

# Areas of Research Interest

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#### **Executive Summary**

Ensuring that the Department for Education (DfE) is informed by the best available evidence is important because we are the department for realising potential. We enable children and young people to thrive by ensuring the delivery of excellent standards of education, training and care, whilst protecting the vulnerable. This helps everybody to realise their potential – and that powers our economy, strengthens society and increases fairness.

What makes for good education is not always intuitive, and so we will not achieve this unless we learn from evidence and act based on 'best bets' for what is going to work. As an evidence-based department, we rely on a wide range of data, analysis and research to inform strategy, policy and delivery. This Areas of Research Interest (ARI) document is structured around our departmental priorities and sets out the key areas in which DfE is focussing its research and analysis efforts and would welcome evidence from the research community. This is not an exhaustive list of all areas where further research would be valuable and does not include some areas where strong evidence exists or is in development. We particularly welcome work which builds quantitative evidence on impact and value for money.

Our headline priorities and key areas of interest are listed below. We highlight more specific questions under these topics in the following "<u>Detailed Areas of Research</u> <u>Interest</u>" section but have specified them at a relatively high level to allow research innovation and flexibility.

### 1. Skills: Drive economic growth through improving the skills pipeline, levelling up productivity and supporting people to work.

1a. What are the country's future skills needs to support growth and prosperity, particularly in STEM and green skills?

1b. What are the organisational challenges and opportunities facing higher education (HE) and further education (FE) institutions?

1c. What are the funding, system and market challenges and opportunities for increasing participation in technical education, apprenticeships and adult training?

1d. What are the drivers of UK and foreign students' decisions about pathways into and out of FE and HE, including impact of funding, finance and experience?

# 2. Schools: Continue to drive up academic standards so that children and young people in every part of the country are prepared with the knowledge, skills and qualifications they need.

2a. What are the barriers and opportunities for recruiting and retaining teachers, and how does this vary by subject, school type, area, and region?

2b. How can we improve teaching quality in schools in ways that scale?

2c. What are the drivers of pupil attendance and absence?

2d. How can we improve outcomes for all pupils, especially those from disadvantaged backgrounds and those with SEND?

2e. How can schools and school trusts use their resources (including staffing, estates and technology) more effectively and efficiently?

2f. How can education and care sectors best respond to environmental climaterelated risks or future pandemics to limit the impact on education?

#### 3. Early Years and Family Support: Provide the best start in life through highquality early education and childcare to raise standards and help parents to work.

3a. Which services, programmes and interventions are effective for improving parenting capacity and quality and the early years home learning environment?

3b. What can we do to support children and their families develop well from birth before entering formal education (and to the start of adulthood for those with SEND)?

3c. What works in improving the supply, demand and quality of both provision and the workforce in early years?

3d. How do we better provide for additional needs in the early years with specific consideration of neurodiversity, speech and language, and mental health?

### 4. Vulnerable Children: Support the most disadvantaged and vulnerable children and young people through high-quality local services, so that no one is left behind.

4a. How can we best support and promote mental and physical health and wellbeing in schools, colleges and higher education?

4b. How can we best support children with special educational needs and disabilities (SEND) and those attending Alternative Provision?

4c. What are the risk factors for children's involvement in serious violence and what interventions and approaches are most effective in reducing it?

4d. How do we best support children, young people and their families within the social care system and prevent poor outcomes, including recruiting, retaining and training our CSC workforce?

### 5. Artifical Intelligence (AI) and Technology: Harness the use of AI, technology and data across our sectors to support safe and effective use within education

5a. What are the potential impacts of AI, and how can new technologies be used safely and effectively within education?

5b. How can the impact of digital technology be robustly measured, and implemented in a way that supports teachers and students?

5c. What approaches or innovation are needed to support the efficient handling of data within education settings?

#### **Purpose**

This document sets out key areas of current research interest, where the research community is well placed to support the development of strategy, policy and delivery by providing quantitative and qualitative evidence.

The DfE conducts and commissions a wide range of research, analysis and long-term studies to support policy development and decision making. Alongside this we want to harness the power of the UK and international research sectors and our unique data assets, to grow the evidence base in a range of areas.

Our ambition is to use this ARI document as a platform to build our external research engagement, drawing on colleagues across government, academia, research funding agencies, research providers and more. We already engage widely with external research bodies, academics and research funders in a variety of ways, but we plan to do this more systematically using this Areas of Research Interest document through a programme of external research engagement.

