

# New Opportunities CEPEO Evidence-Based Policy Priorities

Full Report March 2023



Britain is one of the most unequal countries in the developed world, in terms of outcomes and opportunities. One of the most important drivers of the gap in adult incomes between children from richer and poorer families is differences in their education and skills. Inequalities in education – the fact that those from poorer families do less well at school than those from richer families – drive over half of the inequality in opportunities experienced in this country. This is unsurprising: education is one of the most important predictors of life chances, and those with lower levels of education are less likely to find employment or get a high-paying job. While progress had been made over the past decade in reducing achievement gaps in education between children from richer and poorer families, unequal experiences during the recent Covid-19 pandemic have eradicated this.

The aim of our Policy Priorities is to offer evidence-led, practical steps to move towards a society of more equal opportunities from early years to adulthood. In the battle to overcome severe skills shortages and waning productivity growth, there is a <u>strong economic case</u> for major investment in education and skills throughout life, from early years through to tertiary education and in-work training. The benefits of investments in education and skills are often found to outweigh the costs in the long run, meaning spending in these areas is a relatively low-risk choice for politicians concerned about future debt. Yet mindful of the challenge of competing priorities and high public debt, we present eight immediate priorities that are low cost, grounded in evidence, readily attainable, and materially important, and six more ambitious evidence-led reforms to address long-standing inequalities, equalise opportunities and create a fairer, more productive society.

The purpose of this document is to set out the evidence that informed our policy priorities. For each policy, we refer to a wealth of evidence motivating the underlying challenge and reviewing the effectiveness of possible actions that could be taken in response. Combining both strands leads us to policy suggestions that evidence suggests are not only feasible, but effective. We rely on studies using robust analytical approaches, such as randomised control trials or other methods of drawing causal inference, where possible, but the availability of these kinds of high-quality evidence varies from area to area. We draw from multiple sources of evidence on each issue, spanning different time periods and countries, so that we can be confident that the problems we address have a real detrimental impact and deserve our attention, and that the actions we propose are likely to solve the problems highlighted. Throughout, we refer to administrative data sources, national statistics, and government reports alongside academic research.

The policy priorities offered here have been identified through a lengthy process. We started with policy challenges and actions informed by our own academic expertise, where we knew that robust evidence existed. We then considered if we had full coverage of each stage of the life course and, where there were gaps, sought evidence to support policy actions for recognised policy challenges. We reviewed a long list of options with our expert advisory board to test the quality of the evidence on offer. Where there was consensus among experts, this helped to shape our choices. This was particularly helpful in guiding which policies were less impactful and where we could be more ambitious. We removed policies which did not have strong enough evidence to support them, despite being targeted towards equalising opportunities – for example replacing maintenance loans with maintenance grants for the poorest students. Finally, we tested our policy priorities in two public focus groups run by Public First. We targeted two mixed groups of parents (one with younger children aged 0-10, one with older children aged 11-20), in one northern English city and one southern English town. The groups were organised to include parents from a range of socio-economic backgrounds and previous voting records.



In a few cases, we felt it was vital to make a policy recommendation even though robust evidence to inform a specific solution was not available. In these cases, we are clear and transparent, motivating the problem at hand as extensively as possible, and making recommendations that are likely to be low-cost and sensible.

We begin by presenting eight immediate priorities that focus on simple and low-cost change, that are readily attainable and likely to be materially important.

## Immediate priorities - simple, low-cost change

- 1. Improve communication and simplify applications for childcare subsidies.
- 2. Launch a new campaign to support children's early maths skills.
- 3. Improve communication with parents to reduce pupil absenteeism.
- 4. Retain external examination as the primary means of assessment.
- 5. Reform apprenticeship levy rules to ensure that apprenticeships are a gateway into skilled employment for young people.
- 6. Expand accountability on attendance and outcomes to all providers of post-16 education.
- 7. Introduce an annual "Social Mobility Scorecard" for universities.
- 8. Introduce entry and pay gap audits by socio-economic background.

We complement this list with six more ambitious reforms, that require structural reform or significant investment to address long-standing inequalities.

# Ambitious reforms to address long-standing inequalities

- Ensure access to high-quality early years provision for children from disadvantaged backgrounds.
- 2. Reform school admissions policies to weaken the link between family income and school quality.
- 3. Invest in the recruitment and retention of high-quality teachers.
- 4. Introduce a post-qualification applications (PQA) system for post-18 education.
- 5. Invest more in Further Education (FE).
- 6. Adopt a more generous and holistic approach to incentivising adult learning.

This Full Report is intended to provide a more detailed picture, to complement our <u>Main Report</u>. We are grateful to Torsten Bell, Simon Burgess, Carl Cullinane, Becky Francis, Paul Gregg, Darren Hankey, Jennifer Hudson, Tim Leunig, Tom McBride, Osama Rahman, Jonathan Simons, Marc Stears, and the CEPEO advisory group for their insightful comments on earlier drafts, and to Alice De Gennaro for her time and efforts.

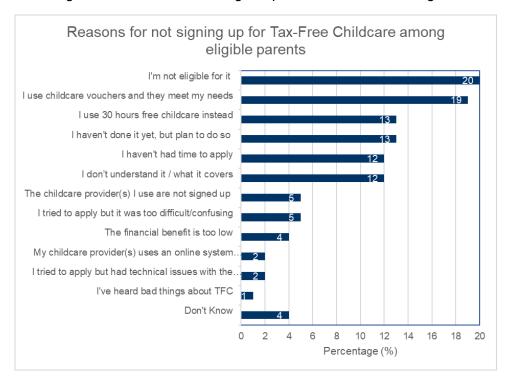


# Immediate priorities - simple, low-cost change

## 1. Improve communication and simplify applications for childcare subsidies

Attending high quality Early Childhood Education and Care (ECEC) benefits <u>children</u>, particularly those from disadvantaged backgrounds, from at least age 2 onwards. Provision of free or subsidised ECEC targeted towards those from disadvantaged backgrounds can therefore potentially help to narrow the gap between disadvantaged pupils and their peers in terms of both cognitive and socio-emotional development, but only if entitlements are taken up. In 2022, less than three quarters of eligible disadvantaged 2-year-olds took up their entitlement to 15 hours per week of free early education during term-time. <u>Interviews</u> with <u>parents</u> whose children were eligible for a free place but who did not take it up suggested that a lack of knowledge of the scheme and challenges of confirming eligibility are key barriers to take-up.

