives.
- Relatedly, young people feel strongly that those essential skills should be a normal part of a
  good education but at the moment not all young people are getting those opportunities.
- Employers can also do more to ensure everyone has the opportunity to build their essential skills through their work, as 45% felt they lacked such chances.
- There is still a challenge that many young people see their capabilities as fixed over time, rather than flexible. This is a challenge that will need to be grappled with – particularly because there is strong correlation between essential skill scores and self-efficacy, and perseverance of effort.
- Finally, essential skills clearly pay a dividend as a wage premium, particularly when combined with the ability to transfer and apply those skills. This supports a robust economic argument for investing in these skills.



## **Chapter 1: Introduction and research context**

#### **Chapter summary**

- The transition of young people from education into employment between the ages of 16 and 25 is always a challenging one.
- The pandemic has once again had a disproportionate impact on young people both through disruption to education, and the oversized damage to the retail and hospitality industries that often act as a critical bridge for young people into employment.
- This has placed further emphasis on essential skills and their critical importance to supporting an effective transition into the world of work – a relevance increasingly echoed by both educators and employers.
- While there is some evidence that essential skills support effective transitions and workplace progression, the emergence of the Skills Builder Universal Framework as a shared approach to defining essential skills and quantifying progress provides a new opportunity.
- This research sets out to use new data gathered with YouGov to explore three guestions:
  - o Who has essential skills, and how does this vary by socio-economic background?
  - o How young people build essential skills, and what are their attitudes to them?
  - o What is the impact of essential skills on earnings and qualifications level?

#### The challenges for young people

The transition from childhood into adulthood and employment is often a challenging one. It is a critical period as the structures and certainties of the education system fall away and individual young people have to navigate their futures – drawing on the knowledge, skills, and behaviours that they have accumulated.

The global pandemic has left few lives untouched. But as with previous economic crises, that economic impact has fallen disproportionately on young people. According to Impetus, young people are being worst hit by the crisis in the jobs market. The most recent labour market statistics show that youth unemployment is likely to follow the trends of previous recessions, meaning the number of young people not working or in education could increase by 50%, reaching a total of 1.1 million (Youth Employment Group, 2020)1.

The impact of the pandemic has particularly affected retail and hospitality, which were important vehicles to get young people onto the career ladder, helping them gain the work experience they need to develop skills and progress in their careers. Workers aged 25 and under are three times more likely to work in one of the two sectors where jobs are at greatest risk (TUC, 2020)<sup>2</sup>.

Precarious employment conditions and early experiences of unemployment bring with them longterm scarring effects, affecting future job prospects, health and well-being. Young people who experience long-term unemployment are more likely to be employed in semi-skilled and unskilled occupations when they do re-enter the labour market. They are likely to suffer a negative impact on earnings over the duration of their working life.

<sup>&</sup>lt;sup>1</sup> https://youthfuturesfoundation.org/wp-content/uploads/2020/09/Youth-Employment-Group-Final-Working-Group-Recommendations-August-2020.pdf https://www.tuc.org.uk/research-analysis/reports/young-workers-are-most-risk-job-losses-due-coronavirus-crisis



At the same time, education disruptions caused by the pandemic have resulted in lost learning time - especially for the most disadvantaged young people. When individuals lose out on education, there are long-term effects on earnings, with far-reaching consequences. The Education Endowment Foundation (EEF) (2020)<sup>3</sup> has published the most detailed analysis to date of the likely impact of school closures on the attainment gap. It concludes that school closures as a result of Covid-19 will likely reverse the progress made in narrowing the attainment gap since 2011.

The ongoing crisis and mitigation measures also have implications for social and emotional wellbeing. Prolonged social isolation and the stress caused by uncertainty are expected to increase the incidence of young people with mental health problems (United Nations, 2020)<sup>4</sup>. During the lockdown, the life experiences of children and young people changed substantially, including increased economic and social pressures on their families. With so much change, it may be difficult to look beyond the day-to-day and not feel overwhelmed.

For all these reasons, the focus of this report is on the role that essential skills can play in supporting young people to make a more successful transition into the world of work.

#### A growing focus on essential skills

The pandemic will have an unpredictable impact on individuals and we need to discuss how we can prepare ourselves for a new and uncertain world.

The lockdown, and its impact on individual lives, has presented us with an opportunity to think hard about the ways we should support young people to transition into secure employment. How can we put in place the structural support and investment we need to improve life outcomes for individuals at different life stages?

We will see that evidence has emerged from multiple research studies that young people, teachers and parents strongly agree that now is the time to invest more in building essential skills such as problem solving, leadership and teamwork. To 'build back better' we need these skills which underpin employability to support young people to switch sectors as the economy recovers.

The Skills Builder Partnership defines essential skills as those highly transferable skills that almost everyone needs to do almost anything: teamwork, leadership, problem solving, creativity, speaking, listening, aiming high, and staying positive.

Teachers believe that essential skills are more valuable than academic qualifications in preparing school and college leavers for the post-Covid world of work. According to a survey by Teacher Tapp (September 2020) for the Careers and Enterprise Company<sup>5</sup>, 74% of teachers say skills like teamwork and speaking will equip pupils to secure a good job in this uncertain economy. Just 62% say the same about good academic qualifications. The poll also asked those 5,000 teachers how they saw their students faring in the post-pandemic jobs market. Almost half (49%) said they fear there will be far fewer jobs and opportunities for their students in the coming years. Worryingly, 98% of teachers said their students have been anxious and uncertain about their future choices since lockdown.

<sup>&</sup>lt;sup>3</sup> https://educationendowmentfoundation.org.uk/covid-19-resources/best-evidence-on-impact-of-school-closures-on-the-attainment-gap/

<sup>&</sup>lt;sup>4</sup> https://www.un.org/development/desa/youth/news/2020/05/covid-19/

<sup>&</sup>lt;sup>5</sup> https://www.careersandenterprise.co.uk/news/workplace-skills-now-more-important-exam-results-post-covid-jobs-market-say-teachers



According to other research, the Covid-19 pandemic has continued trends towards a richer expectation of what a good education looks like: building not just knowledge, but essential skills and positive attitudes too. In a survey by YouGov (2020) for the Edge Foundation<sup>6</sup>, more than 1,000 parents and 500 teachers from across the UK were asked about how their attitudes had changed as a result of the pandemic. 92% of parents surveyed said they want education to help their children develop a range of skills like critical thinking, creative problem solving and communication. Nearly all (96%) teachers surveyed agreed that they wanted their pupils to develop a range of skills.

Employers have consistently argued that graduates are lacking the skills they'd prioritise over qualifications and that more needs to be done to improve them (CBI, 2019)<sup>7</sup>.

#### Essential skills beyond employability

Beyond employability, an important learning from the lockdown has been that essential skills underpin everything we do on daily basis: in education, training, work and in tackling life's challenges.

A recent review of evidence by the Centre for Education and Youth (CfEY) for the Skills Builder Partnership, shows that essential skills such as teamwork and creativity are associated with better life outcomes including not just employment, but also education and wider social and well-being outcomes. The rapid evidence review looked at more than 60 academic studies, to examine the extent to which essential skills impact on outcomes for children and young people, during school and beyond. There is a wide range of existing evidence pointing towards numerous, overlapping links and interactions between interventions, skills and outcomes. For instance, skills such as speaking and listening support academic attainment and professional competency. There is also evidence that teaching and developing these skills can support young people's social and emotional wellbeing, through improved social self-management.

Robust studies included in that CfEY review demonstrate that having essential skills, and their development through interventions, can be substantially beneficial for children and young people in terms of their educational, employment and social and emotional outcomes (Angus et al. 2020).

There is a growing consensus that children, young people and adults need more than good qualifications: building the essential skills we need to succeed is equally important.

#### A shared approach to building essential skills

The Skills Builder Partnership brings together more than 800 organisations including educators, employers and impact organisations around a shared goal: ensuring that one day, everyone builds the essential skills to succeed.

The Skills Builder Universal Framework sits at the heart of this shared approach, breaking down each essential skill into teachable, measurable steps (see Appendix 1). This common language and shared outcomes are critical for aligning and focusing our collective efforts to build these skills.

<sup>7</sup> https://www.cbi.org.uk/media/3841/12546\_tess\_2019.pdf

 $<sup>^{6}\</sup> https://www.edge.co.uk/news/edge-news/challenging-times-inspire-education-change-government-s-old-fashioned-approach-to-properties of the control of$ 



The Framework is the product of a collaborative effort over 18 months, developed with the CBI, CIPD, Gatsby Foundation, Business in the Community, Careers & Enterprise Company and the EY Foundation.

Complementing the Framework, the Skills Builder Principles are the 'how' to the 'what'. Each one echoes effective methods of building the core skills of literacy and numeracy, honed over the last ten years to reflect best practice in building essential skills:

- Keep it simple: Using a consistent language, and focusing on tangible steps.
- Start early, keep going: Working with individuals at stages of education and careers.
- Measure it: Understanding existing skills strengths and development areas.
- Focus tightly: Building essential skills explicitly and deliberately.
- Keep practising: Apply the skills in lots of settings and reflect on their use.
- Bring it to life: Link the essential skills to different elements of working life.

