Institute for Public Policy Research



BALANCING ACT NAVIGATING THE TENSIONS IN OUR SCHOOLS SYSTEM

An evidence review on assessment, curriculum, wellbeing, and mental health

Loic Menzies, Will Yates and Billy Huband-Thompson

August 2023

Foreword by Harry Quilter-Pinner

ABOUT IPPR

IPPR, the Institute for Public Policy Research, is an independent charity working towards a fairer, greener, and more prosperous society. We are researchers, communicators, and policy experts creating tangible progressive change, and turning bold ideas into common sense realities. Working across the UK, IPPR, IPPR North, and IPPR Scotland are deeply connected to the people of our nations and regions, and the issues our communities face.

We have helped shape national conversations and progressive policy change for more than 30 years. From making the early case for the minimum wage and tackling regional inequality, to proposing a windfall tax on energy companies, IPPR's research and policy work has put forward practical solutions for the crises facing society.

IPPR 8 Storey's Gate London SW1P 3AY E: info@ippr.org www.ippr.org Registered charity no: 800065 (England and Wales), SC046557 (Scotland)

This paper was first published in August 2023. © IPPR 2023 The contents and opinions expressed in this paper are those of the authors only.



CONTENTS

Foreword	5
Summary	7
1. Assessment across the school system	11
1.1 Overview of recent reforms to assessment	11
1.2 How can assessment strike a balance between validity and reliability?	12
1.3 How much impact does assessment have on pupils' wellbeing and stress?	17
1.4 Does system-level assessment inhibit high-quality teaching and learning?	20
2. The curriculum	26
2.1 Should the curriculum be narrow or wide, broad or deep?	26
2.2 Should the curriculum focus on academic disciplines, or cross-cutting competencies and personal attributes?	30
2.3 How can the curriculum strike the right balance between a standardised entitlement and flexible choices?	34
3. Wellbeing and mental health?	39
3.1 Overview of wellbeing reforms	40
3.2 What are wellbeing and mental health?	40
3.3 How much influence do schools have over young people's wellbeing and mental health?	43
3.4 How can schools support young people's wellbeing and reduce mental ill health?	47
References	55

ABOUT THE AUTHORS

Loic Menzies is a visiting fellow at Sheffield Institute of Education and a senior research associate in Jesus College Cambridge's Intellectual Forum.

Will Yates is a former teacher and current MPhil candidate in education (knowledge, power and politics) at the University of Cambridge.

Billy Huband-Thompson is an associate at The Centre for Education and Youth.

Harry Quilter-Pinner is director of research and engagement at IPPR.

ACKNOWLEDGEMENTS

IPPR would like to thank the Paul Hamlyn Foundation for supporting this research.

IPPR would like to thank the expert participants who reviewed this paper and contributed to a roundtable discussion to interrogate its findings – including Tania Clarke for her invaluable advice on chapter 3 of this report.

This work was undertaken with the support of and in partnership with Big Change.



This work was undertaken with research contributions from The Centre for Education and Youth.



NOTE TO READERS

This report is an evidence review. The policies suggested in this report are possible options based on the evidence, not IPPR policy recommendations.

Download

This document is available to download as a free PDF and in other formats at: http://www.ippr.org/publications/balancing-act-tensions-in-our-schools-system

Citation

If you are using this document in your own writing, our preferred citation is: Mezies L, Yates W and Huband-Thompson B (2023) *Balancing act: Navigating the tensions in our schools system*, IPPR. <u>http://www.ippr.org/publications/balancing-act-tensions-in-our-schools-system</u>

Permission to share

This document is published under a creative commons licence: Attribution-NonCommercial-NoDerivs 2.0 UK <u>http://creativecommons.org/licenses/by-nc-nd/2.0/uk/</u> For commercial use, please contact <u>info@ippr.org</u>



FOREWORD

Since 2020, Big Change and IPPR have been working together and with many other partners to set a new direction for education and learning in England. This work has focussed on understanding and elevating the public appetite for long term, significant changes. It included a large-scale and in-depth national listening exercise across 2020 and 2021 to capture the views of the public (young people, parents, educators, employers) and assess the post-pandemic demand for change.

This started with research (Quilter-Pinner and Ambrose 2020) arguing for new public conversations about the future of education, and included social listening (Winthrop et al 2021), a listening post study (Relationships Foundation and Big Change 2021), digital marketing and polling to get to grips with large-scale public opinion, alongside focus groups and interviews with teachers, school leaders, parents and employers. As part of this listening exercise, Big Change delivered the Big Education Conversation campaign in June to July 2021, which involved over 25,000 people and 40 partner organisations discussing the purpose of education and sharing ideas for change.

Our polling shows that:

- 77 per cent of young people, parents, teachers and employers agree that we need to rethink the purpose of education and change the system for the better (2021 polling)
- 75 per cent of people believe our country needs a bold, long-term vision for education that all parts of society have contributed to (2022 polling)
- 71 per cent think the government failed to seize the opportunity to transform education post-pandemic, but change is still needed (2022 polling).

This was brought together in Subject to Change (Goddard et al 2022) which captures the findings of all that work.

We identify three key messages to shape a new direction for education and learning.

- 1. It's time to rethink what education is for: We must focus not just on how education is delivered, but what it is trying to achieve, for individuals and society.
- 2. One size doesn't really fit anyone: The majority feel the system isn't working for them even those who are labelled 'successful' by current measures.
- **3.** It really does take a village: Young people, parents and employers want to work with and beyond schools to help young people learn and thrive.

Our work to date has focussed on understanding and galvanising public opinion about the change that education and learning needs. This is vitally important evidence that must be listened to, and the Big Education Conversation initiative is continuing across England. But it is not the only form of evidence that should shape our response. This paper builds on this programme of work by seeking to identify what academic evidence has to say about the changes that are needed in education and learning.

In particular, we have sought to tackle three of the most challenging questions that emerge from our listening and engagement with young people, parents, teachers and employers. These are as follows.

- **1.** How can school systems fairly and effectively assess young people's learning, recognise achievement beyond exams, and drive better school standards?
- 2. What are the likely impacts and potential trade-offs involved in broadening the curriculum beyond just academic subjects for young people?
- **3.** What are the most effective ways school systems can support and improve young people's wellbeing?

We want to understand what the existing evidence says about these questions, as well as where there are evidence gaps that need filling, making a distinction between evidence that something doesn't work and the absence of evidence. This paper will be used to inform future work between IPPR and Big Change, including a publication seeking to shape the manifestos of political parties ahead of the next election and ongoing Big Education Conversations with young people, parents, teachers and employers.

TERMS OF REFERENCE

We focus on key stages 1 to 4, while touching more briefly on key stage 5, since the IPPR is conducting separate work focussing more specifically on the early years and post-16 education. We focus specifically on England rather than the devolved nations, in which education policy has taken differing paths. When reviewing the evidence on assessment, we recognise that teachers routinely assess pupils' learning to inform their teaching, but our focus is on national assessments that are part of statutory frameworks (such as SATs, GCSEs and BTECs).

Harry Quilter-Pinner Director of research and engagement, IPPR

SUMMARY

ASSESSMENT

National assessments sit at the heart of England's education system. While qualifications in some subjects retain a practical element, externally marked tests increasingly dominate assessments.

This approach is widely criticised. Evidence suggests assessments have a growing influence over teaching and learning and may be taking an unacceptable toll on children and young people's wellbeing.

Navigating the tensions that underpin these questions involves difficult trade-offs between validity, reliability and real-world applicability. Reforming assessment involves risks, but improvements could be made by enhancing the assessment mix and reducing the high stakes nature of exams.

Ways forward

Enhance the assessment mix

There is a case for finetuning the mix of assessment across our system. The form and function of system-level assessment has always evolved and there is a case that the assessment mix should place a greater emphasis on the application and synthesis of what pupils have learned. This might involve the following.

- Avoiding a return to teacher assessment within the high stakes system while continuously reviewing the balance between terminal exams and non-examined components, on a subject-by-subject basis.
- Supporting the increased uptake of qualifications designed to certify pupils' ability to work independently and to bring together learning from across disciplines. Keeping qualifications like the extended project qualification (EPQ) at A-level and the personal project within the International Baccalaureate separate from other qualifications and excluding them from high stakes school accountability would 'quarantine' the risks of malpractice and inconsistent support.
- Incorporating a greater range of question and task types in assessment. New technologies, such as comparative judgement, offer ways of mitigating the reduction in reliability associated with more open items.

Dial down the stakes

The dial on school accountability has been turned up too high. High pressure accountability exacerbates schools' struggles in responding to pupils' wellbeing and mental health needs. Small adjustments could release the pressure valve, without undermining government's ability to hold schools to account and improve standards. This might involve the following.

- Making greater use of multi-year, rolling averages in league tables and accountability. Data is inevitably noisy and cohorts vary significantly. Knowing that a single year's data can 'make-or-break' a school, head or teacher's fortunes piles on unacceptable pressure, incentivises 'quick fixes' and provides a less meaningful measure for accountability. It is time to move away from single-year measures.
- **Reviewing whether pupil-level data is needed at key stage 2.** The purpose of SATs is to spot school underperformance, promote high standards in the basics, and provide a baseline for Progress 8. None of these should be 'high

stakes' for pupils. If pupil-level reliability were not needed and such results were not published, a lighter touch, shorter (and therefore less predictable) test would be possible, and pupils' and parents' perception of the exams might shift.

• **Reduce the predictability of what is examined.** Introducing an element of sampling at primary school level would reduce teaching to the test and incentivise schools to teach a broad and balanced curriculum.

CURRICULUM

The curriculum should maintain a focus on a core body of knowledge and skills – but leave room for a wider enrichment offer. There is a strong case for reviewing what is considered core and creating more space for a wider and more comprehensive enrichment offer alongside this.

Ways forward

Build foundations and open doors

The curriculum should focus on a core until the age of 16 – while allowing space for a wider enrichment offer, and then allow for more specialisation after this point. Up to the age of 16, the goal of the curriculum should be to ensure that as many doors as possible are open at the next stage, and that as few as possible are closed. After that, pupils should have access to a range of high-quality options that allow them to find their own pathway. This might involve the following.

- Ensuring that future iterations of the curriculum guarantee all pupils an entitlement to a common body of knowledge and skills. This should draw on expert understanding of how content is best sequenced to unlock future learning, and be informed by ongoing, subject-based debate about the key ideas within each discipline.
- Providing pupils with opportunities to apply their learning in increasingly independent and practical ways. Primary and secondary schooling should focus on achieving competency within a small number of core subjects, since attributes like creativity and critical thinking are best developed through mastery of these domains. As pupils develop solid foundations, they should be given more opportunities to apply their learning in less structured, more independent ways, such as real-world projects.
- Allowing schools the flexibility to shape a context-informed school curriculum. Schools need the flexibility to shape the curriculum around their unique context and community. This requires time and skill, which depends on investment in training as well as freeing up teachers' time. Cultural institutions, large MATs, local authorities and subject-expert bodies can all support this through providing learning resources and expertise, and by contributing to enhanced, subject-specific professional development.
- **Conducting a review of the EBacc.** The EBacc exerts significant influence over the taught curriculum at key stage 4 and even at key stage 3. There is no transparent rationale for which subjects are included. It is time for a review, both of its components and whether it should continue to exist.
- Increasing the breadth of subjects taken by A-level students; reconsidering changes to BTECs; and improving the offer to students resitting English and maths at key stage 5. The timeline for discontinuing BTECs should be reconsidered given the significant risks involved. Improved support for English and maths is urgently needed and options for an alternative qualification should be explored.
- **Creating wider opportunities for learning beyond the school gates.** Schools are not the only places where children and young people learn and develop their skills, knowledge and character. Far more attention should be given to

what childhood looks like as a whole. This would involve greater focus on before and after school care, school culture and ethos, family life and the opportunities available in the local community. Increasing investment in effective lifelong learning could also reduce pressure on the curriculum.

WELLBEING

We are facing a profound mental health crisis among young people in England. This calls for an urgent, substantive, cross-societal response.

Schools can play a role in responding to this crisis – though many of the causes lie outside their control. Schools have some influence over the three domains which play a particularly influential role in determining a young person's life satisfaction and mental health: lifestyle (physical health and participation in social activities); risk-taking behaviours (alcohol consumption and drug taking); and environment quality (living conditions). They can help ensure that more severe mental health challenges are identified and referrals to specialist services made.

The school system is also often criticised for contributing to this crisis – but more evidence is needed to understand the possible links. There are concerns that our education system is contributing to the challenge, but recent quantitative causal evidence does not tend to demonstrate that exams have a negative impact on wellbeing and mental health at a population level. Further evidence is needed to reconcile these contrasting findings.

Ways forward

Schools need more support if they are to play a role in addressing the mental health crisis. Action is needed in response to three interrelated challenges: tackling mental ill health; increasing young people's enjoyment of school; and their experience of childhood. Any serious effort to improve mental health and wellbeing should begin by tackling shortfalls in specialist support.

From coping to thriving

Tightened-up definitions and better data are needed to improve the quality of evidence available, both for policymakers and practitioners. Wellbeing and mental health involve more than just coping with emotions and feeling happy. Wellbeing involves a series of interlinked concepts that allow people to thrive, including purpose and fulfilment. Poor wellbeing and mental ill health are not synonymous. Investment is needed in definitional clarity and better data and evidence. This could involve the following.

- Clearly distinguishing between different goals and outcomes related to wellbeing and mental health.
- Investing in high quality research. This should include:
 - more granular, frequent, and comprehensive assessments of wellbeing and mental health using validated measures
 - studies assessing the extent to which schools influence different dimensions of wellbeing, over the short and longer term
 - analysing interactions between school and background factors. For example, exploring 'what difference does school make for pupils at risk of poor wellbeing or mental ill health?'
 - **longitudinal evaluation of interventions and approaches to support wellbeing and reduce mental ill health.** Evidence on how best to combine 'taught' and 'caught' approaches would be particularly useful.

Helping schools to take their place as part of the ecosystem

The experience of childhood in England needs to be transformed. Schools are part of an ecosystem of partners and services that can contribute to the cross-societal mission of giving young people a better start in life. This could involve:

- **Clearing bottlenecks that prevent access to specialist services.** Elevated thresholds are delaying or entirely obstructing access to child and adolescent mental health services (CAMHS).
- **Promoting the key ingredients of wellbeing and mental health.** Schools can have a positive influence over environmental factors shaping health, and can also tackle threats to pupils' wellbeing in school, including bullying.
- Embracing learning and achievement as sources of purpose, meaning and fulfilment. Aspects of personal wellbeing like 'goal achievement, fulfilment and purpose' align with schools' other responsibilities. It is time to abandon the idea that learning and achieving in school is incompatible with wellbeing and vice versa.
- Equipping teachers with the knowledge and resources they need. Teachers cannot avoid having to respond to the rising incidence of mental ill health, despite not being specialists or therapists. They therefore need to be equipped to do so.
- Making the most of schools' potential as hubs for specialist support and enrichment. Schools are ideally placed to improve access to specialist support and services that improve the family and community environment. By working with partners, schools can provide an extended offer to help pupils develop the passions and interests that will bring meaning to their lives, long into the future.

1. ASSESSMENT ACROSS THE SCHOOL SYSTEM

This section focusses on system-level assessment – in other words, assessment that takes place in schools throughout the country to achieve system-level goals. However, it is important to note that day-to-day assessment is an essential element of teachers' professional expertise, requiring all teachers to have a high level of assessment literacy (Child and Ellis 2021; Christodoulou 2017; Millard et al 2017).

System-level assessment has four main purposes.

- 1. Monitoring school standards and ensuring the curriculum is covered.
- 2. Monitoring national education standards.
- 3. Certifying pupils' learning.
- 4. Gatekeeping access to future opportunities and triaging individuals.

The latter two can be classified as pupil-centred purposes and are less relevant at key stage 2, while the first two are closely linked to educational accountability. At present, all four functions are intertwined and several problems explored in this section could be at least partly mitigated by reducing the use of the same assessment for multiple purposes (Millard et al 2017). Steps have already been taken towards this, for example through the introduction of a national reference test. A sample of pupils sit this test each year and it is used to track national standards and set grade boundaries¹. International surveys like PISA, TIMSS and PIRLS are increasingly playing a similar role by tracking national standards and benchmarking these against other jurisdictions. However, these surveys only take place in a narrow range of subjects and have significant limitations in terms of the sample and response rate (Jerrim 2021b). Meanwhile accountability reforms mean that Ofsted judgements and school intervention are now less dependent on exam results.

1.1 OVERVIEW OF RECENT REFORMS TO ASSESSMENT

England's education system has undergone significant reform over the last decade. Following a controversial expert review, a new national curriculum was published in 2013, followed by successive assessment reforms. These reforms are deeply intertwined and have had wide-ranging consequences for what pupils learn in school and how.

At primary school, national curriculum levels were abolished and over time, new assessments were introduced including a multiplication table test, a phonics screening and a reception baseline. At key stage 4, the headline measure of school performance shifted to 'Progress 8' and this was accompanied by a measure of the proportion of pupils achieving GCSEs in a basket of subjects known as the English Baccalaureate (EBacc). Additionally, the publication of the Wolf review of qualifications in 2011 (Wolf 2011) resulted

¹ It is sometimes thought that GCSE results are norm-referenced in a manner that consigns a certain proportion of pupils to fail, but this is inaccurate since the national reference test allows an increasing proportion of pupils to pass each year if evidence demonstrates an increase in standards.

in the culling of a plethora of qualifications and a rethink of the system of 'equivalences' between certain vocational qualifications and GCSEs.

At key stage 5, AS and A-levels have been 'decoupled' so that A-levels are assessed at the end of a two-year course. A new 'gold standard' vocational qualification, the T-level, is also being introduced while BTECs are being phased out. Pupils who do not achieve a 'good' GCSE in English or maths by the age of 16 are now required to resit the qualification.

Alongside this, following the recommendations of the Rochford review (Rochford 2016), P levels – which had previously been used to assess progress by certain pupils with special educational needs and disabilities (SEND) – were abolished.

Concurrent structural reforms, including forced academisation and the 're-brokering' of underperforming academies, have turned up the dial on accountability. However, the latest Ofsted framework has sought to discourage a culture of 'teaching to the test,' by putting school curricula under the microscope (Ofsted 2019).

The overriding narrative throughout the period has been around 'rigour,' but the verdict is far from clear on the impact of the changes. Some point to English and maths performance in international assessments like PISA, PIRLS and TIMSS as evidence that attainment is improving (Civinini 2020; DfE 2017; Lehain 2023; Schools Week 2019) but others have thrown this evidence into doubt (Jerrim 2019, 2021b) or pointed to England's failure to close the attainment gap between disadvantaged pupils and their peers (Fair Education Alliance and CfEY 2022; Tuckett et al 2022).¹ There are also significant concerns regarding the wider impact of these reforms, as shown throughout this report.

The cancellation of exams during the Covid-19 pandemic galvanised interest in reform among educator-led networks like Big Education (Big Education 2021), as well as initiatives like the Times Commission on Education (Times Education Commission 2022) and organisations such as the Tony Blair Institute (Coulter et al 2022).

Criticisms of traditional exams abound and can be traced all the way back to the 1911 Acland report if not earlier (Acland 1911; Richmond 2021). There are three key tensions that underpin these criticisms. These are:

- 1. the trade-off between validity and reliability
- 2. the extent to which assessment drives stress and anxiety
- 3. the positive and negative ways assessment influences teaching and learning.

1.2 HOW CAN ASSESSMENT STRIKE A BALANCE BETWEEN VALIDITY AND RELIABILITY?

Anachronism and irrelevance

England's exam-dominated approach to public assessment is no longer fit for purpose according to many (Barnard 2019; Burghes 2021; Hazell 2021; Hyman 2021; Rethinking Assessment, no date). Others recognise the value of exams but believe tests overly dominate the assessment mix, and that what *can* be fairly assessed has been prioritised over what *should* be assessed (Pearson 2022).

Rethinking Assessment's blueprint for change (2023) argues that the current, 'one dimensional' system should be reformed and that assessment should be conducted in a greater variety of ways, for example through vivas, open book exams, personal extended projects and 'micro-credentialing' (Lucas 2021).

Many teachers, young people, parents and employers agree.

- 92 per cent of teachers believe the assessment system needs to recognise the full range of a young person's strengths and skills through more than just written exams, according to a YouGov poll of 1,000 teachers (The Edge Foundation 2020).
- 48 per cent of teachers and 47 per cent of parents feel tests and assessments do not provide a fair measurement of pupils' real achievements, according to a small-scale poll of teachers and parents by Britain Thinks (Pearson 2016).
- Fewer than half of employers said they considered qualifications 'significant' or 'crucial' when recruiting, compared to two-thirds who said this of work experience, according to a 2014 UK Commission for Employment and Skills survey (Shury et al 2014).

There is therefore a widespread view that there is a problem, and considerable appetite for change.

The importance of reliability

Exams have considerable advantages over non-examined assessments in terms of reliability and this is crucial if the system is to be fair; the high-stakes nature of assessment in a competitive system means that getting the 'wrong' grade due to an unreliable assessment has significant consequences. At present there is already a margin of error on any grade. Any widening of this, or increase in the degree to which the margin is skewed towards particular groups or minorities, would be a serious problem.

Attempts to enhance validity should therefore consider three main threats to reliability:²

- 1. question type
- 2. teacher judgement
- 3. test conditions.

Question type

Ofqual has highlighted the trade-off between reliability and validity by showing that agreement between markers as to what mark a response should receive is highest on:

"objective questions' such as multiple choice questions (whereas) those questions requiring much longer responses generally have lower levels of marker agreement."

Inter-marker agreement is therefore lower in subjects that involve more essay-style responses (Ofqual 2019). Questions that involve judging against generic descriptors are also particularly prone to unreliability and the limitations of human judgement (Christodoulou 2017).

'Objective' multiple choice questions can still test application of knowledge and skills to real-world scenarios, and it is easy to overstate the extent to which exams currently focus on 'regurgitation of facts.' Assessments are in fact often structured to include a progression from factual recall to application of that knowledge to a real-world scenario.

² Reliability refers to the consistency of measurement, in other words the extent to which 'two identical assessment occasions... would provide the same result' (Child and Ellis 2021). Meanwhile validity is not a property of a test, but the inferences that are made from it (Christodoulou 2013). To claim that validity has been compromised is therefore to say that assessment has become meaningless because it does not support valuable inferences (for example regarding whether a pupil has had a good education, acquired valuable learning, or whether they can progress to further education or employment).

Teacher judgement

Many proposed reforms to assessment would increase the role of teacher judgement. The risk is that this can negatively impact pupils from disadvantaged groups, including those from low income backgrounds, with non-graduate parents, from certain ethnic groups, and with special educational needs and disabilities (Burgess and Greaves 2013; Campbell 2015)³. These risks were demonstrated during the pandemic when teacher-assessed grades increased attainment gaps between pupils eligible for free school meals (FSM) compared to non-eligible pupils with the same level of prior attainment; as well as Gypsy, Roma and Traveller pupils relative to prior-attainment-matched white British pupils; and pupils in state schools compared to peers in independent schools (Beynon 2021).