Similarly, less than half of families estimated to be eligible for tax-fee childcare (TFC) use it. While not specifically designed to target more disadvantaged families, the subsidy provided by TFC may be more important for families living on low incomes or on the margins of employment. The following graphic shows the reasons why parents who were eligible for TFC had not signed up. Lack of knowledge, together with perceived difficulties of applying, are some of the reported barriers. For example, one in five eligible parents thought they were not eligible and around one in eight reported not understanding the scheme.



#### Source:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/1062615/HMRC\_research\_report\_630\_Tax\_Free\_Childcre\_barriers\_to\_sign\_up.pdf\_

This evidence suggests that interventions that increase information about the available schemes and/or make it easier to apply are likely to increase take-up and potentially boost mothers' labour supply and/or children's development.

Recent research in England has found that the design and content of letters sent to parents telling them about their entitlement for a free place for their 2-year-old or for tax-free childcare can affect take-up. Different letters



were tested using a randomised controlled trial (RCT) for each scheme. Including a checklist of documents needed to confirm eligibility for TFC was found to increase take-up by 12%. Similarly, stressing a call to action, highlighting exclusivity, a social norms message, and a next steps checklist was found to increase take-up of the 2-year-old entitlement by 9%.

'Golden tickets' go a step further and essentially passport people through the system, removing the need to apply at all. They are used by <u>some local authorities (LAs)</u> to reach out directly to the families likely to be eligible for the early education entitlement for disadvantaged 2-year-olds. <u>Indicative evidence</u> suggests that these are effective in boosting take-up. This is backed up by evidence from an <u>RCT</u> in Germany, which found positive effects on participation in Germany's childcare system by providing application information and personal assistance for applications. Application rates among lower-SES families increased substantially as a result, halving the SES gap in enrolment. Likewise, many other studies show the effectiveness of similar interventions designed to overcome information barriers or simply the application process in other education choice settings. Other examples include <u>personalised mailing</u> and <u>guidance packs</u> sent to particular students to encourage them to apply to universities in the US.

We recommend that golden tickets be used nationally and expanded to target those eligible for TFC, as well as those eligible for the free entitlement for disadvantaged 2-year-olds. By targeting the under-use of early education entitlements and TFC we can help to reduce childcare costs, improve children's outcomes, and narrow the disadvantage gap.

# 2. Launch a new campaign to support children's early maths skills

<u>Maths attainment has declined since the pandemic</u>, with only 71% of 11-year-olds meeting their expected standards in maths in KS2 SATs in 2022. This fell from 79% in 2019, before school closures and puts current attainment levels a great distance from the <u>Levelling Up Mission</u> of 90% achieving expected standards in reading, writing, and maths by 2030. This decline was not observed for reading skills which showed a small increase from 73% to 74% in the same time period.

One way to ensure attainment targets are met is by starting early. Maths competency at age 5 predicts later educational outcomes at the end of school and beyond. A <u>meta-analysis of 6 longitudinal datasets</u> finds that early math skills have the greatest predictive power for later achievement at age 10/11 (the age at which we have seen a decline in attainment). Further on, at GCSE level, 1 in 4 children below expected levels at age 5 fail to achieve a pass or above in their maths GCSE (compared with 1 in 10 who were above expected levels at age 5).

There are many avenues for supporting early years maths development, one of which is involving parents in the home learning environment. Engagements in children's learning are related to educational outcomes and parents of young children typically only engage in maths-related activities <u>once a week</u>, compared to reading with their children 5 to 7 days a week. The <u>EEF's Early Years Toolkit</u> summarises the best available evidence on key areas for learning and development. It describes the parental engagement strand as being "high impact for low cost based on extensive evidence". The Centre for Social Justice also views parental

<sup>&</sup>lt;sup>1</sup> Impact is measured in estimated number of additional months of progress that pupils could be expected to make, on average, as a result of the approach being used. In the case of parental engagement, it is estimated as being +5 months. https://educationendowmentfoundation.org.uk/education-evidence/early-years-toolkit



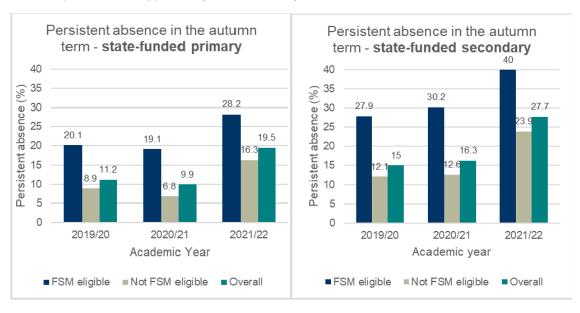
participation as key to addressing the attainment gap in English primary schools, calling for a <u>National</u> Parental Participation Strategy.

Supporting this development can involve the use of educational apps, story books, and applying maths-related concepts to everyday life situations. We recommend a national campaign similar to the DfE Hungry Little Minds campaign which focused on early literacy in 2019.

