



Skills Imperative 2035

Scenario profiles: Who is most at risk?

A series of scenarios highlighting which types of people are most and least at risk of being impacted by changes to the labour market in the coming decade.

Age:

Four

Socio-economic background:

Disadvantaged

Home environment:

Disadvantaged

Cognitive & behavioural skills:

Below average

HIGH RISK



Outlook: High risk

- Skills are cumulative and gaps emerge early before a pupil starts school and often widen over time, shaping later outcomes.
- Children from disadvantaged backgrounds are less likely to experience a positive emotional and educational home environment (e.g. good parental use of discipline and/or high levels of home learning). This is less likely to lead to better starting points when entering school and better progress through education.
- Children who exhibit behavioural difficulties are more likely to have lower cognitive outcomes later in childhood and are harder to impact as they get older. If left unchecked, this could lead to low levels of EES when they enter the labour market and therefore a higher risk of working in declining occupations.
- However, there remains considerable scope to influence young people's outcomes at an older age and, with the appropriate support, they can catch-up.

Recommendations (Government & local/regional authorities):

- Expand family support for young families, particularly for disadvantaged ones.
- Support disadvantaged families to access high-quality early childhood education and care (ECEC) settings, ensuring their children benefit most from expansions in childcare.
- Tackle challenges in the early years workforce - including pay, qualifications and continuing professional development - to ensure all children can benefit from high-quality ECEC.
- Adopt a 'cradle to grave' approach to skills, promoting the development of a broad mix of cognitive, behavioural, and technical specific knowledge and skills, starting from the early years and continuing through school.

**Age:**

Four

Socio-economic background:

Non-disadvantaged

Home environment:

Non-disadvantaged

Cognitive & behavioural skills:

Above average

Outlook: Low risk

- Children from non-disadvantaged backgrounds are more likely to experience a positive emotional and educational home environment (e.g. good parental use of discipline and/or high levels of home learning). This is more likely to lead to better starting points when entering school and better progress through education.

Recommendations (Government & local/regional authorities):

- Expand family support for young families particularly for disadvantaged ones.
- Support disadvantaged families to access high-quality early childhood education and care (ECEC) settings, ensuring their children benefit most from expansions in childcare.
- Tackle challenges in the early years workforce - including pay, qualifications and continuing professional development - to ensure all children can benefit from high-quality ECEC.
- Adopt a 'cradle to grave' approach to skills, promoting the development of a broad mix of cognitive, behavioural, and technical specific knowledge and skills, starting from the early years and continuing through school.

Age:

6

Socio-economic background:

Disadvantaged

Cognitive & behavioural skills:

Below average

6 ESSENTIAL EMPLOYMENT SKILLS (EES)

Collaboration

Communication

Creative thinking

Information literacy

Organising, planning and prioritising

Problem solving and decision making

Outlook: High risk

- Substantial skills gaps could exist before starting school, which could widen over time.
- A disadvantaged emotional and educational home environment (e.g. poor parental use of discipline and/or low levels of home learning) could likely have a negative influence on a child's starting point when entering school as well as progress through education.
- Children who exhibit behavioural difficulties are more likely to have lower cognitive outcomes later in childhood and are harder to impact as they get older. If left unchecked, this could lead to low levels of EES when they enter the labour market and therefore a higher risk of working in declining occupations.
- However, there remains considerable scope to influence young people's outcomes at an older age and, with the appropriate support, they can catch-up.
- Differences in school performance can compound inequalities in children's cognitive and behavioural outcomes that predate their start at school.
- Disadvantaged pupils, who are more likely to be absent from school, are more likely to have behavioural difficulties and achieve lower cognitive outcomes on average.

Recommendations (Government & local/regional authorities):

- Clearly articulate how EES can be effectively developed as part of teaching a knowledge-rich curriculum.
- Promote a common skills framework and tools that educators can use to assess children's progress.