We have received grant funding from Administrative Data Research (ADR) UK for our Data Access and Engagement Programme that runs from 2023 to 2025 to make it easier and faster for accredited researchers to gain access to the data they need. We will share more data through the ONS Secure Research Service using the legal gateway provided by the Digital Economy Act. The programme will also enable the DfE to engage with research bodies and academia around data opportunities and policy needs seeking to maximise the value of linked education data.

In practical terms we hope this ARI document will steer and support researchers in developing relevant evidence and enable them to make stronger funding bids by linking their work to these priorities. Across all the areas outlined in this document we are keen to see evidence from all parts of the UK. Devolution in the UK enables different approaches to be taken to tackling common challenges, and therefore offers potential for all levels of government to learn from each other about "what works" in different policy areas. DfE is keen to support this on policy areas relevant to the Department's work and to facilitate evidence sharing and learning with decision makers in Devolved Governments and local government. For the same reasons, we are keen to see evidence from other international partners.

Across all these topics we are keen to see a range of techniques and approaches used and are particularly interested in analysis that considers the potentially transformational impact of AI and related data analysis across our sectors. We encourage work from a variety of perspectives, whether evaluating existing programmes, tackling gaps in policy, addressing implementation problems or scalability and proposing innovation.

This document is not an exhaustive list of our research interests. It is intentionally highlevel and is intended to open conversations and make clear our priorities. This ARI aims to encourage academics and researchers from any discipline to explore these topics to help build DfE's evidence base and stimulate future collaboration. The purpose of this ARI is not to limit the research done but to provide focus and direction on the topics where further research may be most likely to have a positive impact. We anticipate updating these ARIs roughly annually as the needs of the Department change.

### Working with Us

#### Get In Touch

If you would like to discuss previous, ongoing or potential research into any of the areas in this document, please contact <u>research.engagement@education.gov.uk</u>.

This document is part of a broader engagement between the department and the research community. We will work with academia, research funders and organisations to deliver against these areas of interest and develop a programme of regular structured engagement to ensure that we are able to build and maintain a constructive dialogue over time.

#### Accessing Data

DfE gathers a wide range of data for administrative purposes. Much of this data can be made available for research, provided users follow rules and standards to prevent its misuse. We produce official statistics on:

- early years
- schools
- further education
- higher education
- children and young people
- Local Authority service delivery

This is carried out in line with the <u>code of practice for official statistics</u> and <u>DfE official</u> <u>statistics</u>: <u>standards and policies</u>.

Researchers can current apply for data through the <u>ONS Research Accreditation</u> <u>Service</u> (ONS RAS) for the following DfE datasets:

- the Longitudinal Education Outcomes (LEO) study
- the Growing Up in England (GUiE) dataset
- the Childcare and Early Years Survey of Parents (CEYSP)
- the Further Education Workforce Data Collection (FEWDC)

More datasets will be made available over time and information on the data that is held can be found here: <u>Discover secure research data - Office for National Statistics</u> (ons.gov.uk).

Researchers must apply for access to all other DfE data through the <u>DfE data sharing</u> <u>service</u>. More information about applying for DfE personal data can be found here: <u>Apply</u> <u>for Department for Education (DfE) personal data</u>.

DfE holds numerous datasets in the National Pupil Database (NPD), these fall within four categories:

- Demographics;
- Attainment;
- Absence and exclusion;
- and Children in need and Children looked after.

Use <u>this tool</u> to find and explore information about the data that is held in the NPD, before applying to access.

If you would like to know more about how DfE shares its personal data, read <u>How DfE</u> <u>shares personal data - GOV.UK (www.gov.uk)</u>.

If you are not sure whether to apply through DfE or ONS, please contact <u>data.sharing@education.gov.uk</u>.

#### **Funding Routes**

We hope that this document will help those applying to funding bodies by enabling proposals for new research to draw a direct line to the Department's ARI and strengthen the case for the possible public impact of the research.

We plan to use this Areas of Research Interest document as the starting point for a programme of engagement with researchers and research funders. We want to be able to discuss and share interests and priorities, making it clearer where funding opportunities may be available. Alongside making our interests clear, we are making significant efforts to ensure that our data is more readily accessible to accredited researchers, making it available through the Office for National Statistics (ONS) Secure Research Service (SRS) under the terms of the Digital Economy Act (DEA). We hope, through systematic engagement, to be able to develop a more dynamic research ecosystem where research, data and funding opportunities are more visible and readily accessible.

