Institution: University of Bedfordshire
Unit of Assessment: 25 – Education

a. Context

As part of the research strategy for the new University of Bedfordshire (UoB, formed 2006), the Institute for Research in Education (IREd) was created in 2008 to provide strategic leadership for research in education. IREd has two research units: the Education, Inclusion and Social Justice Group and the Learning Futures Centre. IREd research focuses on innovations designed to improve learner attainment and the quality of teaching (early years to HE). Staff have national and international recognition for their research on the semantic web, equity and inclusion, SEND, diversity (raising attainment), pedagogy, teacher development and leadership and management, change management, research-based practice and new models of research using digital technologies. Long-term business research links are outlined in Section b.

b. Approach to impact

IREd has a strong commitment to evidence informed practice which is demonstrated through publishing research in forms accessible to users supported by a developing approach to collaboration with users to scale up and internationalise small scale research; see UoB's £40K initiation of the online collaboration platform EdComms now co-funded by 19 institutions, from 4 countries. Reach, significance and impact is evidenced through the variety of national and international forms of engagement of staff. Our claim for impact includes these specific forms:

Benefit to society and reduction of harm – through our contribution to the provision of peer reviewed high quality research to teachers, higher education institutions (HEIs) staff and policy makers; through improved provision for pupils with SEND, raised pupil achievement (Maori pupils in New Zealand – NZ), awareness of ways to improve access to higher education (HE) for parent students; through print and web resource and advice (through consultancy) as documented in REF 5 and 3b, to underpin professional judgements.

Benefit to the economy – through research and 15 years of seminars with business to ensure products meet pedagogical needs; through income generation for companies and job creation through extensive textbook publishing over decades. Evidenced by sales and events.

Benefit to UK – through exporting UK ideas and values through print and web-based materials and consultancy/research projects. Evidenced through keynotes, invited presentations and sales.

Benefit to quality of professional life – through users having research-based resources to develop and validate processional practice. Evidenced by publisher user data and evaluations.

Impact claims are further evidenced by the content of outputs, sales, web statistics, repeat consultancies and funding which indicate user satisfaction, along with statements from users (national and international) which can be provided.

To ensure their work has impact, staff:
Conduct research into topics likely to make a systemic difference and co-research and co-publish with users. Evidenced by names and affiliations in web/print resources.

Translate research findings into practical applications – textbooks and web resources over 20 years, e.g. Multiverse, MESH (confidential sales and usage data show reach).

Undertake research and consultancy commissioned by users – see case studies.

Are leading on knowledge mobilisation with the international MESH (the Mapping Educational Specialist knowHow initiative) **collaboration.** Editorial Boards currently include members from 49 organisations from 9 countries.

Disseminate through academic routes plus press releases, research reports that are tailored to lay and professional audiences, seminars, conferences and workshops delivered to professional and non-academic audiences (e.g. teachers, parents, Local Authorities, policy makers, charities, National Union of Students, teaching and HE unions) and school partnership network meetings.

Main beneficiaries, audiences and non-academic user groups for IREd's research include:
Policy makers IREd researchers run government funded specialist programmes on Maths and SEND based on their research. In this context, the research supports the achievement of government policy priorities: contracts were awarded to IREd specialists in these fields. There is

also ongoing impact of earlier research, e.g. the European SchoolNet (conceptualised first in 1995) continues and involves ministries of 33 countries. The LGA Knowledge Hub (previously IDEA online communities of practice) continues (160,000 users). Policy makers are kept briefed about MESH which is the latest iteration of applied research in knowledge mobilisation using digital technologies starting with the IREd staff work on the EUN and UK Labour government initiatives, e.g. Department for Education (DfE), TeacherNet and the Teacher Development Agency (TDA) Teacher Training Resource Bank (TTRB) (2010, 124,000 page views/month). IREd staff are consultants on policy panels, e.g. EU, British Council and OECD, Standards and Testing Agency (inclusion), NUS (student guidelines on inclusion).

Business IREd researchers also work with digital technology businesses through research, consultancy and running private seminars as well as over fifteen years, annual public seminars at the London BETT exhibition (35,000 national/international delegates) for the British Education Suppliers Association (BESA). BESA represents 80% of the UK education market and has 300 member companies, with 150 of those being in the education technology field.

Learners whose teachers have access to materials designed to include the latest research, e.g. SEND (Wearmouth's award-winning *Beginning Teacher's Guide to SEN*, 2009); *Learning to Teach in the Secondary School* series of texts (all major secondary subject areas; first edition of core text was published 1994 and 6th edition in 2013); TTRB 2004-10 and the forthcoming MESH Guides.

School-based teacher training providers and **school-focused educators** (teachers, heads, assistants, Local Authority staff) who use IREd texts/web materials to keep up-to-date.

Unions through consultancy/keynotes (inclusion, knowledge mobilisation, CPD).

Universities and professional bodies worldwide through keynotes, invited seminars and through access to online educational resources (OERs) and UoB digital tools supporting new forms of research, collaboration and knowledge mobilisation, e.g. MirandaNet and EdComms online collaboration platforms (over 2,000 members together worldwide).