Comparing pupils' 'centre assessed grades' and 'calculated grades' also shows that pupils whose parents were graduates were more likely to receive a higher 'centre assessed' grade' relative to their 'calculated grade,' suggesting a possible positive bias towards pupils with more educated parents (Anders et al 2021). A recent qualitative study of pupils affected by exam cancellations also found that minority ethnic and disadvantaged pupils believe that when assessment is based on teacher judgement, bias and structural inequality stands in the way of them being able to demonstrate their achievements. As one young person put it, "I want to be judged by what I do and not what the teachers think I can do" (Bhopal and Myers 2023).

Any reforms to assessment therefore need to marry reliability and validity to avoid further disadvantaging vulnerable pupils. As Christodoulou (2015) points out, it may be that it is the inhuman nature of tests that makes them the best bet for fair assessment.

While some argue that extensive moderation processes could alleviate the problems of human judgement, there is a lack of evidence showing this would be sufficient. As Johnson (2013) notes, based on a review of assessment practice in a range of global jurisdictions:

"An appeal to moderation, it is assumed, will ensure validity, consistency and comparability in teachers' assessments. Sadly, there is at present no convincing evidence to support this assumption."

Extensive moderation processes would also create additional workload for overstretched teachers.

Controlled conditions

Many proposed alternatives to the current exam system would result in assessments being taken outside of the exam hall, in less controlled conditions.

Assessment in England has not always been as heavily weighted towards exams. In the early 1990s, most 16-year-olds were sitting English GCSEs that had no exams and were wholly coursework-based (QCA 2006). A number of concerns led to its replacement with 'controlled assessment' (QCDA 2005). These issues included:

- plagiarism
- pupils receiving unfair amounts of support (whether from parents or from teachers via multiple redrafts)

³ Campbell (2015) demonstrates systematic biases in teachers' assessments of students' abilities, depending on income level, gender, special educational needs status, ethnicity and spoken language. Similarly, drawing on repeated cross-sectional analysis of attainment at age 11, Burgess and Greaves conclude that teacher assessments are likely to be severely detrimental to the recorded achievements of children from poor families and some ethnic minorities (Burgess and Greaves 2013). However, there is some inconsistency between different studies' findings (Lee and Newton 2021).

- outright malpractice in limited cases
- questions over coursework's validity, particularly in science practicals.

Coursework was therefore replaced with 'controlled assessment' (CA) in 2009. This involved pupils completing coursework-style tasks in standardised, supervised conditions. However, CA was soon abandoned, because according to some it was 'cumbersome' and did not allow for the research skills and independent learning that coursework was supposed to provide for - in effect it just became a different kind of exam (Oates 2013; Ofqual 2013). On the other hand, there are some reports that teachers' views were more positive (Ipsos Mori 2011).

Given the varying levels of support available to pupils – both in school and at home – conducting more assessment outside of test conditions could distort results. As the pandemic highlighted, there are big differences in pupils' home learning environments, and these can particularly disadvantage vulnerable pupils. Developments in large language models like ChatGPT may also have heightened the need for carefully controlled test conditions.

Reassessing the case for non-examined assessment

The case for non-exam-based assessment is not closed and needs to be continuously re-evaluated on a subject-by-subject basis, as further research emerges and technology evolves. Analysis by Benton (2016) has shown that GCSE coursework marks were in fact a better predictor of A-level scores than exams, and Pinot de Moira argues that concerns regarding bias in assessment may be overstated and that 'coursework offers neither advantage nor disadvantage to those of low socioeconomic status' (2020: 26). Wyness (2021) therefore argues that coursework should be used alongside exams but that it should be externally set and assessed.

Richmond and Regan (2023) review the benefits and risks of written exams, coursework/controlled assessments, teacher assessment, oral assessments, portfolios, extended essays/projects, and performance-based assessments. They conclude that there may be scope for greater use of oral assessments and for extended essays and projects at key stage 5. They therefore call for all pupils taking classroom-based courses to take the extended project qualification and to sit an additional course at AS level standard that would be assessed through an oral exam. However, at secondary school level they argue that:

"Written examinations should continue to be the main method of assessing students' knowledge and understanding... [because] placing a greater emphasis on coursework and other forms of 'teacher assessment' would increase teachers' workload and lead to less reliable grades that may be biased against students from disadvantaged backgrounds."

Richmond and Regan 2023

Teachers have significant misgivings about coursework. One recent poll showed that it was particularly unpopular with science and maths teachers. English teachers were slightly less negative about it, but even among these teachers, half would still oppose its reintroduction⁴ (Teacher Tapp 2023b). That said, teachers' opposition to coursework may be driven by workload concerns and it would therefore be helpful for future research to explore teachers' views on an externally-assessed approach to coursework. Such an approach would have

²⁸ per cent of English teachers would definitely be in favour of coursework at GCSE compared to 52 per 4 cent who would oppose and 30 per cent who might be supportive. In science and maths, fewer than 10 per cent would be supportive and around three quarters or more opposed. In humanities and languages, 16 per cent would definitely be in favour and around 60 per cent opposed.

the additional advantage of being more reliable, though the need for controlled conditions would remain.

The case for non-examined approaches to assessment should always be assessed on a subject-by-subject basis since the appropriateness, need for and popularity of coursework varies between subjects. Non-examined assessments still play an important role in art and PE GCSEs and a number of vocational qualifications, as well as the extended project qualification. Various alternative approaches are also available in some subjects, such as the required practicals currently used in science. These involve pupils completing tasks outside of the exam, teachers keeping a record of this and pupils answering questions about their completed investigations in the exam. One study found that pupils who were assessed this way did as well (if not better) in practicals at university compared to those who completed practical coursework. This demonstrates that exams do not necessarily undermine authentic learning and that alternatives do not always provide more valid assessments of real-world skills (Cadwallader 2019).

THE EXTENDED PROJECT QUALIFICATION (EPQ)

The EPQ is a level 3 course taken alongside A-levels. Pupils choose the topic or project they work on and can present their work as an essay, report or artifact.

In 2018/19, 45,000 pupils took the qualification, making it more popular than most A-levels. Uptake has increased markedly in recent years and some top-performing sixth forms require pupils to take it. It is in the middle range for difficulty compared to A-levels, and it increases pupils' chances of being offered a place at university as well as their success rate if they attend (Gill 2017, 2022). Equivalents are available at level one and two and a new primary school award is currently under development (Hallgarten et al 2023). The International Baccalaureate also includes a similar 'personal project'.

These qualifications provide examples of high-status qualifications that demonstrate pupils' achievements outside of the exam hall.

Ways forward

As Peterson points out, 'high-stakes tests require a high degree of validity and reliability. This limits the kind of content that can be assessed because many kinds of valuable capabilities are difficult to assess reliably at scale' (Big Change, no date). These limitations need to be acknowledged while recognising that changes to the mix of question types in exams, increases in the role of teacher judgement, and completion of assessed work in less controlled conditions would all come at a cost in terms of reliability – which might disadvantage vulnerable pupils. Part of the value of assessment lies in the inferences that can be made about what a young person will be able to do in the long run (Christodoulou 2023). Exams remain an effective way of assessing 'intermediary' outcomes that provide foundations for valuable long-term outcomes. Most pupils who received a 'centre assessed' grade during the pandemic say they would have preferred to have sat exams (Anders et al 2021; Bhopal and Myers 2023).

Nonetheless, there are several ways validity could be enhanced without unacceptably compromising on reliability.

1. **Comparative judgement** would be one way of including longer tasks and a greater range of question types in assessments. This would provide greater validity without compromising reliability, so long as tasks are completed

in controlled conditions (Pinot de Moira et al 2022). Given its scalability, this approach could play an enhanced role in the assessment mix in some subjects (Freedman 2022b).

- 2. The extended project qualification is a popular, rigorous and well-respected assessment that sits alongside subject-based qualifications. Similar approaches could be scaled up and applied to different phases. By keeping these qualifications separate from others, and outside of high-stakes accountability, it would be possible to 'quarantine' them from such risks. External marking and/or comparative judgement might also minimise bias.
- **3.** The assessment mix should be reviewed on a subject-by-subject basis, learning the lessons from the past as well as current practice in subjects like art, PE, and science. Re-introducing coursework as part of GCSEs is not popular with teachers and would come with significant risks. However, it may be that if tasks were externally set and marked, as proposed by Wyness (2021), and completed under controlled conditions, then it might be more popular. On the other hand, these stringent conditions might obviate any advantages over the existing system.
- 4. The possibilities of assessment are continuously advancing due to technological change, for example through AI (Wheadon 2023), digital portfolios and online adaptive tests. These developments should be closely monitored and reviewed in relation to the challenges set out above (particularly judgement bias, workload and test conditions). Where there is a strong case in relation to these criteria as well as clear alignment with curriculum, new approaches should be trialled for inclusion in the assessment mix.

Future research

More evidence would be useful on the following.

- Whether (and how) moderation processes can tackle problems linked to teacher judgement.
- Teachers' views on different approaches to coursework.
- Whether oral exams could viably be integrated into the assessment mix taking into account evidence that oral exams and other performance-based exams can be particularly stressful for pupils (Howard 2020).
- How pupils' achievements outside the school system could be valued. There are many pupils who will never be able to attain highly in mainstream exams regardless of the support they receive due to the nature of their special educational needs and disabilities. It is incumbent on any inclusive society to find ways of valuing and celebrating these pupils' achievements (Newmark and Rees 2022). The challenge of doing so is societal as well as educational, but there is currently a paucity of evidence on good practice in the area.

1.3 HOW MUCH IMPACT DOES ASSESSMENT HAVE ON PUPILS' WELLBEING AND STRESS?

Widespread concerns

Pupils, teachers and parents are concerned that exams are causing unacceptable stress.

• Over half of parents report concerns about exam stress and a third say that their child has experienced exam-related stress. Parents of FSM-eligible pupils and those whose children have special educational needs and disabilities (SEND) are more likely to report such concerns according to a survey by Dynata (ParentKind and CfEY 2021).

- The words most associated with exams were 'stress' and 'pressure' according to an open-response question answered by 506 parents and teachers (Pearson 2016).
- A survey of 188 headteachers by the group More Than a Score (recruited via the National Education Union and social media) found that 92 per cent of respondents believed 'SATs have a negative impact on teachers' wellbeing' (Bradbury 2019).

The proportion of pupils in the UK who feel anxious about tests, even when they are well prepared, is significantly higher compared to OECD averages – although Ofqual speculate this may be due to UK pupils being more willing to identify and discuss anxiety (Howard 2020). Exam-related stress and anxiety affect girls particularly badly (OECD 2017).

What do we mean by exam stress and anxiety?

Short-lived stress encountered when taking on a challenge differs from more problematic anxiety. Stress is likely to have a worse impact on wellbeing when it is prolonged, elevated and significant, and the nature of a pupil's response to the challenge of an exam can depend on their self-perception and dispositions (Putwain and Symes 2012). For example, SATs can be perceived as 'anxietyprovoking and stressful' if they are seen as a threat, or more positively if they are seen as a challenge (ibid). Pupils' responses can also depend on whether they have a competitive or mastery-focussed mindset (ibid; Roome and Soan 2019).

Given the different ways stress can be perceived, a pupil, teacher or parent may report that an upcoming exam is stress inducing without this being outside the bounds of acceptable stress (particularly if it is short lived). For this reason, Ofqual's 2020 review distinguishes between stress and anxiety (Howard 2020).

A certain degree of stress around tests can be motivational and lead to greater efforts and improved performance (Roome and Soan 2019), and these feelings can later give way to satisfaction and fulfilment.

What drives exam stress and anxiety?

Pressure contagion

'Fear appeals,' in which teachers emphasise the negative consequences of not working hard enough for an exam, can heighten maladaptive exam stress through 'pressure contagion' (Putwain and Roberts 2009). This may play a particularly important role at key stage 2, given that in theory, SATs should have very limited consequences for pupils (although two-thirds of secondary schools use SATs results as the basis for setting (Teacher Tapp 2017)).

The more teachers perceive the test outcome to be important, the more likely they are to make fear appeals (Putwain and von der Embse 2018). Linking exam results to teachers' pay and progression increases the risk of pressure contagion, and in 2016, nine out of 10 teachers stated that their performance evaluation was too dependent on pupils' results (Pearson 2016). Although evidence on the extent to which linking pay and exam results drives teachers' use of fear appeals is mixed (Putwain and von der Embse 2018; von der Embse et al 2017), schools would be wise to avoid the practice (Millard et al 2017)

Test type and volume

The pursuit of reliability and the move towards exam-based, terminal assessment has resulted in pupils spending a huge amount of time in the exam hall. A pupil seeking to fill all three 'buckets' within the Progress 8 performance measure is likely to sit over 30 hours of exams at the end of year 11 (Richmond 2021), not to mention time in mock exams. More time spent in exams may increase the stress of the process but could also reduce it, since the consequences of making a mistake – or of an exam going badly – are higher when there are fewer exams. Unless nonexamined elements are brought back in (as discussed in section 1.2), then reducing time in the exam hall would either involve pupils taking fewer subjects (narrowing the curriculum) or accepting less reliable assessments (since it is harder to arrive at an accurate mark based on fewer questions).

The degree of stress pupils experience may be related to the type of exam being sat and this links back to questions regarding the nature of assessment, explored in section 1.2. For example, multiple choice tests are thought to be less stressful than written assessments and exams involving an audience – like oral or performance-based exams (Howard 2020). However, avoiding these more stressful forms of assessment limits the breadth and validity of the assessment mix.

A contested evidence base

Many studies of the relationship between exams and wellbeing rely on pupils' retrospective accounts of their experiences and do not consider whether wellbeing bounces back after an exam (Wyness 2021). Surveys also frequently fail to distinguish between 'normal' stress, and maladaptive stress or anxiety, and are sometimes run by campaign groups using opportunistic surveys. Where studies use more robust, longitudinal and large-scale data, they tend not to find a negative effect, leading Wyness to conclude that 'causal evidence on the link between exams and pupil wellbeing is weak' (ibid).

Recent studies have sought to strengthen the evidence base in this respect by using longitudinal and comparative data. In a study of key stage 2 pupils, Jerrim (2021a) finds that there is no substantial difference in the wellbeing of children in England (where exams are taken at the end of key stage 2) and children of the same age in UK nations where exams are not taken. Jerrim concludes that there is little evidence of an association between key stage 2 tests and lower levels of mental wellbeing, happiness, self-esteem or school enjoyment. Indeed, there appears to be an increase in pupils' school enjoyment in the six weeks prior to sitting exams, suggesting that tests might in some cases be a source of satisfaction.

One explanation for these trends at primary school might be that fear appeals are less widespread than expected. If this is the case, then one would expect exams that have individual, pupil-level consequences, like GCSEs, to have a greater impact on wellbeing. However, a subsequent longitudinal study focussed on mental health (rather than wellbeing as a whole), showed that mental health problems increase in line with age rather than proximity to exams (Jerrim 2022).

Ways forward

Studies based on perceived exam stress and qualitative accounts of individuals' experiences raise serious concerns about how assessment is impacting on young people's wellbeing. It is clear that some young people perceive exams as a threat that is crushing and destabilising.

Nonetheless, for many pupils, exams are a source of short-term, manageable stress and there is even some evidence of increased school enjoyment around exams. Ultimately, concerns regarding exam stress are not reflected at a population level in studies based on comparative and longitudinal data.

Reforms to exams are unlikely to turn around the worrying state of young people's wellbeing, particularly given schools' limited influence over young people's wellbeing – a theme we return to in section 3.3.

Concerns regarding exams' impact on wellbeing and mental health would therefore best be addressed by the following.

- 1. Improving support for pupils who struggle with exams so that assessment is perceived as less threatening. Research reviewed in this section shows that different mindsets affect pupils' experiences of exams and ultimately, young people are unlikely to make it through life without encountering exams or comparable challenges so deferring the experience may not be helpful. We explore the role of social and emotional learning in promoting young people's wellbeing and mental health in section 3.4.
- 2. Dialling down the stakes on assessment (as suggested throughout this report) may reduce stress and minimise the risk of pressure contagion and 'fear appeals.' Moving away from pupil-level assessment at key stage 2 may also help in this respect.

Future research

More evidence is needed as follows.

- To reconcile large-scale quantitative evidence (regarding exams' lack of negative impact on pupils' wellbeing and mental health), with qualitative findings (on exams' impact on individuals). These should distinguish between short-term manageable stress, and longer-term maladaptive stress and anxiety. Studies should look beyond averages to identify factors that result in some pupils particularly struggling. Robust samples and validated measures should be used rather than opportunistic surveys based on self report and perceptions.
- To investigate whether shorter or longer exam periods are more stressful and strengthen the evidence base on different test and item types including oral exams.

1.4 DOES SYSTEM-LEVEL ASSESSMENT INHIBIT HIGH-QUALITY TEACHING AND LEARNING?

Exam factories?

Back in 2008, a House of Commons Children, Schools and Families Committee report stated that 'a focus on test results compromises teachers' creativity in the classroom and children's access to a balanced curriculum' (Parliament 2008). Meanwhile, Lupton and Hayes note that the one point of consensus found across all the many thousands of sources of information reviewed over the course of The Cambridge Primary Review (2009), was that national tests and league tables were narrowing the curriculum and limiting learning (Lupton and Hayes 2021), turning schools into 'exam factories' (Hutchings 2015).

More recently, 92 per cent of teachers surveyed by YouGov for The Edge Foundation felt that exams and league tables distorted schools' priorities and stopped educators from providing a well-rounded education (The Edge Foundation 2020). The impact of testing on the quality of teaching was teachers' top concern regarding assessment in one survey (Pearson 2016).

Millard et al (2017: 44) identify three main problems associated with current assessment practices:

- 1. repeated practising of mock exams.
- 2. exams and their syllabi distorting the curriculum.
- 3. continuous generation of tracking information (and the associated workload).

In addition, there is also a disproportionate focus on pupils at, and around, grade borderlines (Burgess and Thomson 2022) and 'off-rolling'. These are all reviewed below.

Drilling and practising

As the cognitive scientist Daniel Willingham notes, 'the very use of the military term *drill* in place of the more neutral term *practise* implies something mindless and unpleasant that is performed in the name of discipline rather than for students' profit' (Willingham 2005). However, as he goes on to explain, practising certain things until they become automatic is an essential part of learning, and is a staging post on the way towards deep expertise and critical thinking, because:

- practise frees up working memory to allow progression to more sophisticated tasks
- regular practise makes memory long-lasting
- practise of known, familiar problems helps pupils to understand the underlying structure of common problems, improving their ability to transfer learning to unfamiliar contexts.

Because practise can help pupils move towards the fluency required for more sophisticated tasks (Didau and Rose 2016: 71), practising specific content for an exam might be beneficial. Importantly, what is practised needs to be well selected and practise should not involve repeatedly taking mock exams and past questions, since using such 'final form' assessments can detract from assessing and mastering component knowledge and skills (Christodoulou 2017; Millard et al 2017).

Lessons sometimes focus on assessment rubrics until pupils understand exactly what they need to do to secure a particular number of marks. This might appear mechanistic and instrumental, but how much of a problem this is depends on whether the mark scheme accurately captures the features of high-quality work, and the learning steps involved in getting there.

Some teachers report that exam preparation results in less 'creative' teaching (Gewirtz et al 2021), but 'creative teaching' should not be an end in itself since, as Lemov (2010) points out, the 'shortest path' – involving a 'less cutting-edge, less artfully constructed' approach – is often more effective. There is however a risk that if teaching is limited to the most efficient means of achieving tangible learning, the potential social and emotional benefits associated with less 'efficient' activities might be lost.

Ultimately, the problems of repeated use of final form assessment and focussing on assessment rubrics are primarily to do with pedagogy rather than policy. Further evidence and training on the relative 'pay-off' of strategies that prioritise deeper learning might therefore help to shift teaching practice.

Distorting the curriculum

A concern related to practising is that exams can only ever cover a small sample of the curriculum. If what will come up is predictable, it can distort and narrow the curriculum; this is sometimes referred to as 'curriculum backwash' (Gipps 1988); a form of 'skewing'. This tendency is part of the rationale for abandoning modular exams, since testing bitesize chunks incentivises short-term memorisation and performativity (Christodoulou 2023). It is also a reason for caution regarding the idea of micro-credentials or 'badging⁵' which can lead to 'banking', which Wiliam explains involves:

" a shallow approach to learning, and teaching... [since students] know that they only have to remember the material for two or three weeks until they take the test on that material, and they can then forget it, so there is no incentive for the student to gain the deep understanding that is needed for long-term recall." Wiliam 2011

^{5 &#}x27;Badging' refers to a practice whereby 'aspects of a larger concept, such as a disposition, are reduced to a small number of skills and "badged" up to enable students to acquire credential in bite sizes' (Lucas 2021).

Teachers in practical subjects have reported disproportionately focussing on preparation for written assessment (Gewirtz et al 2021). Peterson (2021) therefore concludes that the gap between what we want young people to learn and what we can reliably assess has grown so large that we should 'call it a day' on curriculum-based assessment.

Yet 'skewing' does not have to be a negative phenomenon (Ellis and Barrs 2008; Gipps 1988). As Wiliam and Oates point out, it might be fine if teachers teach to the right tests (Millard et al 2017: 38). In other words, so long as tests prioritise the most important knowledge and skills, and that they sample unpredictably from a broad domain, then the role they play in prioritising some content, and requiring pupils to learn it, is not unwarranted.

Unfortunately, what comes up in exams is currently too predictable, a problem that may be exacerbated by competition between exam boards which incentivises them to narrow the syllabus. Longer exams (which allow for more reliable assessment) also mean that a larger proportion of the intended learning is examined. This makes the content more predictable than if a smaller sample of the domain were being tested. Counterintuitively, testing less of the syllabus can counteract backwash.

'Skewing' does not only happen within subjects. The fact that only some subjects are examined, and that the accountability framework prioritises some subjects over others can lead to non-assessed subjects being neglected. At key stage 2, for example, SATs have elevated the status of English and maths, incentivising schools to focus on them over other subjects. As set out in section 2.1, this trend disproportionately impacts on disadvantaged groups.

There are similar concerns at secondary school, where more than half of schools have turned to a compressed key stage 3, beginning their GCSE teaching in year 9 or even earlier (NFER 2019). The EBacc measure also incentivises schools to pull pupils away from optional subjects and to teach fewer subjects. This has led to numerous calls for a reduction in the emphasis on the EBacc, or for a widened set of subjects to be included (Parliament 2016; Prior et al 2021; Richmond 2021). We return to this problem in section 2.1.

'Skewing' is not always an unintended side-effect of assessment. Assessments – and the accountability metrics that rest on them – are often introduced precisely in order to shape school behaviour (Ellis and Barrs 2008; Gipps 1988). The main reason for introducing the EBacc was to drive increased prioritisation of academic subjects, while the phonics screening and multiplication check were intended to shift teaching practises. Inevitably there is debate about whether these shifts are desirable and whether schools' responses have overshot intentions.

Finally, it might be argued that because national assessments are subject-based, they lead to an over-emphasis on teaching disciplines rather than cross-curricula skills and dispositions. This is an argument that cannot be disentangled from questions of curriculum, since assessment and curriculum need to pull in the same direction if policy is to be coherent. In other words, if the curriculum is discipline-focussed, then assessment should be too – and vice versa. We return to these questions in section 2.2.

