

<b>Institution: King's College London</b>
<b>Unit of Assessment: UoA25 Education</b>
<p><b>a. Context</b> The Department of Education and Professional Studies (<b>DEPS</b>) is focused on transforming policy and professional practice, both by informing public debate and through more direct action-oriented interventions. Users and beneficiaries span UK local &amp; national governments, international organisations, policy bodies and overseas governments, professional associations and learned societies, voluntary and commercial organisations and individual practitioners. The main fields of impact and key user constituencies of our four research centres are as follows:</p> <p><b>CENTRE FOR RESEARCH IN EDUCATION IN SCIENCE, TECHNOLOGY, ENGINEERING &amp; MATHEMATICS (CRESTEM)</b> <u>Impact fields:</u> (i) curriculum, pedagogy &amp; assessment; (ii) aspirations, attitudes &amp; participation; (iii) learning in formal &amp; informal contexts. <u>Users include:</u> Dept. for Education, Ofqual, Scottish Government, local authorities, US National Academies of Science Panel, OECD, scientific societies, science centres and museums, teachers and teacher educators in the UK and overseas.</p> <p><b>CENTRE FOR LANGUAGE, DISCOURSE &amp; COMMUNICATION (LDC)</b> <u>Impact fields:</u> (i) language and literacy education; (ii) language and discourse in education, health and the workplace. <u>Users include:</u> Dept. for Work and Pensions, DEFRA, NHS, General Medical Council, Royal College of General Practitioners, Jobcentre Plus, teachers and teacher educators in the UK and overseas.</p> <p><b>CENTRE FOR THEOLOGY, RELIGION &amp; CULTURE (CTRC)</b> <u>Impact fields:</u> (i) religious education; (ii) religious, social and political engagement; (iii) Christian mission and ministry in a contemporary context. <u>Users include:</u> Cabinet Office, Office for Civil Society, Labour Party, Citizens UK, Church of England, church ministers and religious educators.</p> <p><b>CENTRE FOR PUBLIC POLICY RESEARCH (CPPR)</b> <u>Impact fields:</u> (i) public service restructuring; (ii) professional knowledge &amp; development; (iii) professional values &amp; ethics; (iv) equality &amp; social justice. <u>Users include:</u> Department for Education, No 10 Policy Unit, Cabinet Office, Liberal Democrat and Labour Parties, teachers and teacher associations, NHS, Health Foundation, Royal Pharmaceutical Society, Tate, UNESCO, and EU trade union and employer federations.</p>
<p><b>b. Approach to impact</b> Advancing knowledge and promoting change 'in the service of society' are key to the College's mission, and have always been integral to DEPS' philosophy. Our research is designed both to inform and challenge existing policy and practice, and to help institutions, professionals and others critically reflect on, effectively engage with and actively shape the processes that concern them. There are five elements in our approach to impact:</p> <p><b>1. Making impact, dissemination, use &amp; applicability integral to research design through: a) <i>The inclusion of key stakeholders on project advisory groups.</i></b> This enables users to feed in at each stage, tap directly into, and help to disseminate the knowledge produced by projects. For example, the DEPS-led ESRC Targeted Initiative in Mathematics and Science Education programme has a 28-strong stakeholder advisory group whose members have fed into publications for policy audiences and hosted policy seminars (e.g. on the DfE's National Curriculum Review and its on-going Science and Mathematics strategies); and the Institute of Physics is developing projects on ethnicity and gender directly influenced by its advisory group participation (CRESTEM impact field: ii / CPPR:iv). <b>b) <i>Collaborative projects designed and conducted in partnership with users.</i></b> Examples here include a collaborative EU-funded project with trade unions and employer federations across eight countries which led to the development of a 'transparency tool' to facilitate the comparability of building trade qualifications within the European Qualifications Framework (CPPR:ii); and an AHRC knowledge exchange fellowship, with Imperial College NHS Trust, which produced new materials to support policy and professional development on patient-practitioner partnership working, generated through discussion with key stakeholders, including the Royal College of Physicians' Patients' &amp; Carers' Network (CPPR:ii,iii). Since 2008 we have also collaborated on four EU FP7 projects that have developed research-based assessment or teaching materials for schools, museums, science centres and botanic gardens and two US National Science Foundation projects (with partners including the San Francisco Exploratorium and Afterschool Alliance) providing online research summaries for practitioners (CRESTEM:iii). In addition, we have hosted Technology Strategy Board-funded Knowledge Transfer Partnership projects with Engineering UK (CRESTEM:i) and the Royal College of GPs (LDC:ii) and collaborative studentships with the Natural History Museum (CRESTEM:iii), LB Newham (CRESTEM:i), Muslim Council of Britain (CPPR:iv/CTRC:i) and the Royal Pharmaceutical Society (CPPR:i-iv), thereby contributing to capacity building in, and supporting the kind of 'people movement' necessary for, effective knowledge exchange practice. <b>c) <i>Incorporating collaborative</i></b></p>