Please note, however, that the department cannot respond to speculative approaches for research funding as we commission specific research needs competitively.

#### Focus on outcomes

Across our research questions, we seek research which improves outcomes for children, young people, and staff, as well as services across our sectors, such as the examples

set out below. As part of this, we are keen to see research which generates improved estimates of impacts and value for money.

Outcomes for the children, young people, and staff

These might include:

- improved recruitment and retention of teachers
- improved physical health and mental health of young people
- improved attainment reflecting improved understanding and retention
- reduced teacher workload
- reduced persistent absences

#### Outcomes for services

Improvements might include increased efficiency and reduced burden and costs across all parts of the education sector from early years settings, to schools and colleges.

#### **Robust and cross-cutting methodologies**

To deliver research and innovation which enable a step change in policy and practice, we need to expand capability and capacity and encourage interdisciplinary collaborations in specific research disciplines. We welcome analysis that goes beyond describing problems and starts to establish causality or explain mechanisms for change.

#### Systems thinking

The education and care system is a complex system and changing the status quo will only be possible by looking at all parts of the system, understanding how they connect, where they are amenable to intervention, and expanding the range of options available for solving the problem.

#### Data science

Analysis of large-scale data from across our sectors is possible for a range of research priorities, including:

- improving performance
- understanding patterns underpinning outcomes
- increasing the effectiveness of interventions

#### Economics of education

Economic expertise is required to understand and improve the cost effectiveness of educational and care services to ensure that they deliver economic and educational benefits.

We are particularly keen where applicable to see research which includes cost benefit analysis, which provides findings in terms of lifetime earnings or months of progress, for example.

#### **Behavioural science**

Social, behavioural and anthropological perspectives are welcomed to ensure that policies and initiatives are designed to be feasible and scalable, as well as effective.

#### Implementation science and use of real-world evidence

Understanding how to make interventions work effectively in practice, at scale and in different contexts is critical to converting what we know works into changes in policy and practice.

#### **Evidence synthesis**

Timely, policy-facing synthesis of bodies of evidence are needed to inform policy making, including realist reviews synthesising effects of interventions within complex systems.

#### **Detailed Areas of Research Interest**

The following sections detail our interests in relation to the Department of Education's <u>Outcome Delivery Plan.</u>

# 1. Skills: Drive economic growth through improving the skills pipeline, levelling up productivity and supporting people to work.

Our goal is to increase productivity and growth by bringing education and business closer together and improving the quality of our skills programme, so that we meet current and future business skills needs.

### 1a. What are the country's future skills needs to support growth and prosperity, particularly in STEM and green skills?

- i. What is the stock of skills in the economy, where are there mismatches between need and availability? Where will the greatest skills needs be across the medium (5-10 years) and long-term (10 to 20+ years)? What impacts might we expect AI to have on future skills needs?
- ii. How are skills and productivity linked, and how is this changing over time?
- iii. Are current adult training and skills programmes, including adult community learning, effective at giving people the skills needed for employment, and the skills that business needs?
- iv. How has the Lifelong Learning Entitlement (LLE) influenced the behaviour of students, providers and employers? To what extent has LLE promoted increased fluidity of study pathways between FE and HE?
- v. What is the impact of under-attainment for disadvantaged students on future skills needs and participation in HE?
- vi. How has the cost-of-living affected access and participation in HE?

### 1b. What are the organisational challenges and opportunities facing HE and FE institutions?

- i. What are the barriers to FE staff recruitment and retention, particularly in areas of existing shortage and predicted need?
- ii. What are the most effective non-pay related solutions for addressing FE workforce shortages? What are the potential impacts of improved pay and financial incentives compared to non-pay solutions in tackling barriers?

- iii. What is the extent of regulatory burden and data supply in the HE sector, and how could the regulatory approach be more effective and efficient?
- iv. What are the key demographic and market dynamics in HE? For example, what are the trends and impacts of franchises in terms of student participation, local growth, and student outcomes?

### 1c. What are the funding, system and market challenges and opportunities for growing technical education, apprenticeships and adult training?