# 3. Improve communication with parents to reduce pupil absenteeism

Rates of persistent absence have increased post-pandemic, especially in secondary schools. Persistent absence is defined as missing 10% or more available half days of school. In Autumn 2019, these rates were 11% for primary pupils and 16% for secondary pupils. <sup>2</sup> In Autumn 2021, however, non-Covid-related persistent absence was 12% for primary pupils and 21% for secondary pupils. <sup>3</sup> New analysis finds that a third of 15-year-olds in England have been persistently absent from classrooms since September 2022. <sup>4</sup>

These persistent absence rates vary by socio-economic background, with rates in Autumn 2021/22 of 28% for primary pupils and 40% for secondary pupils eligible for free school meals (FSM), compared to 16% (for primary) and 24% (for secondary) among those not eligible for FSM.



 $\textbf{Source:} \quad \underline{\textbf{https://explore-education-statistics.service.gov.uk/find-statistics/pupil-absence-in-schools-in-england-autumn-term}$ 

Increased instruction per week leads to increases in attainment, and persistent absences are disruptive to pupil attainment. Recent research analysed the effects of absence on long-run outcomes by looking at cohorts of Swedish individuals born in the 1930s. Ten days of absence was linked with 4.5% of a standard deviation reduction in academic performance in elementary school. Moreover, ten days of annual absence

<sup>&</sup>lt;sup>2</sup> These rates were calculated manually from administrative data: https://explore-education-statistics.service.gov.uk/find-statistics/pupil-absence-in-schools-in-england-autumn-term

<sup>&</sup>lt;sup>3</sup> These rates were calculated by discounting the first 10 days of absence to account for the recommended Covid self-isolation period. Not discounting this, the rates as per the traditional defintion were 25% for primary pupils and 34% for secondary pupils.

<sup>&</sup>lt;sup>4</sup> As of February 2023



was associated with a 1-2% reduction in lifetime earnings. <sup>5</sup> Other research has calculated that even a conservative assumption of persistent absence (missing 10% of lessons) <u>leads to 2-3 months of learning lost</u>.

Taking this evidence together, there is great concern that, post-pandemic, higher absence rates will lead to pupils losing out on learning, having lower school attainment, and damaging long-term earnings and wealth outcomes, and that children from lower income backgrounds will experience these negative effects disproportionately.

Reducing pupil absenteeism is a major policy challenge, with greater investigation required to better understand the root causes of the substantial increases in absence rates seen in schools and colleges since the pandemic. But the best available evidence from before the pandemic suggests that we may be able to cheaply and effectively intervene by harnessing low-cost technology. A large-scale one-year experiment in the US pushed high-frequency information to parents about their child's absences via automated text messages, increasing class attendance by 12% at extremely low cost. Similar experiments in an English context have also found small, but significant, effects for low cost.

Harnessing this cheap and effective intervention could play a role in combatting the post-pandemic spike in pupil absences and, so, minimising future harm to pupils' attainment, especially among children from low-income backgrounds.

## 4. Retain external examination as the primary means of assessment

The disruption to traditional GCSE and A-Level examinations in the past few years, has led to increasing calls for educational assessment by traditional means (i.e., 'high stakes' external examinations) to be abolished.<sup>6</sup> A common suggestion is that we replace external high-stakes testing with internal assessments, usually continuous in nature, by teachers. This would harm equity between students in a way that outweighs concerns around external assessment.

Switching to internal assessment would set back attempts to reduce inequalities in the UK education system. Analysis of administrative data from end of Key Stage 2 national curriculum tests (often known as SATs) showed <u>ethnic bias in teachers' assessments</u>. 12.4% of white pupils received a teacher assessed grade from their teacher that was below their final test score, while this was 32% for black Caribbean pupils. Higher socioeconomic status (SES) students are also <u>more likely to receive favourable internal assessments</u> from teachers compared to equally attaining less advantaged pupils.

While there are concerns over exam stress, most studies investigating the <u>strain of exams</u> on young people <u>rely on small and unrepresentative samples</u>. They also often rely on retrospective accounts and lack a meaningful comparison group who did not sit the same exams. In contrast, a recent paper has shown that there is <u>no difference in mental health</u> among English pupils around the time of their Key Stage 2 tests, compared to pupils in other parts of the country where these tests aren't taken.

Studies also tend to agree that teaching to the test is a likely outcome of high-stakes testing, but evidence of its effects on learning is mixed, and may even benefit students overall, especially those who struggle with

<sup>&</sup>lt;sup>5</sup> Proxied using income measured at ages 35-40 and pension income.

<sup>&</sup>lt;sup>6</sup> A review of concerns such as this in the debate over abolishing GCSEs has been laid out in CEPEO briefing note #14 https://repec-cepeo.ucl.ac.uk/cepeob/cepeobn14.pdf

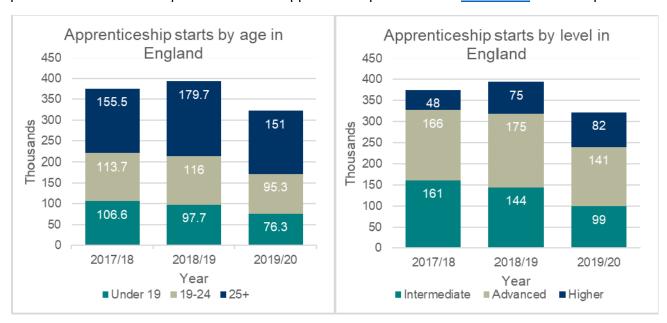


<u>learning</u>. Moreover, any negative effects of teaching to the test could be addressed through re-evaluation of the content and format of external assessments.

Taken together, our recommendation to retain external examinations as the primary means of assessment is based on the balance of evidence that concerns about anxiety or teaching styles are outweighed by the potential harm to equality. Far more harmful would be switching to a system in which we will likely see systematically unfair assessment of pupils at crucial stages of their educational progression. The outcomes of these assessments will affect their later choices and life chances and, while there are indeed benefits to students of continuous formative assessment, these are complements, rather than substitutes, to summative assessment.