These principles have been reaffirmed by reviews including from LKMCo (2017) and CfEY (2020).

#### Why this research

There is existing evidence that indicates the value of essential skills for transitions into employment for young people which was reviewed by CfEY on behalf of Skills Builder Partnership.

That rapid evidence review evaluated studies relating to transition and employment outcomes. Of these, four studies met evidence standards 3 or 4 (the highest levels in Hughes et al.'s 2016 criteria for levels of evidence) and three at level 2 or lower. Of the most robust studies, Albandea and Giret's 2018 study analysed longitudinal survey data showing that among French secondary school-leavers, alongside educational level and field of specialism, perseverance, self-esteem, risk taking and communication skills affect wages. This was particularly the case among the highest earners (indicating these skills matter for accessing top jobs).

Another study by Galvan et al. (2014) worked to identify skills that might be related to the performance of interns at a multinational steel company. The authors analysed 500 interns' performance over four years, demonstrating a strong correlation between better inter- and intrapersonal skills, and interns' performance. They found that while cognitive skills were necessary, having these skills was not sufficient for interns to be successful – instead, broader essential skills were much more significantly associated with better internship outcomes and professional performance.

Other studies also highlight the long-articulated view from employers that essential skills are a core component of successful recruitment. For example, Finch et al.'s 2013 study of employers found that essential skills (particularly listening and teamwork) were especially important to them.

These echo the long-articulated perspective of employers who call for all young people to build these essential skills – from the CBI in 1989 through to the present day.



#### The opportunity: the Skills Builder Universal Framework

At this moment, as broader society increasingly recognises the value of building essential skills for young people, the introduction of the Skills Builder Universal Framework gives us a unique chance to build a greater level of insights into trends around *which* young people have been able to build their essential skills, their reflections on *how* they built them, and *why* they have proved valuable.

The Framework affords us this opportunity, because for the first time it provides a robust, widely used approach to being able to assess essential skills, and to create a score for individuals which can be compared to explore trends and correlations. This score can be created by individual responding to the steps that underpin each skill, and confirming whether this is a descriptor which is accurate for themselves or not.

This Framework provides us with the shared outcomes and common language to be able to build the evidence base in a consistent way. This report sits alongside the literature review already referenced, as well as a longitudinal study using the British Cohort Study (Kashefpakdel & Ravenscroft, 2021). This study showed the links between higher essential skills scores (using proxies) at the age of 10 and higher achievement in reading and mathematics, and 16-years-old and higher mathematics and overall academic achievement, as well as career aspirations.

This research therefore fills another gap in the research by focusing on that transition point between the ages of 16 and 25.

#### The rest of this report

The next chapter explains the methodology that was used, drawing on a questionnaire developed and administered with polling company YouGov.

The rest of the report focuses on three key areas:

- Who is building their essential skills?
   Chapter 3 dissects the data from the survey to understand how essential skills vary by individuals and explores trends between socio-economic background and differences in self-assessed skills scores.
- What are young people's attitudes towards building essential skills?
   Chapter 4 looks at young people's views of their essential skills, and how they value them. It also explores their reflections on how they developed those skills, and where they wish they had had greater opportunities.
- What is the impact of essential skills on earnings and highest level of qualification?
   Chapter 5 looks at the wage premium of building essential skills, as well as the link between essential skills and qualification level achieved.

The final chapter, Chapter 6, then discusses the implications of this research for individuals and wider stakeholders.



## **Chapter 2: The survey and our methodology**

#### **Chapter summary**

- This report builds off a snapshot of 3,016 individuals aged 16-25 in summer 2020, using a questionnaire administered by polling company YouGov.
- Participants completed an essential skills self-assessment, based on the Skills Builder Universal Framework, covering teamwork, leadership, listening, speaking, problem solving, creativity, aiming high, and staying positive. In doing so, they reflected on the step descriptors within the eight skills that they felt they usually met.
- The questionnaire also gathered wider socio-economic data about participants, including age, gender, ethnicity, type of school attended pre-16, Free School Meals (FSM) eligibility, parents' and carers' engagement with education, geographical region, and any additional educational needs.
- Data about employment outcomes were also gathered, including earnings when in full-time employment
- Together, this data provided the underpinning of the insights in the following chapters.

#### YouGov random probability survey

This report considers the responses of 3,016 individuals who completed a survey created by the Skills Builder team and administered by the polling firm YouGov. The fieldwork was undertaken in summer 2020. Statistical weighting ensures the sample is representative of the 16-25 age group across all four countries of the United Kingdom.

This paper applies a similar study design to Mann and Percy (2014) where the relationship between employer engagement and employment outcomes for British teenagers were examined using quantitative research methods and young people recalling their experiences during their education.

#### Measurement of essential skills

Respondents received eight separate questions representing eight essential skills in the Skills Builder Framework (see Appendix 1). Each question presented all 16 steps within the Framework as statements. Young people were guided at the beginning of the section to select the steps they think they can usually do, thinking about different contexts. They could then tick all the steps that they felt they were usually able to achieve across all eight skills.

In our analysis, the respondents were given a point for each step that they selected, and received no points for steps that they indicated that they were not usually able to do.



Table 2.1 Problem Solving skill

| Step | Statement   | % of respondents selected (they think they can usually do this step) |
|------|---|--|
| 0    | I complete tasks by following instructions  | 56%  |
| 1    | I complete tasks by finding someone to help if I need them  | 50%  |
| 2    | I complete tasks by explaining problems to someone for advice if I need                                       | 48%  |
| 3    | I complete tasks by finding information I need myself   | 55%  |
| 4    | I explore problems by creating different possible solutions   | 44%  |
| 5    | I explore problems by thinking about the pros and cons of possible solutions                                  | 50%  |
| 6    | I explore complex problems by identifying when there are no simple technical solutions                        | 33%  |
| 7    | I explore complex problems by building my understanding through research                                      | 45%  |
| 8    | I explore complex problems by analysing the causes and effects  | 41%  |
| 9    | I create solutions for complex problems by generating a range of options                                      | 39%  |
| 10   | I create solutions for complex problems by evaluating the positive and negative effects of a range of options | 41%  |
| 11   | I analyse complex problems by using logical reasoning   | 50%  |
| 12   | I analyse complex problems by creating and testing hypotheses   | 31%  |
| 13   | I implement strategic plans to solve complex problems   | 33%  |
| 14   | I implement strategic plans to solve complex problems and assess their success                                | 30%  |
| 15   | I implement strategic plans to solve complex problems and draw out learning to refine those plans over time   | 28%  |

The responses to these eight questions were then used to calculate a score per skill for each individual. A total *skills score* is calculated as a sum of each individual skill score. The minimum possible skills score is zero, and the highest possible is 126.

Descriptive statistics for the total skill scores are summarised below.

Table 2.2 Descriptive statistics for total skills score

|              |   |             | Statistic |
|--------------|---|-------------|-----------|
|              | Mean                                    |             | 54.41     |
|              | 95% Confidence                          | Lower Bound | 53.17     |
|              | Interval for Mean                       | Upper Bound | 55.66     |
|              | *************************************** |             | 51.00     |
| Total skills |   |             | 1216.040  |
| score        |   |             | 34.872    |
| Minimum      |   |             | 0         |
|              | Maximum                                 |             | 126       |
|              | Range                                   |             | 126       |
|              | Interquartile Range                     |             | 56        |



#### Socio-economic control factors

In analyses of this type, it is important that data are gathered concerning those elements of young people's lives which might be driving their educational and employment outcomes.

As well as their age, gender and ethnicity, the survey collected information on the type of school respondents attended pre-16, whether they recalled receiving free school meals (FSM) at any point in their education, their parents' or carers' level of engagement with their education, the geographical region they were in on the day of the survey, and whether they have any additional educational needs.

For all the analysis undertaken in this study these factors were included in the prediction models to create a comparable sample of young people. Such control variables are essential within statistical regression models. They ensure that any relationships found, for example, between participation in a particular type of activity and an economic outcome, cannot be dismissed as a mask for social privilege or a comparable indicator of advantage.

In Chapter 3, these factors and their relationship with levels of essential skills are explored in a series of cross-tabulations and other methods.

#### Measuring economic outcomes

As a sample selected to provide insights into the transitions of young people from full-time education into the labour market, one statistic that was particularly relevant was earnings when in full-time employment.

This data is used within the analysis to explore whether higher levels of self-reported essential skills score, using the Skills Builder Framework, can be related to higher average earnings. The analysis also looks into the correlation between highest level of qualification and levels of reported essential skills.

Responses were offered by 1,204 individuals indicating their annual gross salary, before taxation or any other deduction, from the majority earning less than £10,000, including many only in part-time work, to a small proportion of young people earning more than £45,000.

To create a more comparable sub-sample of young people for the income models, the data was filtered for young people in full-time employment. More detail is provided in the Chapter 5.