HIGH RISK



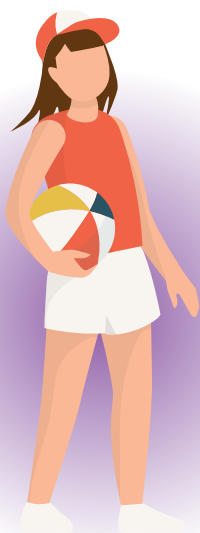
- Build training on how to develop EES into the Initial Teacher Training and Early Career Framework as well as wider teacher professional development.
- Expand disadvantaged children's access to enrichment activities (including extra-curricular activities and careers education), ensuring funding and expectations are sufficient, explicit and deliberately build young people's EES.
- Increase the share of education funding that is targeted towards disadvantaged pupils and lower-performing schools, to counteract inequalities which otherwise widen as young people progress through the school years and post-16 education system.
- Investigate how "high-performing" countries embed EES into teaching and the curriculum.

Recommendation (Education providers):

- Intervene at an early age to support young people at risk of falling behind, especially those from disadvantaged backgrounds.
- Monitor how young people are progressing with the development of their cognitive and behavioural skills and put in place interventions where necessary.
- Offer more extra-curricular activities to young people which are either free of charge or fully subsidised so disadvantaged young people can develop their skills.

Recommendations (Parents):

- Work with schools to encourage pupils with low skills sets to participate in tailored sessions aimed at helping them to catch up.
- Work with schools to identify suitable extra-curricular opportunities for their children.



**MEDIUM /
HIGH RISK**

Age:

8

Socio-economic background:

Non-disadvantaged

Cognitive & behavioural skills:

Below average

Outlook: Medium/high risk of lower levels of EES when leaving school

- Substantial skills gaps which exist before pupils start school can be exacerbated as they get older.
- Children who exhibit behavioural difficulties are more likely to have lower cognitive outcomes later in childhood and are harder to impact as they get older. If left unchecked, this could lead to low levels of EES when they enter the labour market and therefore a higher risk of working in declining occupations.
- However, there remains considerable scope to influence young people's outcomes at an older age and, with the appropriate support, they can catch-up.
- Children from non-disadvantaged backgrounds are more likely to take part in extra-curricular activities that are positively associated with behavioural & cognitive development between the ages of eight and 17.
- Children from non-disadvantaged backgrounds are more likely to experience a positive emotional and educational home environment (e.g. good parental use of discipline and/or high levels of home learning). This is more likely to lead to better starting points when entering school and better progress through education.

Recommendations (Government & local/regional authorities):

- Clearly articulate how EES can be effectively developed as part of teaching a knowledge-rich curriculum.
- Promote a common skills framework and tools that educators can use to assess children's progress.
- Build training on how to develop EES into the Initial Teacher Training and Early Career Framework as well as wider teacher professional development.

Recommendations (Education providers):

- Intervene at an early age to support young people at risk of falling behind, especially those from disadvantaged backgrounds.
- Monitor how young people are progressing with the development of their cognitive and behavioural skills and put in place interventions where necessary.
- Offer more extra-curricular activities to young people which are either free of charge or fully subsidised so disadvantaged young people can develop their skills.

Recommendations (Parents):

- Work with schools to encourage pupils with low skills sets to participate in tailored sessions aimed at helping them to catch up.
- Work with schools to identify suitable extra-curricular opportunities for their children.

Age:

16

Socio-economic background:

Disadvantaged

Cognitive & behavioural skills:

Above average

**LOW /
MEDIUM RISK**



Outlook: Low/medium risk of lower levels of EES when leaving school

- Children from disadvantaged backgrounds are less likely to participate in extra-curricular activities which are positively associated with behavioural and cognitive development between the ages of eight and 17. These opportunities can promote better outcomes.
- A disadvantaged emotional and educational home environment (poor parental use of discipline and/or low levels of home learning) is more likely to have a negative influence on their starting points when entering school as well as their progress through education.
- Pupils from disadvantaged backgrounds are more likely to be absent from school than their peers, leading to lower attainment outcomes.

Recommendations (Government & local/regional authorities):

- Clearly articulate how EES can be effectively developed as part of teaching a knowledge-rich curriculum.
- Promote a common skills framework and tools that educators can use to assess children's progress.
- Build training on how to develop EES into the Initial Teacher Training and Early Career Framework as well as wider teacher professional development.