- i. What are the determinants of demand and quality for technical education, apprenticeships and adult training? How do they vary (e.g. geographically, demographically) and how it can they be influenced?
- ii. What is effective practice in pedagogy and curriculum design in technical education, apprenticeships and adult training? Where are the barriers to delivery of high-quality courses, and how might these be overcome?
- iii. How effective have T-levels been in increasing student and business involvement in technical education? Which factors increase student uptake and business recruitment of people with T-levels?
- iv. How does the effectiveness of technical education, apprenticeships and adult training in the UK compare to leading jurisdictions internationally?
- v. How has apprenticeship funding reform affected employer engagement in apprenticeships and other forms of training?

### 1d. What are the drivers of UK and foreign students' decisions about pathways into and out of HE, including impact of funding, finance and experience?

- i. How important is domestic and international student tuition fee income to the financial sustainability of the HE sector?
- ii. What are the challenges and opportunities for the UK HE sector to remain internationally competitive?
- iii. What are the likely effects of measures to increase quality in HE on applicant perceptions and graduate labour market outcomes?

## 2. Schools: Continue to drive up academic standards so that children and young people in every part of the country are

## prepared with the knowledge, skills and qualifications they need.

Our goal is to create a world-class school system that ensures every child is taught a broad and ambitious knowledge-rich curriculum by highly skilled teachers, so they can achieve their potential.

We need to continue to develop the evidence base around effective teaching practice and curriculum design, with teaching increasingly viewed as an applied science (akin to medicine) where evidence-based approaches are widely utilised, and skilled teachers draw upon expert support and professional communities. We also need to build our understanding of how best to replicate the success of high performing schools, and how school trusts can improve the effectiveness and efficiency of their schools, including through management of the school estate. A key part of this is building evidence on the most successful school approaches to improving attendance.

### 2a. What are the barriers and opportunities for recruiting and retaining teachers, and how does this vary by subject, school type, area, and region?

- i. What are the impacts of teacher workload on graduate career decisions and staff retention? What are the potential impacts of improved flexible working, pay and financial incentives for graduates?
- ii. What are the characteristics of successful initial teacher training candidates?
- iii. What factors influence the recruitment and retention of teachers at all stages of their careers particularly in schools that serve disadvantaged communities?

#### 2b. How can we improve teaching quality in ways that scale?

- i. How can we assess teaching quality and support schools in making valid and proportionate assessments of quality (e.g. comparing novice and expert practice; monitoring impact on pupil outcomes)?
- ii. What does evidence from the natural and cognitive sciences suggest about how schools might influence pupil motivation, behaviour, and learning? How can this be translated into teaching practices that reliably improve pupil attainment?
- iii. What teaching approaches are most effective in helping pupils to pay attention, grasp new ideas, develop skill (such as writing), retain knowledge, transfer knowledge, and be motivated to learn? Why are these approaches most effective?

Applied research might include, for example: how various forms of retrieval practice can help pupils retain knowledge for longer periods, or how teacher instruction, teacher questioning, and in-class reading can be used to enhance understanding, and how these effects vary across different phases or subjects.

- iv. What are the most valid and reliable assessment methods, and how are these used effectively in schools to support and assess pupil learning? Which ways of representing and sequencing curricula are most effective in supporting pupil learning and why?
- v. How can professional development be used to help teachers and school leaders to become more effective? What are the features of both the design and delivery of effective teacher and school leader professional development, at scale? Why are these features effective?

#### 2c. What are the drivers of pupil attendance and absence?

- i. What works to reduce persistent and severe absence and why?
- ii. How can schools and local partners work together effectively to reduce persistent and severe absence?
- iii. What works to reintegrate pupils who are persistently or severely absent?
- iv. How effective are attendance interventions in improving outcomes for pupils?
- v. How can schools effectively support pupils to improve attendance?
- vi. What works to address the change in parental attitudes towards attendance?
- vii. What are the drivers of pupils not attending school and what factors influence pupils being at risk of becoming persistently absent?

### 2d. How can we improve outcomes for all pupils, especially those from disadvantaged backgrounds and those with SEND?

- i. What are the barriers to learning experienced by pupils with SEND, and what strategies are effective in helping them overcome these barriers?
- ii. How can schools effectively monitor and evaluate the impact of changes they make for pupils, including those who are behind or those with SEND?
- iii. What are the features of high-quality tutoring? Applied research might demonstrate how schools can use tutoring across phases and subjects to help pupils who are behind, or to stretch pupils.
- iv. What knowledge and skills do all teachers and school leaders need to support pupils with SEND? How should this differ throughout the stages of a teacher's career?
- v. How do schools use in-school units such as SEN Units, Resourced Provision and in-school Alternative Provision to improve pupil outcomes?
- vi. How can we better integrate technical education into our schools?

