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Pro-Director Foreword

As Pro-Director and Vice-Dean Research, it gives me great pleasure to introduce this new collection of IOE impact stories, a suite of recent and ongoing projects that showcase the scale and impact of IOE’s research.

Impact, engagement and knowledge exchange are fundamental to our understanding of what makes excellent research. At IOE, our research is driven by the impact that it makes on the scientific community as well as on individuals and wider society. It is a commitment shared by all our researchers, academic staff, and students, and it is borne out in the ground-breaking research we undertake in collaboration with our many partners and funders, research participants and stakeholders, who support our endeavours.

The stories in this publication showcase how our work is helping to reframe debates and to influence the development of policy and practice in order to address critical societal challenges. They reflect our strategic priorities, as outlined in our Strategic Research Plan, in the pursuit of research excellence to better understand and shape the world we live in.

We are proud of the richness of our research and the disciplinary breadth of these impact stories, which encompass education and social science, and cover the life course from children and families, young people, and adulthood. The breadth and impact of our work from education, public health and gender equality to global development are hallmarks of our achievements. We are grateful to the researchers for sharing their stories with us and for the work they have undertaken in supporting high quality education and social research.

We are a community that looks outwards too and is globally engaged in shaping the future of research. As the stories show, we continue to be bold in creating new synergies and methodologies. This is what places IOE as a world leader in research excellence and innovation.

Professor Lynn Ang
Pro-Director and Vice-Dean Research
IOE, UCL's Faculty of Education and Society
March 2022
Better policy and practice to support more equitable science participation

Encouraging a diverse range of people to pursue scientific careers is vital to maximise scientific innovation and advance social justice. But despite international efforts, barriers to participation remain. To address these concerns, an IOE team developed and trialled the Science Capital Teaching Approach (SCTA) in collaboration with teachers. The SCTA was published in 2017 for public use.

Research showed that the SCTA resulted in significant increases in student science capital, positive attitudes to science and changes to teaching practice.

The team has delivered training on the SCTA to over 40 organisations in the UK, as well as international training. The key principles of the SCTA approach have been mainstreamed within the strategic plans of the Science Museum, Institute of Physics, the Ogden Trust and the Greater London Authority, to name a few.

The influence of SCTA has grown significantly, creating a step-change in how science education is understood and delivered in over 80 countries. Education providers are now equipped to help students to find more meaning and relevance in science, reducing barriers to science participation for millions of young people and improving professional capacity internationally.
Maximising the Impact of Teaching Assistants (MITA) is based on the largest programme of research on Teaching Assistants (TAs) worldwide. It identified an urgent need for schools to reassess and change the way they use TAs by demonstrating, for example, that routinely used approaches to deploying and supporting TAs had a negative impact on pupils’ academic progress, especially pupils with Special Educational Needs and Disabilities (SEND). Overreliance on TAs for pupils with SEND in mainstream schools led to separation and segregation in the classroom.

The research led to an explanatory framework and guidance rethinking the TA role and resulted in a series of handbooks and accessible resources for schools and TAs that translate the research into actionable strategies.

The findings also formed the basis of national guidance written with the Education Endowment Foundation: Making Best Use of Teaching Assistants (MBUTA), which was distributed to all schools in England.

Independent evaluations show that the widespread awareness of MBUTA in schools has resulted in substantial changes in attitudes and practices relating to TA deployment. This impact is also seen internationally. For example, the New Zealand government used the MBUTA guidance to inform national policy on paraprofessionals and training for more than 3,500 teachers, with a demonstrable impact on practice.
Using data from the Millennium Cohort Study, researchers at the Centre for Longitudinal Studies provided the first evidence highlighting the scale of mental ill-health among young people across the UK. The research estimated that one in four 14-year-old girls and one in ten boys of the same age were suffering high depressive symptoms. It distinguished population wellbeing and mental health, and examined the influences of different spheres of young people’s lives on each.

To mobilise the impact of the research an infographic was developed, highlighting risk and protective factors for mental wellbeing and mental health, and revealing that the drivers of each often differ. This was highly effective in communicating the findings to non-academics including policy makers and civil servants.

The findings informed the Government Green Paper on Transforming Children and Young People’s Mental Health Provision (Dec 2017), influenced Public Health England’s five-year mental health strategy through the case made for a whole system response to both the mental health and wellbeing of young people, and have guided decision-making at the Department for Education, through improving their understanding of the expected impacts from school-based interventions to support mental health and wellbeing.

Tackling mental ill-health among young people across the UK: the data and research evidence that underpin national policy and planning
Most student financing systems are in crisis because they have time-based repayment loans (TBRL), requiring repayments regardless of circumstances. Consequently a significant proportion of graduates default, inflicting major damage to credit reputations, and constraining government budgets. The situation has been dramatically exacerbated with the economic trauma associated with COVID-19.