- Expand access to holistic family support programmes for disadvantaged families.
- Increase funding for attendance and pastoral support, such as home visits, recruiting extra attendance officers, and tailored support for disadvantaged pupils.
- Support more disadvantaged young people to access extra-curricular activities more frequently

Recommendation (Education providers):

- Monitor how young people are progressing with the development of their cognitive and behavioural skills and put in place interventions where necessary.
- Offer more extra-curricular activities to young people which are either free of charge or fully subsidised.

Recommendations (Parents):

- Work with schools to encourage pupils with low skills sets to participate in tailored sessions aimed at helping them to catch up.
- Work with schools to identify suitable extra-curricular opportunities for their children.

**Age:**

16

Socio-economic background:

Non-disadvantaged

Cognitive & behavioural skills:

Above average

Outlook: Lower risk of lower levels of EES when leaving school

- Children from non-disadvantaged backgrounds are more likely to participate in extra-curricular activities which are positively associated with behavioural & cognitive development ages eight to 17.
- Children from non-disadvantaged backgrounds are more likely to experience a positive emotional and educational home environment (e.g. good parental use of discipline and/or high levels of home learning). This is more likely to lead to better starting points when entering school and better progress through their education.
- Pupils from non-disadvantaged backgrounds are less likely to be absent from school than their peers, leading to higher attainment outcomes.

Recommendations (Government & local/regional authorities):

- Clearly articulate how EES can be effectively developed as part of teaching a knowledge-rich curriculum.
- Promote a common skills framework and tools that educators can use to assess children's progress.

Recommendation (Education providers):

- Monitor how young people are progressing with the development of their cognitive and behavioural skills and put in place interventions where necessary.
- Offer more extra-curricular activities to young people which are either free of charge or fully subsidised so that disadvantaged young people can develop their skills.

Age:

16

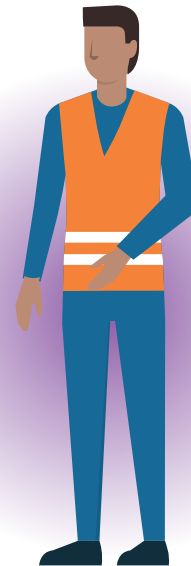
Circumstances:

Apprentice Manufacturing Process Operative

Qualifications:

Below average GCSE/Level 2 results

**MEDIUM /
HIGH RISK**

**6 ESSENTIAL EMPLOYMENT SKILLS (EES)**

Collaboration

Communication

Creative thinking

Information literacy

Organising, planning and prioritising

Problem solving and decision making

Outlook: Medium-high risk

- Process, plant and machine operatives have experienced a decline in their employment share, largely due to automation. Longer term, this group is expected to maintain its share.
- Many people doing low- and mid-skilled work may lack the qualification levels and EES possessed by workers in growing, higher-skilled occupations, making it difficult for them to transition into higher demand areas.
- Research shows students with lower prior attainment are also more likely to withdraw from their apprenticeship before finishing it.

Recommendations (Government & local/regional authorities):

- Adopt a 'cradle to grave' approach to skills, promoting the development of a broad mix of cognitive, behavioural, and technical specific knowledge and skills, starting from the early years and continuing through school and post-16 education.
- Create a clear and coherent network of pathways into growth occupations, including higher vocational pathways at Levels 4 and 5 and bridging courses that help young people progress onto vocational courses at Level 3 and above.
- Incentivise employers to offer accredited training and apprenticeships for young people with low levels of prior qualifications and/or from disadvantaged backgrounds.



LOW RISK

Age:

19

Circumstances:

Studying English at University

Qualifications:

Good A Level/Level 3 results

Outlook: Low risk

- While applied STEM degrees give the largest early-career earnings premium, graduates of these courses can be more vulnerable to technological change and skills obsolescence. Graduates in arts, humanities and social sciences can have skills that are more resilient to changes in the economy and labour market.
- Degree educated adults tend to have higher levels of EES than their peers with lower-level qualifications, which increases their prospects of accessing growth occupations.
- However, there is some evidence that entry-level roles across high-skilled professional occupations are declining, increasing the pressure on young people to demonstrate they have the skills, experience and qualifications that employers are seeking.