### 2e. How can schools and school trusts use their resources (including staffing, estates and technology) more effectively and efficiently?

- i. Which school-wide (or school trust-wide) systems, processes, and interventions improve pupil attainment and narrow disadvantage attainment gaps? Applied research might explore, for instance, how leaders use behaviour systems, pupil setting, the length of the school day, and whole-school enrichment interventions.
- ii. What activities do school trust leaders prioritise to improve their schools' performance?
- iii. What are the most effective school management practices relating to staffing, resourcing, finances, and purchasing? What tools and approaches provide the most support to school leaders carrying out these practices?
- iv. What knowledge, skills and techniques are required for good school estate management? Are they available in the employment market and how can they be developed?
- v. What impact does accountability and inspection have on key outcomes for the education system, including internationally?
- vi. What makes a difference in the management of school estates? What can be done to improve management of the school estate?

#### 2f. How can education and care sectors best respond to environmental climaterelated risks or future pandemics to limit the impact on education?

- i. What are the biggest environmental risks impacting on the educational system and student outcomes, and how can they be mitigated?
- ii. How do we harness technological advances to support our sectors reduce exposure and vulnerability to climate risk?
- iii. What are the different ways that outdoor learning can affect young people and how can they be measured?
- iv. What is the impact of children's access to nature from an educational and wellbeing perspective?
- v. What are the most effective education strategies for raising awareness and promoting behaviour change toward sustainable lifestyles among different demographic groups?

# 3. Early Years and Family Support: Provide the best start in life through high-quality early education and childcare to raise standards and help parents to work.

Our goal is for the early years sector to provide the foundations for children to have happy, healthy and successful lives, and to enable parents to work. The sector has some challenges in common with our other sectors but it faces a different local and systemic context. We are interested in evidence that will help us enable a healthy and sustainable early years market which maximises the valuable outcomes of the sector.

### 3a. Which services, programmes and interventions are effective for improving parenting capacity and quality and the early years home learning environment?

- i. Which parenting programmes are most effective?
- ii. Are these programmes acceptable to families and easily scalable?

## 3b. What can we do to support children and their families develop well from birth before entering formal education (and to the start of adulthood for those with SEND)?

- i. How effective are the Family Hubs pilots in improving outcomes for young children and their families? What works best to engage families and deliver services?
- ii. How do we improve parental access to, and engagement with, family services? How do we improve connections and relationships between parents and professionals (e.g. through parental networks)?
- iii. What offers would further incentivise parents, particularly from disadvantaged communities, to take up childcare and get back into work? This should include building a local level understanding of supply and demand, costs, and provider profit margins.

### 3c. What work in improving the supply, demand and quality of both provision and the underlying workforce in early years?

- i. How can high quality training and support for the early years workforce improve child outcomes?
- ii. What are the barriers to early years staff (including childminders) recruitment and retention and how can they be addressed?

### 3d. How do we better provide for additional needs in the early years, with specific consideration of neurodiversity, speech and language, and mental health.

i. What are the characteristics of additional needs for children in the early years, with specific consideration of neurodiversity, speech and language, and mental health interventions?

ii. How can we best develop tools to assess development before school-age, so we can measure important changes in educational outcomes over time and understand the relative impact of Early Childhood Education and Care (ECEC) and home learning environment?

# 4. Vulnerable Children: Support the most disadvantaged and vulnerable children and young people through high-quality local services, so that no one is left behind.

A sizeable minority of children and young people in England face a significant range of vulnerabilities and disadvantages. These include those already known to children's social care, children in need, those eligible for free school meals (FSM) because of low family income, those with SEND, in particular those who have an Education, Health and Care (EHC) plans and those who attend Alternative Provision. Given the human, economic and social cost of poor performance in this area, we are seeking evidence on the best ways to improve outcomes for these children and young people, before issues become acute and require more significant intervention.