Far better is the use of income-contingent loans (ICL) in which repayments are only required when borrowers have the capacity to do so; this insures against repayment hardship and defaults, and maximises government loan revenues.

State-of-the-art modelling undertaken at IOE with government officials (in Brazil, Chile, Colombia, Japan, Malaysia and the US) has demonstrated the advantages of the development of country-specific ICLs. Consequently equitable and affordable ICLs have been designed in a number of countries where loans are operating particularly poorly. For example, research with officials showed conclusively that a well-designed ICL for Colombia would improve revenues and eliminate repayment hardships, and in October 2021 this resulted in legislation being passed introducing an ICL in Colombia in 2022; senior politicians and officials have singled out the hugely important role that IOE played in these reform processes.
Making an impact on UK and international policy for skills acquisition, outcomes and job quality

Interdisciplinary and comparative research undertaken by the Centre for Learning and Life Chances (LLAKES) has drawn attention to international differences in skills acquisition and job quality and provided policy makers, practitioners and employers with adaptable frameworks to enhance policy and practice.

The development of the ‘expansive-restrictive’ conceptual framework to describe approaches to apprenticeships, has been widely taken up in the UK and internationally and led to a stronger focus on apprenticeships at the ‘expansive’ end of the continuum. A quasi-cohort analysis of data in two international surveys measured literacy and numeracy acquisition in upper secondary education and training. Countries most successful in raising skills levels and reducing inequalities had more integrated systems, with longer programmes, common core curricula with mandatory numeracy and literacy learning, and higher rates of participation in vocational tracks.

An outcome of research undertaken across 15 European countries was the development of seven indicators to evaluate job quality. Members of the LLAKES centre wrote reports for, and participated in, expert committees of the Organisation for Economic Co-operation and Development (OECD) and Foundation for Living and Working Conditions and their findings informed a European Parliament Resolution on work-life balance and the recommendation that these indicators are monitored.
Transforming Holocaust education and related policy across England and beyond

The Holocaust has been a mandatory subject in the Key Stage 3 National Curriculum for history since 1991, yet research undertaken by the UCL Centre for Holocaust Education identified significant limitations in existing classroom practice and entrenched misunderstandings and gaps in student knowledge. To challenge these misconceptions the team developed initial teacher education, CPD, MA and Beacon School programmes to form a pathway of professional development targeting teachers’ needs at every stage of their careers that were based on the research. Since 2009, these programmes have benefitted more than 21,000 English secondary teachers, transformed classroom practice and enriched the knowledge and understanding of millions of students.

The underpinning research also resulted in the production of a ground-breaking secondary school textbook to confront student misconceptions of the Holocaust, over 48,500 copies of which have been distributed to over 1,400 schools; centrally informed the UK government’s national Holocaust Learning Centre and the policy directions set by the International Holocaust Remembrance Alliance, and led to the development of a pre-service teacher-training programme commissioned by UNESCO and the Organisation for Security and Co-operation in Europe (OSCE Office for Democratic Institutions and Human Rights) which is employed in more than 60 countries worldwide.
Grouping students by attainment is widespread in primary and secondary schools in the UK, a practice that has been endorsed by successive governments throughout 1997 to 2015. The Best Practice in Grouping Students project undertaken by researchers at the IOE showed that attainment grouping was promoting educational inequality. Through a randomised control trial involving 24,742 Year 7 and 8 students, the findings demonstrated that about a third of students were misallocated to sets, that students in low sets were subject to poorer pedagogy and lower aspirations and that over time the gap in self-confidence and in attainment between low and high attaining pupils widened. A further study, Best Practice in Mixed Attainment, identified key principles for effective practice from its findings.

The team used the research findings to raise awareness of the harmful effects of attainment grouping working directly with the Department for Education and senior Ofsted officials and by encouraging professional debate among teachers through conference presentations, mainstream media and an on-going campaign.

The research has been a catalyst for a major shift in the government’s approach to attainment grouping. The promotion of attainment grouping has been halted with policy now encouraging teachers to reflect on and think critically about grouping practices to the benefit of millions of learners.
Influencing government policy on teacher workload

It is well known that excessive teacher workload is linked to challenges with teacher recruitment, retention, job satisfaction and mental health. And yet for a long time there was little robust evidence for England setting out the hours teachers worked each week, the activities that they spent this time on, whether this had changed over time or not and how this compared to other education systems. For the last seven years, researchers at the IOE have been filling this gap through quantitative analysis of large-scale data sources.