Recommendations (Government & local/regional authorities):

- Ensure more young people are equipped to enter growth occupations by gaining higher qualifications, either through the traditional university route or via high quality technical and vocational alternatives to a degree.
- Explore what additional incentives or changes to funding and accountability measures might be introduced to encourage, recognise and reward efforts by post-16 providers and universities to develop their students' EES.
- Evaluate ways of assessing EES that Post-16 education providers can use to monitor and address students' gaps and learning needs.
- Help students to understand the importance of developing their EES.
- Establish and promote a clear and coherent network of high-quality vocational and technical routes into professional jobs.

Recommendation (Universities):

- Embed EES development across all programmes to help graduates adapt to shifting labour markets.
- Work with employers to embed work-integrated learning into all course types where possible, including non-STEM degrees.

Age:

17

Circumstances:

Studying three A-Levels, in Maths, English and Physics

Qualifications:

Good GCSE/Level 2 results

MEDIUM RISK

**Outlook: Medium risk**

- Students who study academic qualifications during upper secondary education are much more likely to progress to university, which subsequently positions them better to enter growing high-skilled jobs.
- There is some evidence that entry-level roles in growing high-skilled occupations are declining, increasing the pressure on young people to demonstrate they have the skills, experience and qualifications, that employers are seeking.

Recommendations (Government & local/regional authorities):

- Ensure more young people are equipped to enter growth occupations by progressing from upper secondary education into higher education, either via the traditional university route or high quality alternative pathways.
- Explore what additional incentives or changes to funding and accountability measures might be introduced to encourage, recognise and reward efforts by post-16 providers and universities to develop their students' EES.

- Evaluate ways of assessing EES that education providers can use to monitor and address students' gaps and learning needs.
- Help students to understand the importance of developing their EES and to articulate them using a common skills framework.
- Establish and promote a clear and coherent network of high-quality vocational and technical routes into professional jobs.

Recommendation (Post-16 education providers):

- Embed EES across their courses and in wider support for students.
- Adopt a skills framework and benchmark and monitor young people's EES development using this framework, ensuring students across all pathways make good progress.
- Where possible, increase access to extra-curricular activities that deliberately develop students' EES, emphasising opportunities for students from disadvantaged backgrounds.



**MEDIUM /
HIGH RISK**

Age:

16

Circumstances:

FE college student studying a Level 2 BTEC Diploma in Childcare

Qualifications:

Below average GCSE/Level 2 results

Outlook: Medium to high risk

- Anticipated changes in the labour market carry threats for young people who have low skills (particularly EES) and low-level qualifications, who are likely to find themselves competing for a dwindling number of low- and mid-skilled jobs.
- However, childcare work represents a rare example of a lower-middle skill level occupation that is projected to grow.

Recommendations (Government & local/regional authorities):

- Ensure young people leave education with the skills and qualifications required for them to enter, or progress into, growth occupations.
- Explore what incentives or changes to funding and accountability measures might be introduced to encourage, recognise and reward efforts by colleges and universities to develop their students' EES.

Recommendation (Post-16 education providers):

- Evaluate ways of assessing EES that education providers can use to monitor and address student gaps and learning needs.
- Help students to understand the importance of developing their EES and to articulate them using a common skills framework.
- Establish and promote a clear and coherent network of high-quality vocational and technical routes into professional jobs.
- Greater coordination and collaboration between FE providers, HE providers and employers, which can be supported through national frameworks and incentive structures.

Occupation:

Part-time administrator

Age:

50

Location:

Penzance

Highest level qualifications:

GCSEs (or Level 2 equivalent)

6 ESSENTIAL EMPLOYMENT SKILLS (EES)

Collaboration

Communication

Creative thinking

Information literacy

Organising, planning and prioritising

Problem solving and decision making

Outlook: High Risk

- Secretarial, admin and sales jobs face a high risk of job displacement over the next few years.
- Automation and AI pose a risk to lower-paid, lower skilled occupations such as these.
- The number of secretarial and related jobs are projected to fall by more than 15 per cent between 2020 and 2035.
- Workers in high-risk occupations are more likely to be at either end of the age distribution and located outside London and the South East.
- Workers in high-risk occupations possess lower levels of EES and qualifications compared to workers in growing occupations and therefore will face more barriers transitioning.
- Decline in employer-funded training in England which has not been mirrored across most of Europe.