Chart 2.1 Reported income for all young people in the labour market (all types of employment)

All 3,016 respondents reported on their current economic activity with results summarised below (table 2.3). The majority of the sample are still in full time education (45%) and in full time work (24.5%).

Table 2.3 Economic activity on the day of the survey

|  | Frequency | %    |
|--|-----------|------|
| Full time student  | 1345      | 44.6 |
| Full time student and working part time (at least a few hours each week) | 460       | 15.2 |
| working full time and doing an apprenticeship                            | 52        | 1.7  |
| Working full time  | 738       | 24.5 |
| Not in education, employment or training (e.g. apprenticeship etc.)      | 158       | 5.2  |
| Working one or more part time jobs                                       | 133       | 4.4  |
| Don't know   | 58        | 1.9  |
| Other  | 71        | 2.4  |
| Total  | 3016      |      |

All the respondents in the survey also reported the level of qualification they achieved by the time of the survey. Chart 2.2 presents the distribution of the responses. The chart shows that Level 3 (33%) and Level 4-6 (26%) was mostly reported by the respondents.



2%
9%
20%
■ No qualification
■ Entry level
■ L1-L2
■ Level 3
■ L4-L5
■ L6+

Chart 2.2 Reported highest qualification achieved (%)

#### **Estimation methods**

A series of quantitative research methods were used to analyse the data gathered through YouGov in summer 2020. Using SPSS and Stata, the following exploratory analyses are undertaken:

- i. Who has essential skills, and how does this vary by socio-economic background?
- ii. How young people build essential skills, and what are their attitudes to them?
- iii. How essential skills score relates to income and qualification levels for young people?

We hypothesise that each incremental increase in the essential skills score (based on young people's self-reported reflection data) will be associated with an improvement in outcomes measures including increased income and a higher qualification achieved.

This explorative analysis is primarily carried out using Multivariate Regression models including Logistic regression for qualification analysis and Interval Regression modelling for the analysis of the income, supporting by Running Line smoothing algorithms to analyse non-linear patterns.

#### Limitations

This paper uses quantitative research methods to surface the relationships between higher proficiencies in essential skills and specific outcome areas. This is not a causal relationship and the limitations of regression models using cross-sectional data apply in this study. Controlling for a range of socio-economic factors allows analysts to ensure that any relationships found - for example, between skills and an education outcome - cannot be dismissed as a mask for social privilege or a comparable indicator of advantage or gender.

Skills questions in this survey rely on self-reported data. This is a common practice in the absence of scientifically validated measurements of skills. In the future, it is encouraged for researchers and analysts to develop improved techniques to measure essential skills where self-reflection bias is reduced to a minimum.



The outcome data collected through this survey capture a snapshot of employment status for young people and it is not offering a long-term picture. In the future, where possible, research into persistent unemployment and longer-term outcomes would add significant value to our understanding of skills.



## Chapter 3: The relationship between essential skills levels and young people's socio-economic background

#### **Chapter summary**

- The questionnaire was administered with YouGov to more 3,016 young people aged between 16 and 25. Individuals completed a comprehensive skills self-assessment against the Skills Builder Universal Framework as well as sharing wider personal data.
- This allows us to build a clearer picture for the first time about how levels of essential skills vary by different characteristics:
  - Social advantage: Greater social advantage was correlated with higher skills scores for essential skills, using both FSM and social grade.
  - o Gender: Females had statistically significantly higher skills scores than males.
  - o *Geography:* There was no statistically significant difference in geography within the UK and essential skill scores.
  - Parental engagement: Individuals who reported that their parents were significantly involved in their education reported higher essential skills scores than those who did not, at a statistically significant level.
  - School type: Individuals who attended an Alternative Provision setting had significantly lower essential skills scores than peers who attended any other educational setting.

#### The focus of the study: young people

This section presents the full background analysis for those young people who responded to the skills questionnaire. The research objective here was to explain the differences in the levels of essential skills and to what extent these relationships are significant.

Young people were defined as between 16 and 25 years of age inclusive. The distribution of skills score across representative age groups is non-normal as demonstrated in chart 3.1. Statistical tests show the between-group mean difference is not significant and age does not appear to predict level of essential skills on its own.

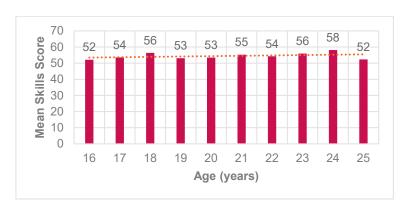


Chart 3.1 Mean skills score across age groups



#### (A) Social advantage and essential skills

The YouGov survey provided a number of metrics that this analysis uses to measure social disadvantage, including a social grading scale constructed by YouGov as a profiling variable and whether the respondents received FSM when they were in school. This is used because eligibility for FSM reflects family income and other measures of disadvantage. Disaggregating the total skills score by these measurements aims to reveal any patterns caused by respondents' social class.

Young people who recall receiving FSM during school years have a lower skills score on average. Similarly, respondents who are from lower social classes achieve lower skills scores in this sample. Both of these relationships are statistically significant at 5% using the one-way ANOVA test and treating skills score as a continuous dependent variable.

The median skills score for young people who received FSM at school is equal to 42, but 54 for their peers who didn't. The median score for respondents from higher social grading is 55 while the median for lower grading is equal to 41. This difference shows that young people who are from more economically advantaged backgrounds have generally developed essential skills to higher levels.

Table 3.1 Crosstabulation- social advantage and skills score

|                 |      | Total Skills Score |           |                 |
|-----------------|------|--------------------|-----------|-----------------|
| N= 2,830        |      | Score<54           | Score>=54 | Median<br>score |
| Received FSM    | No   | 80%                | 86%       | 54              |
| while at school | Yes  | 20%                | 14%       | 42              |
| Social Grade    | ABC1 | 69%                | 78%       | 55              |
| Occidi Cidac    | C2DE | 31%                | 22%       | 41              |

#### (B) Gender and essential skills

Female respondents on average scored higher than their male counterparts. Almost 51% of the young females score equal or above the average in their essential skills while this is 9% lower for their male peers. The median skills score for female respondents is equal to 54 while the male respondents' median score is 11% lower and equal to 48.

Table 3.2 Crosstabulation- gender and skills score

| N= 2.046 | Total Skills Score |           |  |
|----------|--------------------|-----------|--|
| N= 3,016 | Score<54           | Score>=54 |  |
| Male     | 54%                | 46%       |  |
| Female   | 49%                | 51%       |  |

The result of a chi square test using crosstabulation analysis shows that this association is statistically significant at 5%.



#### (C) Geography and essential skills

Disaggregating the respondents' skills scores based on their region would show if there is a particular part of the country where the distribution is skewed towards higher levels of skills.

Table 3.3 shows the result of the crosstabulation of the UK countries and skills score. Young people from Northern Ireland and Wales have on average reported slightly higher levels of skills. Looking at the 4th quartile of the total skills score, Northern Irish respondents scored the highest. In the first quartile, respondents from England and Scotland scored as below. However, these differences are not statistically significant and region is not a strong predictor of level of skills in this sample.

Table 3.3 Crosstabulation- country and skills score

| N= 3,015         | Total Skills Score |           |  |
|------------------|--------------------|-----------|--|
| N- 3,015         | Score<54           | Score>=54 |  |
| England          | 49%                | 51%       |  |
| Wales            | 48%                | 52%       |  |
| Scotland         | 49%                | 51%       |  |
| Northern Ireland | 47%                | 53%       |  |

Similar analysis was conducted to look at English regions only and compare the distribution within the country.

Table 3.4 Crosstabulation- England regions and skills score

| N= 2 546 | Total Skills Score |           |  |
|----------|--------------------|-----------|--|
| N= 2,546 | Score<54           | Score>=54 |  |
| North    | 50%                | 50%       |  |
| Midlands | 48%                | 52%       |  |
| East     | 53%                | 47%       |  |
| London   | 52%                | 48%       |  |
| South    | 46%                | 54%       |  |

Respondents from the South region appear to have scored slightly higher compared to other regions. Young people from the East of England reported lower levels of essential skills in comparison to the rest of the country. However, these skills differences are not statistically significant. There is a very weak relationship between two variables (P-value:0.18).

#### (D) Parental engagement and essential skills

Young people were asked how engaged their main parent(s) or guardian(s) were with their education and the 4-scale option varied from very engaged to not engaged at all. The hypothesis in testing is that young people with higher levels of parental engagement score higher than their peers with lower levels of engagement. Table 3.5 confirms this relationship showing that young people with highest levels of parental engagement scored the highest against the Framework.



Table 3.5 Crosstabulation- parental engagement and skills score

| N= 2 020           | Total Skills Score |           |  |
|--------------------|--------------------|-----------|--|
| N= 2,938           | Score<54           | Score>=54 |  |
| Very engaged       | 42%                | 58%       |  |
| Fairly engaged     | 52%                | 48%       |  |
| Not very engaged   | 56%                | 44%       |  |
| Not at all engaged | 63%                | 37%       |  |

Only 37% of young people with the lowest level of parental engagement in their education reported a skills score equal or above average while this is 21 percentage points higher for those with very engaged parents/guardians (58% reported a skill score equal or above average).