Unproductive and disengaging workload for teachers

In 2018–19, half of teachers were expected to submit attainment data on their pupils at least once a half term, yet only around 10 per cent considered that data to accurately reflect their pupils' attainment (Allen 2019b). The government's own workload challenge emphasised this problem (Gibson et al 2015). Onerous and unproductive expectations linked to data have a double-barrelled impact:

they detract from time spent on more productive activities, while also breeding frustration and professional dissatisfaction.

Encouragingly, there are recent signs of improvement. The proportion of teachers providing attainment data to management on at least a half-termly basis fell from 64 per cent in 2017 to 38 per cent in 2023 (Teacher Tapp 2023a). Yet the problem is far from solved: as recently as February 2023, when asked what they would do to cut 'unproductive' workload, 20 per cent of primary school teachers and 10 per cent of secondary teachers who provided a response referenced 'data' (ibid). There is therefore still a long way to go.

Thresholds, cliff edges and off-rolling

Historically, there have been serious problems with schools 'hot housing' pupils who were on the 'C–D borderline' at GCSE, or who were on the margins of agerelated national curriculum expectations at key stages 1 and 2. The advent of Progress 8 and the removal of national curriculum levels has gone some way to reducing this problem, and this has benefited pupils who would previously have fallen below the threshold (Burgess and Thomson 2022).

Exam thresholds have not disappeared though and they still influence teaching and learning. The government's recent levelling up white paper announced a target for 90 per cent of primary school children to achieve expected standards in reading, writing and maths by 2030 (DfE 2022b; Thomson 2022). This will inevitably drive an increased focus on pupils just below the threshold.⁶ There is nothing inherently wrong with seeking to ensure that the vast majority of pupils achieve a basic threshold, and directing efforts in this way may drive equity by pushing resources towards pupils who need extra support. However, a critical risk of thresholds is that pupils are written off because they are considered too far from the threshold to have a chance of succeeding. In section 1.2 we noted the consequences this can have for pupils with certain forms of SEND who might be unlikely to achieve these standards (Newmark and Rees 2022). There are also well-documented concerns about the 'off-rolling' of pupils whose attainment might drag down a school's results. for example by excluding them or encouraging them to move on (Menzies and Angus 2021; Nye and Thomson 2019).

ASCL's 'Forgotten Third' campaign has drawn attention to students who currently fall below the grade four 'standard pass' threshold in English and maths – a group comprising 187,000 pupils in 2018 (ASCL 2019). These pupils are currently expected to resit English and maths post-16, significantly influencing the curriculum they study at key stage 5 and requiring them to study a qualification which they have already 'failed'. At present, fewer than half of pupils who resit their English exams succeed in securing a grade four, and only around a third do so in maths (Belgutay 2021). This is hardly surprising given the lack of support available to them – for example there is currently no pupil premium for 16- to 19-year-olds (Waite 2023).

There have therefore been widespread calls for a qualification that focusses specifically on basic numeracy and literacy skills for this group (Clarke 2023; Waite 2023). AQi have suggested that functional skills qualifications might offer one alternative; however these qualifications have seen falling entries in recent years and there are concerns among employers about a lack of consistency in specifications, a lack of understanding of the qualifications, variable pass rates, and a lack of confidence regarding whether they equip learners with the necessary skills (Matthews 2021).

⁶ It is worth noting that proposals for pass/fail qualifications that demonstrate pupils' proficiency (Peterson 2021) come with a risk of these threshold effects.

Vocational and technical learning

This is not the place for a full review of the persistent undervaluing of vocational learning. However, recent assessment reforms have had a considerable impact on access to vocational learning and we review this briefly below.

Key stage 4

Reforms to key stage 4 qualification have led to "wholesale changes in the set of qualifications that schools offered to pupils (...) which primarily affected lowerattaining students" (Burgess and Thomson 2019b).

These changes include:

- the discontinuing of many existing qualifications
- the ending of some GCSE equivalencies (which allowed pupils to count some BTECs as 'worth' four GCSEs)
- the introduction of the EBacc.

Pupils affected by these reforms are now achieving a quarter of a grade lower per subject. They are also six to seven percentage points less likely to have achieved five or more A* to C grades (or equivalent) at GCSE by the age of 18 (ibid). The extent to which this is a problem however, depends on whether or not the qualifications they were previously gaining were of value, something the Wolf report questions (Wolf 2011).

There is evidence that vocational options at key stage 4 can support some pupils' post-16 progression, but this comes with a number of caveats (Vidal Rodeiro and Vitello 2023; Vidal Rodeiro and Williamson 2019). There is also a risk that such options can result in dividing pupils into vocational and academic tracks at the end of key stage 3, an approach that is at odds with a system nominally structured around a broad, comprehensive 11–16 phase.

At present, equivalences are decided upon by Ofqual; high-quality vocational qualifications can be counted within the 'open baskets' in Progress 8; and Ofsted inspects the underlying rationale behind the curriculum. The status quo should therefore allow for schools, teachers, pupils and parents to work together, using their contextual judgement to choose options that are appropriate for each pupil while keeping future choices open (as discussed in section 1.2). Arguably though, the EBacc may be somewhat distortive.

Key stage 5

This report does not focus on post-16 education but in summary, the decade to 2015 saw a 179 per cent explosion in the uptake of vocational qualifications at key stage 5, primarily driven by the popularity of BTECs. Headteachers report that these options are an important part of the qualification mix and that they play a significant role in keeping pupils motivated. For this reason, post-16 providers have continued to offer them even where they are not included in league tables (Richards 2016).

Students with BTECs are now much more likely to progress to higher education than they have been in the past and nearly half of the most disadvantaged students entering higher education now hold these qualifications (Dilnot et al 2022; Mian et al 2016). Yet BTECs are currently under threat. The government is committed to shifting pupils towards new T-levels, but it is unclear whether these will be a direct substitute and many pupils who are 'not T-level ready' will be negatively affected by the changes (EPI 2022). It would therefore be wise to delay discontinuation until T-levels are better established and teething problems overcome.

Ways forward

Exams exert a powerful influence over what is taught in schools and how. This is often intentional, with assessment – and the accountability system that hangs off it – providing policymakers with one of their most powerful levers for shaping the education system.

There is nothing inherently unreasonable about the assessment system being used to enforce a curriculum which (as we will see in chapter 2) must prioritise within the vast realm of knowledge and skills. It is also reasonable for exams to act as an incentive for pupils to learn and practise key content, and for the assessment system to be used to set expectations regarding the basic standards that all pupils should achieve, regardless of their background.

Yet in recent years, assessment and accountability have become increasingly rigid. This system comes at a cost to teachers' and schools' autonomy, reducing local and contextual decision-making over teaching, learning and curriculum design.

A series of adjustments could help rebalance the system, including:

- 1. Dialling down the stakes on assessment, for example by moving towards multiyear accountability measures (Menzies and Jerrim 2020; NAHT Accountability Commission 2018). Reducing short-term, sink-or-swim pressures in this way might give teachers more flexibility to exercise their professional judgement.
- 2. Reconsidering the need for pupil-level grading at key stage 2. SATs are used for school accountability, system monitoring, curriculum enforcement and setting a (school-level) baseline for Progress 8. None of these require pupil-level results. If pupil-level reliability were not needed, primary school exams could be shortened, lightening the testing burden and reducing the predictability of what will come up.
- 3. Greater use of sample-based approaches would allow a wider range of subjects and skills to be assessed without overly increasing the assessment burden. A number of different approaches have been proposed (Allen 2019a; Millard et al 2017; Moss et al 2021). These might involve pupils sitting tests in different subjects in different schools, on an unpredictable carousel. Pupils could also be tested in different year groups. If this approach were combined with a move towards multi-year school-level measures, it might lead to an unpredictable, low-stakes assessment.
- 4. Widening the range of subjects that are most highly prized in secondary school league tables by reviewing the Ebacc. The review should reconsider what subjects are included within it (for example the components of the humanities basket and whether there is a place for arts and technology), as well as whether the measure should continue to exist.
- 5. Reviewing post-16 English and maths resit arrangements, considering the most appropriate form of assessment and the support available to pupils.
- 6. Continuing efforts to reduce the workload associated with reporting by reinforcing the fact that Ofsted does not expect to see tracking data. Assessment literacy should also be prioritised in teacher training to ensure more teachers understand the different purposes and benefits of 'final form' versus regular assessment.

Future research

More evidence is needed:

• to compare the impact of learning exam rubrics, and repeatedly practising final-form assessments with alternative teaching strategies.

2. THE CURRICULUM

There is too much to learn and not enough life, let alone time in school, in which to learn it. The desire to do everything is therefore understandable. However, curriculum design is, to a large degree, a process of prioritising, selecting and sequencing. This inevitably involves difficult choices.

The first choice with regard to the curriculum is, 'how much can be covered?' since this lays the ground for asking, 'what should be covered?' and then, 'who should decide?' In this section we explore each of these questions in turn.

2.1 SHOULD THE CURRICULUM BE NARROW OR WIDE, BROAD OR DEEP?

The English education system currently prioritises a narrow, rather than wide, range of subjects and skills:

- numeracy and literacy at key stage 1
- English and maths at key stage 2
- an academic core at key stage 4
- a small number of subjects at key stage 5.

As noted in section 1.4, this is partly driven by assessment.

There is also a long-running debate as to whether the curriculum within different subjects should focus on breadth or depth. There is an argument for exposing pupils to an expansive and diverse range of content, but learning takes practise, and pupils are likely to benefit from gaining deep, critical mastery of a focussed selection of knowledge and skills.

This section considers the advantages and disadvantages of concentrating on a small 'core' of subjects (the 'narrow-wide' tension) before turning to the question of breadth versus depth within subjects. It concludes that prioritising a core set of subjects and mastering carefully selected content and skills in greater depth is justified, while also highlighting some of the excessive narrowing that has taken place and suggesting steps to mitigate this.

The value and limits of 'the core'

In order to access future learning, pupils need solid foundations in literacy and numeracy (Aubrey et al 2006; Bilton and Tilotson 2020). Additionally, many of the opportunities that maths and numeracy unlock – for example in engineering, economics, biochemistry, and the social sciences – may not be obvious to pupils or their parents until well after pupils leave school. This has driven recurring appeals to go 'back to basics', whether under John Major in the early 1990s, as part of the National Strategies under David Blunkett, or elsewhere in the world – for example as part of the current backlash against New Zealand's curriculum (Hood and Hughson 2022; Wiggins 2023). The benefits and drawbacks of focussing on the core therefore need to be examined carefully on a stage-by-stage basis.

Primary school

A third of primary school pupils do not achieve expected standards in reading, writing and maths (DfE 2019a). These pupils will find it hard to access learning and follow their interests in the future – which might provide justification for

an ever-greater focus on core numeracy and literacy at primary school. Recent international assessments show some (tentative and caveated) indications of improvement in these areas (Civinini 2020; DfE 2017; Jerrim 2021b) – or at least of elevated performance relative to other jurisdictions (Lindorff et al 2023).

However, there are long-running concerns that the focus on English and maths narrows the curriculum, reducing the time available for other subjects like science, art, history and modern foreign languages (Ofsted 2002; Spielman 2017; Wellcome Trust/NFER 2016; Wilshaw 2016). This may explain why these possible improvements have not been accompanied by improvements in science performance (where attainment has instead fallen) (Coughlan 2020; Jerrim 2019; Schools Week 2019). Concerns as to whether all pupils have access to a broad and balanced curriculum provided part of the rationale for the latest Ofsted framework which places considerable emphasis on the curriculum; however pressure to 'catch up' with lost learning post-pandemic risks exacerbating the narrowing of the curriculum (Quilter-Pinner and Ambrose 2020).

Curriculum narrowing impacts inequitably on different groups of pupils, with pupils who struggle to master the non-negotiable 'core' often being removed from other subjects for one-to-one and small group interventions (Hutchings 2015). Not only does this mean that pupils have a hollowed-out experience, it also means pupils spend a larger proportion of their time having to battle with subjects they find difficult, potentially reducing their motivation.

Secondary school

As noted in section 2, the EBacc has shifted school behaviour and pupils are now studying a smaller range of subjects at secondary school. The average number of subjects studied at the end of key stage 4 fell from just over 11 subjects in 2010/11 to just under eight subjects in 2019 (Richmond 2021). Some subjects have been particularly badly affected, with design and technology subjects seeing a reduction in teaching time of more than 50 per cent between 2011/12 and 2020/21 (Coulter et al 2022). The curriculum has also narrowed at key stage 3, with time spent on EBacc subjects increasing from 56 per cent in 2010 to 62 per cent in 2016 (Andrade and Worth 2017).

Many believe that the prioritisation of academic subjects has negatively affected certain pupils. Drawing on a 2016 survey of NUT members, Gewirtz et al (2021) highlight damage to pupils' self-esteem and motivation, while research by The Edge Foundation describes the current system as 'pushing squares into circles' (Mcpherson et al 2023). The Edge Foundation's report goes on to highlight comments from excluded pupils who report being more engaged by the 'autonomy and choice over what and how they learned' available in alternative settings that were less 'constrained by a narrow curriculum' – though the study does not specify whether this translated through into increased achievement.

Motivation and engagement should not be conflated with learning. As Didau and Rose point out, 'we tend to be more motivated to get stuck into tasks we're comfortable with, but that won't necessarily result in us learning much' (2016). Curriculum design, like schooling, should therefore take a deeper, more eudaimonic view of long-term fulfilment rather than the pursuit of immediate, 'affective' or (hedonic) notions of enjoyment (Clarke et al 2023; Clarke 2020; Yacek and Gary 2023). This is a theme we return to and elaborate on in section 3.2. Burgess and Thomson's (2019a) analysis of the initial impact of GCSE reforms (between 2016 and 2018⁷) does not reveal a detrimental impact on disadvantaged pupils. They find:

- a slight narrowing in the difference in the number of qualifications taken by disadvantaged pupils and their more advantaged peers
- a slight increase in the attainment gap at the upper end of the distribution coupled with a small improvement in performance of disadvantaged pupils with low prior attainment
- a small drop in the proportion of disadvantaged pupils failing to achieve basic standards.

Gaining a solid grounding in a core basket of subjects from across the academic disciplines also has the potential to unlock access to future learning and equip pupils for lifelong learning. We return to this debate in section 2.2.

Despite the case for encouraging all pupils to study a core set of academic subjects up to the age of 16, there is a question as to which subjects these should be. The rationale behind the selection within the current EBacc has been discredited, given that it was largely based on a publication by the Russell Group about 'facilitating subjects' that was later withdrawn – and which focussed on A-level choices rather than GCSEs (Weale 2019). As suggested in section 1.4, a review of the EBacc would therefore be merited.

The narrow nature of what pupils learn in school is not solely down to the national curriculum and the assessment system. Wales has not been through the same reforms as England (Thomson 2019), but arts subjects have declined there despite this. Subject uptake is also closely linked to pupils' socioeconomic backgrounds. Disadvantaged pupils are 39 per cent less likely than their non-disadvantaged pupils to take music GCSE and only half as likely to take PE (Hunt et al 2022). Hunt et al hypothesise that this may be due to the costs of extracurricular pursuits and disparities in the availability of teachers. Scarcity of school funding is also likely to play a role since subjects like music are expensive to provide, particularly given cuts to local authority music services.

Post-16

As discussed in chapter 1, pupils are now expected to continue studying maths and English if they have not previously achieved a standard pass. The rationale behind this is that not having these core basics hinders future success and constrains young people's ability to adapt and learn as they go through life, while acting as a drag on the UK economy (CBI/Pearson 2015; Pro Bono Economics 2021). The significance of literacy and numeracy in later life and learning means it would be a mistake not to ensure all pupils achieve competence. However, as noted in chapter 1, there are well-justified calls for more support, and a potentially better-tailored qualification for those resitting.

So far we have referred to a broad mix of subjects up to the age of 16 and taken for granted that this selection will narrow at key stage 5. But this need not be the case. England's A-level system requires students to choose a much smaller number of subjects than is the case with baccalaureate-based systems. As a result, England has one of the narrowest curricula for 16- to 19-year-olds in the developed world (Robinson and Bunting 2021). Moving away from the AS/A2 system has contributed to a reduction in the range of subjects that students take, despite a degree of variety being linked to higher future earnings (ibid). There have therefore been various calls for a new, baccalaureate-style qualification (The National Baccalaureate Trust 2022; Times Education Commission 2022).

⁷ The authors consider a pre- and post-reform period, but arguably this is too short a period to account for shifts in school behaviour. The authors also caution against directly attributing changes to the reforms.

Options for a radical transformation of key stage 5 are beyond the scope of this report, but would involve trade-offs and have significant implications for other features of the education system (Freedman 2022b). The EDSK thinktank argues that reform and broadening is needed, but that this would require a fundamental reshaping of school phases, so that upper-secondary education becomes a three-year phase. The authors argue that this is needed if increased breadth is to be combined with the depth needed to embark on university study (Richmond and Regan 2021). On the other hand, the National Baccalaureate Trust's proposals are intended to achieve increased breadth through a restructuring of the 14-to-18 phase (The National Baccalaureate Trust 2022).

In the realm of vocational education, T-levels have widened the range of subjects students take, but as noted in section 1.4, the abolishing of BTECS is likely to narrow the range of options available (EPI 2022).

Breadth or depth within subjects

Regardless of whether the curriculum focusses on a core set of subjects or a wider range, there is a tension with regard to how much content should be covered in each subject. A smaller range of content allows for the sophisticated analysis and critical questioning that is only possible when the sophisticated analysis and critical questioning that is only possible when pupils have deeper knowledge. This approach might also be required if pupils who learn more slowly, due to certain special educational needs, are to master what they are taught (Newmark 2023). Yet this might be in tension with a desire for a greater breadth of coverage – including studying a range of historical periods, or literature from a wider range of cultures.

This is a longstanding tension. Kenneth Baker, the secretary of state who oversaw the creation of the first national curriculum, still regrets overloading it, and over a hundred academics signed a letter critiquing the latest curriculum's 'endless lists of spellings, facts and rules' (Paton 2013). However, despite the curriculum's already sprawling, and in some cases unmanageable, reach (The Royal Society of Chemistry 2023), there are constant calls to bring in content that was left out.

Ultimately it is always easier to make the case for why something is sufficiently important to merit its inclusion than it is to explain why something should be left out. As we will see in section 2.2, the theory of 'powerful knowledge' (Young and Muller 2013) provides one approach to scholarly selection of key ideas within a discipline, while the idea of core knowledge provides another (Hirsch Jr 1988).

Ways forward

The principle of prioritising a core set of subjects that opens doors at the next stage is a sound one, because time in school will never be sufficient to cover everything. However there are inevitably questions about which subjects and skills open doors – which we shall turn to in the following section.

Within subjects, depth should be prioritised over breadth since depth allows pupils to develop their critical and analytical skills and to widen out their learning further down the line. However, what is selected for this deep, core approach should encompass a diverse and inclusive range of material. Similarly, although it is important for pupils to be prepared to navigate the society they live in, this needs to reflect its changing and culturally pluralistic nature.

Navigating these complex questions could involve the following.

1. Continuing to prioritise. Maths and English are key foundations at primary school and up to the end of key stage 4, all pupils should study a broad basket of academic disciplines since these open up rather than close down future options. Meanwhile, A-levels provide a valuable depth of study for pupils

progressing to university and T-levels provide a good balance of vocational learning and core basics.

- 2. Ensuring the next curriculum review is carefully led. The review should involve individuals with the expertise needed to manage difficult trade-offs and make tough, subject-specific decisions. The review should also be informed by consultation with the sector.
- 3. Aiming to reduce rather than increase content. A good rule of thumb when considering adding something to the curriculum is to ask, 'what will be taken out to make space for it'?
- 4. Counteracting excessive narrowing. Reforms proposed in section 1.4 (such as sampling at primary school, reviewing the EBacc, increasing access to the EPQ and reconsidering timelines for BTECs) may help to enrich the curriculum diet.

Future research

More evidence is needed on the following.

 The risks and benefits of more radical proposals for 'baccalaureate-style' reforms (Richmond and Regan 2021; The National Baccalaureate Trust 2022; Times Education Commission 2022). Research should take into account the full range of dependencies and interactions with the rest of the education system (Freedman 2022b), including the likely upheaval and workload that major reforms would bring and how this might affect recruitment, retention and where resources are directed.

2.2 SHOULD THE CURRICULUM FOCUS ON ACADEMIC DISCIPLINES, OR CROSS-CUTTING COMPETENCIES AND PERSONAL ATTRIBUTES? Calls for a rethink

The Tony Blair Institute for Global Change has called for greater emphasis on critical thinking, creativity, communication and collaborative problem-solving in the curriculum. The Institute argues that traditional subjects have 'crowded out' skills it believes could become more important in the future (Coulter et al 2022). Surveys of teachers, parents, pupils and employers often echo this view:

- 84 per cent of working-aged adults believed that a series of transferable 'essential skills' including creativity, staying positive, listening and teamwork, should be taught in schools, according to a YouGov survey for the Skills Builder Partnership (Seymour and Craig 2023).
- 60 per cent of employers rate skills such as resilience, communication and problem-solving among their top three priorities when recruiting, yet 38 per cent of them are dissatisfied in this area (CBI/Pearson 2018).
- Cullinane and Montacute (2017) find that essential skills (or attributes) such as confidence, motivation, resilience and communication are associated with better academic outcomes as well as better prospects in the workplace. They report that 72 per cent of teachers believe their school should focus more on these 'skills', noting that 97 per cent of teachers – as well as 88 per cent of young people and 94 per cent of employers – considered them more important than academic qualifications.
- Only 25 per cent of young people think they are very good at communicating what they think or taking initiative, according to a Populus poll of 1,510 young people (EY Foundation/CMI 2016).

A desire to break down boundaries between subjects has influenced many countries' curricula and sits behind the World Economic Forum's recent Education 4.0 taxonomy for future learning (World Economic Forum 2023). For example, New Zealand has focussed on values and competencies, combined with broad learning areas, which teachers are encouraged to link together (Ministry of Education – Te Tāhuhu o te Mātauranga 2015). However, as noted in section 2.1, serious concerns are now prompting a rethink (Wiggins 2023; Hood and Hughson 2022).

The recent Times Education Commission highlights Estonia's focus on '21st century competencies' and reforms to the curriculum in Singapore as examples of curricula that have moved away from traditional disciplines, alongside examples of schools nearer to home, like the XP school and School 21, that have eroded the boundaries between subjects (Times Education Commission 2022).

The multitude of surveys and examples cited above suggest that there is considerable appetite for nurturing non-subject-based skills. However, nine out of 10 children are at or above midpoint in terms of whether they are happy with the things they learn in lessons, with the average score being 7.4 out of 10. The figure is lowest at key stage 4 and highest at key stage 2⁸; meanwhile 70 per cent of pupils feel that 'school is helping me to develop wider skills I will need later in life' while only 12 per cent disagree (The Children's Society 2022).