# 5. Reform apprenticeship levy rules to ensure that apprenticeships are a gateway into skilled employment for young people

Apprenticeships have great potential as a way into skilled employment for young people stuck in low-skilled work. The recent <u>expansion of UCAS' service</u> to include apprenticeship opportunities highlights the importance of this pathway for school leavers. However, there is currently a <u>preference in the apprenticeship system for existing employees over young people</u>, as companies use the levy as a way to train existing staff. This issue has been exacerbated by the pandemic. Apprenticeship starts <u>fell by 45%</u> during the first lockdown and though they recovered slightly in the autumn, they were still 28% lower than the previous year. Young people and entries to lower qualification level apprenticeships have been <u>hardest hit</u> over this period.



Source: https://researchbriefings.files.parliament.uk/documents/SN06113/SN06113.pdf

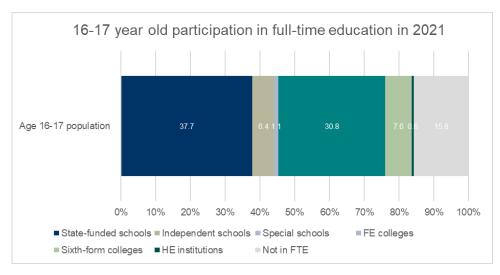
The government introduced an apprenticeship bonus payment over summer 2022 to try to reduce this damage but <u>employers claimed the payment for only 18% of starts between August and November</u>, likely because the bonus cannot be claimed for existing employees. The problem had already begun pre-pandemic with the apprenticeship levy being used predominantly for higher qualified people already working at the organisation, rather than young people looking to improve their skills.



A fundamental reform of the levy is needed. For apprenticeships to be a meaningful pathway for young people, levy rules must reflect this. This could be done through ensuring that at least a proportion of the levy must be ringfenced for young people with lower qualification levels. If a more holistic package of support was offered for adult learners (outlined below), the entire levy could be ringfenced for school leavers, offering a genuine alternative route to higher skills for young people.

# 6. Expand accountability on attendance and outcomes to all post-16 providers to reduce NEET rates

A large proportion of young people study in sixth form colleges and Further Education (FE) colleges from age 16 to progress their learning.



Source: https://explore-education-statistics.service.gov.uk/find-statistics/participation-in-education-and-training-and-employment#dataBlock-7b05189e-0015-40e5-168f-08da47b0392d-charts

However, despite the law requiring that young people continue to participate in education or training until the age of 18, there is little enforcement of participation beyond 16. Indeed, at the end of 2021 only 84% of young people were in full time education. A further 9% were in part time education, and 2% in employment. Worryingly, the NEET (Not in Employment, Education or Training) rate among 16- and 17-year-olds was at its highest level since 2013 (at 5% of this age group). This is alarming given the potentially detrimental long-term impacts of inactivity for young people on later health, earnings and quality of work. Furthermore, being NEET occurs disproportionately among those already experiencing other forms of disadvantage.

Current guidance places accountability for re-engaging young people who have dropped out with resource-depleted local authorities. Education providers themselves, meanwhile, <a href="https://have.a.general.duty.com/have.a.



Evidence from the secondary education sector suggests that the publishing of key information does hold institutions to account and can lead to changes in outcomes. A <u>natural experiment</u> that looked at the effect of the abolition of school league tables in Wales found that the percentage of students achieving at least five good GCSE passes (the key published performance measure) declined by 3.3 percentage points per school in Wales relative to England. The 2021 FE white paper mentioned the "<u>introduction of new powers to intervene when colleges are failing to deliver good outcomes for the communities they serve</u>". This proposal would be a simple way to fulfil this objective.

We recognise that sixth-form funding has experienced some of the <u>largest cuts in spending since 2010</u>. Even with additional funding set aside for further education and sixth forms in 2021, college spending per pupil in <u>2024-25 will still be around 10% below 2010-11 levels</u>, and school sixth-form spending per pupil will be around <u>23% below 2010-11 levels</u>. This means post-16 providers would face similar resource constraints to local authorities in enforcing attendance. Thus, this policy would be more beneficial if coupled with more investment in post-16 education (as discussed below), to make this type of enforcement more manageable for a strained sector.

## 7. Introduce an annual "Social Mobility Scorecard" for universities

There are <u>significant rewards</u> to attending higher education in the form of higher earnings and higher employment rates on average, among other benefits. Once we account for differences in individuals' characteristics, the average impact of attending HE on earnings at age <u>29 is 26% for women and 6% for men.</u> However, there is wide variation in earnings according to the particular university a student attends, with some universities being <u>associated with negative returns to earnings at age 29.</u> We also know that students who are disadvantaged in terms of socio-economic status <u>are less likely to attend</u> the universities associated with high labour market returns, even when they have the qualifications to get in. The current arrangement, where universities associated with the highest earnings returns only educate a small proportion of disadvantaged students, is not just a problem for equality of opportunity, but also raises questions of whether they are making the contribution to society we should be expecting.

Based on this evidence, we must incentivise the most selective universities to recruit more students from low SES backgrounds. We propose the creation of an official, government released annual "Social Mobility University Scorecard". This would work similarly to the highly regarded Social Mobility Employer Index, which publishes data on the top employers for social mobility. In 2021, there were 203 entrants to the index compared to 98 at its inception in 2017. The Social Mobility Foundation's impact report found that returning organisations are more likely to demonstrate progress on social mobility, as those who had submitted previously were 4 times more likely to be collecting 3 or more socioeconomic background data points. Evidence from the education sector suggests that the publishing of key information does hold institutions to account and can lead to changes in outcomes; as noted above, a natural experiment that looked at the effect of the abolition of school league tables in Wales found that the percentage of students achieving at least five good GCSE passes (the key published performance measure) declined by 3.3 percentage points per school in Wales relative to England. A study that constructed 'mobility report cards' for colleges in the US highlights

<sup>&</sup>lt;sup>7</sup> Based on analysis of Longitudinal Educational Outcomes (LEO) linked administrative dataset.