**elements within academic-led projects.** This is often achieved in the context of extended programmes of research designed to address specific problems (e.g. see our impact case studies (REF3b) on Assessment for Learning, Cognitive Acceleration, Science Education). Other examples include the ESRC-funded Improving Confidence & Competence in Algebra team working with teachers to develop a series of professional development activities to support the integration of formative assessment into the mathematics curriculum (CRESTEM:i&ii); and an AHRC-funded visual ethnography of young Polish migrants' spirituality, with Plymouth Catholic Diocese & Plymouth Art Centre, which helped inform Diocesan youth officers' engagement with newer members (CTRC:iii). **d) Developing follow-on projects, resources & activities to facilitate the incorporation of research insights into professional practice.** Examples here include: the development of a book and DVD to generate teacher reflection, debate and practical ways of responding to the realities and dilemmas of urban classrooms as part of an ESRC follow-on study on urban classroom culture (LDC:ii); the development of training DVDs for GPs working with multilingual patient populations and for overseas trained doctors, funded by the NHS London Postgraduate Deanery as a follow on to a Warburg Trust-funded study of doctor-patient communication (LDC:ii); use of EU funds to run teacher education workshops and establish an online community of practice to help develop inquiry-based learning and assessment in secondary level science education across 15 European countries (CRESTEM:i); and a King's-Tate research collaboration exploring the professional knowledge base of museum and gallery educators, which has, via dissemination to 12 arts and science institutions across the UK, stimulated reflection on the practical implications of the work for staff recruitment and training (CPPR:ii,iii).

**2. Contributing to policy & practice through public & professional debate** DEPS researchers regularly participate in media interviews, supported by a dedicated Press Officer within King's Press Office (>10 staff). For example, Hodgen's research on standards in mathematics featured on BBC Breakfast, Radio 4's *Today* programme and extensively in the print media, and has been cited regularly in ministerial speeches (CRESTEM:i). Since 2008 DEPS staff and their research have appeared in over 150 radio and television interviews and newspaper articles, and staff engage directly with the public through other channels: popular books, such as Askew's *Primary Mathematics for Mums and Dads* (>20k sales, translated into five languages and re-published in the US) (CRESTEM:i) and McGrath's 'family' of popular text books (>400k sales, translated into 15 languages) (CTRC:iii); sermons (CTRC:i-iii), and public lectures (McGrath spoke to over 8000 people during a recent tour of the US - CTRC:iii). Since 2008 DEPS colleagues have produced over 100 policy and professionally focused researched-based articles and books, delivered over 120 keynote addresses to national and international education policy and practitioner conferences, and given over 300 talks to practitioners. There are many examples of policy and practice take-up of DEPS research from such activities (e.g. see our impact case studies, REF3b).

**3. Contributing to policy committees & commissions** DEPS staff serve on influential policy bodies, and provide them with expert advice. For example, Osborne serves on the US National Academies of Science Panel, Brown serves on the Royal Society's Advisory Committee on Mathematics Education and its Education Committee (CRESTEM:i), Francis directed the Pearson/RSA Academies Commission, key recommendations from which have subsequently been taken up by the DfE and Labour Party, and the Wolf Report recommendations on vocational education have been accepted by the DfE (CPPR:i). Since 2008 we have participated in over 40 expert policy advisory groups in the UK and overseas, responded over 50 times to requests to advise government ministers, officials, advisors and parliamentary committees, and submitted over 20 responses to government and other official consultations. Black, Brown and Hodgen, for instance, submitted written advice to the National Curriculum Review on numerous occasions. Black's evidence was cited more extensively than any other in the Expert Panel's final report. Subsequently, he was invited to produce the drafts of the National Curriculum Programmes of Study for Physics at Key Stages 3 and 4, and he is currently involved in drafting new criteria for GCSE Physics, and for the physics component of GCSE Science (Double Award) (CRESTEM:i).