The evidence base regarding how different skills affect life outcomes and how they are best developed is also patchy and complicated by the conflation of personality traits (like 'the big five'⁹), with more cognitive skills. For example, an influential paper by Heckman and Kautz (2012) showed that personality traits predict many health, crime and employment outcomes better than academic achievement and that these attributes are psychometrically testable. The authors note that some of these traits have a degree of malleability and that they should therefore not be overlooked in education policy. However beyond underlining the potential benefits of some social and emotional learning programmes (which we return to in section 3.4), these findings' implications for curriculum design are debatable. Similarly, one literature review finds that there are a small number of robust studies showing links between various 'essential skills' and employment prospects, but that 'the evidence is less clear on how these skills are best developed' (Angus et al 2020).

Arguments for going beyond traditional subjects are often made in instrumental, economic terms (CBI/Pearson 2018; Coulter et al 2022). However, as Hannon and Peterson (2021) argue, making this case means relying on a thin, anthropocentric notion of success. They therefore argue for greater emphasis on attitudes and values that support 'thriving' and helping others, drawing on the OECD's 'the future we want' framework (OECD 2018).

The case for subject disciplines

Research from fields of cognitive science and curricular sociology provides strong support for a subject-based approach to the curriculum. As noted earlier, models from cognitive psychology demonstrate that learning and skill development involve transferring knowledge from the working memory to the long-term memory (Willingham 2005) and that skills are the product of domain-specific knowledge (Tricot and Sweller 2014).

Advocates of powerful knowledge¹⁰ argue that schools should teach the knowledge generated by specialised disciplines because they each offer unique approaches to unlocking truths about the world (Ashbee 2021; Enser 2021; Young and Muller 2013). As Yacek and Gary (2023: 138) argue:

⁸ Figures are not available for EYFS and key stage 1.

⁹ The 'big five' refers to a model of personality based on: neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness.

¹⁰ Enser (2021) characterises powerful knowledge as knowledge that allows us to: discover new ways of thinking; better explain and understand the natural and social worlds; think about alternative futures and what we could do to influence them; have some power over our own knowledge; be able to engage in current debates of significance; and go beyond the limits of our personal experience.

"Engaging with the various academic disciplines is valuable because they harbour unique perspectives into the mystery, beauty and wonder of perspectives that can profoundly alter and enrich how students see themselves and the world around them."

Resolving the tension

This results in a three-pronged dilemma, whereby:

- curriculum design involves prioritisation
- there are calls for a doubling down on core subjects that unlock future choices
- there are also calls for the curriculum to place greater emphasis on nondisciplinary competencies and attributes.

Four possible options are:

- 1. shifting the curriculum away from discrete subjects
- 2. drawing out cross-cutting themes
- 3. taking down the scaffolding
- 4. skills development beyond the taught curriculum.

1. Shifting the curriculum away from discrete subjects

There are many examples of curricula moving away from a focus on traditional subjects. The International Baccalaureate's middle years programme is structured around 'big ideas' like 'fairness' and 'sustainability' (International Baccalaureate Organisation, no date). Meanwhile the Australian curriculum includes over-arching general capabilities (The Australian Curriculum, no date) but has been enacted in different ways in different states: with some focussing more on capabilities and others retaining a greater focus on subjects.

In England, non-subject based approaches to the curriculum have included projectbased learning (PBL), competence-based curricula and enquiry-based learning. Examples include the Royal Society of Arts' Opening Minds programme – though this has been described as an approach to teaching rather than just a curriculum (Candy 2011) and a more recent 'Learning through REAL projects' programme that received a largely negative evaluation from the Education Endowment Foundation (EEF 2016). As noted above, individual schools like School 21, the XP School (Times Education Commission 2022), and Surrey Square School have also taken the initiative in breaking down barriers between subjects (Surrey Square Primary School, no date).

One qualitative meta-synthesis (Strobel and Van Barneveld 2009) found that PBL can be beneficial for long-term retention of knowledge and skills, but notes that much of the evidence originates in adult medical education. The authors therefore suggest that the approach is likely to be beneficial for 'competent and skilled practitioners', a very different group of learners to school pupils. We return to the difference between 'novice' and 'expert' learners below.

2. Cross-cutting aims

Another approach is to maintain the subject-based structure of the curriculum while identifying its underlying aims more clearly. This might be one way of emphasising the wider competencies and attributes that it seeks to nurture. To some extent this is the status quo; at present, the specified aim of England's national curriculum is to provide:

"an introduction to the essential knowledge they [pupils] need to be educated citizens. It introduces pupils to the best that has been thought and said, and helps engender an appreciation of human creativity and achievement." DfE 2014 The national curriculum also specifies that schools¹¹ should teach a 'broad and balanced' curriculum that:

- promotes pupils' spiritual, moral, cultural, mental and physical development
- prepares pupils for the opportunities, responsibilities, and experiences of later life.

Broader aims are also enshrined in schools' legal duty to promote pupils' social, moral, spiritual and cultural development (The Key, no date a). Ofsted also makes a judgement on 'personal development', with the current framework highlighting the importance of resilience, confidence and independence (Ofsted 2022).

Despite formal codification, cross-cutting aims have been described as 'relegated priorities' (Peterson et al 2014). Yet these wider aims – and the 'why' of education – can play a key part in schools' and trusts' vision, values, culture and ethos (Baars et al 2018; Menzies et al 2010). This might be an alternative to prescription in the national curriculum.

Tools like the 'Skills Builder' profile (Skills Builder Partnership, no date) are valued by some schools because they provide a shared language around socalled 'essential skills' (Seymour and Craig 2023) which subject teachers can use to draw out 'teachable moments' (Peterson et al 2014). Despite the active debate regarding whether such skills are 'domain specific' or general, and the value of assessing them (Baer, 2010; Plucker and Beghetto, 2004)¹², it may be that shared language helps highlight domain specific manifestations of things like creativity and problem solving.

3. Taking down the scaffolding

Didau and Rose (2016) argue that schools should teach metacognition, just not as a subject. They go on to explain that once learners become more knowledgeable within a domain and acquire a degree of expertise, scaffolding should gradually be removed and pupils given opportunities to apply their learning with increasing degrees of independence.

This approach aligns with research showing that the structured techniques that help novices can have a negative impact if they are maintained once learners are more experienced – a phenomena known as 'the expertise reversal effect' (Sweller et al 2011). This effect is also highlighted by Kirschner (Kirschner 2009) and helps explain the benefits (noted above) of project-based learning for expert learners (Strobel and Van Barneveld 2009).

4. Skills development beyond the classroom

Not all valuable skills, competencies and attributes need to be developed as part of the curriculum. Participation in extra-curricular (sometimes called 'cocurricular') activities can also play a part (CfEY 2021; Cullinane and Montacute 2017). However, at present there are serious inequalities in access to such opportunities:

- Only 46 per cent of disadvantaged pupils take up extra-curricular activities compared to 66 per cent of their better off peers (ibid).
- Schools serving more disadvantaged pupils are half as likely to offer debating clubs compared to schools serving more advantaged pupils (ibid).
- Poorer pupils are 'doubly disadvantaged' when it comes to accessing residential school trips because the schools they attend are less likely to offer

¹¹ Note that only maintained schools are required to teach the national curriculum.

Scholars are divided as to whether qualities such as creativity are domain specific – that is, specific to different subjects – or cross-cutting. In other words, there is a debate as to how closely related being a 'creative pianist' is to being a 'creative scientist' and therefore, whether it is meaningful to focus on teaching people to be generically creative.

such activities, and when they do, cost is a barrier to participation (Menzies et al 2017).

As Cullinane and Montacute (2017) point out, this is concerning given that disadvantaged pupils are less likely to access these experiences outside of school, and so have the most to gain.

Ways forward

Wholesale redesign of the curriculum around generic, non-disciplinary skills is unlikely to be effective and there is a risk it might be damaging, given the evidence from across the literature – whether empirical, international, cognitive-science or curriculum-theory based.

However, pupils need opportunities to apply their learning with increasing independence in less structured and more authentic scenarios as they progress. There may also be benefits to schools having a shared language to draw out some of the skills they hope pupils will develop. Although the national curriculum currently specifies a broad set of aims, and Ofsted reviews how schools support pupils' personal development, school and trust leaders may be able to do more to draw out these threads as part of their ethos and culture.

Opportunities to develop wider skills could be enhanced by the following means.

- 1. Nudging schools towards 'taking down the scaffolding', for example by ensuring teacher training adequately covers the 'expertise reversal effect.' Changes to the assessment mix highlighted in section 1.2 (such as scaling up the EPQ) could also play a role.
- 2. Adequately resourcing extra-curricular provision so that learning can go beyond the constraints of the school timetable. There is a strong case for investing in an 'enriching educational recovery' that embeds non-formal learning in schools, partly by tapping into community-based provision (CfEY 2021). This approach would also support the cross-societal improvements to childhood that we return to in section 3.4.

Future research

More evidence is needed on the following.

- How and when to 'take down the scaffolding' so that pupils can apply their learning in an increasingly independent and unstructured way.
- How school culture and ethos as well as extra- or co-curricular activities can contribute to non-disciplinary skills and whether this can happen in an equitable manner given differing uptake of such activities.

2.3 HOW CAN THE CURRICULUM STRIKE THE RIGHT BALANCE BETWEEN A STANDARDISED ENTITLEMENT AND FLEXIBLE CHOICES?

The need for an entitlement

According to one view, if there are certain things that all pupils should learn – and that should not depend on pupils', parents', teachers', or schools' choices – then they should be included in the curriculum. For example, The Social Mobility Commission has argued that a core curriculum entitlement is an important lever for social mobility (2014). This aligns with the work of Hirsch (1988), who argues that there is a body of knowledge that provides 'cultural literacy' and which children need to understand in order to participate fairly and productively in society.

Until recently there was a lack of experimental evidence regarding the effectiveness of this approach. However, a recent US randomised controlled

trial found that teaching the core knowledge curriculum¹³ had large and significant positive effects on English and maths achievement. These gains were sufficient to eliminate achievement gaps between advantaged and disadvantaged pupils (Grissmer et al 2023). The studies' authors note that one reason for these effects might be that general knowledge could enhance self confidence, motivation and social connections.

Proponents of 'powerful knowledge' (Young and Muller 2013) argue that a curriculum entitlement to powerful knowledge equips pupils to participate in 'the great conversations of humankind' (Ashbee 2021). Rather than adapting to, and seeking relevance to pupils' context, the purpose of this type of curriculum is to be expansive – taking children outside of their everyday experiences (Enser 2021).

Although the idea of 'powerful knowledge' overlaps with Hirsch's 'core knowledge', it is not the same, since powerful knowledge does not imply a prescribed list of facts to be transmitted and memorised. Instead, each subject's body of powerful knowledge evolves in response to developments in the field. Thus, powerful knowledge does not necessarily imply national prescription. Indeed, Enser argues that it puts 'the ball, and the power... very firmly back in (teachers') court' by encouraging them to reflect on their discipline and to engage in professional, expert debate and discussion around the ideas that underpin their subject (ibid). A curriculum centred on powerful knowledge might therefore require curriculum designers, at classroom, school and/or trust/local authority level, to be given the time and space to absorb, debate and reflect on subject-specific developments, things they currently lack. However, limited access to curriculum expertise and high-quality resources can make this difficult, particularly when teachers have limited subject knowledge – or in small schools, maintained schools in local authorities with limited capacity, standalone academies, and small MATs.

Another function of a prescribed core might be to ensure 'coherence'. Coherence can involve learning in one subject reinforcing what is learned elsewhere so that it all 'hangs together' (Kidd, no date; Robinson 2018). Yet this can be achieved through a well thought through, school-designed curriculum rather than requiring national prescription.

Oates (2010) describes a more expansive view of coherence involving an arrangement of content in a logical order that is informed by evidence on age-related progression, supported by alignment with assessment, pedagogy, teacher training, teaching materials and incentives.

This type of coherence requires system-level planning and a degree of expertise that not all classroom teachers can bring to the table – suggesting a need for national prescription.

It is important to note that the curriculum rightly looks different in special schools; although community and foundation special schools are required to teach all national curriculum subjects, they have the freedom to diverge from age-related expectations and can disapply the curriculum from individual pupils (The Key, no date b). The new 'engagement model' that replaced P levels is also intended for use with pupils 'working below the standard of the national curriculum assessments and not engaged in subject-specific study' (Standards and Testing Agency 2020).

The risks of prescription

An alternative view is that the curriculum should be far more responsive to the backgrounds, contexts and interests of pupils and schools. Central

¹³ This curriculum focusses on building general knowledge and was taught from kindergarten to eighth grade in a group of US schools.

prescription might also be argued to allow those in power to entrench historic and structural inequalities while producing a curriculum that is irrelevant and disengaging.

Greater flexibility might allow:

- teachers to adapt the curriculum to their pupils' context and to challenge the undervaluing of diverse perspectives and experiences
- pupils to have more choice regarding what they study and to pursue their own interests and talents.

The challenge is that teaching a different curriculum in different contexts and allowing pupils to focus on their existing interests and talents can be in tension with the idea that education and the curriculum should open doors to the *un*familiar. Indeed, The Social Mobility Commission (2014) has argued that curriculum choice can result in disadvantaged pupils taking less academic subjects and being locked out of opportunities that might promote upwards mobility, in effect acting as a form of covert tracking.

A possible way of navigating between these two positions is as follows.

- To diversify the curriculum, recognising and counteracting systemic and historic biases, for example through moves to decolonise the curriculum (Kara 2020; Thomas 2020). Professor Michael Young from the Institute of Education warns that advocates of powerful knowledge too often think it is enough to prescribe without considering how knowledge is distributed, how economic resources affect access to knowledge, and the need for pupils to *want* to engage with it (Duoblys 2022; Young 2014).
- To give schools the flexibility to 'hook' pupils in with material that responds to their interests so that they can experience success, but then use this as a gateway to less familiar and horizon-expanding content (Menzies and Angus 2021).

Another approach to marrying entitlement and choice involves contextual adaptation. Work by the Royal Society of Art has argued that 'the National Curriculum should provide a minimum entitlement, but should not define everything that is taught in schools' (Thomas 2012).

TABLE 2.1

1. Resource (about a place)	2. Recognition (for a place)	3. Rights (with a place)
Localities are convenient learning resources:	Students should know about where they live:	Localities have a democratic right to influence the curriculum:
- to enhance national curriculum content	- as an entitlement which many families do not provide	- democratic space to talk about educational purpose
- to provide sustainable and accessible context for 'real world learning'	- to create a sense of belonging and identity	- curriculum as a resource for a comunity to effect social change
- easier to access than other places	 to connect with local employmment opportunities to connect with local 	 shared common purpose with communities will make schools more resilient.
- communities have useful knowledge and cultures to support learning.	knowledge and culture.	
BUILDS ENGAGEMENT	BUILDS ATTACHMENT	BUILDS DEMOCRACY/COMMUNITY

The rationale for an area-based approach

Source: Hallgarten (no date)

As set out in table 2.1, a local dimension is important because:

- 1. schools need to recognise their local context if pupils are to understand where they live
- 2. localities have a democratic right to influence curriculum design and content
- 3. the local context is a resource to improve learning (ibid).

Oates (2010) also makes the case for a distinction between the national curriculum and the school curriculum. He distinguishes between 'concepts' and 'contexts' and argues that the national curriculum should specify core concepts like 'the preservation of mass' or 'literary devices including metaphor,' but that concepts can be studied in relation to locally-informed and pupil-adapted contexts. The national curriculum might therefore specify that in geography, pupils will study watercourses including lakes, rivers and canals. However, it is in shaping the *school* curriculum that the decision might be made to conduct a case study of a local canal or to visit a local museum. As Oates points out, it is these local enactments within each school that give the curriculum its relevance and motivating (or demotivating) properties (ibid).

The role of content and context may differ between subjects and Ofsted's recent curriculum reviews are premised on the principle that the degree of contextual detail needed to make sense of ideas differs between subjects (Ofsted 2021).

There is scope for pupils to shape decisions about the contexts they study, even if they do not decide on the concepts. However, it remains important that their choices do not simply reinforce stereotypical preferences, or close off opportunities to encounter the unfamiliar.

A challenge with all of the above is that schools often lack the capacity or resources to engage in careful and skilled adaptation. Other institutions, such as museums and subject associations (Blake 2018), as well as areabased partnerships (Shaw et al 2023) and large multi-academy trusts, might therefore need to play a greater role.

Ways forward

The national curriculum should guarantee all pupils an entitlement to a common body of knowledge and skills. It needs to be based on expert understanding of how content should be sequenced in order to unlock future learning – as well as ongoing, disciplinary debate regarding the key ideas within each subject.

Giving pupils more choice over what they study at an earlier stage (beyond specific opportunities such as extended learning projects) is likely to have an inequitable impact. Nonetheless, the national curriculum should allow for local adaptation so that it can be applied to relevant contexts within each school, taking into account pupils' interests.

Reconciling the benefits of national entitlement and local adaptation might involve the following.

- 1. Improving access to curriculum expertise through training, learning resources and capacity. Larger MATs, local institutions, subject-expert bodies and curriculum resource providers could all contribute to this, and Ofsted should continue to inspect the underlying rationale behind each school's curriculum, focussing on quality not just compliance.
- 2. Ensuring the national curriculum is truly national. Given the importance of a core curriculum entitlement, future changes to academy regulations should reinstate the national curriculum's status within all mainstream schools.

Future research

More evidence is needed on the following.

- The approaches schools take when applying concepts from the national curriculum to different contexts.
- How stakeholders like local institutions, subject associations, learned societies and large MATs can support schools in adapting the national curriculum.

3. WELLBEING AND MENTAL HEALTH?

There is overwhelming evidence that children and young people's wellbeing has declined rapidly in recent years and that mental ill health is spiralling.

Studies show the following.

- The proportion of young people aged seven to 16 with a probable mental disorder rose from one in 10 in 1999, to one in nine in 2017 and then to one in six in 2020. Among young people aged 17 to 19, rates reached one in four in 2022 (NHS Digital 2022).
- The number of accident and emergency attendances by people aged 18 or under with a recorded diagnosis of a psychiatric condition more than tripled between 2010 and 2018/19 (Young Minds, no date)
- 11 per cent of children aged 10–17 have low levels of wellbeing, based on their self-declared life satisfaction (The Children's Society 2022).
- Only 53 per cent of 15-year-olds report being satisfied with their lives in the UK compared to an average of 67 per cent across the OECD (OECD 2019).
- The life satisfaction of 15-year-olds across the UK has fallen faster than in any other country with comparable data over the last three years, and pupils in the UK are much less likely to report that they have a sense of meaning in life than their peers in other OECD countries (Jerrim 2019).

The Covid-19 pandemic has deepened the crisis. The number of 0- to 18-year-olds referred to children and young people's mental health services was up 134 per cent in April to June of 2021 compared with the same period in the previous year, and up 96 per cent compared to the same period in 2019 (Royal College of Psychiatrists 2021). Fortunately, young people's wellbeing recovered to approximately prepandemic levels in 2022; however anxiousness remains high (DfE 2023).

There are numerous hypotheses regarding what might be causing the current crisis, but no consensus regarding the likely explanation (Robertson 2021).

It is beyond the scope of this report to evaluate the different hypotheses that have been proposed. However, they could be briefly summarised as follows.

- There is a growing evidence base around the potential role of social media (Braghieri et al 2022; Twenge et al 2018), but even this is somewhat contested (Ritchie 2023).
- Factors like material deprivation, homelife and poverty are hugely influential determinants of wellbeing and mental health (Crenna-Jennings 2021; Elliott 2016; Knies 2017, 2022; NHS Digital 2022), yet the decline in wellbeing and mental health in England predates increases in poverty (Freedman 2022a).
- Young people have considerable concerns about global issues such as the climate emergency (Hickman et al 2021), as well as racism and other forms of prejudice and discrimination (Ghezae 2021; Ghezae et al 2022). These concerns can cause them significant distress.
- As explored in section 1.3, some have suggested that exams have a negative impact on young people's wellbeing and mental health (Bradbury 2019),

but longitudinal and comparative international studies do not support this hypothesis at a population level (Jerrim 2021a, 2022; Wyness 2021), making assessment an unlikely explanation for large-scale trends, even though exams cause some individuals considerable distress.

Unfortunately, without knowing the cause of the current situation it is hard to know what the right response is. The sense that 'something must be done' is powerful, but that does not obviate the need for the response to be effective.

Wellbeing and the avoidance of mental ill health are intrinsic goods, regardless of their instrumental importance. However, there is evidence – albeit non-causal and highly contested (Clarke 2020) – that higher levels of emotional, behavioural, social, and school wellbeing are also associated with subsequent high academic achievement and engagement (Gutman and Vorhaus 2012).

3.1 OVERVIEW OF WELLBEING REFORMS

There is a long history of policy relating to schools and wellbeing. Granada et al (2022) identify three distinct phases over recent decades.

- 1. 1997–2010: a national programme with school level flexibility. This phase included the Every Child Matters agenda which sought to promote a holistic approach to care, education, and safeguarding but afforded schools considerable flexibility. It was accompanied by initiatives like the Social Emotional Approaches to Learning (SEAL) programme that encouraged a whole-school approach underpinned by the idea of 'emotional intelligence'.
- 2. 2010–15: education and PSHE. During this period, education policy focussed on academic learning. This was accompanied by various calls (for example from Ofsted) for schools to improve the quality of personal, social, health and economic education (PSHE) and relationships and sex education (RSE).
- 3. 2015 onwards: character education, personal development and mental health. Since 2015, there has been increased emphasis on social and emotional learning and various small- to medium-scale initiatives to support pupils' wider development and mental health. Initiatives have included training for mental health leads and new mental health support teams. During this period, Ofsted also separated out its judgement on 'personal development, behaviour and welfare' into different sections on behaviour and attitudes, and personal development.

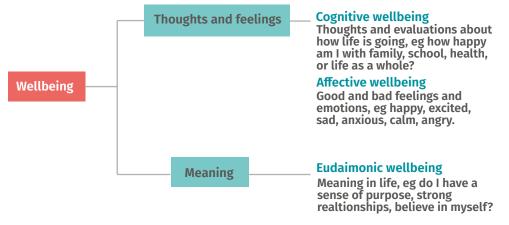
3.2 WHAT ARE WELLBEING AND MENTAL HEALTH?

Wellbeing

The cross-governmental strategy for mental health outcomes defines wellbeing as 'a positive state of mind and body, feeling safe and able to cope, with a sense of connection with people, communities and the wider environment' (HM Government 2011). Several different dimensions sit beneath this definition. The Children's Society unpack these in figure 3.1 below, distinguishing between 'thoughts and feelings' and 'meaning' (The Children's Society 2022).

FIGURE 3.1

Components of self-reported wellbeing



Source: The Children's Society (2022: 6)

The dimension of 'thoughts and feelings' is often termed 'subjective wellbeing' (SWB), or hedonic wellbeing. Meanwhile, 'meaning' aligns with eudaimonic or psychological wellbeing (PWB).

- SWB refers to: 'the presence of positive emotions, absence of negative emotions, and one's overall life satisfaction' (Clarke and Hoskin 2022: 318)
- PWB refers to: 'individuals' personal development, sense of purpose, and fulfilment in life' (ibid)

Self-determination theory is one popular approach to PWB. It emphasises the importance of competence, autonomy and relatedness (Ryan and Deci 2000). Meanwhile Seligman's 'PERMA' model proposes that SWB is made up of positive emotions, engagement, relationships, meaning and accomplishment (Seligman 2018).