<sup>&</sup>lt;sup>8</sup> Using a composite measure of free school meals eligibility and neighbourhood characteristics.

<sup>&</sup>lt;sup>9</sup> Based on analysis of a cohort of 140,000 students from school to university through linked National Pupil Database-Higher Education Statistics Agency data.



how we can use administrative data to highlight patterns of access to higher education and of intergenerational mobility by combining student-level, parent-level and college-level statistics.

The creation of this scorecard would bring data together on proportions of disadvantaged students in each course (available in the Office for Students access and participation dashboard) and their associated earnings (from the Longitudinal Education Outcomes dataset) in an accessible manner to understand the contribution that each course makes to social mobility. This would particularly reward universities, such as Queen Mary University of London (QMUL), who <u>attract high proportions of disadvantaged students each year, and who produce high-earning graduates</u>. This would recognise the important contribution to society of these universities, while providing an incentive to others.

## 8. Introduce entry and pay gap audits by socio-economic background

There are substantial differences in access to professional occupations by socio-economic background, with privately educated graduates being a third more likely to enter into high status occupations than state educated graduates with <u>similar backgrounds</u>. But this isn't just an issue of access: there are also large socio-economic pay gaps within occupations. Individuals from working-class backgrounds earn 16% less in elite occupations compared to colleagues from more privileged backgrounds. And this gap persists after accounting for <u>education differences across employees</u>. Striving for equality of opportunity means we must equalise both access to, and progression within, firms across the range of socio-economic backgrounds.

Gender pay-gap reporting has reduced gender pay inequalities. Pay transparency increases the probability that women are working in above-median-wage occupations by 5 percent. The Social Mobility Employer Index publishes data on the top employers for social mobility and has seen more than a doubling in entrants to the index from 2017 to 2021. The Social Mobility Foundation found that returning organisations were more likely to demonstrate progress on social mobility, as those who had submitted previously were four times more likely to be collecting three or more socioeconomic background data points, suggesting that transparency can facilitate change.

We propose the introduction of both entry and pay gap audits by socio-economic background. This would include the reporting of pay inequalities and the proportion of individuals from different socio-economic backgrounds entering occupations, in a similar way to the current gender pay-gap reporting. This would shine a light on both access and progression of individuals from low-socioeconomic backgrounds in firms.



# Ambitious reforms to address long-standing inequalities

# Ensure access to high-quality early years provision for children from disadvantaged backgrounds

There are already large gaps in development between children from richer and poorer families by the time they start school. For example, <u>nationally representative data</u> from the Millennium Cohort Study shows that less than one in ten individuals from the poorest 20% of families are identified as being in the top quintile of cognitive development at age 3 compared to around a third of individuals from the richest 20% of families. There are similarly large gaps in socio-emotional development as well.

These gaps are explained in part by differential use of early childhood education and care (ECEC). For example, children eligible for free school meals are only around half as likely to use their full entitlement to free early education at ages 3 and 4 compared to children not eligible for free school meals. This is important because attending high quality ECEC provision has short- and longer-term benefits for children. For example, a wide range of international evidence, including observational evidence from England, suggests that it improves cognitive test scores before or soon after starting school, and can help to reduce the socioeconomic gap in cognitive and socio-emotional development. Longer-term follow-up studies in England showed that attending a high quality pre-school was associated with better grades at GCSE (relative to not attending), and evidence from natural experiments in the US and Norway suggests it increases the likelihood of graduating high school and starting college, and has positive effects on achieved qualifications and labour market outcomes when individuals are in their early 30s.

The benefits of attending high quality ECEC provision are particularly large for children from <u>disadvantaged</u> <u>backgrounds</u>, who are the least likely to attend and have, on average, <u>fewer resources at home</u> to support their development. These benefits are apparent from at least age 2, with <u>some evidence</u> suggesting benefits of earlier attendance as well. These benefits are greatest if children attend <u>high quality provision</u>.

The announcement in <u>Spring Budget 2023</u> that 30 hours per week of 'free' ECEC during term-time would be available for children from 9 months in working families from September 2025 will address one of the biggest holes in the system from the perspective of affordability, as it will offer significant financial support for families at a time when childcare <u>costs are highest</u> and financial support is lowest. The offer is likely to substantially reduce the costs of care for eligible families, and <u>may induce more mothers to work (more)</u>.

But it provides more financial support for relatively better-off working families than for non-working, potentially more disadvantaged, families, and thus risks widening inequalities in children's development and perpetuating intergenerational inequalities. For example, as the figure below shows, the Sutton Trust highlights that relatively more families with higher earnings are eligible for the existing 30 hour offer for 3-4-year-olds (which has the same eligibility criteria as the new offer for those from 9 months), while families entitled to the existing 2-year-old offer – which is targeted on the 40% most disadvantaged families – are disproportionately concentrated at the lower end of the earnings spectrum and amongst non-working families. This is because eligibility criteria for the 30-hour offer includes all parents earning at least the equivalent of working at least 16 hours a week at minimum wage over the following three months.