### 4a. How can we best support and promote mental health and wellbeing in schools, colleges and higher education?

- i. How can we best support children and young people with developing resilience and mental health through their schooling? What programmes and approaches are most effective and why?
- ii. How can school culture, leadership, teaching and curricula promote good child and adolescent mental health? How have schools improved their culture, leadership, teaching and curricula to both improve pupil wellbeing and attainment?
- iii. How are schools/colleges and the health sector working together to promote student wellbeing and to support children and young people with more severe problems (e.g. Education Mental Health Support Teams)?
- iv. How effective have whole school/college approaches to improving student mental health and wellbeing been? What factors underpin the most effective whole school/college approaches? How can schools/colleges effectively measure the impact of these approaches?

### 4b. How can we best support children and young people with special educational needs and disabilities (SEND) and those who attend Alternative Provision (AP)?

i. How can we improve the education experiences and outcomes for children and young people with SEND or in AP? How do we best identify needs and level of need, what are the benefits of early intervention, and what are appropriate outcomes to measure for this group?

- ii. How can children and young people with SEND and in AP be best supported in important transitions, including into post-16 education and adulthood?
- iii. How do we create a SEND and AP system that better meets the needs of children and their families? Building on the SEND and AP improvement plan, we would like to better understand local delivery, partnership working in the system, cost and financial stability. What does good provision look like and how can we share best practice?
- iv. What are the characteristics of the SEND and AP workforce? What are the barriers to SEND and AP staff recruitment and retention, and how can we overcome these?

### 4c. What are the risk factors for children's involvement in serious violence and what interventions and approaches are most effective in reducing it?

- v. What are the risk factors for children's involvement in serious violence, and how can these be used to target early intervention support most effectively?
- vi. What have been the impact and effectiveness of the AP Specialist Taskforces and SAFE Taskforces programmes? What are the implications for spreading and scaling the models?
- vii. How does a child's journey through different systems of support, and the different qualities of the experiences along the way, serve to protect or expose them to involvement in serious youth violence?

## 4d. How do we best support children, young people and their families within the social care system and prevent poor outcomes, including recruiting, retaining and training our workforce?

- i. How effective are the key reforms set out in 'Stable Homes, Built on Love' in response to the Care Review that seek to improve the provision of children's social care across Local Authorities? These include recruitment of foster carers, support for kinship carers and provision of children's care placements.
- ii. How can we best identify and intervene early to support vulnerable children and their families before they enter the social care system?
- iii. What are the characteristics of the specialist care workforce (e.g. social workers, children's homes, and early help providers)? What are the barriers to specialist staff recruitment and retention, and how can we overcome these?

#### 5. Artificial Intelligence (AI) and Technology: Harness the use of AI, technology and data across our sectors to support safe and effective use within education

Digital technologies, and AI in particular, will provide great opportunities – and potentially challenges – for teaching and school management. We want to make sure that we have a strong evidence base as these technologies grow in use.

### 5a. What are the potential impacts of AI, and how can new technologies be used safely and effectively within education?

- i. What are the potential long-term opportunities and challenges of AI use in education at all stages?
- ii. In what ways can AI and other digital technology reduce teacher workload and improve student outcomes? How can AI and digital technology impact on productivity?
- iii. How do AI and other digital technologies support existing ways of working in schools and colleges? What are the main opportunities for the future?
- iv. What are the cyber security risks within the school estate? What is best practice for cyber security in schools and how can we scale this across the school estate?
- v. What are the best ways to ensure that AI is used safely, ethically, and in ways that protect the data and interests of children, young people, teachers, and schools and colleges? What forms of regulation and enforcement may be appropriate?
- vi. What are the most effective approaches to upskilling the education workforce to use AI well? What impact could this have on productivity?
- vii. How can AI and other emerging technologies be implemented in education settings so that they do not widen existing inequalities or create new inequalities?
- viii. How has the increased accessibility of generative AI influenced HE and FE providers and students?

### 5b. How can the impact of digital technology be robustly measured, and implemented in a way that supports teachers and learners?

- i. How can we adapt research methodologies to robustly measure the impact of technology in education, given its fast-moving nature?
- i. How do device ratios impact students and teachers?
- ii. What are the most robust methodologies for assessing the effectiveness of technology used for education?

### 5c. What approaches or innovation are needed to support the efficient handling of data within education settings?

i. What models of management and professional development of teaching and nonteaching roles support efficient and safe use of data and technology including AI?

- ii. What resources are required to ensure the safe and efficient handling of data in education settings?
- iii. What innovative approaches to data in education could increase staff capacity and reduce workload?



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