Although they overlap, the distinction between hedonic (SWB) and eudaimonic (PWB) conceptions of wellbeing has important implications, since what schools might do to support wellbeing will differ depending on which they prioritise. The former might prompt a focus on managing feelings and emotions, while the latter might involve a greater focus on personal goals, meaningful activities, and sense of purpose – such that schoolwork and academic goals might themselves be recast as sources of personal wellbeing.

PWB and SWB are differently associated with future outcomes. Clarke and Hoskin (2022: 319) suggest that eudaimonia (PWB) predicts future wellbeing and attainment, whereas hedonia (SWB) may be negatively associated with attainment. Breaking this down by phase, hedonic wellbeing (SWB) may be particularly important for primary pupils' achievement, and interpersonal and eudaimonic wellbeing (PWB) for secondary pupils (Clarke 2020; Clarke et al 2023). A failure to distinguish between the two can lead to a misconceived trade-off between academic achievement and wellbeing (Clarke et al 2023; Clarke 2020; Yacek and Gary 2023).

Unfortunately, studies do not always make it clear which conception of wellbeing they are drawing on, and as we will see, the discourse on education and wellbeing – including government guidance – has tended to be dominated by SWB (Clarke and Hoskin 2022).

Alongside individual wellbeing, the What Works Centre for Wellbeing (no date) also considers the wellbeing of communities and the nation, and 'how sustainable that is for the future'. They therefore monitor 10 different dimensions.

- 1. Personal (subjective) wellbeing.
- 2. Health.
- 3. Our relationships.
- 4. What we do.
- 5. Where we live.
- 6. Personal finance.
- 7. Education and skills.
- 8. The natural environment.
- 9. The economy.
- 10. Governance.

However, studies of youth wellbeing do not tend to adopt this conceptualisation.

Mental health

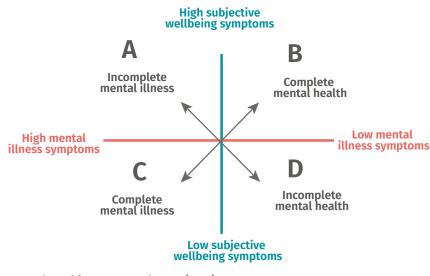
The World Health Organization (WHO) defines mental health as "a state of mental wellbeing that enables people to cope with the stresses of life, realise their abilities, learn well and work well, and contribute to their community" (WHO 2022b).

According to Keyes and Lopez (2009), the study of mental health is 'distinct from and complementary' to mental illness. In this report we refer to 'mental ill health', drawing on the WHO's definition of a mental disorder as "characterised by a clinically significant disturbance in an individual's cognition, emotional regulation, or behaviour... [that] is usually associated with distress or impairment in important areas of functioning" (WHO 2022a).

There is a strong overlap between mental health and wellbeing but the two are not the same. Keyes and Lopez note that symptoms of mental illness 'correlate modestly and negatively' with subjective wellbeing (which they equate to mental health). They therefore argue that the two are not simply "opposite ends of a single health continuum" (2009) and instead propose a quadrant model (see figure 3.2).

FIGURE 3.2

Mental health and mental illness: the complete state model



Source: adapted from Keyes and Lopez (2009)

Similarly, Patalay and Fitzsimons (2016) find that wellbeing and mental ill health are only weakly correlated and differently determined, although, Crenna-Jennings (2021) finds a moderate relationship between wellbeing and psychological distress – concluding from this that reducing mental ill health among young people requires attention to more than just mental healthcare.

Although approaches will overlap, policy responses might differ depending on whether the goal is to get everyone into quadrant B (characterised by an absence of mental ill health *and* high wellbeing), the top two quadrants (A or B), or the right-hand quadrants (B or D).

Ways forward

Semantics can feel like a waste of time but at present, it is not clear what schools are aiming for when it comes to mental health and wellbeing, let alone what they should be doing. Far greater clarity is therefore needed when it comes to definitions and metrics if schools are to take on a distinctive role in supporting their pupils' wellbeing and mental health.

This might involve the following.

- 1. Clearly distinguishing between different goals related to wellbeing and mental health, as well as their associated short- and long-term outcomes. Reducing mental ill health and improving both PWB and SWB are all important goals, but they require different (though overlapping) responses. Conflated and ambiguous definitions can mean approaches are mislabelled as 'ineffective' or 'effective' when they might be appropriate for one goal but not another.
- 2. Embracing learning and achievement as sources of purpose, meaning and fulfilment. As we will see throughout this report, there are grounds for suggesting that PWB (or eudaimonic) wellbeing has been underemphasised when it comes to schools' role in wellbeing and mental health. This is especially pertinent given that 'goal achievement, fulfilment and purpose' are closely aligned with schools' other responsibilities, in a way that is not as clearly and uncontestably the case with more hedonic views of 'happiness' and SWB.

3.3 HOW MUCH INFLUENCE DO SCHOOLS HAVE OVER YOUNG PEOPLE'S WELLBEING AND MENTAL HEALTH?

The material and social determinants of wellbeing and mental ill health

It is beyond the scope of this report to review the full range of factors that shape children and young people's wellbeing, but it is worth highlighting three domains that play a particularly influential role in determining their life satisfaction (Proctor et al 2009).

- Healthy lifestyle (including good physical health and participation in social activities)
- Non-participation in risk-taking behaviours (such as alcohol consumption and drug taking)
- Environmental quality (such as living in a good neighbourhood and having good family relations).

Recent studies have emphasised the strong relationship between wellbeing – as well as mental health – and poverty and material deprivation (Crenna-Jennings 2021; Elliott 2016; Knies 2022; NHS Digital 2022). One systematic international review found that socioeconomically disadvantaged children and young people were two to three times more likely to develop mental health problems and that persistent poverty and decreases in socioeconomic status were strong predictors of the onset of mental health problems (Reiss 2013). Importantly, deprivation (rather than income across the board) appears to be a key driver of lower wellbeing (Knies 2017, 2022). This makes the alleviation of child poverty a particularly important policy priority.

The Children's Commissioner's recent 'Big Ask' survey found that children and young people who were unhappy with their family life were nine times more likely to be unhappy with their life overall (Children's Commissioner 2021). Recent research also draws attention to the link between children and young people's difficulties sleeping, and their mental health (DfE 2023), yet data from BeeWell's work in Manchester suggests that 40 per cent of pupils in years 8 and 10 currently do not get enough sleep to feel awake and concentrate on schoolwork (What Works Wellbeing 2022).

As noted in section 3.2, determinants of wellbeing will differ depending on the conception being used, with factors like purpose, meaning, competence, autonomy, and relatedness playing a central role in PWB.

Given the above trends, it is unsurprising that studies suggest schools have limited influence over children and young people's mental health and wellbeing.

- A study of over 23,000 primary school aged children in England found that school only explains between 3 and 4.5 per cent of the variation in mental health outcomes (Patalay et al 2020).
- A study of over 26,000 11- to 14-year-olds found that school effects only accounted for 2.4 per cent of the variation in psychopathology, 1.6 per cent of depression, and 1.4 per cent of wellbeing (Ford et al 2021).

These trends may hide important variation. Analysis of international data from PISA shows that in many countries, socioeconomic background mediates the extent to which factors like perceived academic competence and being bullied at school affect children and young people's life satisfaction (Marquez 2022). Therefore, more affluent pupils may be more resilient to school-based factors, whereas pupils who are disadvantaged elsewhere in their lives may be particularly reliant on school support. On the other hand, this relationship might be bi-directional, with a recent case study illustrating schools' potential role as a place of sanctuary and safety for pupils with 'chaotic or disrupted home lives' (Barker et al 2023).

The influence of schools and teachers

Schools have some influence over the three domains highlighted by Proctor (2009) above – for example participation in physical activity is an important determinant of children and young people's wellbeing, and schools can encourage this.

Schools' universalism also means they are well placed to:

- complement pupils' early childhood and at-home experiences
- compensate for what might be lacking
- address the consequences of weaker social and emotional skills (Granada et al 2022).

The Early Intervention Foundation notes that universal approaches in school have the benefit of touching upon children and young people who might not otherwise seek help or volunteer for support programmes (Clarke et al 2021).

The school experience

Even if schools' impact on overall life satisfaction is small, they may have more influence over satisfaction with school life, and happiness in class (Blazar and Kraft 2016). This may be intrinsically valuable.

At present, 12.5 per cent of children aged 10–15 state that they are unhappy with school and this figure has been increasing since satisfaction peaked in 2014–15 (based on 10 years of data)¹⁴ (The Children's Society 2022). However, caution is once again needed when using this single, hedonic measure of SWB.

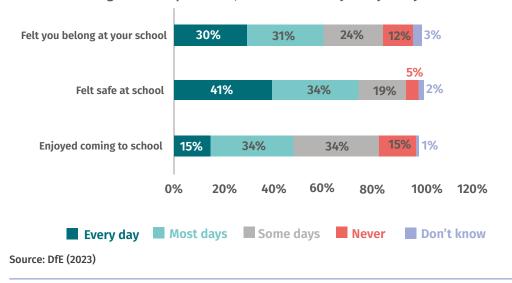
Happiness with schoolwork has also fallen over the last five years and it is now back down to 2009–10 levels. Satisfaction at school is lowest in relation to:

- feeling listened to
- pupils being treated fairly when they do something wrong
- pupils getting on well together (The Children's Society 2022).

Safety is a fundamental building block of wellbeing and mental health, and although nine out of 10 children and young people scored above midpoint in terms of feelings of safety (ibid), NHS (2022) data reports a slightly lower figure of 82 per cent feeling safe and shows that 11- to 16-year-olds with a probable mental disorder are much less likely to feel safe at school than their peers who do not have a mental disorder. They are also less likely to report enjoying learning, having a friend they can turn to for support or being able to be themselves at school.

FIGURE 3.3

School belonging, perceptions of school safety and enjoyment of school: Children and young people in England, aged 11 to 18, June 2022



Thinking about the past week, how often would you say that you...?

The most recent PISA survey found that a quarter of pupils in the UK reported being bullied at school 'at least a few times a month' (OECD 2019). This is deeply worrying given that an international meta-analysis has shown that children and young people who are bullied are more than twice as likely to suffer from suicidal ideation and suicidal attempts (Van Geel et al 2014). Bullying remains a particular problem for LGBTQ+ pupils (Stonewall 2017).

Asking pupils to distinguish between how they feel about school 'every day,' 'most days' and 'some days' provides greater granularity, with only three-quarters of pupils reporting that they feel safe at school 'most days' (see figure 3.3) (DFE 2023)

¹⁴ The Children's Commissioner (2021) reports a figure of 16 per cent for 9- to 17-year-olds.

The large-scale studies cited above contain considerable variation and for some individuals, school is a deeply unhappy experience. This can have a profound impact, as rising rates of school refusal appear to suggest (Millar 2020). The school experience is particularly problematic for poorer pupils, girls, and those with special educational needs and disabilities (SEND) (DfE 2023).

Pupils eligible for free school meals (FSM) are less likely to report being motivated to learn, being able to concentrate in class, feeling safe in school, and having a strong sense of belonging at school (ibid). These pupils are also more likely to struggle with school costs which are causing increasing concerns for many families (ibid). This is an example of how school and wider socioeconomic factors can interact, disproportionately impacting on subgroups who may not be visible in averages.

It is sometimes suggested that it is academic pressure, and the stress of exams that are causing children and young people's mental health difficulties and low wellbeing. This is a hypothesis we examined in section 1.3. To summarise, we found that longitudinal and comparative data does not point to exams as a compelling hypothesis for what is driving current trends at a national level, but that there are many worrying accounts of individuals' struggles with academic pressure including exams.

Ways forward

Schools' influence over young people's overall wellbeing and rates of mental ill health is limited. Policymakers should therefore not expect schools to resolve a set of challenges that are deeply rooted in the fabric of society.

Some studies draw tentative causal links between feelings of belonging and enjoyment at school and wider happiness (DfE 2023). However, causality may run in the other direction, such that strong foundations outside of school enable pupils to engage with and have a positive experience in school.

Nonetheless, as universal institutions where pupils spend a large proportion of their time, schools are well-placed to play a part in shaping some of the determinants of wellbeing and mental health and should not be overlooked in a cross-societal mission to improve young people's wellbeing and mental health.

If schools are to play their part, policymakers and the sector will need to work together to do the following.

- 1. Clear bottlenecks that prevent access to specialist services. Schools and the mental health support teams that work with them cannot contribute to prevention or adequately respond to pre-clinical needs if elevated thresholds are delaying or entirely obstructing access to child and adolescent mental health services (CAMHS).
- 2. Promote the key ingredients of wellbeing and mental health. Schools are well placed to support the development of positive relationships, provide access to physical activities, and engage with families, while signposting to specialist support where necessary.
- 3. Tackle key threats to children and young people's wellbeing and mental health in school. At present too many pupils particularly those from certain groups do not enjoy school because they experience frequent bullying, do not feel like they belong or have a voice, and do not feel safe.

Future research

More evidence is needed to understand the following.

• The extent to which schools influence different dimensions of wellbeing, considering both PWB and SWB, and short-term and long-term outcomes.

• Interactions between school and background factors – for example, what difference does school make for pupils at risk of low levels of wellbeing and mental ill health?

3.4 HOW CAN SCHOOLS SUPPORT YOUNG PEOPLE'S WELLBEING AND REDUCE MENTAL ILL HEALTH?

Learning about and nurturing wellbeing and mental health

Schools may be able to nurture knowledge, skills, habits, and attributes that promote wellbeing and reduce mental ill health.

Since 2020, it has been compulsory for schools to teach certain social and emotional skills as part of PSHE (DfE 2019b). As part of its judgements on personal development, Ofsted also considers how schools help pupils stay mentally healthy (DfE 2022c). This may be why a recent survey for the Education Endowment Foundation suggests that most primary schools are devoting more time to social and emotional learning than they did in the past – although this is also likely to be a response to rising levels of need (van Poortvliet et al 2019). However, as noted earlier, Clarke and Hoskin (2022) point out that government requirements tend to focus on understanding and managing feelings and emotions, rather than nurturing a sense of purpose and meaning.

A review by the Early Intervention Foundation (Clarke et al 2021) concludes the following.

- There is good evidence that **universal social and emotional learning (SEL) interventions** can have a small to moderate impact on young people's social and emotional skills and in reducing symptoms of depression and anxiety in the short term. There is less evidence in relation to long-term impact.
- There is emerging but limited evidence suggesting that positive psychology-based approaches can have a small, longer-term impact on life satisfaction and in reducing symptoms of depression and anxiety.
- There is good evidence that **mental health literacy interventions** can improve mental health knowledge. There is limited evidence as to how this translates into attitudes towards mental health, and help-seeking behaviour.
- There is very limited high-quality evidence on the impact of positive youth development interventions on young people's mental health and wellbeing. These interventions involve activities such as personal mentoring, youth sports, recreational activities and youth leadership programmes that aim to increase self-esteem, sense of purpose, decision making, leadership skills and positive interactions with others.
- Mental health interventions such as anxiety and depression prevention initiatives that seek to prevent or reduce mental health difficulties (rather than promoting mental health and wellbeing) can improve symptoms of depression and anxiety in the short term. There is a lack of evidence on long-term impact. Targeted interventions such as cognitive behaviour therapy based interventions can reduce symptoms of depression in the short and medium term which can be helpful in tackling sub-clinical needs.

When considering the findings from systematic reviews like these, it is important to remember that an absence of evidence meeting the reviews' standards does not equate to evidence that an approach is ineffective.

Social and emotional learning

Social and emotional learning (SEL) programmes tend to focus on self management, relationship skills, responsible decision making, self awareness and

social awareness (Clarke et al 2021). Based on a review of 54 studies, the EEF (no date) describes three main approaches.

- 1. School-level approaches to developing a positive school ethos, which also aim to support greater engagement in learning.
- **2.** Universal programmes which generally take place in the classroom with the whole class.
- **3.** More specialised programmes which use elements of SEL and which are targeted at pupils with particular social or emotional needs.

Although the EEF (no date) has primarily focussed on SEL's impact on attainment,¹⁵ it concludes that SEL also has an 'identifiable and valuable impact on attitudes to learning and social relationships in school,' and that social and emotional skills are 'protective factors for mental health' (van Poortvliet et al 2019). Unfortunately, many studies of SEL have been conducted in the United States and programmes can struggle to replicate their impact once imported into the English context (Wigelsworth et al 2020).

Impact varies considerably depending on implementation quality (Clarke et al 2021). Primary school-specific research that fed into the EEF's review concluded that SEL can be effective but that 'positive outcomes are dependent on a number of factors we are as yet to fully understand' (Wigelsworth et al 2020). The authors make six recommendations.

- **1.** Teach SEL skills explicitly.
- 2. Integrate and model skills through everyday teaching.
- 3. Plan carefully for adopting a SEL programme.
- 4. Use a 'SAFE' curriculum: sequential, active, focussed and explicit.
- 5. Reinforce SEL skills through whole-school ethos and activities.
- 6. Plan, support, and monitor SEL implementation.

The fourth of these points draws on a meta-analysis showing that approaches that followed 'SAFE' principles were significantly more effective than those that did not (Durlak et al 2011).

'Caught' and 'taught' approaches

Granada et al (2022) recommend working with specialist external providers to deliver targeted interventions and distinguish between explicit SEL instruction (which they refer to as 'taught' approaches) and 'caught' approaches which rely more on the culture and climate of the school. There is some debate as to which approach is preferable and whether they should be combined in 'whole-school' and 'multi-component' approaches.

As noted above, the EEF recommends that schools take an explicit approach to teaching SEL (van Poortvliet et al 2019) and Granada et al (2022) argue that a preference for 'caught' approaches (based on school culture and climate), rather than 'taught' approaches has hamstrung SEL's effectiveness.

Explicit teaching has the advantage of providing a shared language and framework that can be used during discussions about behaviour and emotional regulation (Granada et al 2022). Taking a taught approach also makes it easier to adhere to the 'SAFE' principles, for example careful sequencing; the teaching of 'clearly identified skills with clear and specific learning objective'; and practice through role-playing scenarios with feedback (Wigelsworth et al 2020).

¹⁵ The review finds moderate impact for very low cost but notes that this is based on very limited evidence, and that results vary considerably between approaches.

Picking the right taught approach is difficult, as SEL interventions' aims and foci vary considerably and study findings are rarely conclusive or consistent. One recent large-scale randomised control trial of mindfulness-based programmes, for example, concluded that these programmes were 'not warranted' as means of improving pupils' wellbeing (BMJ 2022), despite mindfulness-based approaches having previously seemed promising (Zenner et al 2014).

School climate influences wellbeing by:

- creating a sense of belonging
- nurturing emotional and social skills that support the building of positive relationships
- 'herd effects' whereby pupils in schools with more positive climates are surrounded by peers who are engaged, have supportive social relationships and have strong social and emotional skills
- influencing individuals' sense of commitment to school (Leurent et al 2021).

Despite concluding that schools have limited influence over young people's mental health in general, Ford et al (2021) found that 'teacher-rated school climate' – including school culture, environment, behaviour management and staff leadership – explained much of this influence. There is also some evidence to suggest that previous research has underestimated the influence of school climate over mental health, although the links remain complex and not necessarily causal (Leurent et al 2021).¹⁶

Research on the role of school climate particularly emphasises the importance of 'school belonging' (DfE 2023), with one meta-analysis suggesting that teacher support,¹⁷ as well as positive personal characteristics (such as conscientiousness, optimism and self-esteem) are the best predictors of mental health (Allen et al 2018).

A recent systematic review concluded that school climate is malleable and can be improved through interventions – particularly through school-wide programs implemented by school leaders. However, the study also noted that there is limited rigorous evidence in the area (Charlton et al 2020).

Some suggest that teachers' social and emotional skills have an influence over pupils' wellbeing by shaping interactions, providing an element of role-modelling, and affecting teachers' ability to organise and manage the classroom – but the evidence for this claim is limited (Jones et al 2013). There is some evidence for the idea that teachers' own wellbeing influences pupils' wellbeing but effect sizes in larger-scale quantitative studies are extremely small (Harding et al 2018).

Whole-school and multi-component approaches

The dominant view is that neither taught nor caught approaches are sufficient on their own, and that they need to be combined. For example, the whole-school community might need to learn about wellbeing; put evidence-based practices into action individually; and then embed these practices at an institutional level, for example through school policies (Clarke and Hoskin 2022; Hoare et al 2017).

¹⁶ Study findings differ markedly depending on whether baseline levels of mental health are controlled for. The effect of school climate largely disappears when these controls are applied, but Leurent et al (2021) note that the baseline measures were taken after pupils had already spent a year at secondary school.

¹⁷ Teacher support is defined extremely broadly. It refers to: 'teachers who promote mutual respect, care, encouragement, friendliness, fairness and autonomy. It is present when teachers are perceived as likeable, when they praise good behaviour and work and are available for personal and academic support. Supportive teachers expect students to do their best, and scaffold learning to help the student achieve. Teacher support is felt when pupils feel a sense of connection with their teacher' (Allen et al 2018: 5).

The Early Intervention Foundation agrees that whole-school approaches are most effective and recommends a combination of:

- universal and targeted interventions
- embedding practices in a supportive school environment that nurtures positive relationships, belonging and purpose
- building links to the home environment and mental health services (Clarke et al 2021).

On the other hand, Durlak et al (2011) define multi-component programmes as those combining classroom approaches with a whole-school or parent dimension and – contrary to expectations – do not find these to be more effective than those solely involving a classroom dimension.

Humphrey et al (2013) conclude that, given the patchy evidence base and the need for local adaptation, a centrally prescribed national programme on SEL is ill-advised. Instead, the authors recommend that schools should be supported to use evidence to shape an approach tailored to their context.

Training teachers

Programmes incorporating teacher training and parental support to improve pupils' wellbeing at primary school are more likely to be effective than classroom interventions alone (Adi et al 2007). Teachers in schools that offer training also report higher mental health literacy and capacity to support pupils, yet teachers currently report low confidence in relation to legislation and processes for supporting pupils' mental health (Mansfield et al 2021).

As Crenna-Jennings (2021) points out, even though teachers should not be expected to be mental health specialists, given the prevalence of mental health problems, they will inevitably need to respond to such needs and should be equipped to do so. She therefore suggests that mental health support teams (which we return to in section 3.4) need to play a role in training teachers, and that school leaders should spend time in alternative provision, developing their expertise.

One of the key proposals in the youth mental health green paper was for all schools to be incentivised to have a designated senior lead for mental health and wellbeing (Hannafin 2018). Mental health leads are not mental health professionals and cannot replace the urgent need for more specialists; however they tend to be responsible for:

- supporting individual pupils
- teaching pupils about mental health and wellbeing
- training staff
- liaising with specialist mental health services
- coordinating and developing mental health provision in the school (Mansfield 2021).

The programme is still in its early days and it is too early to say whether it will be effective, but by 2018, 71 per cent of schools already reported having a mental health lead and the figure was slightly higher in secondary schools.