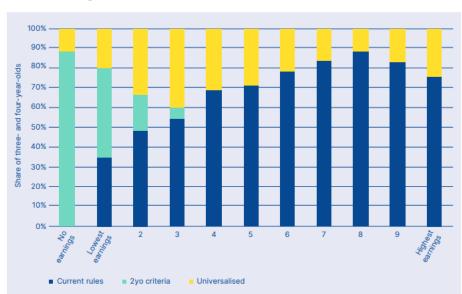


Figure 2: Share of three- and four-year-olds brought into eligibility under different criteria, by household earnings

Source: https://www.suttontrust.com/wp-content/uploads/2021/08/Sutton-Trust-A-Fair-Start.pdf

There is also a danger that this 'free hours' approach may negatively affect childcare availability, especially for those from the most disadvantaged backgrounds, if the funding rates paid by the government to cover the 'free' care are too low. There is ample anecdotal evidence that existing 'free' care is not truly free to parents: the guidance to providers suggests they can charge for 'extras' such as lunch, and many only designate a subset of their daily hours for parents to claim against their funded entitlement. There is also evidence that the funding rate paid to providers for the existing hours of 'free' care is too low and as a result, providers tend to 'cross-subsidise' between publicly and privately funded hours of care – in other words, they charge higher fees to parents, often of 0-2 year olds, to compensate for the lower fees paid by the government for the funded entitlements. The introduction of the new 'free' care for those aged 9 months plus reduces the scope for providers to utilise this model of cross-subsidisation, potentially risking their financial viability.

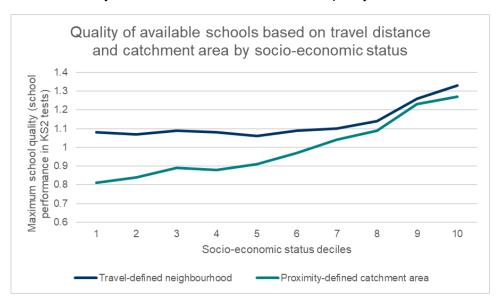
The benefits to children's development of attending high quality ECEC are apparent from <u>around 15-20 hours</u> <u>of care per week</u>, so ensuring children from disadvantaged backgrounds have access to at least this much free or highly subsidised care is vital. Supporting access across the year, not just during term-time, could also make it easier for lower income families to secure places, particularly at private providers, who might otherwise prioritise families able to pay for additional hours.

Substantially increasing the early years premium would additionally increase incentives for providers to take children from disadvantaged families, and could enable them to invest in higher quality provision, which is key to delivering the benefits for children.



# 2. Reform school admissions policies to weaken the link between family income and school quality

Families of pupils eligible for free school meals (FSM) <u>value the same school characteristics as families from more affluent backgrounds</u>. This finding, based on administrative data from a whole cohort of pupils applying to secondary schools in England in 2014/15, contradicted previous literature (not based on population data) suggesting that school choices vary by socio-economic status. Despite this similarity in preferences, non-FSM students access better schools as they are more likely to live closer to them. In London, FSM students attend schools where 59% of pupils achieve 5 passes or higher at GCSE compared to 65% for non-FSM students, widening to an 8 percentage point gap outside London. Because <u>school admissions largely operate under proximity-based rules</u>, a <u>postcode lottery</u> arises in which students in certain catchment areas are limited to particular schools even if they could travel to a school of better quality.



Source: https://theconversation.com/school-postcode-lottery-how-to-improve-the-odds-for-poorer-children-53335

Compared to more affluent families, disadvantaged parents are limited in their ability to access schools with the characteristics they desire, because they have fewer resources to buy a house in the respective catchment area (as 3.5% of households report explicitly doing) or to pay for tutoring to access grammar schools. Grammar schools are highly socially selective and they increase rather than decrease inequalities at a population level. There are stark differences in grammar school attendance within selective areas by SES. Only 6% of the most deprived families attend a grammar school. Using an index of socio-economic status, it is not until the 90<sup>th</sup> percentile that we see more than half of students attending a grammar school. The top percentile group, however, sees attendance rates of 80%. Furthermore, high-attaining pupils who miss out on grammar school places in selective areas are less likely to stay go on to higher education. If they do, their chances of attending a high-status university and achieving a good degree classification is lower compared to equivalent pupils who went to grammar schools.

Reforms to school admissions policies would weaken this link between school quality and family income. Using some criteria beyond postcodes, <u>such as pupil premium quotas</u>, or introducing a degree of random assignment of pupils to schools, through a defined lottery system or random assignment within distance



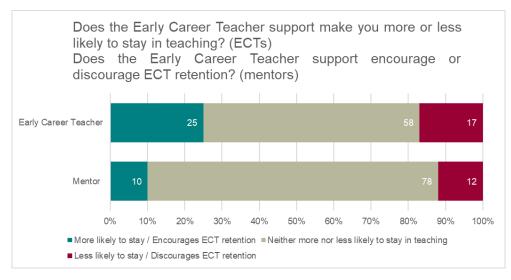
bands, catchment areas could be expanded, breaking the link between house process and school quality. The evidence also supports aligning grammar school admissions policies with all other state schools to reduce inequalities and equalise opportunities.

## 3. Invest in the recruitment and retention of high-quality teachers

The NFER's 2022 Teacher Labour Market in England Annual report found that the UK has a shortage of qualified teachers in the sciences, maths, computing and modern foreign languages. Furthermore, there is a substantial risk that these subjects will not meet their recruitment targets. Teachers' median real-term pay was around 7 to 9 percent lower in 2020/21 compared to 10 years prior. This squeeze on pay results in teachers leaving the profession for better paid work, as was found in a study analysing the effects of an economic boom on a variety of school characteristics and outcomes.

The government recently introduced a set of targeted early-career bonus payments aimed at boosting retention in shortage subjects. Analysis of the Retention Payment Reform found that bonuses in 2018/19, which were equivalent to 8% of salary, led to a 23% reduction in the probability of teachers leaving in a given year. Retention payments should be rolled out to other shortage subjects and the value of these bonuses should be increased in real terms until the shortages are eliminated. For the same reasons, we welcome that the government has pledged to increase teachers' starting pay to £30,000. This has already been pushed back to September 2023, but it must be implemented as soon as possible, and certainly no later than the current plan, given that the current high level of inflation is further eroding the real value of teacher pay.