**4. Building & maintaining stakeholder relationships** Long-term relationships with stakeholders are developed through colleagues' active participation in non-academic organisations connected with DEPS' work, in which they often occupy positions of leadership. These include **a) Professional associations:** for example, Roberts' links with the RCGP over nearly 20 years have helped to secure take up by GP trainers of her research on the linguistic penalty suffered by black

and minority populations in health consultations (LDC:ii); and through Leung's close involvement with the National Association of Language Development in the Curriculum, insights from his Cormenius-funded research on working with minority students fed into a Teaching Agency-funded programme for teacher education providers and DfE and Ofsted officials, and a teacher development programme funded by the Bell Foundation (LDC:i). **b) Policy and community organisations:** Bretherton and Rowlands, for instance, are closely linked to Citizens UK (the latter as Theologian in Residence 2011-12), and, in the 2010 General Election, in which community organising figured prominently, the combination of strong ties to Citizens UK and recent AHRC research led to Bretherton advising all three major political parties. He subsequently served on the Cabinet Office's Community Organisers and Community First Expert Reference Group, which helped oversee the delivery of the contract to train community organisers, wrote commissioned briefing papers for Nick Hurd (Minister for Civil Society) and the Office for Civil Society, and advised the Labour Party on establishing the Movement for Change, which promotes community organising in the labour movement (CTRC:ii). This example illustrates how such embedding in non-academic networks can spawn impact trajectories that expand in unpredicted ways. Many of our research students are also influential in their communities of practice and hence well placed to feed research insights into policy and practice. For example, two current doctoral students have briefed DfE ministers and officials on mathematics in the National Curriculum Review (CRESTEM:i); whilst Shapiro's PhD research fed into the development of LB Lewisham's Black Pupils' Achievement programme (which she led as Head of Lewisham's Ethnic Minority Achievement Service) and its successor, the Lewisham Pupil Ambassadors project (CPPR:iv).

**5. Infra-structural support for impact generation** Explicit measures to support and develop impact generation take a number of forms: **a) External appointments:** we have appointed several Visiting Fellows with extensive policy-world experience - e.g. Bridgford (International Labour Organisation, ex-European Trade Union Confederation advisor), Hill (ex-Audit Commission, No 10 Policy Unit, DfE, Home Office), Tomei (ex-Director, Nuffield Foundation) and Onion (ex-Qualifications, Curriculum Development Agency) – who hold seminars, run short courses and provide advice on project applications and the research-policy interface. **b) Impact planning:** building on the success of the RCUK requirements for pathways to impact planning, we now require this of all funded research. We have established departmental Impact Leads (Archer, Francis), and impact features as a standing item on the Department Research Committee agenda, providing an opportunity to share intelligence on upcoming tenders and policy issues. **c) Staff development & capacity building:** impact has increasingly become a key focus for staff development during the assessment period via mentoring and appraisal; and think-tank representatives, civil servants and academics with strong impact records have given talks at departmental seminars during 2011/12 and 2012/13. The research, policy and practice nexus animates our four research centres, and impact issues are both pervasive and sometimes explicitly thematised in centre seminars, for example, the 2010-2012 Research Workshops in Language & Literacy. 10 DEPS staff have attended media training courses since 2008; and we are now prioritising collaborative studentships with user organisations when allocating funds from our Rosalind Driver bequest for research students in science education. The DEPS-led ESRC Targeted Initiative in Science and Mathematics Education programme runs impact capacity development for all of its 25 academics, including media training led by journalists, and, with the Royal Society, has developed guidance on researcher-practitioner communication which has informed the 'developing relations with teachers' section of the ESRC's online impact toolkit.

**c. Strategy and plans** Our approach to impact, as manifested in our research aims (see REF5), is deeply ingrained in the department and its on-going research. In the period ahead, it will continue largely as set out above, but, in addition, we will seek to learn from and further embed the lessons of our most successful impact work, and take advantage of new developments in the infrastructural support for impact. Examples of on-going and planned programmes of work which are substantially framed by impact agendas include: 'Enterprising Science' (with BP/Science Museum) (CPPR:iv/CRESTEM:ii), work on applying a 'capabilities approach' to supporting people with long-term conditions (with e.g. Diabetes' and Parkinsons' clinicians and patient organisations) (CPPR:ii,iii), work with teachers and teacher educators on embedding critical pedagogy in RE classrooms (CTRC:i); and the 'queering ESOL' seminar series (ESRC, with IoE & Leeds) (LDC:i). We will continue to host meetings to share experiences and promote good practice, drawing on an ever-wider network of colleagues who work at the academic-policy interface. These measures will