'Trauma informed' and 'attachment aware' approaches have attracted considerable interest in recent years and there is some non-experimental evidence that these programmes can change teachers' attitudes (Parker et al 2020) and lead to improvements in various outcomes linked to wellbeing, as well as academic benefits (Rose et al 2019). However, for now, there are very few rigorous studies of how these approaches impact on pupils. One recent systematic review urged caution, concluding that these approaches are 'time consuming and potentially costly' and, worryingly, that there is 'potential for harm' (Maynard et al 2019). Caution is therefore needed and it would be a mistake to see these approaches as providing an off-the-shelf, proven solution.

Assessing wellbeing

There are widespread calls for more systematic assessment of wellbeing and mental health (BeeWell, no date; Quilter-Pinner and Ambrose 2020; The Children's Society 2022). As noted in section 3.2, improved data on young people's wellbeing would provide greater insight into sub groups' experiences (particularly those that are under-represented in current datasets), as well as how experiences vary geographically. More frequent (rather than annual) data collection would also be helpful in monitoring change over time (The Children's Society 2022). Additionally, more granular and comprehensive data would be helpful in tracking the longterm impact of interventions like those reviewed in section 3.3.

Some have suggested that data on wellbeing should be published as part of school accountability to encourage 'parity of esteem' between academic outcomes, and wellbeing and mental health (Quilter-Pinner and Ambrose 2020: 5). However (aside from philosophical debates about whether academic and wellbeing outcomes really are equally central to schools' purpose), given schools' limited influence over wellbeing (set out in section 3.3), it might not make sense to hold them accountable for it.¹⁸ A second problem is that wellbeing measures are not well suited to quantitative forms of accountability, since perverse incentives are likely to influence respondents' answers.¹⁹ The qualitative dimension of school accountability (Ofsted) may therefore be better suited to this function, and a report card, providing a rounded picture of different aspects of school life might be an alternative way of pursuing 'parity of esteem' – or at least increased prioritisation and recognition. Moreover, schools (and intervention providers) should use well-validated metrics to assess wellbeing for formative purposes.

A hub for wraparound support

Even if they cannot take responsibility for tackling mental ill health and improving pupils' wellbeing, as universal providers, schools are a crucial part of the infrastructure for addressing challenges faced by young people. Schools can do this by acting as hubs for specialist services and childhood-enhancing enrichment opportunities.

Schools as hubs for specialist services

Thorley (2016) argues that secondary schools are well-placed to act as hubs for early intervention on mental health because they can:

- improve the accessibility of services
- address school-related stressors
- ease pressures on specialist CAMHS.

Similarly, Robertson (2021: 69–70) argues that schools 'should be resourced and staffed to provide in-house mental health experts, potentially shared between a number of schools', and that multi-academy trusts should either commission specialist support centrally, or advise their schools on how to do so.

Steps are already underway to bring together mental health services and schools. A children and young people's mental health trailblazer programme was launched following the 2017 green paper on mental health (DoH/DfE 2017). This programme

¹⁸ Admittedly, to a lesser degree it might be argued that out-of-school factors also have a considerable influence over academic outcomes.

¹⁹ In tests of learning, you cannot skew your answer to look like you know more than you do. In contrast, assessments of wellbeing depend on respondents giving honest answers when describing how they feel.

led to the creation of new mental health support teams (MHSTs) which are expected to:

- 1. provide direct support to children and young people with mild to moderate mental health issues
- 2. support educational settings to introduce or develop their whole-school or college approach to mental health and wellbeing
- **3.** give advice to staff in educational settings and liaise with external specialist services to help children and young people get the right support and stay in education (Ellins et al 2021).

The trailblazer also involves a new, post-graduate, education mental health practitioner role (EMHP). An early evaluation suggests schools have welcomed this additional support and that their confidence in dealing with issues and accessing support has grown. However, staff turnover has been high, and teams have not been able to spend as much time as hoped helping schools develop a whole-school approach because demand for mental health support has been so overwhelming. High thresholds have also caused bottlenecks when specialist help is needed. Indeed, the most commonly reported barrier to supporting pupils' mental health – reported as 'very significant' by 80 per cent of teachers – is difficulty accessing CAMHS (Mansfield et al 2021).

While schools have considerable potential as hubs for MHSTs and EMHPs, there remain questions as to how MHSTs should balance their preventative responsibilities with their early intervention role, and whether they should play a role in supporting young people with more complex and serious needs (Ellins et al 2023).

Schools have considerable potential as hubs for services that support families and communities. This is particularly important given the extent to which young people's wellbeing is influenced by family relationships, poverty and community factors (Crenna-Jennings 2021; Proctor et al 2009), and is the rationale behind the new 'Family Hubs' programme (DfE 2022a).However, as Quilter-Pinner and Ambrose (2020) argue, there is potential to go much further through a universal programme of 'community schools' – a possibility we return to below.

Schools as hubs for enrichment

Beyond tackling mental ill health – and regardless of the degree to which schools currently impact on wellbeing – the statistics in this report make it clear that many children and young people are not enjoying happy, fulfilling childhoods, and that the situation is worse in the UK than in most comparable countries. There is therefore an urgent need to invest in the wider determinants of children and young people's wellbeing.

The Child Poverty Action Group has argued that before- and after-school provision (involving access to sports, music, arts and drama), might be one way of helping children and young people to thrive (CPAG 2022) – though as noted above there is limited evidence on the impact of 'positive youth development' interventions (Clarke et al 2021).

It is estimated that an 'enrichment premium,' allowing all disadvantaged pupils to access three extracurricular activities per week would cost £1.3 billion a year and be widely welcomed by parents, pupils and teachers alike (CfEY 2021; Parentkind 2021). Such opportunities would also act as additional childcare (CPAG 2022) and Statham et al estimate that a 'childcare guarantee' (to which this could be linked) would 'deliver annual returns to the exchequer of £7.9 billion, boost post-tax family incomes by over £7 billion, and narrow the gender pay gap' (2022: 6). Provision need not depend on teachers: polling by YouGov shows there is strong support among parents, teachers and pupils alike for specialist organisations to deliver enrichment (Scouts and NCS 2021).

Building on the past

According to Quilter-Pinner and Ambrose:

"The government should revisit the vision behind community schools and set out a national entitlement... to the core elements of this, including: an extended school day (pre- and post-school activity); a comprehensive programme of parental engagement and activities; and, crucially, embedded mental health and social work support." Quilter-Pinner and Ambrose 2020

They argue that by partnering with other public services and local groups, reinvigorated community schools could "reach beyond the classroom and influence the wider determinants of educational outcomes" (Quilter-Pinner and Ambrose 2020).

This would build on learning from the previous extended schools programme, whereby extended schools tailored their offer to their context and often combined it with other programmes. It therefore varied considerably from school to school, but Smith (2014) describes three broad approaches.

- 1. Developing extended activities for pupils, parents, and communities.
- 2. Providing a more coherent and sustained approach to issues that underly pupil attainment and motivation, including family support and community attitudes to learning.
- 3. Multi-agency work.

The programme's evaluation was very positive, although it was primarily descriptive rather than causal and the findings came with assorted caveats. Nonetheless, on balance, the authors concluded that full service extended schools had a positive impact on "personal, social and health outcomes for young people, family stability, community wellbeing and school performance" and that these effects were particularly marked for pupils and adults facing heightened challenges (Cummings et al 2007).

Ways forward

Improving young people's wellbeing at a societal level involves three distinct but interrelated challenges.

- **1.** Tackling mental ill health.
- 2. Increasing young people's enjoyment of school.
- 3. Improving the experience of childhood.

SEL provision, in one form or another, can play a limited role in tackling all three challenges, but the evidence regarding which approaches are effective remains contested and often contradictory.

On balance, a taught element appears to be beneficial and school climate is another important factor. Current policies allow space for this, since RSE and health education already include expectations regarding SEL provision. However, effective delivery depends on high-quality training, and if schools are to take on an expanded role, they need to be equipped to play it.

This might involve the following.

1. Improving access to training. Teachers are currently navigating a context of increasingly frequent mental ill health and are being expected to take on additional responsibilities for helping pupils learn about wellbeing. Doing so

is skilled, challenging work that does not always align with every teacher's motivations for entering the profession (Menzies et al 2015). Upskilling teachers will require increased and ongoing government funding.

- 2. Assessing wellbeing and mental health in a more granular and comprehensive manner. Significantly improved data is needed if policy and practice in relation to wellbeing and mental health is to be truly evidence based. Far more widespread monitoring is therefore needed. Assessments should use validated measures that include both PWB and SWB. Assessments need to take place throughout the year and allow the identification of local and sub-group level trends.
- **3.** Adjusting the balance in guidance. Rather than focussing almost exclusively on managing relationships and emotions, guidance for schools should emphasise the importance of helping pupils to explore how they can live purposeful, fulfilled lives.
- 4. Funding schools to act as hubs for specialist services and enrichment. Steps have already been taken to expand access to specialist services through schools. If these prove effective, they should be rapidly scaled up. Meanwhile, children and young people's wellbeing and mental health depends on the network of family and community relationships in which they are embedded, as well as the material conditions they grow up in. If schools are supported to act as hubs for services and opportunities that contribute to these, then children and young people will be far better equipped to thrive.

Future research

More evidence is needed as follows.

- To understand trends in wellbeing across different dimensions, among different sub-groups and in different geographical areas, ideally on a more than annual basis.
- To resolve current uncertainties regarding the short- and long-term impact of different approaches to supporting wellbeing and reducing mental ill health. This should include clarifying how best to combine different taught and caught approaches.
- To fill gaps in the evidence base around full service extended schools and positive youth development interventions.

REFERENCES

- Acland AHD (1911) Report of the Consultative Committee on Examinations in Secondary Schools, 6004, HM Stationery Office
- Allen K, Kern ML, Vella-Brodrick D, Hattie J and Waters L (2018) 'What Schools Need to Know About Fostering School Belonging: a Meta-analysis', *Educational Psychology Review*, 30(1): 1–34. <u>https://doi.org/10.1007/s10648-016-9389-8</u>
- Allen R (2019a) 'The ungameable game', 29 September 2019. https://rebeccaallen.co.uk/2019/09/29/the-ungameable-game
- Allen R (2019b) 'Data, data everywhere...', FFT Education Datalab, 3 December 2019. https://ffteducationdatalab.org.uk/2019/12/data-data-everywhere
- Anders J, Macmillan L, Sturgis P and Wyness G (2021) Inequalities in young peoples' educational experiences and wellbeing during the Covid-19 pandemic. University College London. <u>cepeowp21-08.pdf (ucl.ac.uk)</u>
- Andrade J and Worth J (2017) 'Changing the subject? How EBacc is changing school timetables', NfER Blog, 20 July 2017. <u>https://www.nfer.ac.uk/news-events/nfer-blogs/changing-the-subject-how-ebacc-is-changing-school-timetables</u>
- Angus A, Millard W, Joshua V, Baars S, Bowen-Viner K and Kashefpakdel E (2020) How Do Essential Skills Influence Life Outcomes? An Evidence Review.
- ASCL (2019) The Forgotten Third: Final report of the Commission of Inquiry, Association of School and College Leaders. <u>https://www.ascl.org.uk/ASCL/media/ASCL/Our%20view/</u> <u>Campaigns/The-Forgotten-Third_full-report.pdf</u>
- Ashbee R (2021) Curriculum: Theory, culture and the subject specialisms, Routledge
- Aubrey C, Godfrey R and Dahl S (2006) 'Early mathematics development and later achievement: further evidence', *Mathematics Education Research Journal*, 18: 27–46. https://doi.org/10.1007/BF03217428
- Baars S, Shaw B, Mulcahy E and Menzies L (2018) School cultures and practices: supporting the attainment of disadvantaged pupils: A qualitative comparison of London and non-London schools, Department for Education. http://dx.doi.org/10.13140/RG.2.2.20275.68646
- Baer J (2010) 'Is creativity domain specific', in *The Cambridge handbook of creativity* (321–341), Cambridge University Press
- Barker R, Hartwell G, Egan M and Lock K (2023) 'The importance of school culture in supporting student mental health in secondary schools. Insights from a qualitative study', *British Educational Research Journal*. <u>https://doi.org/10.1002/berj.3853</u>
- Barnard A (2019). 'Our century-old, rote-learning, exam factory approach to education is no longer not fit for purpose', FE News, 24 July 2019. <u>https://www.fenews.co.uk/exclusive/</u> <u>futureofeducation-our-century-old-rote-learning-exam-factory-approach-to-educationis-no-longer-not-fit-for-purpose</u>
- BeeWell (no date) 'Background #BeeWell', retrieved 14 April 2023 from https://gmbeewell.org/about/background
- Belgutay J (2021) 'GCSE resits 2021: More students achieve grade 4', TES, 12 August 2021. https://www.tes.com/magazine/archived/gcse-resits-2021-more-students-achievegrade-4
- Benton T (2016) Evidence for the reliability of coursework. <u>https://www.cambridgeassessment.org.uk/Images/346753-evidence-for-the-reliability-of-coursework.pdf</u>
- Beynon K (2021) 'GCSE Results 2021: Has this year's grading system impacted some more than others?', FFT Education Datalab, 13 August 2021. <u>https://ffteducationdatalab.org.</u> uk/2021/08/gcse-results-2021-has-this-years-grading-system-impacted-some-morethan-others/

- Bhopal K and Myers M (2023) 'The impact of COVID-19 on A Level exams in England: Students as consumers', British Educational Research Journal, 49(1): 142–157. <u>https://doi.org/ https://doi.org/10.1002/berj.3834</u>
- Big Change (no date) 'A New Education Story', retrieved 11 April 2023 from https://neweducationstory.big-change.org/
- Big Education (2021) *Learning from Lockdown*. Big Change. <u>https://www.big-change.org/</u> projects/big-education-learning-from-lockdown
- Bilton C and Tilotson S (2020) *Guidance Report: Improving literacy in Key Stage 1*, Education Endowment Foundation
- Blake J (2018) Completing the revolution: Delivering on the promise of the 2014 national curriculum, Policy Exchange. <u>https://policyexchange.org.uk/publication/completing-the-revolution-delivering-on-the-promise-of-the-2014-national-curriculum</u>
- Blazar D and Kraft MA (2016) 'Teacher and Teaching Effects on Students' Attitudes and Behaviors', *Educational Evaluation and Policy Analysis*, 39(1): 146–170. https://doi.org/10.3102/0162373716670260
- BMJ (2022, August 1). 'UK School Mindfulness for teen mental health not warranted', BMJ Publishing Group, 1 August 2022. <u>https://doi.org/10.1136/EBMENTAL-2022-300424</u>
- Bradbury A (2019) Pressure, anxiety and collateral damage: The headteachers' verdict on SATs, More than a Score. <u>https://www.morethanascore.org.uk/wp-content/uploads/2019/09/</u> <u>SATs-research.pdf</u>
- Braghieri L, Levy R and Makarin A (2022) 'Social media and mental health', *American Economic Review*, 112(11): 3660–3693
- Burgess S and Greaves E (2013) 'Test Scores, Subjective Assessment and Stereotyping of Ethnic Minorities', *Journal of Labor Economics*, 31. <u>https://doi.org/10.1086/669340</u>
- Burgess S and Thomson D (2019a) Making the Grade: The impact of GCSE reforms on the attainment gap between disadvantaged pupils and their peers, The Sutton Trust
- Burgess S and Thomson D (2019b) 'The impact of the Wolf reforms on education outcomes for lower-attaining pupils', *British Educational Research Journal*, 45(3): 592–621. https://doi.org/https://doi.org/10.1002/berj.3515
- Burgess S and Thomson D (2022) Beyond the threshold: The implications for pupil achievement of reforming school performance metrics, The University of Bristol
- Burghes D (2021) 'Assessing the GCSE System of Assessment Rethinking Assessment', Rethinking Assessment, 15 February 2021. <u>https://rethinkingassessment.com/rethinking-blogs/assessing-the-gcse-system-of-assessment</u>
- Cadwallader S (2019) The impact of qualification reform on the practical skills of A level science students. <u>https://dera.ioe.ac.uk/33206/1/A_level_science_Paper_5FINAL.pdf</u>
- Cambridge Primary Review (2009) Children, their world and their education. https://cprtrust.org.uk/wp-content/uploads/2013/10/CPR_revised_booklet.pdf
- Campbell T (2015) 'Stereotyped at Seven? Biases in Teacher Judgement of Pupils' Ability and Attainment', *Journal of Social Policy*, 44(3): 517–547. <u>https://doi.org/10.1017/</u> S0047279415000227
- Candy S (2011) 'RSA Opening Minds: a curriculum for the 21st century', FORUM, 53(2). www.wwwords.co.uk/FORUM
- CBI/Pearson (2015) Inspiring Growth : The CBI/Pearson Education and Skills Survey 2015. www.pearson.com/uk
- CBI/Pearson (2018) Educating for the Modern World. <u>https://www.cbi.org.uk/media/1171/cbi-educating-for-the-modern-world.pdf</u>
- CfEY (2021) Enriching Education Recovery The role of non-formal learning, extra-curricular and enrichment activities in driving a transformational catch-up experience for children and young people. <u>https://cfey.org/wp-content/uploads/2021/10/CfEY-Enriching-Education-V5.pdf</u>
- Charlton CT, Moulton S, Sabey CV and West R (2020) 'A Systematic Review of the Effects of Schoolwide Intervention Programs on Student and Teacher Perceptions of School Climate', *Journal of Positive Behavior Interventions*, 23(3): 185–200. <u>https://doi. org/10.1177/1098300720940168</u>

- Child S and Ellis P (2021) The What, Why and How of Assessment: A Guide for Teachers and School Leaders, SAGE
- Children's Commissioner (2021) The Big Ask: The Big Answer. https://assets.childrenscommissioner.gov.uk/wpuploads/2021/11/occ_the_big_ ask_the_big_answer_2021.pdf
- Christodoulou D (2013) 'Validity and reliability', 17 December 2013. https://daisychristodoulou.com/2013/12/validity-and-reliability
- Christodoulou D (2015) 'Tests are inhuman and that is what is so good about them', 11 October 2015. <u>https://daisychristodoulou.com/2015/10/tests-are-inhuman-and-that-is-what-so-good-about-them</u>
- Christodoulou D (2017) Making Good Progress?: The future of Assessment for Learning. Oxford University Press
- Christodoulou D (2023) 'You can't assess your way out of a curriculum problem', No More Marking, 17 April 2023. <u>https://substack.nomoremarking.com/p/you-cant-assess-your-way-out-of-a</u>
- Civinini C (2020) 'Timss 2019: Top 10 England improves at primary maths', TES, 8 December 2020. <u>https://www.tes.com/magazine/archived/timss-2019-top-10-england-improves-primary-maths</u>
- Clarke A, Sorgenfrei M, Mulcahy J, Davie P, Friedrich C, Mcbride T, Fazel M, Scott S, Collishaw S, Humphrey N, Newsome C, Waddell S and Freeman G (2021) 'Adolescent mental health. A systematic review on the effectiveness of school-based interventions', *Early Intervention Fundation*, July: 1–87. <u>https://www.eif.org.uk/report/adolescent-mental-health-a-</u> systematic-review-on-the-effectiveness-of-school-based-interventions
- Clarke T (2020) 'Children's wellbeing and their academic achievement: The dangerous discourse of 'trade-offs' in education', *Theory and Research in Education*, 18(3): 263–294. https://doi.org/10.1177/1477878520980197
- Clarke T and Hoskin S (2022) 'Teaching children and adolescents about mental wellbeing: an exploratory multi-site case study in England', *Educational Psychology in Practice*, 38(3): 317–340. https://doi.org/10.1080/02667363.2022.2100321
- Clarke T, McLellan R, and Harold G (2023) 'Beyond Life Satisfaction: Wellbeing Correlates of Adolescents' Academic Attainment, *School Psychology Review*, 1–20. https://doi.org/10.1080/2372966X.2023.2217980
- Clarke V (2023) 'Rishi Sunak's 'maths until 18' plan questioned by experts', BBC News. https://www.bbc.co.uk/news/education-64559118
- Coughlan S (2020) 'England's children decline 'significantly' in science tests', BBC News. https://www.bbc.co.uk/news/education-55223711
- Coulter S, Iosad A and Scales J (2022) Ending the Big Squeeze on Skills: How to Futureproof Education in England. <u>https://www.institute.global/insights/public-services/ending-big-</u> squeeze-skills-how-futureproof-education-england
- CPAG (2022) Children's Futures And The Economic Case For Before- And After-School Provision. https://cpag.org.uk/sites/default/files/files/policypost/Childrens_futures_and_the_ economic_case_for_before-and_after-school_provision.pdf
- Crenna-Jennings W (2021) Young people's mental and emotional health: Trajectories and drivers in childhood and adolescence, The Education Policy Institute
- Cullinane C and Montacute R (2017) *Life Lessons: Improving essential life skills for young people,* The Sutton Trust. <u>https://www.suttontrust.com/wp-content/uploads/2017/10/Life-Lessons-Report_FINAL.pdf</u>
- Cummings C, Dyson A, Muijs D, Papps I, Pearson D, Raffo C, Tiplady L, Todd L and Crowther D (2007) *Evaluation of the Full Service Extended Schools Initiative: Final Report,* The University of Manchester. <u>https://research.manchester.ac.uk/en/publications/</u>evaluation-of-the-full-service-extended-schools-initiative-final-
- Department for Education [DfE] (2014) 'National curriculum in England: framework for key stages 1 to 4', GOV.UK, 2 December 2014. <u>https://www.gov.uk/government/publications/</u> <u>national-curriculum-in-england-framework-for-key-stages-1-to-4/the-national-</u> <u>curriculum-in-england-framework-for-key-stages-1-to-4</u>