There should also be focus on recruiting and retaining teachers that are of high-quality because effective teachers improve <u>pupil achievement</u>, <u>help close the gaps between more and less advantaged pupils</u>, and <u>increase pupil earnings</u> in later life. Therefore, we must consider the current state of teacher training, which has been undergoing major reform since the publication of the Carter review in 2015. The introduction of the Early Career Framework (ECF) has effectively extended the induction period for new teachers from two to three years and has been welcomed by the sector. However, the additional training is too labour intensive and school-based mentors don't have enough time to support new teachers, despite the intention of <u>funding supporting this</u>. Thus, we recommend a <u>slimming down</u> of the ECF to make it more effective.



Source: https://teachertapp.co.uk/articles/where-next-for-the-early-career-framework/



There is a large body of evidence suggesting that high quality professional development for teachers improves pupil outcomes. A <u>meta-analysis</u> combining results across 60 studies on teacher coaching employing causal research designs found pooled effect sizes of +0.18 standard deviations (SD) on student achievement. Another <u>meta-analysis focusing on STEM</u> instructional improvement efforts found an average effect of +0.12 SD on student outcomes. This is promising considering most shortage subjects fall under STEM. Positive effects have also been found specifically for <u>literacy growth</u>. The new suite of fully-funded National Professional Qualifications (NPQs) represents a major investment in such professional development, with budget available for around 10% of all teachers in England to take an NPQ course every year. We recommend that NPQs are designed in accordance with the <u>latest research</u> on the theory and design of teacher professional development in order to maximise the benefits from this additional funding.

# 4. Introduce a post-qualification applications (PQA) system for post-18 education

The UK is the only country in the world in which university applications are made before school exams have been completed. This means that applications occur using teacher predicted grades. There is a large body of evidence highlighting the inaccuracies and systematic differences in predicted grades across student groups.

Analysis of UCAS data has shown that predictions are highly inaccurate with only 16% of applicants achieving the A-level grades they were predicted to achieve, while 75% of students are over-predicted. Among equally high attaining students, disadvantaged students receive less generous predictions compared to more advantaged students. Disadvantaged students are then more likely to 'undermatch' and enter courses with students of relatively lower average ability, which leads to higher chances of dropping out, receiving a lower-class degree, and earning less in the future. We cannot simply shift the responsibility of the assignment of predicted grades away from teachers; even when relying on machine learning and advanced statistical techniques, it is only possible to accurately predict the grades of 1 in 4 students. Moreover, using predicted grades in place of actual exam results is not a sensible part of our admissions process.

The alternative, used by every other major education system worldwide, is a post-qualification application (PQA) system. This would allow students to make university applications after they have taken their A-level exams and received their results. This system would be more accurate, fairer, and bring the UK in line with the rest of the world in allowing students to make these life changing application decisions based on full information.

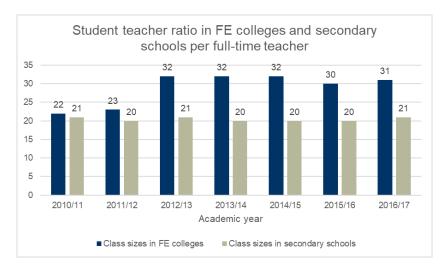
Two proposals for achieving this are as follows. First, the school summer holidays could be shortened by reorganising the school calendar, allowing pupils to sit their exams and receive their grades during term time, and then make their university applications before the school holidays began. A second, less disruptive (to both school and university calendar), option would be to condense the final exam period to 4 weeks, and accelerate exam marking to 7-8 weeks. Examinations would take place in early May. Students would return to school afterwards, receiving their results in mid-July, in time for an in-school 'applications week'. Universities would then have a month to process and make offers at the end of August, and students would have a short time to accept their favoured choice.

We cannot ignore the flaws of a system that grants and denies young people such big opportunities based on inaccurate and unfair predicted grades. These students deserve the chance to have their applications assessed in light of their actual achievements.



#### 5. Invest more in Further Education

The Further Education (FE) sector faces major challenges as <u>FE budgets have fallen significantly in real terms in the past decade</u>. Spending per student aged 16-18 was 14% lower in 2019-20 compared to 2010-11. Even with the additional funding announced in recent spending reviews, college spending per pupil in 2024-25 will still be around 5% below 2010-11 levels. Increasing student numbers and the overhaul of the post-16 qualification landscape increases the pressure on these institutions. Over the same time period as the large cuts to funding, colleges have seen average learning hours fall and average <u>class sizes</u> rise (pg68) from low 20s to low 30s in less than a decade.

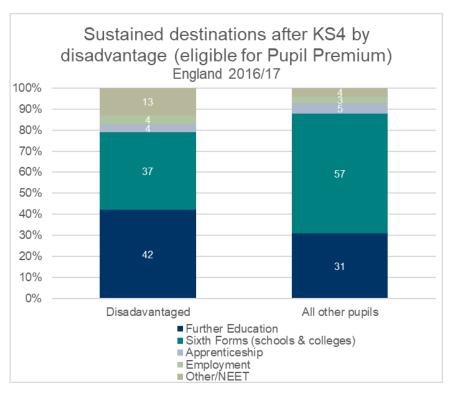


Source:

The pressure the FE sector is facing is compounded by the disproportionate effect that the pandemic, cost-of-living, and mental health crises are having on young people. Increasing levels of <u>anxiety among young people is translating into low motivation to study</u>, in turn affecting attendance rates. <u>Evidence from the Association of School and College Leaders (ASCL)</u> members highlights increasing levels of anxiety post-pandemic, especially in children and young people who already have an anxiety disorder, as having a significant ongoing impact on attendance. This is also likely to feed into lower future attainment among college attendees. A lack of resources in the FE sector reduces the ability of colleges to support learners struggling with their mental health, and to tackle low attendance.