The analysis of the variance (ANOVA) also shows that the mean between the groups is significantly different and the relationship between parental engagement and essential skills score is significant at 5%. Table 3.6 shows the mean for each category of engagement.

Table 3.6 ANOVA- Descriptive analysis

| Level of parental engagement | N    | Mean | Standard<br>deviation |
|------------------------------|------|------|-----------------------|
| Very engaged                 | 1322 | 60   | 34.4                  |
| Fairly engaged               | 1245 | 52   | 33.5                  |
| Not very engaged             | 293  | 50   | 34.1                  |
| Not at all engaged           | 78   | 45.5 | 38.7                  |

#### (E) School type and essential skills

Young people were asked about the type of school they attended before the age of 16. This study sought to reveal any pattern regarding the level of essential skills across fee-paying schools and state schools.

The findings in Table 3.7 show that 55% of the respondents who attended selective schools or feepaying independent schools scored equal or above average against the framework. 4% fewer peers from state schools scored equal or above average against the framework (51%). However, young people attending alternative provision schools with additional educational needs are far less likely to score at similar levels, with only 15% equal and above average.



Table 3.7 Crosstabulation- school type attended and skills score

| N= 2.760  | Total Ski | lls Score |                   |
|---|-----------|-----------|-------------------|
| N= 2,760  | Score<54  | Score>=54 | Skills score Mean |
| Non-selective state school (i.e. comprehensive school)                      | 49%       | 51%       | 55                |
| Grammar/ selective state school   | 45%       | 55%       | 58                |
| Independent/ fee-paying school  | 45%       | 55%       | 57                |
| Alternative Provision<br>(i.e. Pupil Referral Unit,<br>Special school etc.) | 85%       | 15%       | 22                |

The findings of the ANOVA test show that the difference in skills score means for each of the school types is statistically significant at 5%. However, this is only attributed to the students who studied at an alternative provision. The result of a Tukey Post hoc test shows that this is the only significant relationship and therefore the difference in mean between the rest of the categories is not statistically significant.

When repeating the analysis excluding alternative provision from the school type, the picture remains the same and therefore school type is not associated with higher levels of essential skills reported by young people in this sample.

When looking at young people with special educational needs, their average total skills score is lower than their peers with no additional needs. The difference in means skills score between groups is statistically significant at 5%.

Table 3.8 Crosstabulation- SEND and skills score

| N = 2,779                     |             | Score <54 | Score >=54 |
|-------------------------------|-------------|-----------|------------|
| Do you have any additional or | Yes, I do   | 53%       | 47%        |
| special educational needs?    | No, I don't | 46%       | 54%        |



## Chapter 4: How essential skills are being built, and the impact they have for young people

#### **Chapter summary**

- This chapter explores the value that young people perceive in essential skills, where they have opportunities to build them, and how they link to wider attitudes and aspirations.
- Overwhelmingly, young people see the value of essential skills across key aspects of their lives for transition, including academic performance, university entrance, successful employment and progression, and overcoming wider life challenges.
- There is strong agreement from young people that these skills should be taught through the
  education system, and many felt that they had those opportunities primarily through extracurricular provision, but many also referred to dedicated learning time and through broader
  subject teaching too.
- In employment though, young people felt that only 46% had opportunities to regularly build their essential skills, while 45% did not. There is some evidence that individuals who reported higher levels of essential skills both have clearer career ambitions, and have found them easier to work towards.
- Finally, there are strong links between higher essential skill scores and self-efficacy and perseverance of effort.

In this section the study reviews young people's experiences and attitudes and aims to understand the role of essential skills in improving them. Throughout the chapter a series of sub-analyses are conducted to show the relationship between essential skills level and wider views held by young people in the sample.

#### (A) Young people's perspective on where essential skills are useful

Respondents were asked to select how important they think essential skills are in a number of areas. Table 4.1 summarises the findings.

Young people believe that essential skills are important for employment opportunities and successful recruitment processes. Between 90-93% of young people aged 16-25 in the UK see skills such as leadership, teamwork, creativity and communication as important for employment and recruitment.

Just under 90% of young people in this sample also think essential skills are important to overcome difficulty and adversity at different stages of life. Skills such as aiming high and staying positive are very relevant to this view.

Within the context of education, 77% of the respondents think essential skills are important for their academic performance and 65% think they are important for their university entry application.

Age and gender do not influence these findings. Male and female respondents find these skills almost equally important with slight differences in their views. Younger students, although putting



slightly more importance on academic performance, also recognise how these skills are supportive in the longer term.

Table 4.1 Overall, how important, if at all, would you say all of these skills are for each of the following in general?

| N=3,016  | Very<br>important<br>(%) | Fairly<br>Important<br>(%) | Not very<br>important<br>(%) | Not at all important (%) | Don't know<br>(%) |
|--|--------------------------|----------------------------|------------------------------|--------------------------|-------------------|
| Academic performance (e.g. in exams, essays, coursework etc.)            | 31.6                     | 46.4                       | 14.7                         | 2.9                      | 4.3               |
| UCAS application and university entrance                                 | 23.8                     | 42.4                       | 22.3                         | 4.5                      | 7.1               |
| Employment opportunities   | 56.3                     | 34.6                       | 3.6                          | 0.9                      | 4.6               |
| Successful<br>recruitment process<br>(i.e. once offered an<br>interview) | 53.6                     | 37.2                       | 3.5                          | 1.1                      | 4.6               |
| Overcoming difficulty<br>and adversity at<br>different life stages       | 50.6                     | 38.7                       | 5                            | 0.9                      | 4.8               |

In addition, young people with higher skills scores are more likely to find these skills very important than not important at all.

#### (B) Young people's perspective on where they had opportunities to build essential skills

Respondents were asked to share their views about certain aspects of developing essential skills during their time at school/college. 89% of 16-25-year-olds in the survey agree these skills should be taught in schools and colleges.

Table 4.2 To what extent would you agree or disagree with the following statement?

| N=2,669-2,831   | Strongly<br>agree<br>(%) | Tend to agree (%) | Tend to<br>disagree<br>(%) | Strongly<br>disagree<br>(%) |
|---|--------------------------|-------------------|----------------------------|-----------------------------|
| Essential skills such as those listed above should be taught in lessons at schools/ college                       | 46.1                     | 43.5              | 8.5                        | 2                           |
| My ability in the skills I selected is fairly 'fixed' over time and it is rare to make significant improvements   | 10.3                     | 32.9              | 43.2                       | 13.6                        |
| I had access to plenty of opportunities through<br>the school/college I attended to grow the skills<br>I selected | 23                       | 43.8              | 24.8                       | 8.4                         |
| I feel confident that I can use the skills I selected in a range of situations                                    | 31.5                     | 56.3              | 9.8                        | 2.4                         |



Young people also mainly disagree with the notion that these competencies are fixed and can't change over time, with 57% of the respondents believing that they can make significant skills improvement over time. In addition, 67% of young people said they had access to plenty of opportunities through the school/college they attended to grow the skills they reported on.

Confidence levels among young people in this sample to apply these skills in real life are high. 87% of the respondents said they are confident in using their skills in a range of situations. To explore this further, the analysis looked to profile those young people who expressed high levels of confidence in essential skills and said they had access to plenty of opportunities to develop these skills, exploring the relationship with their total skills score.

Young people who said they had access to opportunities to develop these skills go on and score more highly against the Framework. Schools and colleges which provided these opportunities for their students increase their actual level of skills and this relationship is positive and statistically significant. These respondents are also more likely to be from grammar or fee-paying schools which perhaps offer richer and wider extra-curriculum activities with specific targets to develop skills such as speaking, listening, teamwork and leadership. They also have reported higher levels of parental engagement in their education which seems to have enabled them to develop essential skills in addition to what they learned at school.

Parental engagement also has an impact on young people's level of confidence in applying their skills. Young people whose parents are highly engaged in their education report higher confidence levels. Moreover, social grade is also correlated with confidence in applying skills: young people from more advantaged backgrounds are more likely to agree they are confident in using their skills in a range of scenarios (89%). School type attended and age did not affect confidence.

#### (C) Young people's perspective on how they built their essential skills in education

Young people were asked about the ways in which they mostly learned essential skills while they were in school and/or college. The majority of the respondents reported developing their essential skills through extra-curricular activities including arts and sports clubs; 46% of young people selected this response. 40% of young people chose classroom learning as a way of building essential skills, where schools and colleges dedicated time specifically to these skills. Respondents also found work experience a worthwhile way to develop essential skills, with 39% of young people saying they learned skills this way. See table 4.3 for the full results.

While many respondents reported learning opportunities, there were 14% of 16-25-year-olds who said their school and/or college didn't give them the opportunity to develop any of the essential skills.