Pivotal to this sustained programme of research was the Teaching and Learning International Study (TALIS) 2013 report for England authored by the team at IOE and published in 2014. The key finding that lower secondary school teachers in England were working much longer hours that teachers in other countries led the Department for Education to establish independent review groups; commit to measuring teacher workload biannually; publish advice and guidance to schools on how workload can be reduced; and fund collaborative projects to reduce workload. The influence on government policy went in tandem with substantial attention to the research findings from the media, think-tanks and teaching unions upon its public release.
Optimising systematic reviews for better policymaking in public health and global development

Systematic reviews provide a comprehensive and unbiased assessment of research evidence to inform public health decision-makers about whether policies are likely to be effective. New methods developed at the IOE to enhance the way systematic literature reviews are undertaken have improved global public health decision-making. Solution-focused reviews produced by the Evidence for Policy and Practice Information and Coordinating Centre (EPPI-Centre) have informed national-level policies including plain packaging for tobacco in the UK, compensation for people who acquired Hepatitis C in UK hospitals, healthcare record keeping in Afghanistan and apprenticeship schemes in India.

These influential empirical findings build on the researchers’ advances in systematic review methodology and information technology. National and international organisations have adopted these advances to improve their systems linking policy and research. The training and guidance provided by the team across disciplines and policy sectors strengthens global capacity to undertake reviews.

Since 2000, the EPPI-Centre has produced more than 50 commissioned reviews for the Department of Health and Social Care, the Department for International Development, now replaced by Foreign, Commonwealth & Development Office, and the World Health Organization. Together, these have brought about life-changing benefits in the UK and abroad.
Gender equality in education is a major concern in international declarations and national policy commitments. However, the ways in which gender is defined are not always clear; nor is it evident whether policies bring transformative results. Research undertaken by the Centre for Education and International Development (CEID) has addressed these weaknesses through 1. analysing and conceptualising the complexity of gender and other inequalities in education and 2. through collaborating with multiple partners to co-produce evidence to inform policy and practice.

Scholarship on the conceptualisation of gender equality and marginalization in education influenced Department for International Development’s Girls’ Education Challenge programmes and the accountability for gender equality in education project led to the development of an indicator dashboard, the AGEE framework, pictured below, that is being used by UNESCO to monitor progress towards education targets and changes in existing laws and policies.

Findings from the End Gender Violence in Schools project informed the development and implementation of action plans in four countries led by Education Ministries. In Ethiopia, for example, the government is revising their Code of Conduct to Prevent school-related gender-based violence and has been training teachers and improving coordination between services benefitting over 23 million children.

Overall, this programme of research has influenced the release of long-term funding of £800m for implementation projects. Young people in many more countries in Africa and beyond have benefited as programmes are rolled out through agencies.
In 2018, in response to public outrage at sexist imagery in public advertising, Transport for London (TfL) commissioned the IOE to explore diverse women and girls’ experiences of advertising in London. Using participatory methodologies and an intersectional approach the research found that not only was advertising felt to be sexist, it failed to include and represent racial, religious, cultural, sexual, class and body diversities. For instance, over half of women from minority ethnic backgrounds felt they were not well represented in advertising, older women felt almost invisible, and women of all ages were concerned about photoshopping.

The resulting research report ‘Women we see: Diverse girls and women’s experiences of gender and advertising in London’s Public Spaces’ directly informed the creative brief and judging criteria for two Greater London Authority and TfL UK-wide competitions challenging brands to produce more equitable, socially responsible advertising campaigns. Several award-winning advertising campaigns resulted including Holland and Barrett’s ‘Me.No.Pause’ that breaks the taboo of aging women in advertisements and highlights women’s experiences of menopause. The UK advertising sector, including the National Advertising Standards Authority, has responded with changes to policies, guidelines and advertising campaigns.
Putting social and emotional skills at the heart of education policy

Research undertaken at IOE has provided much needed clarification of how to conceptualise and measure ‘non-cognitive’ or ‘soft’ skills; how these skills predict later life outcomes; and the importance of continued support for building and maintaining such key competences. A crucial finding of the research was the need to consider the co-development of social and emotional as well as cognitive capabilities and the fact that these competences cross-fertilise and build on each other.

The research also demonstrated the links between social and emotional competencies and life-course development, with students who are supported in their specification of goals and in planning their attainment (agency) doing better. This concept of agency informed the Organisation for Economic Co-operation and Development (OECD) 2030 Education and Skills Framework and underpinned the OECD’s development of the Learning Compass that has turned the concepts into practice. The Learning Compass has stakeholders in over 40 countries including China, USA, Malaysia, Mexico, Russia and the UK.

Nationally the research findings have influenced policy developments including the Public Health England report on ‘Local actions on health inequalities: Building children’s and young peoples’ resilience in schools’ and a framework developed by the Office of the Children’s Commissioner that measures and monitors vulnerability in children.