This is particularly problematic from a social mobility and 'levelling up' perspective, because FE colleges are crucial providers of education and training for their local areas, especially for more disadvantaged individuals. Young people from disadvantaged backgrounds are <u>less likely to stay in education</u> beyond age 16 than those from more advantaged backgrounds, but amongst those who do stay in education, over 40% attend FE colleges, compared to less than a third of those not from disadvantaged backgrounds. Non-graduates, including those acquiring qualifications via FE colleges, are <u>less likely to move labour markets</u> between the ages of 16 and 27 than graduates, with only 1 in 6 moving commuting area over this period compared to 1 in 3 of those with a degree level qualification or higher. This highlights the important role that FE colleges play in delivering the skills required in their local areas.





Source:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/798404/SMC\_State\_of\_the\_Nation\_Report\_2018\_-19.pdf

Participation in FE has been associated with positive effects on employment, access to professions, earnings and second chances. In reaching large numbers of disadvantaged learners, FE colleges play a key role in widening participation and equalising opportunities across the nation by providing disadvantaged pupils with greater opportunities. The role of colleges in levelling up is acknowledged in the White Paper which proposes 'strengthening locally accessible institutions, notably the national network of further education colleges' (p. 194).

Greater investment in post-16 education is needed to ensure that students who do not follow the 'traditional' route through A-level and onto university – disproportionately those from disadvantaged backgrounds – have access to high-quality post-16 routes into rewarding work.

# 6. Adopt a more generous and holistic approach to incentivising adult learning

There is a <u>critical skills shortage</u> in the UK which is not being fully addressed. A 2022 FSB report found that around three quarters of small firms faced <u>difficulties recruiting applicants with suitable skills</u> in the previous 12 months. <u>Unemployment is also low</u> and the number of <u>vacancies</u> in the economy relatively high. One estimate suggests that if these shortages are not addressed, the UK economy could be <u>£39bn</u> worse off each year from 2024.



This is because, alongside research and development (R&D), skills or human capital are crucial for economic growth. The Open University's Business Barometer highlights that, amongst UK firms facing skills shortages, three quarters reported lower output, profitability or growth as a result of the lack of available skills. Academic research backs up these reports: one paper finds that increasing the cognitive skills of a country's workforce (derived from educational achievement tests) by one standard deviation leads to approximately 2 percentage points higher annual growth in GDP per capita. This is substantial when considering that the average growth rate in the UK between 1961 and 2021 was 2.5%. Summaries of research in this area tend to support these findings.

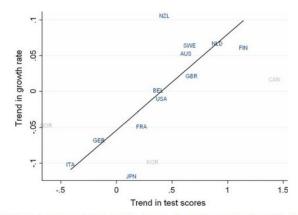


Fig. 2 Trends in Growth Rates vs. Trends in Test Scores. *Notes*: Scatter plot of trend in the growth rate of GDP per capita from 1975 to 2000 against trend in test scores, which is equivalent to the first column of Table 6. Three countries without test scores before 1972 in light gray; regression line refers to the remaining twelve countries. See Appendix B for details

Source: https://hanushek.stanford.edu/sites/default/files/publications/Hanushek%2BWoessmann%202012%20JEconGrowth%2017%284%29.pdf

Because those newly entering work from full-time education or training each year only comprise a small percentage of the workforce, this means that on-the-job training and adult education are crucial vehicles through which to upskill the workforce and increase productivity. Though there has been a greater policy focus on adult learning in recent years, more could be done to offer stronger incentives for both individuals and firms, particularly to incentivise acquisition of shortage skills or amongst certain individuals or communities.

The new <u>lifelong loan entitlement</u> (LLE) is designed to facilitate learners studying more flexibly at levels 4-6, but little is known about the appetite of adult learners to take out loans to pay for retraining, or about the likely repayment of such loans. Grants, instead of loans, could potentially be offered for courses delivering shortage skills or taken by certain individuals, such as those from 'left behind' communities, as an additional incentive, to ensure the scheme has the desired benefits.

As well as incentivising individuals to undertake further education or training, firms could be further incentivised to invest in training for their employees via a more generous 'skills tax credit'. This could complement the apprenticeship levy but apply to the full distribution of firms and not be limited to only certain types of training. It could function in a similar way to the R&D tax credit, which provides generous tax relief on R&D investments, and has been <a href="effective">effective</a> in stimulating R&D. Under a comparable model, firms would be



able to deduct more than 100% of the value of spending on education and training from taxable profits each year. This recognises the inherent riskiness of human capital investment, one aspect of which is the fact that individuals in which investments have been made might leave the firm before the full benefits of training have been realised. Similar systems have been employed in Austria and the US. In China, an increase in the proportion of tax credits for firms to provide on-the-job-training increased expenses on training and improved production efficiency of firms, promoting firm performance and innovation. This would complement the apprenticeship levy – which could then be refocused entirely on new entrants to the labour market (as outlined above). These incentives could again be skewed towards shortage skills or those from 'left-behind' communities to maximise the chance that they deliver on their objectives by offering larger tax credits to firms investing in these skills or individuals.

There is an opportunity to employ several mechanisms targeted at both individuals and firms to form a more generous and holistic approach to incentivising adult learning that could better address current skill shortages and boost economic growth.

The UCL Centre for Education Policy and Equalising Opportunities (CEPEO) is a research centre focused on equalising opportunities across life. Our research strands span early years, through school, into tertiary education, and adulthood.