Charities through consultancy (inclusion) e.g. The Bedford Charity.

Local Authority workforce through knowledge mobilisation resources (print and web).

Additional information about a wider range of activity and its impact including that not included in the case studies is added here as requested:

Carmichael has undertaken extensive research which is influencing the adoption of **semantic web technologies** to capture and share existing research resources and knowledge, as well as to generate new research materials to support teaching, learning and research.

Digital Creativity and Literacy for HEIs research produced OERs and an open online module for teachers/ lecturers on digital technologies for teaching (HEA/JISC) (Jones, Younie, Leask).

Primary Education staff research pedagogy in different subjects and settings. Staff and students in primary education have a series of co-publications in the journal *Education 3-13* (2012, 2013) which are outcomes of the Primary group's research conferences (2010 and 2011). Mistry's work on men and early years teaching has led to outputs disseminated in the national media (e.g. Guardian Higher Education Network, 2013), websites (e.g. nursery world news, 2013) and journals (*Management in Education*, 2013; *Education 3-13*, 2013).

English: Gardner (PhD near completion) has been invited to run workshops in Australia based on his recently completed three-year funded project (Bedford Charity) on reluctant writers. He is a poet and author who also publishes on the teaching of creativity in English (e.g. *English in Education*, 2012). Simon Gibbons' work also supports this area.

Teacher Education: Staff and students have a long standing partnership with St Joseph's Teacher Training College in Malawi and won a 3-year British Council grant (DelpHE project) which has led to staff exchanges, research and publications on pedagogy (Gardner and Rix, *Journal of Social Sciences* 2012).

Diversity: Maylor's work (2009-13) on diversity and inclusion led to invited seminars with third sector organisations (e.g. Runnymede Trust, 2009-10), the Equality Challenge Unit (2012), the

United Nations Working Group of Experts on People of African Descent (2012) among others.

c. Strategy and plans

Philosophical approach: The central concerns of IREd researchers lie at the interface between theory and practice and reflect the inter-relationship between views of learning and of knowledge, and how they relate to policy, pedagogy, assessment and the specified curriculum. Going forward, IREd staff remain committed to evidence informed policy and practice, through undertaking research relevant to practitioners and policymakers and attention to publishing research in forms which practitioners and policymakers can use. Priorities are:

Inducting new staff into new methodologies to ensure impact, reach and significance of their work: Staff capacity-building is a key strategy for impact i.e. mentoring and encouragement for new researchers into scaling up and internationalising small scale work. Staff are encouraged to join research groups, professional associations and editorial panels, participate in external examining, present at conferences and to take up opportunities for national and international collaboration. Funds are set aside to support staff in these academic practices.

Industry: Continuing and extending collaboration: IREd members are continuing to undertake research and run private and public seminars for digital technology businesses (see Section b).
This work takes forward the research findings relevant to business published in BECTA (2010) *ICT Tools for Future Teachers 2 Reports: Schools & Industry* (Preston & Leask).

Partnerships: international: Continue and extend collaboration with existing partners in international collaborative research partnerships (and build relationships with new partners) which have a strong focus on ensuring impact, reach and significance. Emphasis will be placed on ensuring research excellence, scaling up small scale research and maximising outward facing research impact by realising research opportunities through international collaborations with existing partners, e.g. peak organisations International Council on Education for Teaching (ICET), Teacher Education Forum Aotearoa New Zealand (TEFANZ), Australian Teacher Education Association (ATEA), Organisation for Economic Co-operation and Development (OECD) and universities in Europe, Thailand, Pakistan, Australia, New Zealand and the USA.

Partnerships: local and regional school/university: Continue and extend regional partnerships (600 schools in the UK Eastern region), collaborative research, links with Teaching Alliance schools, research-informed specialist teaching on SEND, Maths, initial teacher education (ITE), postgraduate programmes, Teachmeets and fellowships.

Publishing for users: continue publishing *Learning to Teach* textbook series (see case studies, 25 years) and raise the standards of the research evidence which underpin chapters.

Systemic change – through dissemination and training Further develop translational research practice and publishing (as defined in Wellcome, 2013 'What is Translational Research?'). Extend training delivered nationally and internationally to MESH partners. Continue to brief UK civil servants and other research users on progress of MESH/translational research.

d. Relationship to case studies

The approach to impact supports the research of all staff and places a responsibility on senior staff to induct new researchers into 21st century approaches to research for impact. The approaches above apply to both case studies:

Case study 1: Improving access to education for marginalised groups: focuses on three interconnected areas of work: research with students who are parents, research with scientists and collaborative work across institutions in the UK and NZ that has impacted on policy and practice (inter)nationally related to (in) equality associated with 'race' and ethnicity, gender, and minority groups needs in schools and in higher education.

Case study 2: Improving the quality of education through exploiting digital technologies: focuses on 20 years of research and development collaboration nationally and internationally to research the affordances of digital technologies for school based education, professional development and for knowledge mobilisation and now developing translational research models.