- Department for Education [DfE] (2017). 'Pupils in England climb global rankings in reading and literacy', GOV.UK, 5 December 2017. <u>https://www.gov.uk/government/news/pupils-in-</u> england-climb-global-rankings-in-reading-and-literacy
- Department for Education [DfE] (2019a) National curriculum assessments at key stage 2 in England, 2019 (revised). https://assets.publishing.service.gov.uk/government/uploads/ system/uploads/attachment_data/file/851798/KS2_Revised_publication_text_2019_ v3.pdf
- Department for Education [DfE] (2019b). Relationships Education, Relationships and Sex Education (RSE) and Health Education. <u>https://assets.publishing.service.gov.uk/</u> government/uploads/system/uploads/attachment_data/file/1090195/Relationships_ Education_RSE_and_Health_Education.pdf
- Department for Education [DfE] (2022a) Family Hubs and Start for Life Programme Guide. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/ attachment_data/file/1096786/Family_Hubs_and_Start_for_Life_programme_guide.pdf
- Department for Education [DfE] (2022b) Opportunity for all Strong schools with great teachers for your child Presented to Parliament by the Secretary of State for Education by Command of Her Majesty, HM Government. <u>https://assets.publishing.service.gov.uk/</u> government/uploads/system/uploads/attachment_data/file/1063601/Opportunity_for_ all_strong_schools_with_great_teachers_for_your_child__web_--accessible.pdf
- Department for Education [DfE] (2022c) 'Education inspection framework', July 2022. https://www.gov.uk/government/publications/education-inspection-framework/ education-inspection-framework
- Department for Education [DfE] (2023) State of the Nation 2022: Children and young people's wellbeing. https://assets.publishing.service.gov.uk/government/uploads/system/ uploads/attachment_data/file/1134596/State_of_the_nation_2022_-_children_and_ young_people_s_wellbeing.pdf
- Department of Health/Department for Education [DoH/DfE] (2017) 'Transforming Children and Young People's Mental Health Provision: a Green Paper'. <u>https://assets.publishing.</u> <u>service.gov.uk/government/uploads/system/uploads/attachment_data/file/664855/</u> <u>Transforming_children_and_young_people_s_mental_health_provision.pdf</u>
- Didau D and Rose N (2016) What every Teacher Needs to Know about Psychology, John Catt
- Dilnot C, Macmillan L and Wyness G (2022) Educational Choices at 16-19 and University Outcomes. https://oxb-prd-cdn-01.azureedge.net/mediacontainer/medialibraries/ oxfordbrookes/documents/research/obbs/research projects/educational choices at 16-19/qualifications-and-university-outcomes-mpo-final.pdf
- Duoblys G (2022) 'Michael Young: What we've got wrong about knowledge and curriculum', TES, 21 September 2022. <u>https://www.tes.com/magazine/teaching-learning/general/</u> michael-young-powerful-knowledge-curriculum
- Durlak JA, Weissberg RP, Dymnicki AB, Taylor RD and Schellinger KB (2011) 'The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions', *Child Development*, 82(1): 405–432
- EEF (no date) 'Social and emotional learning', retrieved 12 April 2023 from https://educationendowmentfoundation.org.uk/education-evidence/teaching-learningtoolkit/social-and-emotional-learning
- EEF (2016) Project Based Learning: evaluation report and executive summary. https://dro.dur.ac.uk/20513/1/20513.pdf?DDD29+DDO128+hsmz78+d700tmt
- Ellins J, Hocking L, Al-Haboubi M, Newbould J, Fenton S-J, Daniel K, Stockwell S, Leach B, Sidhu M, Bousfield J, McKenna G, Saunders K and Mays N (2023). Early evaluation of the Children and Young People's Mental Health Trailblazer programme: a rapid mixed-methods study. <u>https://doi.org/10.3310/hsdr-tr-130818</u>
- Ellins J, Singh K, Al-Haboubi M, Newbould J, Hocking L, Bousfield J and Mays N (2021) Early evaluation of the children and young people's mental health trailblazer programme. Interim Report, School of Social Policy, University of Birmingham
- Elliott I (2016) 'Poverty and mental health: a review to inform the Joseph Rowntree Foundation's Anti-Poverty Strategy', *Mental Health Foundation*: 1–110
- Ellis S and Barrs M (2008) 'The assessment of creative learning' Creative Learning: 73-89

- Enser M (2021) 'Powerful knowledge: What teachers need to understand', TES, 17 September, 2021. https://www.tes.com/magazine/archived/powerful-knowledge-what-teachersneed-understand
- EPI (2022) T levels: students taking overlapping qualifications and take-up Education Policy Institute. <u>https://epi.org.uk/publications-and-research/t-levels-students-taking-overlapping-qualifications-and-take-up</u>
- EY Foundation/CMI (2016) An Age of Uncertainty: Young people's views on the challenges of getting into work in 21st century Britain, Ernest Young Foundation and Chartered Management Institute. <u>https://www.managers.org.uk/~/media/Files/PDF/Reports/CMI-EYF-An-Age-Of-Uncertainty-September-2016.pdf</u>
- Fair Education Alliance and CfEY (2022) *Report Card 2022: Achieving a Fair Education in England*, Fair Education Alliance. <u>https://www.faireducation.org.uk/report-card-2022</u>
- Ford T, Degli Esposti M, Crane C, Taylor L, Montero-Marín J, Blakemore S-J, Bowes L, Byford S, Dalgleish T, Greenberg MT, Nuthall E, Phillips A, Raja A, Ukoumunne OC, Viner RM, Williams JMG, Allwood M, Aukland L, Casey T, Kuyken W (2021) 'The Role of Schools in Early Adolescents' Mental Health: Findings From the MYRIAD Study', *Journal of the American Academy of Child and Adolescent Psychiatry*, 60(12): 1467–1478. https://doi.org/10.1016/j.jaac.2021.02.016
- Freedman S (2022a) 'Kids and Social Media: a Mental Health Crisis or Moral Panic?', Comment Is Freed, 25 January 2022. <u>https://samf.substack.com/p/kids-and-social-media-a-</u> mental-health?utm_source=substackandutm_medium=emailandutm_content=share
- Freedman S (2022b) The exam question: Changing the model of assessment reform. https://www.instituteforgovernment.org.uk/sites/default/files/publications/examquestion.pdf
- Gewirtz S, Maguire M, Neumann E and Towers E (2021) 'What's wrong with 'deliverology'? Performance measurement, accountability and quality improvement in English secondary education', *Journal of Education Policy*, 36(4): 504–529. <u>https://doi.org/10.1080</u> /02680939.2019.1706103
- Ghezae FT (2021) Racism is racism: The impact of 'every day' racism on the mental health of young people, Emerging Minds Network. <u>https://www.psy.ox.ac.uk/news/read-our-</u> blogs/racism-is-racism-the-impact-of-201cevery-day201d-racism-on-the-mental-healthof-young-people
- Ghezae FT, Adebiyi A and Mustafa J (2022) 'How does racism affect the mental health and wellbeing of children and young people in the UK?' *The Lancet Psychiatry* 9(1): 15–16. https://doi.org/10.1016/S2215-0366(21)00399-0
- Gibson S, Oliver L and Dennison M (2015) *Workload Challenge: Analysis of teacher consultation responses*, Department for Education. <u>https://assets.publishing.service.gov.</u> <u>uk/government/uploads/system/uploads/attachment_data/file/485075/DFE-RR456A_-</u> <u>Workload_Challenge_Analysis_of_teacher_consultation_responses_sixth_form_</u> <u>colleges.pdf</u>
- Gill T (2017) An analysis of the effect of taking the EPQ on performance in other Level 3 qualifications. https://www.cambridgeassessment.org.uk/Images/375447-an-analysis-ofthe-effect-of-taking-the-epq-on-performance-in-other-level-3-qualifications.pdf
- Gill T (2022) Uptake and results in the Extended Project Qualification. https://www.southampton.ac.uk/learnwithustransition/epq-support/admissions-
- Gipps C (1988) 'The debate over standards and the uses of testing', British Journal of Educational Studies, 36(1): 21–36
- Goddard C, Quilter-Pinner H and Agunbiade K (2022) Subject to change Listening to and empowering young people and the public to set a new direction for education and learning. https://www.big-change.org/wp-content/uploads/2022/01/Subject-to-Change_ Insights-Report.pdf
- Granada A, Hallgarten J and Hasset A (2022) A policy and practice review Catalysing Social and Emotional Learning in Schools in England. <u>www.cfey.org</u>
- Grissmer, David, Richard Buddin, Mark Berends, Daniel Willingham, Jamie DeCoster, Chelsea Duran, Chris Hulleman, William Murrah, and Tanya Evans (2023) 'A Kindergarten Lottery Evaluation of Core Knowledge Charter Schools: Should Building General Knowledge Have a Central Role in Educational and Social Science Research and Policy?', EdWorkingPaper: 23-755). https://doi.org/10.26300/nsbq-hb21

- Gutman L and Vorhaus J (2012) The impact of pupil behaviour and wellbeing on educational outcomes, Department for Education, https://www.gov.uk/government/publications/ the-impact-of-pupil-behaviour-and-wellbeing-on-educational-outcomes
- Hallgarten J (no date) The rationale for an area-based approach, CfEY
- Hallgarten J, Robertson A, Seleznyov S and Hassett A (2023) *The Primary Extended Project Award (PEPA)*, The Centre for Education and Youth. <u>https://cfey.org/reports/2023/05/the-</u> primary-extended-project-award-pepa
- Hannon V and Peterson A (2021) *Thrive: The purpose of schools in a changing world.* Cambridge University Press.
- Harding S, Morris R, Gunnell D, Ford T, Hollingworth W, Tilling K, Evans R, Bell S, Grey J, Brockman R, Campbell R, Araya R, Murphy S and Kidger J (2018) 'Is teachers' mental health and wellbeing associated with students' mental health and wellbeing?' *Journal of Affective Disorders*, 242. <u>https://doi.org/10.1016/j.jad.2018.08.080</u>
- Hazell W (2021) 'GCSEs 2022: Top private schools say "narrow" GCSE exams no longer fit for purpose', The I, 16 November 2021. <u>https://inews.co.uk/news/education/private-schools-gcse-exams-2022-a-levels-1301831</u>
- Heckman JJ and Kautz T (2012) 'Hard evidence on soft skills', Labour Economics, 19(4): 451-464
- Hickman C, Marks E, Pihkala P, Clayton S, Lewandowski RE, Mayall EE, Wray B, Mellor C and van Susteren L (2021) 'Climate anxiety in children and young people and their beliefs about government responses to climate change: a global survey', *The Lancet Planetary Health*, 5(12): e863–e873
- Hirsch Jr, E D (1988) Cultural literacy: What every American needs to know, Vintage
- HM Government (2011) No health without mental health A cross-government mental health outcomes strategy for people of all ages. <u>www.dh.gov.uk/mentalhealthstrategy</u>
- Hoare E, Bott D and Robinson J (2017) 'Learn it, Live it, Teach it, Embed it: Implementing a whole school approach to foster positive mental health and wellbeing through Positive Education', International Journal of Wellbeing, 7(3): 56–71. <u>https://doi.org/10.5502/ijw.v7i3.645</u>
- Hood N and Hughson T (2022) Now I Don't Know My ABC: The Perilous State of Literacy in Aotearoa New Zealand, Education Hub
- Howard E (2020) A review of the literature concerning anxiety for educational assessments, Office of Qualifications and Examinations Regulation. <u>https://assets.publishing.service.</u> gov.uk/government/uploads/system/uploads/attachment_data/file/865832/A_review_ of_the_literature_concerning_anxiety_for_educational_assessment.pdf
- Humphrey N, Lendrum A and Wigelsworth M (2013) 'Making the most out of schoolbased prevention: lessons from the social and emotional aspects of learning (SEAL) programme', *Emotional and Behavioural Difficulties*, 18(3): 248–260. <u>https://doi.org/10.108</u> 0/13632752.2013.819251
- Hunt E, Tuckett S, Robinson D, Hutchinson J and Coleman C (2022) *Covid-19 and Disadvantage Gaps in England 2020*. <u>https://epi.org.uk/publications-and-research/covid-19-and-</u> <u>disadvantage-gaps-in-england-2021</u>
- Hutchings M (2015) Exam factories? The impact of accountability measures on children and young people. <u>https://web.archive.org/web/20180924193025/https://teachers.org.uk/files/exam-factories.pdf</u>
- Hyman P (2021) 'Let's not return to flawed exams. We have better ways to assess our children', 15 August 2021, *The Guardian*. <u>https://www.theguardian.com/</u> <u>commentisfree/2021/aug/15/lets-not-return-to-flawed-exams-we-have-better-ways-to-</u> <u>assess-our-children</u>
- International Baccalaureate Organisation (no date) 'MYP curriculum International Baccalaureate', retrieved 24 April 2023 from <u>https://www.ibo.org/programmes/middle-years-programme/curriculum</u>
- Ipsos Mori. (2011). Evaluation of the Introduction of Controlled Assessment Report on qualitative and quantitative research Legal notice. <u>assets.publishing.service.gov.uk/</u> government/uploads/system/uploads/attachment_data/file/605706/1011_IpsosMori_ final_evaluation_of_the_introduction_of_controlled_assessment.pdf
- Jerrim J (2019) 'Nine key findings from PISA 2018', UCL IOE blog, 3 December 2019. https://blogs.ucl.ac.uk/ioe/2019/12/03/nine-key-findings-from-pisa-2018

- Jerrim J (2021a) 'National tests and the wellbeing of primary school pupils: new evidence from the UK', Assessment in Education: Principles, Policy and Practice, 28(5–6): 507–544
- Jerrim J (2021b) 'PISA 2018 in England, Northern Ireland, Scotland and Wales: Is the data really representative of all four corners of the UK?', *Review of Education*, 9(3): e3270
- Jerrim J (2022) 'The mental health of adolescents in England: How does it vary during their time at school?' *British Educational Research Journal*, 48(2): 330–353
- Johnson S (2013) 'On the reliability of high-stakes teacher assessment', *Research Papers in Education*, 28(1): 91–105. <u>https://doi.org/10.1080/02671522.2012.754229</u>
- Jones SM, Bouffard SM and Weissbourd R (2013) Educators' social and emotional skills vital to learning, SAGE Publications <u>https://journals.sagepub.com/doi/ abs/10.1177/003172171309400815</u>
- Kara B (2020) 'How to reform your school curriculum for true diversity', Schools Week, 14 June 2020. https://schoolsweek.co.uk/diversity-cannot-be-a-curriculum-bolt-on
- Keyes CLM and Lopez SJ (2009) 'Toward a science of mental health', Oxford Handbook of Positive Psychology, 2: 89–95
- Kidd D (no date) Why we Must Create Curriculums that Combine Compassionate and Creative Thinking - Teachwire. TeachWire, retrieved 7 April 2023 from <u>https://www.</u> teachwire.net/news/why-we-must-create-curriculums-that-combine-compassionateand-creative-thinking
- Kirschner PA (2009) Epistemology or pedagogy, that is the question, Routledge
- Knies G (2017) Income effects on children's life satisfaction: Longitudinal evidence for England, Institute for Social and Economic Research, University of Essex. <u>https://www.iser.essex.ac.uk/research/publications/working-papers/iser/2017-02</u>
- Knies G (2022) 'Effects of Income and Material Deprivation on Children's Life Satisfaction: Evidence from Longitudinal Data for England (2009-2018)', *Journal of Happiness Studies*, 23(4): 1469–1492. <u>https://doi.org/10.1007/s10902-021-00457-3</u>
- Lehain M (2023) Reducing the demand for government 2) Schools. What's worked well and what's needed next, Conservative Home. <u>https://conservativehome.com/2023/05/29/</u> mark-lehain-reducing-the-demand-for-government-2-schools-whats-worked-well-andwhats-needed-next
- Lemov D (2010) Teach like a champion: 49 techniques that put students on the path to college (K-12), John Wiley & Sons
- Leurent B, Dodd M, Allen E, Viner R, Scott S and Bonell C (2021) 'Is positive school climate associated with better adolescent mental health? Longitudinal study of young people in England', SSM - Mental Health, 1: 100033. https://doi.org/10.1016/j.ssmmh.2021.100033
- Lindorff A, Stiff J and Kayton H (2023) *PIRLS 2021: National Report for England.* https://assets.publishing.service.gov.uk/government/uploads/system/uploads/ attachment_data/file/1156633/PIRLS_2021_-_national_report_for_England__May_ 2023.pdf
- Lucas B (2021) Rethinking assessment in education: The case for change. <u>https://drive.google.</u> <u>com/file/d/16qKudSF7qKRpgLOc5Ut3XeNjPl7Ni39n/view?usp=sharingandusp=embed_facebook</u>
- Lupton R and Hayes D (2021) Great Mistakes in Education Policy: And how to avoid them in the future, Policy Press
- Mansfield R, Humphrey N and Patalay P (2021) 'Educators' perceived mental health literacy and capacity to support students' mental health: associations with school-level characteristics and provision in England', *Health Promotion International*, 36(6): 1621– 1632. <u>https://doi.org/10.1093/heapro/daab010</u>
- Marquez J (2022) 'Does school impact adolescents' life satisfaction differently for students of different socio-economic status? A comparative study in 33 countries', *Education Inquiry*, 13(4): 412–427. <u>https://doi.org/10.1080/20004508.2021.1930345</u>
- Matthews E (2021) Functional Skills Qualifications: The first decade, AQi briefings. https://www.aqi.org.uk/briefings/functional-skills-qualifications-the-first-decade
- Maynard BR, Farina A, Dell NA and Kelly MS (2019) 'Effects of trauma-informed approaches in schools: A systematic review', *Campbell Systematic Reviews*, 15(1–2)

- Mcpherson C, Bayrakdar S, Gewirtz S, Laczik A, Maguire M, Newton O, O'brien S, Weavers A, Winch C, and Wolf A (2023) *Schools for All?*. <u>https://www.edge.co.uk/research/projects/</u> research-reports/schools-for-all
- Menzies L and Angus A (2021) 'Pushed out and left out', in Menzies L and Baars S (eds) Young People on the Margins (1–31), Routledge. <u>https://doi.org/10.4324/9780429433139-1</u>
- Menzies L, Bowen-Viner K and Shaw B (2017) *Learning Away: The state of school residentials* in England 2017. <u>https://doi.org/http://dx.doi.org/10.13140/RG.2.2.25176.01284</u>
- Menzies L and Jerrim J (2020) Improving headline school performance measures. http://dx.doi.org/10.13140/RG.2.2.34991.97446
- Menzies L, Parameshwaran M, Trethewey A, Shaw B, Baars S and Chiong C (2015) Why Teach? http://dx.doi.org/10.13140/RG.2.2.12227.86567
- Menzies L, Roberts J and Harding J (2010) 'What do we mean by ethos and culture?', in Christodoulou D (ed), Ethos and Culture in Schools in Challenging Circumstances. Policy First. https://www.researchgate.net/publication/360109967_Ethos_and_Culture_ in_Schools_in_Challenging_Circumstances_Chapter_12_What_do_we_mean_by_ethos_ and_culture
- Mian E, Richards B and Broughton N (2016) *Passports to progress*, Social Market Foundation. <u>https://www.smf.co.uk/wp-content/uploads/2016/07/Social-Market-Foundation-Passports-to-Progress-Vocational-Qualifications-Embargoed-0001-070716.pdf</u>
- Millar F (2020) "It was damaging him": the spiralling number of children refusing to go to school', *The Guardian*. <u>https://www.theguardian.com/education/2020/nov/14/it-was-damaging-him-the-spiralling-number-of-children-refusing-to-go-to-school</u>
- Millard W, Small I and Menzies L (2017) Testing the Water: How assessment can underpin, not undermine, great teaching, The Centre for Education and Youth/Pearson. https://www.researchgate.net/publication/330812163_Testing_the_Water_How_ assessment_can_underpin_not_undermine_great_teaching#fullTextFileContent
- Ministry of Education Te Tāhuhu o te Mātauranga (2015) The New Zealand Curriculum
- Moss G, Goldstein H, Hayes S, Muñoz Chereau B, Sammons P, Sinnott G and Stobart G (2021) High Standards not High Stakes. <u>https://www.bera.ac.uk/publication/high-standardsnot-high-stakes-an-alternative-to-sats</u>
- NAHT Accountability Commission (2018) Improving School Accountability.
- https://www.naht.org.uk/Portals/0/PDF's/Improving%20school%20accountability. pdf?ver=2021-04-27-121950-093
- Newmark B (2023) 'Who are schools for?', 29 April 2023. <u>https://bennewmark.wordpress.</u> <u>com/2023/04/29/who-are-schools-for</u>
- Newmark B and Rees T (2022) A good life: towards greater dignity for people with learning disability. https://cstuk.org.uk/assets/CST-Publications/CST_AmbitionInstitute_ Whitepaper_AGoodLife.pdf
- NFER (2019) Education Inspection Framework 2019 NFER Response: Teacher Voice Data. https://www.nfer.ac.uk/media/3428/teacher_views_on_ofsted_proposed_education_ inspection_framework.pdf
- NHS Digital (2022) Mental Health of Children and Young People in England 2022. https://digital.nhs.uk/data-and-information/publications/statistical/mental-health-ofchildren-and-young-people-in-england/2022-follow-up-to-the-2017-survey
- Nye P and Thomson D (2019) *Who's Left 2019, part two: How do you lose 6,700 pupils?*, FFT Education Datalab. <u>https://ffteducationdatalab.org.uk/2019/12/whos-left-2019-part-two-how-do-you-lose-6700-pupils</u>
- Oates T (2010) Could do better: Using international comparisons to refine the National Curriculum in England. <u>https://www.cambridgeassessment.org.uk/Images/124223-tim-oates-paper-could-do-better-using-international-comparisons-to-refine-the-national-curriculum-in-england.pdf</u>
- Oates T (2013) Radical solutions in demanding times: alternative approaches for appropriate placing of 'coursework components' in GCSE examinations. <u>https://</u> www.cambridgeassessment.org.uk/Images/145830-coursework-radical-solutions-indemanding-times-.pdf

- OECD (2017) PISA 2015 Results (Volume III). Students' Wellbeing, Organisation for Economic Co-operation and Development. <u>https://www.oecd.org/education/pisa-2015-results-volume-iii-9789264273856-en.htm</u>
- OECD (2018) The future of education and skills: education 2030: the future we want. https://www.oecd.org/education/2030/E2030%20Position%20Paper%20(05.04.2018).pdf
- OECD (2019) Country Note: UK PISA results 2018
- Ofqual (2013) *Review of Controlled Assessment in GCSEs*. <u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/377903/2013-06-11-review-of-controlled-assessment-in-GCSEs.pdf</u>
- Ofqual (2019) 11 things we know about marking and 2 things we don't ...yet The Ofqual blog. https://ofqual.blog.gov.uk/2019/03/05/14572

Ofsted (2002) The curriculum in successful primary schools. www.ofsted.gov.uk

- Ofsted (2019) Ofsted's new inspection arrangements to focus on curriculum, behaviour and development, GOV.UK. <u>https://www.gov.uk/government/news/ofsteds-new-inspection-arrangements-to-focus-on-curriculum-behaviour-and-development</u>
- Ofsted (2021) Principles behind Ofsted's research reviews and subject reports, Gov.uk. https://www.gov.uk/government/publications/principles-behind-ofsteds-researchreviews-and-subject-reports/principles-behind-ofsteds-research-reviews-and-subjectreports
- Ofsted (2022) *Education inspection framework*. Gov.Uk. <u>https://www.gov.uk/government/</u> publications/education-inspection-framework/education-inspection-framework
- Parentkind (2021) Extended School Day, Parent poll results. <u>file:///H:/My Drive/How</u> <u>Education policy happens/International/NZ/Parentkind_and_CPAG_poll_extending_the_</u> <u>school_day_final_report.pdf</u>
- ParentKind and CfEY (2021) Parent Voice Report 2021. <u>https://cfey.org/wp-content/</u> uploads/2023/01/Parent-Voice-Report-2022.pdf
- Parker J, Olson S and Bunde J (2020) 'The Impact of Trauma-Based Training on Educators', Journal of Child and Adolescent Trauma, 13(2): 217–227. <u>https://doi.org/10.1007/s40653-019-00261-5</u>
- Parliament (2008) Testing and Assessment Third Report of Session 2007–08, House of Commons Children Schools and Families Committee. <u>https://publications.parliament.uk/</u> pa/cm200708/cmselect/cmchilsch/169/169ii.pdf#
- Parliament (2016) Include expressive arts subjects in the Ebacc Petitions, UK Parliament. https://petition.parliament.uk/archived/petitions/111731
- Patalay P and Fitzsimons E (2016) 'Correlates of Mental Illness and Wellbeing in Children: Are They the Same? Results From the UK Millennium Cohort Study', *Journal of the American Academy of Child and Adolescent Psychiatry*, 55(9): 771–783. <u>https://doi.org/10.1016/j.jaac.2016.05.019</u>
- Patalay P, O'Neill E, Deighton J and Fink E (2020) 'School characteristics and children's mental health: A linked survey-administrative data study', *Preventive Medicine*, 141, 106292
- Paton G (2013), March 19). 'Academics attack "endless lists of facts" in new curriculum', *The Telegraph*. https://www.telegraph.co.uk/education/educationnews/9941075/Academics-attack-endless-lists-of-facts-in-new-curriculum.html
- Pearson (2016) Assessments Attitudes of UK Teachers and Parents Background and methodology. https://www.pearson.com/content/dam/one-dot-com/one-dot-com/uk/ microsites/testing-the-water/documents/2016-Assessment-Polling-Results.pdf
- Pearson (2022) Qualified to succeed: Building a 14 -19 education system of choice, diversity and opportunity. https://www.pearson.com/content/dam/one-dot-com/one-dot-com/ uk/documents/future-of-assessment/pearson-report-future-qualifications-assessmentengland.pdf
- Peterson A (2021) What the Dodo got wrong, Rethinking Assessment. https://rethinkingassessment.com/rethinking-blogs/what-the-dodo-got-wrong
- Peterson A, Lexmond J, Hallgarten J and Kerr D (2014). Schools With Soul: A new approach to Spiritual, Moral, Social and Cultural Education. <u>https://www.thersa.org/globalassets/pdfs/reports/schools-with-soul-report.pdf</u>