Table 4.3 Through which, if any, of the following ways did your school and/ or college give you the chance to develop any of these skills?

| N=3,016  | % of respondents |
|--|------------------|
| Through classroom learning dedicated specifically to these skills  | 40%              |
| Through sport and drama classes (i.e. timetables lessons)  | 37%              |
| Through other extra-curricular activities (i.e. arts, sports, academic clubs etc.)                         | 46%              |
| Through coaching and mentoring   | 19%              |
| Through work experience  | 39%              |
| Through other activities/ events with employers (i.e. workshops etc.)                                      | 27%              |
| Through career-related learning including personal guidance  | 22%              |
| Other  | 3%               |
| Don't know/ can't recall   | 9%               |
| Not applicable - I don't think my school and/ or college gave me the chance to develop any of these skills | 14%              |

An investigation into those young people who said their school didn't provide the opportunity to develop their skills shows that they are mostly from state schools or alternative provision settings and less likely to have attended selective or fee-paying schools. They are also more likely to have been eligible for FSM when they were at school, which indicates that young people who need these skills the most may be less likely to have had the chance to build them.

#### (D) Young people's perspective on how they built essential skills in employment

Young people with some type of work experience or employment in the past or at the time of the survey were asked about the opportunities to develop essential skills at work. The aim was to have a picture of the number of opportunities young people have access to once they are in employment or during their experiences of the world of work. There is an even split between young people whose employers provided opportunities to develop the essential skills and those who rarely or never had access to these opportunities (46% vs. 45%).

Young adults toward the top of the age group are more likely to have been provided with opportunities to develop their essential skills. Respondents' gender doesn't play a role in access to these opportunities.

Table 4.4 how often, if at all, would you say you have been provided with opportunities by an employer, such as training, to improve any of the eight skills mentioned?

| N=1,803  | % of respondents |
|--|------------------|
| Very often (i.e., there are usually or always opportunities and training available)  | 15%              |
| Fairly often   | 31%              |
| Not very often   | 29%              |
| Never (i.e., I have never been offered any opportunities or training by my employer) | 16%              |
| Don't know   | 10%              |



#### (E) The role of essential skills in young people's pursuit of career ambitions

During the survey, young people reflected on how easy or difficult they find it to pursue their career ambitions. They were asked "Since leaving secondary school and/ or college...In general, how easy, if at all, would you say it has been for you to pursue your career ambitions (including going to university)?"

Table 4.5 How easy or difficult it has been to pursue your career ambition

| N=2,408                            | % of respondents |
|------------------------------------|------------------|
| Very easy                          | 11%              |
| Fairly easy                        | 46%              |
| Not very easy                      | 27%              |
| Not at all easy                    | 10%              |
| I do not have any career ambitions | 6%               |

Despite the fact that this questionnaire was administered during the beginning of the global pandemic, many respondents appear to have found it relatively straightforward to pursue their ambitions. Over 55% of young people who are not in school/college said they found it fairly or very easy to follow their ambitions including going to university. 6% of those who responded to this question said that they don't have any career ambitions.

Analysis was undertaken to understand whether higher skills score is correlated with young people's experiences of pursuing their ambitions or lack of ambition. Chart 4.1 shows the mean skills score for each category, after recoding our factor into a categorical variable with three values.

Easy Difficult No career ambition

Chart 4.1 Mean skills score per group

Young people who found their career ambition easier to pursue on average have reported higher skills scores compared to their peers who found it more challenging. Respondents who said they have no career ambition had the lowest skills scores. This difference is statistically significant at 5%.

The mean difference between all groups of young people is statistically significant. The largest difference in skills score is between those who found it easier to pursue their career ambition and young people with no career ambition.

Young people who found it difficult to pursue their career ambition, on average, have lower skills scores. Initial analysis also shows that they are mainly from non-White ethnic backgrounds (significant correlation at 5%) who are likely to have received FSM when they were at school (also significant correlation at 5%).



#### (F) The effect of essential skills on young people's self-efficacy, attitude and aspiration

In this study, four theory-led proxies were used to form questions where self-efficacy, perseverance of effort, locus of control and aspiration were measured. These metrics are validated measures suggested by the past academic and professional literature.

Table 4.5 To what extent would you agree or disagree with the following statements?

| N=2,291-2,618   | Strongly<br>agree (%) | Tend to agree<br>(%) | Tend to disagree (%) | Strongly<br>disagree (%) |
|---|-----------------------|----------------------|----------------------|--------------------------|
| I think that I can achieve<br>goals that are important to<br>me <sup>8</sup>        | 35                    | 57                   | 6                    | 2                        |
| I am determined to finish whatever I begin <sup>9</sup>                             | 38                    | 51                   | 9                    | 2                        |
| I can pretty much<br>determine what will<br>happen in my life <sup>10</sup>         | 14                    | 39                   | 33                   | 14                       |
| I have always had a clear idea of who I want to become when I grow up <sup>11</sup> | 17                    | 31                   | 29                   | 23                       |

The majority of 16-25-year-olds reported high levels of self-efficacy. 92% of young people who responded to this question agreed that they can achieve goals that are important to them, a proxy for self-efficacy. The picture is similar for perseverance of effort; almost 90% of the respondents said they are determined to finish what they started.

However, 47% of young people don't agree they can determine what happens to them in life. In addition, young people in this sample had fewer clear ideas about who they want to become when they grow up, a proxy for career aspiration (53% of the respondents).

The following analysis looks into the effect of essential skills score on these attitudes and aspirations for the young people in the sample. The appropriate statistical tests reveal whether higher essential skills score is correlated with self-efficacy and other metrics measured above.

In the first instance, the association between self-efficacy and total skills score was explored. Using one-way ANOVA, the analysis shows that the difference in mean skills score between the group of young people who reported higher levels of efficacy and their peers is statistically significant at 5%. This means that those with higher total scores appear to report higher levels of self-efficacy. Even after controlling for age, gender and social backgrounds in a separate regression model, the result remains highly significant and positive.

The second measurement is the perseverance of effort. Taking a similar approach to self-efficacy, the results of the analysis show that higher skills score and perseverance are positively and significantly correlated, even after taking age, gender and FSM into account.

<sup>&</sup>lt;sup>8</sup> Chen, Gully and Eden (2001)

<sup>&</sup>lt;sup>9</sup> Duckworth and Quinn (2009)

<sup>&</sup>lt;sup>10</sup> Levenson (1981)

<sup>&</sup>lt;sup>11</sup> Chambers et al. 2018



Thirdly, the correlation between essential skills and locus of control is studied in the same method as above. The difference between the skills score means is only significant between those who strongly agreed and those who tend to disagree with the measurement statement (P-value:0.03). The correlation is not as straightforward as the other metrics but the two variables are only directionally negatively correlated, i.e. the higher the young person's essential skills score, the more likely they feel in control of what happens to their life.

Total skills score and aspirations in this context are not significantly correlated.

Table 4.6 Skills score mean across groups of young people

| Self-efficacy   |      | Mean Skill | Standard  |                |
|---|------|------------|-----------|----------------|
| I think that I can achieve goals that<br>are important to me                | N    | Score      | deviation | Standard error |
| Strongly agree  | 920  | 64         | 35.7      | 1.1            |
| Tend to agree   | 1499 | 56         | 32.9      | 8.0            |
| Tend to disagree  | 146  | 41         | 32.6      | 2.7            |
| Strongly disagree   | 53   | 26         | 33.6      | 4.6            |
|   |      |            |           |                |
| Perseverance of effort  |      |            |           |                |
| I am determined to finish whatever<br>I begin                               |      |            |           |                |
| Strongly agree  | 962  | 63         | 34.7      | 1.1            |
| Tend to agree   | 1291 | 55         | 33.7      | 0.9            |
| Tend to disagree  | 222  | 48         | 31.6      | 2.1            |
| Strongly disagree   | 50   | 23         | 29.7      | 4.1            |
|   |      |            |           |                |
| Locus of control  |      |            |           |                |
| I can pretty much determine what will happen in my life                     |      |            |           |                |
| Strongly agree  | 330  | 51         | 36.3      | 2              |
| Tend to agree   | 902  | 56         | 35        | 1.1            |
| Tend to disagree  | 748  | 57         | 33.5      | 1.2            |
| Strongly disagree   | 311  | 53         | 34.6      | 1.9            |
|   |      |            |           |                |
| Career aspiration   |      |            |           |                |
| I have always had a clear idea of<br>who I want to become when I grow<br>up |      |            |           |                |
| Strongly agree  | 434  | 59         | 37        | 1.7            |
| Tend to agree   | 792  | 54         | 34.5      | 1.2            |
| Tend to disagree  | 732  | 58         | 32.5      | 1.2            |
| Strongly disagree   | 572  | 54         | 33.9      | 1.4            |



## Chapter 5: How essential skills support young people's employment outcomes

#### **Chapter summary**

- This chapter builds off the insights about the socio-economic factors that correlate with
  essential skill scores, and young people's perception of the value of essential skills and how
  they build them. It turns to establishing the value of essential skills in supporting young
  people's employment outcomes.
- There is evidence of a wage premium of around 15% or £3,400 per year for full-time workers aged over 19 moving from the 1<sup>st</sup> percentile of skills score up to the median.
- This wage premium is substantially increased in cases where young people report
  confidence in applying their essential skills in a range of scenarios. In this case, the wage
  premium for those individuals rises to £10,200.
- We have also seen that higher levels of essential skills are correlated with higher qualification levels.