## Impact template (REF3a)

be strengthened by additional infrastructural support at departmental and College level. As noted in REF5, our plans beyond 2013 incorporate a commitment 'to enhance the interactions and synergies between DEPS' research centres, increasing our capacity to address major contemporary processes affecting education & professional life'. On-going, termly cross-group meetings will provide a springboard for addressing this aim, which we envisage pursuing through three thematic foci: 'Learning, communication & contemporary media', 'Globalisation & superdiversity', and 'Transforming public services'. This development accords with and will be supported by two College-wide developments. **First**, the establishment of two bodies specifically focused on impact and outreach - the King's Cultural and Policy Institutes (KPI & KCI). Through existing research collaborations, and our joint MA with the Southbank Centre, DEPS already has good links with KCI, which aims to create an effective bridge between King's and the cultural and creative industries. KCI incorporates a science focus – its staff of 10 includes a Director of Science Engagement – and will support the impact of CRESTEM's research in the period ahead. Established in 2012, KPI seeks to promote knowledge exchange in all areas of public policy, and provides financial and intelligence resources to support projects targeting policy impact. For example, KPI has already funded a project (commencing Sept. 2013) to promote take up of the EQF transparency tool (see section b, above). **Second**, College-wide initiatives, coordinated by King's Interdisciplinary Social Science DTC and the Graduate School, will increase the opportunity for doctoral researchers to understand and develop the impact potential of their research through, for example, internships, policy-oriented methods training (via King's partnership with Ipsos-MORI), and three-month funding extensions for ESRC students to engage in knowledge co-generation.

**d. Relationship to case studies** The ecology of research-based change outlined in our case studies stems from a long-term commitment to knowledge exchange through the mix of strategies identified in section b. **Approach to impact**, above (indicated in the text below by numbers in brackets – 1a, 1b etc.). The case studies both exemplify these strategies and illustrate the range of users of DEPS' research - from international, UK and local government policymakers, through to voluntary and commercial organisations, schools and individual practitioners: Extensive uptake of **Assessment for Learning** by governments, schools and teachers has resulted from research developed collaboratively with teachers and local authority advisors (1c), DfES representation on the project steering group (1a), researchers working alongside civil servants and educators to help plan and then lead the national implementation of AfL in Scotland (1d), submissions to policy committees (3), and the wide dissemination of the research via training and talks for UK LAs, teacher subject associations, commercial training providers and schools, DfES officials, EC meetings and educationalists in 11 other countries, books, pamphlets, radio and TV (2). The original **Cognitive Acceleration** research involved extensive collaboration with teachers, was extended to primary schools by further collaboration with teachers, and has been widely disseminated through publications and professional development activities, leading to extensive take up internationally (1c, 1d, 2). Take up of our research on effective **English for Speakers of Other Languages** pedagogy by the DfE's *Skills for Life* programme, the DWP, teacher educators, and teachers has resulted, *inter alia*, from invited expert advice given by Cooke, e.g. on the drafting of the core curriculum for adult ESOL (3), practitioner guides developed with teachers and widely disseminated to training providers and teachers (1b, 2), and research-based DVDs sent to all Jobcentre Plus offices and institutions teaching ESOL (1c, 2). When changes to adult ESOL were proposed, Cooke briefed MPs, drawing on close ties with the National Association for Teaching English and other Community Languages to Adults (4). The funders of the **Post-16 Participation in Mathematics** study, Nuffield, brokered meetings with government ministers, coordinated the media strategy and led meetings with stakeholders (1a). These activities, together with our existing links with professional and policy organisations (2, 4), helped to ensure that the research came to the attention of government ministers and officials, thereby contributing to the policy shift described in the case study. The ESRC Targeted Initiative advisory group led to links with Gatsby (1a), which then provided funding for a teacher survey as part of the follow up work examining policy processes and teacher supply (1d). The **Science Education** research fed directly into curriculum and assessment policy and practice in England and Wales, the new US Science Standards and the OECD's PISA framework via the development and dissemination of research-based CPD resources and assessment tools (1c and d), participation in policy committees (3), and strong links with stakeholders (4).