- Pinot de Moira A (2020) The impact of coursework on attainment dependent on student characteristics A study based on GCSE and A level outcomes between 2004 and 2017. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/ attachment_data/file/896472/The_impact_of_coursework_on_attainment_dependent_ on_student_characteristics.pdf
- Pinot de Moira A, Wheadon C and Christodoulou D (2022) 'The classification accuracy and consistency of comparative judgement of writing compared to rubricbased teacher assessment', *Research in Education*, 113(1): 25–40. <u>https://doi. org/10.1177/00345237221118116</u>
- Plucker J and Beghetto R (2004) 'Why Creativity Is Domain General, Why It Looks Domain Specific, and Why the Distinction Does Not Matter', in *Creativity: From potential to realization*. <u>https://doi.org/10.1037/10692-009</u>
- Prior L, Jerrim J, Thomson D and Leckie G (2021) 'A review and evaluation of secondary school accountability in England: Statistical strengths, weaknesses and challenges for "Progress 8" raised by COVID-19', *Review of Education*, 9(3): e3299
- Pro Bono Economics (2021) Counting on the recovery: The role for numeracy skills in 'levelling up' the UK
- Proctor CL, Linley PA and Maltby J (2009) 'Youth Life Satisfaction: A Review of the Literature', Journal of Happiness Studies, 10(5): 583–630. https://doi.org/10.1007/s10902-008-9110-9
- Putwain DW and Roberts CM (2009) 'The development of an instrument to measure teachers' use of fear appeals in the GCSE classroom', *The British Journal of Educational Psychology*, 79(4): 643–661. <u>https://doi.org/10.1348/000709909X426130</u>
- Putwain DW and Symes W (2012) 'Achievement goals as mediators of the relationship between competence beliefs and test anxiety', *British Journal of Educational Psychology*, 82(2): 207–224
- Putwain DW and von der Embse NP (2018) 'Teachers use of fear appeals and timing reminders prior to high-stakes examinations: Pressure from above, below, and within', Social Psychology of Education, 21(5): 1001–1019
- QCA (2006) A review of GCSE coursework. https://dera.ioe.ac.uk/7354/1/courseworkreport.pdf
- QCDA (2005) A Review of GCE and GCSE Coursework Arrangements. <u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/</u> attachment_data/file/605697/0105_QCA_a-review-of-GCE-GCSE-courswork.pdf
- Quilter-Pinner H and Ambrose A (2020) The 'New Normal' The future of education after Covid-19. <u>https://www.ippr.org/research/publications/the-new-normal</u>
- Reiss F (2013) 'Socioeconomic inequalities and mental health problems in children and adolescents: A systematic review', *Social Science and Medicine*, 90: 24–31. <u>https://doi.org/https://doi.org/10.1016/j.socscimed.2013.04.026</u>
- Relationships Foundation and Big Change (2021) Pandemic as a portal, Listening to the voice of the school system to inform transformation. <u>https://www.big-change.org/wp-content/uploads/2021/04/Big-Change-Pandemic-as-Portal.pdf</u>
- Rethinking Assessment (no date) *Home Rethinking Assessment*, retrieved 1 April 2023 from <u>https://rethinkingassessment.com</u>
- Rethinking Assessment (2023) Creating an assessment system that values the breadth of strengths of every child. <u>https://drive.google.com/file/d/1NoyUc3P-wFi_ LCJSOSlzzUrQxkLC2WsG/view</u>
- Richards B (2016) Passports to Progress: How do vocational qualifications help young people in building their careers? Part One, Social Market Foundation London
- Richmond T (2021) *Re-assessing the future: part 1. <u>https://www.edsk.org/wp-content/</u> uploads/2021/01/EDSK-Re-assessing-the-future-part-1.pdf*
- Richmond T and Regan E (2021) *Re-assessing the future Part 2 the final years of secondary education.* <u>https://www.edsk.org/publications/reassessing-the-future-part-2</u>
- Richmond T and Regan E (2023) Examining Exams: Are there credible alternatives to written examinations? <u>https://www.edsk.org/wp-content/uploads/2023/04/EDSK-Examining-exams.pdf</u>
- Ritchie S (2023) Don't panic about social media harming your child's mental health the evidence is weak, The i News. <u>https://inews.co.uk/news/technology/dont-panic-about-social-media-harming-your-childs-mental-health-the-evidence-is-weak-2230571</u>

- Robertson A (2021) 'Mental Health', in Menzies L and Baars S (eds), Young People on the Margins (51–76), Routledge
- Robinson D and Bunting F (2021) A narrowing path to success? 16-19 curriculum breadth and employment outcomes. <u>https://epi.org.uk/wp-content/uploads/2021/09/EPI-Royal_Society-16-19-report.pdf</u>
- Robinson M (2018) 'Curriculum Coherence', Trivium 21c, 16 December 2018. https://trivium21c.com/2018/12/16/curriculum-coherence
- Rochford D (2016) *The Rochford Review: final report*, Standards and Testing Agency. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/ attachment_data/file/561411/Rochford_Review_Report_v5_PFDA.pdf
- Roome T and Soan CA (2019) 'GCSE exam stress: student perceptions of the effects on wellbeing and performance', *Pastoral Care in Education*, 37(4): 297–315
- Rose J, McGuire-Snieckus R, Gilbert L and McInnes K (2019) 'Attachment Aware Schools: the impact of a targeted and collaborative intervention', *Pastoral Care in Education*, 37(2): 162–184. <u>https://doi.org/10.1080/02643944.2019.1625429</u>
- Royal College of Psychiatrists (2021) 'Record number of children and young people referred to mental health services as pandemic takes its toll', 21 September 2021. https://www.rcpsych.ac.uk/news-and-features/latest-news/detail/2021/09/23/ record-number-of-children-and-young-people-referred-to-mental-health-services-aspandemic-takes-its-toll
- Ryan RM and Deci EL (2000) 'Self-determination theory and the facilitation of intrinsic motivation, social development, and wellbeing', *American Psychologist*, 55(1): 68
- Schools Week (2019) PISA 2018: Maths up, but no real change in reading or science. https://schoolsweek.co.uk/pisa-2018-maths-up-no-improvement-in-reading-or-science
- Scouts and NCS (2021) Enriching Education Recovery: Summary of new polling with children and young people, parents and teachers. <u>https://wearencs.com/our-insights</u>
- Seligman M (2018) 'PERMA and the building blocks of wellbeing', *Journal of Positive Psychology*, 13(4): 333–335. <u>https://doi.org/10.1080/17439760.2018.1437466</u>
- Seymour W and Craig R (2023) Essential Skills Tracker 2022 <u>https://global-uploads.webflow.</u> <u>com/5ab25784c7fcbff004fa8dca/6225e5d4ecf9d41a117e44c2_Essential Skills Tracker 2022</u> <u>vFinal.pdf</u>
- Shaw B, Huband-Thompson B and Hallgarten J (2023) From fragmented centralism to connected localism The future of Area-Based Education Partnerships. <u>https://cfey.org/</u> wp-content/uploads/2023/02/ABEP-report-CfEY.pdf
- Shury J, Vivian D, Spreadbury K, James AS, Tweddle M, Jones R and Constable S (2014) UK Commission's Employer Perspectives Survey 2014
- Skills Builder Partnership (no date) 'Skills Builder Expanded Universal Toolkit', retrieved 12 April 2023 from <u>https://www.skillsbuilder.org/expanded-framework</u>
- Smith MK (2014) Extended schools and services theory, practice and issues, The Encyclopedia of Pedagogy and Informal Education. <u>https://infed.org/mobi/extended-</u> schools-and-services-theory-practice-and-issues
- Spielman A (2017) HMCI's commentary: recent primary and secondary curriculum research. Gov.Uk, 11 October 2017. <u>https://www.gov.uk/government/speeches/hmcis-commentary-october-2017</u>
- Standards and Testing Agency (2020) *The engagement model*, Gov.Uk, 27 January 2020. https://www.gov.uk/government/publications/the-engagement-model
- Statham R, Freedman S and Parkes H (2022) *Delivering a Childcare Guarantee*. https://www.ippr.org/files/2022-12/delivering-a-childcare-guarantee-dec-22.pdf
- Stonewall (2017) School Report. <u>https://www.stonewall.org.uk/system/files/the_school_report_2017.pdf</u>
- Strobel J and Van Barneveld A (2009) 'When is PBL More Effective? A Meta-synthesis of Meta-analyses Comparing PBL to Conventional Classrooms', *Interdisciplinary Journal of Problem-Based Learning*, 3. <u>https://doi.org/10.7771/1541-5015.1046</u>
- Surrey Square Primary School (no date) *Surrey Square Primary School Curriculum*, retrieved 12 April 2023 from <u>https://surreysquareprimary.co.uk/Curriculum</u>

- Sweller J, Ayres P, Kalyuga S and Chandler P (2011) 'The Expertise Reversal Effect', Faculty of Education - Papers, 38. https://doi.org/10.1007/978-1-4419-8126-4_12
- Teacher Tapp (2017) The Strange Teacher Habits of Ability Groupings, 21 November 2017. https://teachertapp.co.uk/articles/strange-teacher-habits-ability-groupings
- Teacher Tapp (2023a) Unproductive tasks, planning and falling under the radar. <u>https://teachertapp.co.uk/articles/unproductive-tasks-planning-and-falling-under-the-radar</u>
- Teacher Tapp (2023b) Ofsted, your colleagues and a return of GCSE coursework, 28 March 2023. https://teachertapp.co.uk/articles/ofsted-your-colleagues-and-a-return-of-gcse-coursework
- The Australian Curriculum (no date) *The Australian Curriculum* (Version 8.4), retrieved 24 April 2023 from https://www.australiancurriculum.edu.au
- The Cambridge Primary Review (2009) *Children, their world, their education*. <u>https://cprtrust.org.uk/wp-content/uploads/2013/10/CPR_revised_booklet.pdf</u>
- The Children's Society (2022) *The Good Childhood Report 2022*. <u>https://www.childrenssociety.org.uk/information/professionals/resources/good-childhood-report-2022</u>
- The Edge Foundation (2020) *Teacher poll on impact and effectiveness of exams*, 12 May 2020. <u>https://www.edge.co.uk/news-and-events/surveys/teacher-poll-on-impact-effectiveness-of-exams</u>
- The Key (no date a) 'Promoting British values in schools', retrieved 12 April 2023 from https://schoolgovernors.thekeysupport.com/school-improvement-and-strategy/ strategic-planning/values-ethos/promoting-british-values-in-schools
- The Key (no date b) 'Special schools: curriculum requirements', retrieved 12 April 2023 from https://schoolleaders.thekeysupport.com/curriculum-and-learning/special-schoolcurriculum/special-school-curriculum-post-september-2014
- The National Baccalaureate Trust (2022) National Baccalaureate Trust Proposal Final. https://drive.google.com/file/d/1sAiv4IE_31ZDACUzBoZbDB12UF8xeGyy/view
- The Royal Society of Chemistry (2023) 'Too much content to teach within the time available', The Royal Society of Chemistry. <u>https://www.rsc.org/new-perspectives/talent/the-</u> science-teaching-survey/2022/too-much-content-not-enough-time
- The Social Mobility Commission (2014) Cracking the code: how schools can improve social mobility. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/360753/Cracking_the_code_Final.pdf
- Thomas D (2020) 'How should teachers choose what to teach?' Oak National Academy, 27 June 2020. <u>https://www.thenational.academy/blog/how-should-we-choose-what-we-teach</u>
- Thomas L (2012) Thinking about an Area Based Curriculum. <u>https://www.thersa.org/globalassets/pdfs/rsa_thinking-about-an-area-based-curriculum-a-guide-for-practitioners.pdf</u>
- Thomson D (2019) 'If the EBacc were scrapped, would anything change?', FFT Education Datalab, 3 June 2019. <u>https://ffteducationdatalab.org.uk/2019/06/if-the-ebacc-were-scrapped-would-anything-change</u>
- Thomson D (2022) 'How can the government's target of 90% of pupils achieving the expected standards at Key Stage 2 be achieved?', FFT Education Datalab, 1 March 2022. https://ffteducationdatalab.org.uk/2022/03/how-can-the-governments-target-of-90-of-pupils-achieving-the-expected-standards-at-key-stage-2-be-achieved
- Thorley C (2016) Education, education, mental health: Supporting secondary schools to play a central role in early intervention mental health services, IPPR
- Times Education Commission (2022) Bringing out the Best: How to transform education and unleash the potential of every child. <u>https://nuk-tnl-editorial-prod-staticassets.</u> <u>s3.amazonaws.com/2022/education-commission/Times Education Commission final</u> <u>report.pdf</u>
- Tricot A and Sweller J (2014) 'Domain-Specific Knowledge and Why Teaching Generic Skills Does Not Work', *Educational Psychology Review*, 26(2): 265–283. <u>http://www.jstor.org/</u> stable/43549795

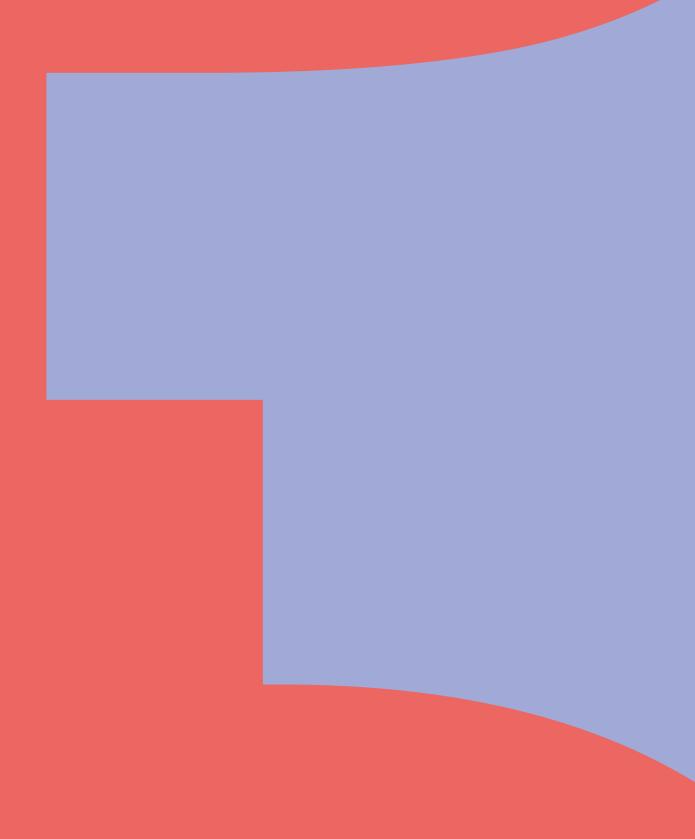
- Tuckett S, Hunt E, Robinson D and Cruikshanks R (2022) Covid-19 and Disadvantage Gaps in England 2021. https://epi.org.uk/publications-and-research/covid-19-and-disadvantagegaps-in-england-2021
- Twenge JM, Martin GN and Campbell WK (2018) 'Decreases in psychological wellbeing among American adolescents after 2012 and links to screen time during the rise of smartphone technology'. *Emotion*, 18(6): 765. <u>https://doi.org/10.1037/EMO0000403</u>
- Van Geel M, Vedder P and Tanilon J (2014) 'Relationship between peer victimization, cyberbullying, and suicide in children and adolescents ameta-analysis', *JAMA Pediatrics*, 168(5): 435–442. https://doi.org/10.1001/jamapediatrics.2013.4143
- Van Poortvliet M, Clarke A and Gross J (2019) *Guidance Report Improving Social and Emotional Learning in Primary Schools*, Education Endowment Fund. https://educationendowmentfoundation.org.uk/public/files/Publications/SEL/EEF_Social_and_Emotional_Learning.pdf
- Vidal Rodeiro C and Vitello S (2023) 'Progression to post-16 education in England: the role of vocational qualifications', *Research Papers in Education*, 38(2): 164–186. <u>https://doi.org/10.1080/02671522.2021.1961295</u>
- Vidal Rodeiro C and Williamson J (2019) 'Meaningful destinations: using national data to investigate how different education pathways support young people's progression in England', Research Papers in Education, 34(6): 725–748. <u>https://doi.org/10.1080/02671522</u>. 2018.1536889
- von der Embse NP, Schoemann AM, Kilgus SP, Wicoff M and Bowler M (2017) 'The influence of test-based accountability policies on teacher stress and instructional practices: a moderated mediation model', *Educational Psychology*, 37(3): 312–331. <u>https://doi.org/10.1 080/01443410.2016.1183766</u>
- Waite S (2023) 'Maths to 18: Why it's right to end the cliff edge at 16', Schools Week, 12 January 2023. https://schoolsweek.co.uk/maths-to-18-why-its-right-to-end-the-cliff-edge-at-16
- Weale S (2019) 'Russell Group scraps preferred A-levels list after arts subjects hit', *The Guardian*. <u>https://www.theguardian.com/education/2019/may/23/russell-group-scraps-</u> <u>preferred-a-levels-list-after-arts-subjects-hit</u>
- Wellcome Trust/NFER (2016) NFER Teacher Voice Omnibus Survey Data. <u>https://wellcome.org/</u> sites/default/files/nfer-teacher-voice-omnibus-survey-data-apr16.pdf
- What Works Wellbeing (no date) 'What is wellbeing?'. <u>https://whatworkswellbeing.org/about-</u> wellbeing/what-is-wellbeing
- What Works Wellbeing (2022) 'Future Wellbeing: Insights from Year 8s and Year 10s in Greater Manchester', 14 April 2022. <u>https://whatworkswellbeing.org/blog/future-wellbeing-</u> insights-in-greater-manchester

Wheadon C (2023) 'AI Powered Essay Marking', 3 June 2023. <u>https://substack.nomoremarking.com/p/ai-powered-essay-marking?utm_source=substackandpublication_id=1499167andpost_id=125488030andutm_medium=emailandutm_content=shareandtrigg_erShare=trueandisFreemail=true</u>

- Wigelsworth M, Verity L, Mason C, Humphrey N, Qualter P and Troncoso P (2020) Programmes to Practices Identifying effective, evidence-based social and emotional learning strategies for teachers and schools: Evidence review January 2020. https://educationendowmentfoundation.org.uk/public/files/Social_and_ Emotional_Learning_Evidence_Review.pdf
- Wiggins A (2023) 'Making the Grade: Why NZ kids are falling behind at school', New Zealand Herald, 21 March 2023. <u>https://www.nzherald.co.nz/nz/making-the-grade-new-zealands-struggling-school-education-system-how-we-can-do-better/VDDQDPYUYBFMRL2RMWFUB7DS54</u>
- Wiliam D (2011) What assessment can cannot do, Pedagogiska Magasinet
- Willingham DT (2005) Why don't students like school?: A cognitive scientist answers questions about how the mind works and what it means for the classroom, John Wiley and Sons
- Wilshaw M (2016) HMCI's commentary: science and foreign languages in primary school. GOV. UK. <u>https://www.gov.uk/government/speeches/hmcis-monthly-commentary-may-2016</u>
- Winthrop R, Barton A and Ziegler L (2021) 'What can social media listening tell us about the desire for education change?' Brookings Institute

- https://www.brookings.edu/articles/what-can-social-media-listening-tell-us-about-thedesire-for-education-change-insights-from-students-parents-and-teachers-in-england
- Wolf A (2011) Review of Vocational Education-The Wolf Report. <u>https://www.gov.uk/</u> government/publications/review-of-vocational-education-the-wolf-report
- World Economic Forum (2023) *Defining Education 4.0: A Taxonomy for the Future of Learning*. <u>https://www.weforum.org/whitepapers/defining-education-4-0-a-taxonomy-for-the-future-of-learning</u>
- World Health Organization [WHO] (2022a) Mental disorders. <u>https://doi.org/10.1371/JOURNAL.</u> PMED.1003901
- World Health Organization [WHO] (2022b) *Mental health*. <u>https://www.who.int/news-room/</u><u>fact-sheets/detail/mental-health-strengthening-our-response</u>
- Wyness G (2021) Briefing note: Should we abolish GCSEs? <u>https://repec-cepeo.ucl.ac.uk/</u> <u>cepeob/cepeobn14.pdf</u>
- Yacek DW and Gary K (2023) 'The uses and abuses of boredom in the classroom', British Educational Research Journal, 49(1): 126–141. <u>https://doi.org/https://doi.org/10.1002/</u> berj.3833
- Young M (2014) The Curriculum and the Entitlement to Knowledge. Cambridge Assessment. <u>https://www.cambridgeassessment.org.uk/Images/166279-the-curriculum-and-the-</u> entitlement-to-knowledge-prof-michael-young.pdf
- Young M and Muller J (2013) 'On the powers of powerful knowledge', *Review of Education*, 1(3): 229–250. <u>https://doi.org/https://doi.org/10.1002/rev3.3017</u>
- Young Minds (no date) *Mental Health Statistics UK*, retrieved 12 April 2023 from <u>https://www.youngminds.org.uk/about-us/media-centre/mental-health-statistics</u>
- Zenner C, Herrnleben-Kurz S and Walach H (2014) 'Mindfulness-based interventions in schools—a systematic review and meta-analysis', *Frontiers in Psychology*, 5. https://doi.org/10.3389/fpsyg.2014.00603

Institute for Public Policy Research



GET IN TOUCH

For more information about the Institute for Public Policy Research, please go to www.ippr.org

You can also call us on +44 (0)20 7470 6100, e-mail info@ippr.org or tweet us @ippr

Institute for Public Policy Research

Registered Charity no. 800065 (England & Wales), SC046557 (Scotland), Company no, 2292601 (England & Wales)