#### (A) The impact on income for young people in the labour market

A series of exploratory regression analyses were conducted to assess the impact of higher essential skills score on young people's income once they are in full-time employment. The analysis is conducted for respondents age 20 and above to take into account differences of work experience to achieve a comparable sample of respondents <sup>12</sup>.

Exploratory regression analysis reveals strong links between higher skill scores and higher incomes among young people aged 20 to 25 in full-time work. Robust interval multivariate regression with squared terms and weighted variables using YouGov weighting shows that the equivalent change in reported earnings for a young person moving from 1st percentile of skills score up to the median value, from 0 to 54, is an additional £3,400 per year, up from £22.4k. This is a 15% increase in absolute terms or 0.3 standard deviations, significant at the 5% level or better (P-values < 0.02).

The analysis controls for key background factors such that we only compare young people who are broadly similar to each other, except in the detailed skills scores they report. Including these controls slightly reduces the effect size correlated with higher skills (down from £3,400 to £3,200), suggesting that the controls are in aggregate associated positively with both higher skills and higher incomes. For instance, young people are compared only having controlled for:

 the disadvantage in their upbringing (whether on FSM at school; attending a feepaying school);

<sup>&</sup>lt;sup>12</sup> Only full-time workers are considered as this is the form of work where young people typically are best able to leverage their skills for wages. Part-time work can be undertaken as a short-term boost to earnings, where income does not reflect skill levels (e.g., temp jobs for university students). Similarly, apprenticeships are excluded as there is a deliberate choice to invest in skills at a low wage for apprenticeships, where the low wage is compensated for by additional training and the potential for higher wages in the future. The small number of full-time workers aged 16 to 19 are also excluded as entering full-time, non-apprenticeship work in this period is often associated with circumstances that require young people to work with urgency, as opposed to the opportunity to be more flexible in finding a job that fully leverages their skills. The core analysis is also tested against a larger sample to confirm robustness to these assumptions.



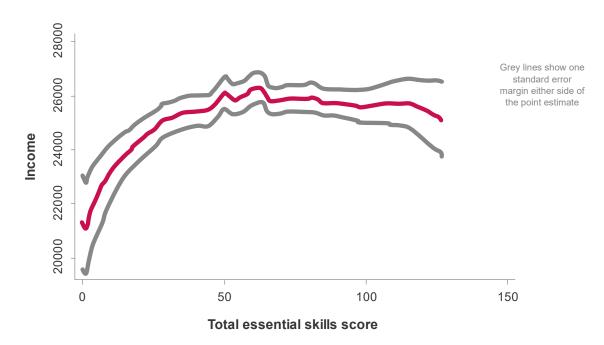
- their educational context (self-reported level of parental support for education; attending a grammar school; special educational needs);
- their demographic background (gender, ethnicity and age);
- which region of the UK they are in (providing some adjustment for different economic conditions and incomes between regions).

Table 5.1 Result of the multivariate interval regression with controls (age and region also controlled for but not shown due to space constraints; n=608)

|                                     | Estimation | Standard Error | P-value |
|-------------------------------------|------------|----------------|---------|
| Skills Total score<br>(linear term) | 98         | 37             | 0.00    |
| Skills Total score (squared term)   | -0.7       | 0.3            | 0.01    |
| Parental engagement                 | 385        | 592            | 0.51    |
| Male                                | 2,467      | 842            | 0.00    |
| SEND                                | -302       | 1,615          | 0.85    |
| FSM                                 | -2,864     | 1,178          | 0.01    |
| Grammar                             | 1,194      | 1,186          | 0.31    |
| Private                             | 4,960      | 2,034          | 0.01    |
| Ethnicity                           | -892       | 1,783          | 0.61    |

The relationship between stronger essential skills and higher income is particularly strong at the lower end of skill levels. Viewing the data through running line smoothing algorithms (the pink middle line in chart 5.1), retaining the same set of control variables, we can see that the relationship between skills and income moderates until reaching young people in the upper half of the skill spectrum, where income remains stable and high even if young people report even higher skill scores. This finding would benefit from further exploration in the future.

Chart 5.1 Running Line model: income and skills score





The model is repeated to control for higher levels of education. This is an important check as higher skills might both support young people to reach higher levels of education, such as deciding to join and be successful at university, as well as being enhanced by further educational experience. When level of qualification is controlled for as well, the results remain about the same: the increase in skill level is associated with a £2,900 increase instead of £3,200 and remains statistically significant (at 10%).

Additional robustness checks were undertaken to test confidence in the chosen regression specification; excluding outliers <sup>13</sup>; excluding individuals who may have misunderstood or incorrectly answered the skills questions <sup>14</sup>; and including all age groups in the labour market (<25). P-values remain significant at 10% level or better across these robustness checks and effect sizes remain comparable in scale.

#### (B) Does confidence in applying skills affect the wage premium?

Young people were asked how confident they feel they are in applying essential skills to a range of circumstances. The income model was regenerated to find out whether those who said yes will benefit from any extra wage premium when they are in employment.

The results indicate that young people's confidence in applying essential skills is also a key factor in the relationship between essential skills and income. Among the roughly one-third of young people who strongly agreed with the statement "I feel confident that I can use the skills I selected in a range of situations", the relationship between skills and income is much stronger. An increase from the 1% value of skills score on this subsample (5) up to the median (72) is associated with a £10,200 increase in annual income (sample size 200; p-value < 0.01) (Please see the pink middle line in chart 5.2). Helping young people understand how to apply their essential skills, practicing doing so and appreciating the value of essential skills in diverse environments appears to be key to unlocking earning potential.

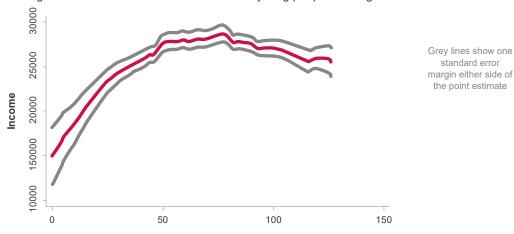


Chart 5.2 Running Line model: income and skills score for young people with higher confidence

Total essential skills score

<sup>&</sup>lt;sup>13</sup> As measured using a standard heuristic application of Cook's Distance (exclude those above 3x the mean value).

<sup>&</sup>lt;sup>14</sup> There are unusual spikes in the total skill scores at the min and max values (0 and 126), suggesting at least some respondents ignored all these questions or selected all options without due consideration. There is also a spike in score at 8, suggesting at least some respondents selected the nearest-match skill-level in each of the skills, rather than selecting all skills they felt able to do, as intended by the question. This excludes c.5% of the applicable respondents.



One caveat to this analysis is that higher paid jobs are on average likely to offer more opportunities to deploy more complex skills. This is expected to – over time – result in young people having stronger skills, being more confident in those skills and more likely to score themselves more highly in the questionnaire. As young people build skills at work, they will over time be expected to gain promotions and performance awards at work, increasing their salary.

However, it is also highly likely that having higher skills helps secure the higher paid job in the first place. Employers regularly report the importance of skills in their hiring process<sup>15</sup>. This reflects the importance placed on essential skills for securing employment by young people, as demonstrated in the previous chapter.

Since essential skills were measured while the young people are already in work, the correlation between skills and income is likely to reflect some combination of gaining more skills while at work and having higher skills in advance to help them secure the higher paid job.

Essential skills are built over time, significantly supported by increased time in education, as seen in:

- i. Skills Builder Impact Report (2020)<sup>16</sup> which shows increasing skills with age during education, with progress made during each academic year<sup>17</sup>
- ii. the strong correlation between skills and highest qualification, noting the selection effect discussed in more detail later in this chapter; and
- iii. evidence from young people that school provided opportunities to develop their skills, as discussed earlier in this report.

This gradual accumulation in skills over time reinforces the point that essential skills acquired prior to work are likely to be a key factor in driving access to higher waged work (and perhaps progress once in work), since essential skills development typically requires practicing and developing over multiple years, building from education through into the workplace (as well as experiences outside of school/work).

#### (C) Association between essential skills score and qualifications achieved

Young people reported the highest level of qualification they achieved on the day of the survey. For the purpose of this analysis, they are grouped into 6 categories of qualifications starting from no qualification/entry level/level 1 to the postgraduate study in level 6 above. An Ordinal Logistic regression model is used to predict the probability of young people with different skills scores falling into qualification categories, with the same controls for socio-economic factors as for wages in place to improve the quality of the modelling.