Recommendations (Central Government):

- Reinvigorate the adult skills system, including a step change in funding, to promote and reduce the barriers to adults retraining and transitioning from declining occupations into growth sectors.
- Make adult education and skills an explicit policy objective within the Industrial Strategy and the Growth and Skills Levy
- Strengthen the Right to Request Time Off so that people can remain employed while retraining during an unpaid career break.
- Work with Mayoral Combined Authorities & local authorities to cut costs of studying for adults in high-risk jobs.
- Reduce the earnings penalty associated with a reduction in working hours for adults returning to education or pursuing training outside work.

HIGH RISK



Recommendations (Local government):

- Bring together local education providers, agencies and employers to develop a support package to help workers identify alternative jobs in growing occupations while providing careers guidance and training.
- Ensure housing and transport policies reflect current and future local skills needs and gaps and support workers to take up jobs in growth occupations.
- Simplify and raise awareness of entitlements to free courses & loans/grants to help workers retrain.

Recommendation (Education providers):

- Local adult education providers and employers work together closely to support a range of pathways for workers in high-risk occupations to reskill.
- Work with local/regional employers to create training courses and qualifications tailored to help working adults to transition more easily.

Recommendations (Employers):

- Invest in developing EES and other skills of their workforce, particularly for employees in declining occupations.
- Recruit local displaced workers and help them to reskill / upskill into growing occupations.
- Support managers to identify & utilise workers' 'latent' EES, chiefly those in mid- and low skill level occupations.
- Invest in management training and strengthen medium/ long term strategic workforce planning capabilities.

Recommendations (Employees)

- Make employers aware of their latent skills which might be useful in the organisation.
- Invest in developing EES and other skills and qualifications to improve chances of successfully transitioning to other areas of the labour market.

**Occupation:**

Retail Worker

Age:

20

Location:

Barnsley

Highest level qualifications:

Average Level 3 results

Background:

Raised in a disadvantaged home

Outlook: Medium to high risk

- Retail workers have a medium to high risk of job displacement over the next 10 to 15 years.
- At risk of falling out of the labour market.
- Workers in high-risk occupations are more likely to be at either end of the age distribution and located outside London and the South East.

Recommendations (Central Government):

- Reinvigorate the adult skills system, including through a step change in funding, to promote and reduce the barriers to adults retraining and transitioning from declining occupations into growth sectors.
- Simplify and raise awareness of entitlements to free courses & loans/grants to help workers retrain and transition.
- Increase access to adult-orientated careers and training guidance and advice.
- Work with Mayoral Combined Authorities & local authorities to reduce the direct costs of studying for adults in high-risk occupations.
- Encourage education providers to create training qualifications tailored to meet the needs of working adults.

Recommendations (Local Government):

- Bring together local education providers, agencies and employers to develop a support package to help workers identify potential alternative local jobs in growing occupations while also providing careers guidance and training.
- Ensure housing and transport policy reflect current and future local skills needs and gaps and support workers to take up jobs in growth occupations.

Recommendations (Education providers):

- Work with local/regional employers who are likely to be hiring new workers in growing occupations to create training courses and qualifications pathways designed to help at-risk or displaced workers transition more easily.

Recommendations (Employers):

- Invest in developing EES and other skills of their workforce, particularly for employees in declining occupations.
- Proactively seek to recruit displaced workers from declining occupations and help them to reskill/upskill.
- Support line managers to identify and utilise 'latent' EES of their workers, particularly the under-utilised skills of workers in mid- and low skill level occupations
- Invest in management training and strengthen medium/longer term strategic workforce planning capabilities.

Recommendations (Employees):

- Make employers aware of any latent skills which might be useful in their organisation.
- Invest in developing EES and other skills and qualifications to improve chances of successfully transitioning to other areas of the labour market.