The result shows that as skill score increases, people are more likely to have completed an undergraduate or postgraduate degree and less likely to have only level 2 or 3 qualifications (after

<sup>&</sup>lt;sup>15</sup> E.g., CBI/Pearson skill surveys; Employer Skill Surveys from government, as well as many more ad hoc surveys

<sup>&</sup>lt;sup>16</sup> https://www.skillsbuilder.org/impact-report-2020

<sup>&</sup>lt;sup>17</sup> The pattern is particularly clear at primary age. At secondary school, there is evidence of progress in skills during each academic year, but also some evidence of regression during the long summer break, or perhaps changes in how strictly students evaluate their skills as they grow older and progress through national exams. As discussed earlier in this report, age is not a consistent driver of self-reported skill scores on its own.



controlling for age). This likely reflects a mutually-reinforcing positive spiral, in which higher levels of essential skills make it easier to access higher levels of education (for example, young people report it helps with things like UCAS statements and academic performance) and higher levels of education and more time in education typically provide more opportunities to develop essential skills.

This relationship is statistically significant at 1%. Chart 5.3 shows the probability of achieving levels of qualification as skills score change (predictive margins show the 95% confidence interval). As the total skills score increases the probability of having achieved Level 6 and 6 plus increases while the slope for other representative lines declines.

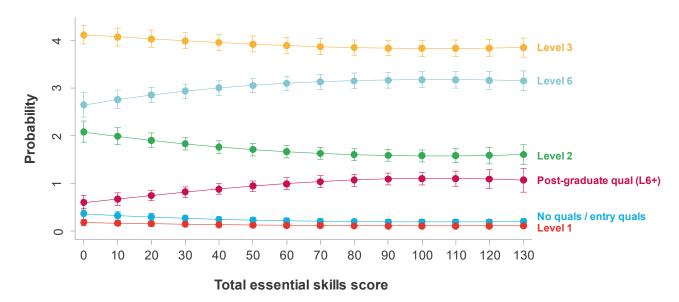


Chart 5.3 Level of qualification and skills score

According to the prediction model, the odds of a young person falling into higher levels of qualifications increases by 1.014 when skills score increases by one additional unit.



### **Chapter 6: Discussion**

#### **Chapter summary**

This report gives us important new insights from the three key questions that have framed this research. These insights have several important implications for all those working to support individuals to build essential skills:

- The considerable variation in essential scores mean that educators need to think about the needs of individual students, whilst employers need to think about essential skills in a more nuanced and granular way.
- Social disadvantage and school type are strongly correlated with lower essential skills, and so educators and employers should think about where they target their efforts to boost equity.
- Parental engagement matters and so educators should think about how they can engage
  parents better, whilst employers could consider how to raise awareness of essential skills
  among their employees who are parents.
- Young people themselves see the role of essential skills vividly in supporting their academic performance, employment opportunities and overcoming adversity in their lives.
- Relatedly, young people feel strongly that those essential skills should be a normal part of a
  good education but at the moment not all young people are getting those opportunities.
- Employers can also do more to ensure everyone has the opportunity to build their essential skills through their work, as 45% felt they lacked such chances.
- There is still a challenge that many young people see their capabilities as fixed over time, rather than flexible. This is a challenge that will need to be grappled with – particularly because there is strong correlation between essential skill scores and self-efficacy, and perseverance of effort.
- Finally, essential skills clearly pay a dividend as a wage premium, particularly when combined with the ability to transfer and apply those skills. This supports a robust economic argument for investing in these skills.

#### **Chapter introduction**

This report gives us some of important new insights across three broad categories:

- (1) Who has essential skills, and how does this vary by socio-economic background?
- (2) How do young people build essential skills, what are their attitudes to them, and what is their broader impact?
- (3) What is the impact of essential skills on income and qualification level for young people?

This chapter looks to explore and discuss these findings, and their implications for educators and for employers. It also highlights some potential responses to the report, before finally making some recommendations for further development.



## (1) Who has essential skills, and how does that vary by socio-economic background?

#### Competence in essential skills varies widely

The first point is that the range of skills scores demonstrated in the YouGov questionnaire is considerable. In the analysis from Chapter 1, the range of skill scores of the young people had a standard deviation of 35 around a mean of 54 – and a total range of 126 (out of a maximum possible of 128).

Whilst these findings are from 16–25-year-olds, we can assume with some confidence that these gaps were likely to have opened up through individuals' time in education. This would be consistent with the impact reports generated by Skills Builder Partnership and Enabling Enterprise over the last five years<sup>18</sup>.

The implication for educators is that they should be conscious of this significant ability range in thinking about the development of their students. This is means taking the time to think about the needs of the individual, rather than presuming that all learners can move in lockstep through the steps of building their essential skills.

The implication for employers is that it is a mistake to think about essential skills as a binary criterion (for example, is someone able to listen effectively), which is sometimes the suggestion of popular surveys in this space. While the overwhelming majority of respondents had some elements of some of the essential skills, the range of scores means that competence in teamwork, leadership or creativity would vary considerably. As such, employers should be more discerning and precise when it comes to specifying exactly what steps within a broad essential skill are really required to fulfil a job role effectively, and recruit to that rather than general theme – for example, of 'good teamwork'.

#### Social disadvantage plays a significant role

In Chapter 3, we looked at social disadvantage through two lenses: through whether or not young people recalled receiving FSM during their time in school; and through a social grading scale constructed by YouGov. This analysis found significant differences on both approaches: the median score for individuals who received FSM while at school was 42 against a median score of 54 for their peers who were not eligible for them. Similarly, those individuals in the higher social grade had a median score of 55 against their peers in lower social grade with a median score of 41.

These findings echo other studies which have highlighted that individuals from more economically disadvantaged backgrounds do not have the same opportunities to build essential skills as their more privileged peers.

For example, studies from both the Sutton Trust and the Social Mobility Commission have highlighted that independent schools and wealthier parents seem to put more emphasis on building the essential skills of their children (Whitty et al., 2013). Similarly, an independent review of the Skills Builder approach carried out by LKMco (now the Centre for Education and Youth) in 2017 found that 'there is a sizeable body of evidence showing poorer children and young people tend to demonstrate lower levels of aptitude in skills... such as communication, confidence, and pro-social

<sup>&</sup>lt;sup>18</sup> See, for example, <u>www.skillsbuilder.org/impact</u>



behaviour when they enter school. If unaddressed, these gaps remain evident throughout schooling.'

This insight has important implications for educators, in that a blanket provision of essential skills activities might be insufficient to address some of the structural barriers to all students mastering essential skills. Akin to the systematic disparities we see around literacy, numeracy and other academic development, the same differences also exist in essential skills and so will need tailored approaches to address them.

Employers are also investing more in supporting the development of essential skills. For example, through educational outreach by running workshops in schools and colleges. They are also offering work experience and internships, placements on the new T-Levels, and the Kickstart scheme. They should think about where their investment of resource is likely to have the greatest impact, and this analysis suggests that some criteria to reflect social disadvantage might be worth considering.

#### Students in Alternative Provision settings are falling behind

There were differences in essential skill scores depending on the school type. These scores were higher for grammar and independent schools versus non-selective state schools, although the difference was not large. The big contrast was with those who had attended an alternative provision setting, where the mean skills score was 22, against 55-58 for the other educational settings.

The nature of this analysis makes it difficult to determine causation. Was it that individuals attended an alternative provision setting because they had not developed the essential skills to cope in a mainstream environment? Or was it that they did not have the same opportunities to build essential skills in that environment as their peers in a mainstream setting? In either case, this is certainly a finding worth further investigation.

It would also suggest that alternative provision settings might benefit from a greater emphasis on building essential skills to support their students. Depending on the setting, this might be an area where employers could also play a supporting role.

#### Parental engagement plays a big part

Individuals who reported that their parents or carers were very engaged with their education performed significantly better in respect to their essential skills score against their peers whose parents or carers were less engaged. Only 37% of young people with the lowest level of parental engagement in their education reported a skill score equal or above average while this is 36 percent higher for those with very engaged parents or carers (58% reported a skill score equal or above average).

For educators, the role of parental engagement in broader academic development is well recognised. It is also worth engaging parents more around essential skills – something that we are increasingly seeing in schools who are in the Skills Builder Partnership.

We have also seen some employers work with their employees who are parents to boost their understanding and confidence in building their children's essential skills too.



#### (2) How do young people build essential skills, and what are their attitudes to them?

#### Young people value essential skills

In Chapter 4, we saw that overwhelmingly, young people see the value of essential skills across key aspects of their lives for transition, including academic performance, university entrance, successful employment and progression, and overcoming wider life challenges.

The results here were particularly strong in recognising the importance of essential skills for employment opportunities and being successful recruited where about 90-93% of respondents saw these as being important for both.

There was also broad recognition of the supporting role of essential skills for academic performance (77%) and university entry (65%). Beyond that, 89% of young people in the survey felt that essential skills helped them to overcome broader barriers and obstacles in their lives.

The key implication here is that in the main, young people are aligned with the idea that essential skills are valuable and worthwhile to develop. For educators and employers alike, this means that the real challenge is about building these skills effectively – not about first convincing those individuals that these skills are worth their efforts and energy.

### Young people want more opportunities to build essential skills in education

There is strong agreement from young people that these skills should be taught through the education system (89%). Many felt that they had those opportunities (67%) although a significant number did not. Where that provision did exist, much of it was through extra-curricular activities, work experience and employer engagement. Only 40% of respondents felt they had had the chance for classroom learning dedicated specifically to these skills.