Occupation:

Software programmer

Age:

32

Location:

London

Qualifications:

Post-graduate degree (Level 7)

Background:

Non-disadvantaged

**Outlook: Low to medium risk**

- Professional workers, such as lawyers, doctors, accountants and IT professionals are expected to grow their share of UK employment.
- Risk that some key tasks for entry level/junior software programmers might be replaced by technology or move overseas.
- This is likely to affect the pipeline into more senior IT and software roles in future.
- Workers in London are more likely to successfully transition to other growing, low-risk professional occupations associated with higher pay (upgrades)
- Workers in the South of England are also moderately more likely to make transitions into growing occupations with lower levels of pay (lateral moves).

Recommendations (Government)

- Reinvigorate the adult skills system, including a step change in funding, to promote and reduce the barriers to adults retraining and transitioning from declining occupations into growth sectors.
- Encourage employers to invest more in adult skills to equip early career professionals to rapidly develop their EES and technical skills so they can fill the growing professional job opportunities.
- Strengthen the Right to Request Time Off so that people can remain employed while retraining.
- Reduce the earnings penalty associated with a reduction in working hours for adults returning to education or pursuing training outside work.

- Work with Mayoral Combined Authorities and local authorities to reduce the direct costs of studying for adults in high-risk occupations.

Recommendations (Local Government):

- Ensure housing and transport policy reflect current and future local skills needs and gaps and support workers to take up jobs in growth occupations.

Recommendations (Employers):

- Invest in helping workers develop their EES and other skills by providing time and opportunities to do this.
- Support line managers to identify and utilise 'latent' EES of workers, chiefly those in mid and low skill level occupations
- Invest in management training and strengthen medium/longer term strategic workforce planning capabilities.

Recommendations (Employees):

- Make employers aware of any latent skills which might be useful in their organisation.
- Invest in developing EES and other skills and qualifications to make it easier to transition to other areas of the labour market



LOW RISK

Occupation:

Nurse

Age:

47

Location:

Reading

Qualifications:

Degree (Level 6)

Background:

Non-disadvantaged

Outlook: Low risk

- Some occupations, such as professional workers and health care workers, are expected to grow their share of UK employment.
- Health, education and social care sectors are expected to grow in next decade.
- Workers in London are more likely to successfully transition to other growing, low-risk professional occupations associated with higher pay (upgrades)
- Workers in the South of England are also moderately more likely to make transitions into growing occupations with lower levels of pay (lateral moves).

Recommendations (Government)

- Reinvigorate the adult skills system, including a step change in funding, to promote and reduce the barriers to adults retraining and transitioning from declining occupations into growth sectors.
- Increase access to adult-orientated careers and training guidance and advice

Recommendations (Government)

- Bring together local education providers, agencies and employers to develop a support package to help workers identify potential alternative local jobs in growing occupations while also providing careers guidance and training.

Recommendations (Employers):

- Invest in helping workers develop their EES and other skills by providing time and opportunities to do this.
- Support line managers to identify and utilise 'latent' EES of their workers.
- Invest in management training and continue to strengthen term strategic workforce planning capabilities.

Recommendations (Employees):

- Make employers aware of any latent skills which might be useful in their organisation.
- Invest in developing EES and other skills and qualifications to make it easier to progress within their chosen occupation or transition to other areas of the labour market if required or desired

Learn more about NFER

If you would like to know more about our research, our resources and our services, or about partnering with us in our work, please get in touch:

NFER Head Office

The Mere, Upton Park,
Slough SL1 2DQ

T: +44 (0)1753 574123
F: +44 (0)1753 691632
enquiries@nfer.ac.uk

NFER Northern Office

Suite S2, IT Centre, York Science Park, Heslington,
York, YO10 5NP

T: +44 (0)1904 433 435
F: +44 (0)1904 433 436
north@nfer.ac.uk

In a world of unprecedented disruption and change, caused by a global pandemic, social upheaval, technological innovation and the climate crisis, it is more important than ever that education policy and practice is informed by high-quality evidence.

NFER exists to create this evidence and get it into the hands of those who can use it to make a difference.

www.nfer.ac.uk

X (formerly Twitter): @TheNFER

LinkedIn: [linkedin.com/company/thenfer](https://www.linkedin.com/company/thenfer)

Bluesky: @thenfer.bsky.social

© National Foundation for Educational Research 2025

All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, or otherwise, without the prior written permission of NFER.