This is a significant gap, and a deeper exploration of those respondents who said their school had not provided them with the opportunity to build those skills highlights that most attended non-selective state schools or alternative provision settings. These are the same individuals who are most likely to be eligible for FSM, suggesting that those individuals with the greatest need to build these skills further are not getting that opportunity.

This has important implications for educators to ensure that the opportunities to build these essential skills are not seen as an additional benefit for the most advantaged, but as a core part of a good education for all. It also highlights that in cases where schools are less able to rely on extracurricular opportunities to build essential skills that they should instead consider making more use of classroom learning time and weaving skills development into other timetabled lessons. This is a dual approach that we have seen pay dividends elsewhere (for example, Ravenscroft, 2017).

The lesson for employers here again is to be thoughtful about where their outreach and support activity can have the greatest benefit and, crucially, can reinforce a systematic approach to building the essential skills of every child and young person in a school.



#### Essential skills boost young people's career confidence

The questionnaire also asked respondents how easy or difficult they had found it to pursue their career ambition. It showed that young people who had found their career ambition easier to pursue on average reported a mean skill score of 62, those who were finding it more difficult reported a mean skill score of 51, whilst those who reported no career ambitions had a mean skill score of 24.

While employers have long been advocates for investing in essential skills in education, this finding reinforces that key message – that from the perspective of the individuals themselves, their career progression is eased by having those essential skills.

#### Young people need more opportunities to build essential skills in employment

Once in employment, only 46% of young people felt that they had opportunities to regularly build their essential skills, while 45% did not. While young people towards the higher end of the age bracket (up to 25 years-old) reported more opportunities to build their essential skills, only 15% of respondents had regular opportunities for training.

This suggests considerable opportunity for employers to invest more heavily in this area, not least because they are consistently strong advocates for the importance of building these skills. Developments in technology mean that a growing number of companies have been able to make training available on-demand for employees to hone their skills, and this is worth consideration.

Other good practice in this area includes giving regular feedback and coaching for individuals to hone their skills, building the essential skills into performance review and development conversations, and modelling good practice explicitly.

#### Essential skills boost self-efficacy and perseverance of effort

There is evidence that there are strong links between skill score and self-efficacy – that is, the individual's belief that they can achieve goals that are important to them. Those who strongly agreed with the statement had a mean skills score of 64 against just 26 for those who strongly disagree.

Similarly, there is a strong link between skill score and perseverance of effort – that the individual is determined to finish whatever they begin. Those individuals strongly agreeing with the statement had a mean skills score of 63 against 23 for those who strongly disagree.

The link here is intuitive: the essential skills include elements of being able to create and adapt plans and to be able to overcome obstacles through the two skills of aiming high and staying positive. However, these skills alone cannot account for the full difference, and it is likely that competence in the other essential skills – problem solving, creativity, teamwork, leadership, speaking, and listening – all support individuals in achieving goals and increasing the likelihood of successfully completing tasks.

Given the widely recognised benefits of individuals having both a strong sense of self-efficacy and the ability to persevere, links with the essential skills are important. They help to reinforce the case



for educators that building tangible steps of essential skills can over time contribute to the development of a powerful broader attribute.

#### (3) What is the impact of essential skills on labour market outcomes?

#### There is a wage premium for essential skills

Chapter 5 demonstrated that there is a wage premium for essential skills of around £3,400 for individuals moving up from the 1<sup>st</sup> percentile of skills score to the median value (equivalent to a 15% increase). This relationship is particularly strong at lower levels of the skill spectrum.

This wage premium is strongly enhanced where individuals are also confident in applying their essential skills in a range of situations. In this case the increase in skills score from the 1<sup>st</sup> percentile up to the median is associated with a £10,200 increase in annual income.

These results prove robust to range of checks, and add further weight to the return to building essential skills. They suggest that a purely economic consideration of investing more heavily in building essential skills is likely to be justified by the subsequent wage premium, even if the underlying causal relationship were lower than the correlation relationship identified in this study, which incorporates skills gains during work as well as prior to work.

#### Essential skills are linked to achieving higher level qualifications

Finally, there is also evidence that those with higher essential skill scores are more likely to have achieved a higher-level qualification. This would seem to back up the earlier finding that young people strongly perceived essential skills to support their academic achievement.

Again, this would suggest that investing in essential skills can pay dividends in supporting academic achievement. This has direct implications for educators in supporting the holistic development of students even whilst accountability focuses on academic attainment.

Given the increasing engagement of employers in training and development, particularly in T-Levels and apprenticeships, this finding suggests that investment in building broader essential skills alongside technical skills and knowledge is likely to pay dividends.

#### Conclusion

We hope this report has helped to further illuminate the trends and relevance of essential skills for young people. This rich analysis has illustrated that the challenge in building essential skills for everyone is not one of awareness: young people already value those skills, and see their relevance across their lives.

It has helped to show that the value placed on those skills is merited: higher essential skill levels are linked with higher qualifications, a meaningful wage premium, and a reduced likelihood of falling out of education, employment or training. They also link with higher levels of perseverance and greater self-efficacy, and a greater sense of being able to progress in a career.



However, the analysis also highlights some concerning disparities: individuals from lower socioeconomic backgrounds are less likely to have built their essential skills to a high level, as are individuals whose parents were less engaged in their education or those who attended an alternative provision setting.

We hope that this light being shone on both the value of essential skills, and these disparities, will help to galvanise the Skills Builder Partnership to continue on its important mission: to ensure that one day, everyone builds the essential skills to succeed.



## **Bibliography**

Albandea, I., Giret, J.F. (2018) 'The effect of soft skills on French post-secondary graduates' earnings'. In: International Journal Of Manpower. Emerald Group Publishing, vol. 39(6), pages 782-799

Angus, A., Millard, W., Joshua, V., Baars, S., and Bowen-Viner, K. (2020) *How do essential skills influence life outcomes? An evidence review*. London: Centre for Education & Youth [Accessed at: <a href="https://www.skillsbuilder.org/how-do-essential-skills-influence-life-outcomes">https://www.skillsbuilder.org/how-do-essential-skills-influence-life-outcomes</a>]

Cullinane, C. & Montacute, R. (2017) *Life Lessons: Improving essential life skills for young people*, The Sutton Trust.

Finch, D.J., Hamilton, L.K., Baldwin, R. and Zehner, M. (2013) 'An exploratory study of factors affecting undergraduate employability'. In: Education + Training. Volume 55 (7): 24.

Galvan, J.A., Casman, E., Fisher, E., Nair, I. and Small, M.J. (2014) 'Assessing the Role of 21st Century Skills on Internship Outcomes in a Steel Multinational Enterprise'. Carnegie Mellon University Press

Hughes, D., Mann, A., Barnes, S., Baldauf, B. and McKeown, R. (2016) *'Careers education: International literature review'*. [Accessed at: https://www.educationandemployers.org/wpcontent/uploads/2016/07/Careers-review.pdf]

Kashefpakdel E. & Ravenscroft T.M. (2021) *Essential skills and their impact on education outcomes; a quantitative analysis of the British Cohort Study*, London: Skills Builder Partnership [Accessed at: <a href="https://www.skillsbuilder.org/essential-skills-and-their-impact-on-education-outcomes">https://www.skillsbuilder.org/essential-skills-and-their-impact-on-education-outcomes</a>]

Mann A. and Percy C. (2014) 'Employer engagement in British secondary education: wage earning outcomes experienced by young adults'. In Journal of Education and Work. 27:5, 496-523

Millard, W., Menzies, L. and Baar, S. (2017) *Enterprise Skills: Teachability, Measurability and Next Steps*, LKMCo.

Ravenscroft, T.M. (2017) *The Missing Piece: The essential skills that education forgot*, Woodbridge: John Catt Educational Ltd.

Ravenscroft, T.M. & Baker, L. (2020) *Towards a Universal Framework for Essential Skills*, London: Essential Skills Taskforce At: <a href="https://www.skillsbuilder.org/towards-a-universal-framework-for-essential-skills">https://www.skillsbuilder.org/towards-a-universal-framework-for-essential-skills</a>

Ravenscroft, T.M. (2020), *Skills Builder Universal Framework of Essential Skills*, London: Skills Builder Partnership. At: <a href="https://www.skillsbuilder.org/universal-framework/listening">https://www.skillsbuilder.org/universal-framework/listening</a>

Whitty, G., Power, S. and Sims, S. (2013) Lasting benefits: The long-term legacy of the Assisted Places scheme for Assisted Place holders, London: Sutton Trust.



# **Appendix 1**

Skills Builder Universal Framework Version: Final, May 2020

Skill: Listening

The receiving, retaining and processing of information or ideas

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



Skill: Speaking

The oral transmission of information or ideas

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



**Skill: Problem Solving** 

The ability to find a solution to a situation or challenge

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



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

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



**Skill: Staying Positive** 

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

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



# **Skill: Aiming High**

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

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



**Skill: Leadership** 

Supporting, encouraging and developing others to achieve a shared goal

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



**Skill: Teamwork** 

Working cooperatively with others towards achieving a shared goal

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