Institution: The University of Leeds

Unit of Assessment: 25

a. Overview

This submission describes research in education by staff in the School of Education (SoE), the Leeds Institute for Medical Education (LIME), and the School of Politics and International Studies (POLIS). The largest group, SoE researchers, work within one of four Academic Teams: *Language Education*, *Science and Mathematics Education*, *Childhood and Inclusive Education* and *Learning, Leadership and Policy*.

During this REF period, our key achievements include the following:

i.   publishing regularly in the highest quality international journals such as *British Educational Research Journal*, *Oxford Review of Education*, *Applied Linguistics*, *Language and Society*, *Brain and Language*, *Psychological Science, International Journal of Science Education, Journal of Curriculum Studies* and *Medical Education*;

ii.   enabling significant research projects by securing grant income of over £1.78m, in austere times;

iii. sustaining and developing a critical mass of researchers in topical and important research areas, such as: typical and atypical child development, social justice, professional learning, teacher education, Adult English to Speakers of Other Languages (ESOL), the teaching of English as an Additional Language (EAL), the new sociology of childhood, and school science teaching and policy;

iv.   providing advice and consultancy to national and international bodies including British and international examination boards, Local Education Authorities, the Teaching Agency/ TDA, NHS Trusts, and overseas ministries of education, in this way (among others) strengthening the recursive relationship between our research and policy-makers and practice;

v.   securing the sustainability of the UoA by (1) moving from a situation where a substantial amount of teaching was undertaken by staff employed on teaching-only contracts, to a more equitable model that offers research opportunities for staff at all levels; and (2) by recruiting early career researchers across the UoA's range of expertise, putting in place individualised development plans for each.

b. Research strategy

Leeds educational research contributes to the central theoretical debates on education at the highest level, and we engage with and contribute to educational practice at regional, national and international levels. We achieve this through three inter-related research strategies, as follows:

(1) Identifying and connecting with macro-level themes and issues within our specialisms
(2) Achieving impact and relevance through engaging with user communities
(3) Supporting a dynamic and collegiate research culture

1. Identifying and connecting with macro-level themes and issues within our specialisms.
Our central strategy in RAE2008 was 'Intensification around areas of strength'. Our strengths continue to inform research priorities, but in this REF period we have extended the strategy to explicitly include a more programmatic focus on macro-level themes and issues. We undertake large-scale projects with the potential for significant contributions to educational theory and to the evidence base for impact on policy and practice. This often involves a series of projects, which develop issues over several years.

One example of the success of this strategy is our on-going suite of funded Science Education projects, spanning the whole of the current REF period and continuing, with funding secured for several more years, and future projects in development. These investigate participation and attainment among different groups of school and university students. Findings build on and contribute to understandings of young people's lives in our society, and have direct relevance for policy on STEM education (see also Impact Case Study 4: Contributing to evidence-informed curriculum policy in secondary school science). A second example is our ongoing study of the learning of ESOL and EAL in British cities, investigated through a series of funded projects in schools, colleges and adult education settings, which started in 2005 and has continued throughout the current REF period and forward: external funding (from AHRC) is in place until 2018 for one strand of this work and further projects are being developed. This work is generating a new,

more holistic and socially based understanding of the experience of this group of language learners, leading to theoretically significant publications as well as to work more directly aimed at practitioners (for instance, a teachers' guide to ESOL, and a large number of seminars, workshops and conference presentations with practitioners).

Priority areas for the future include: (1) developments of our international expertise in the new sociology of childhood, seeking to understand different aspects of children's participation in and experience of modern society; (2) broadening and deepening the focus on learning technology described in RAE2008, to encompass the impact of digital technology on young people's lives, learning and language use, both in developed and developing countries; (3) developing our longstanding expertise in 14-19 education and policy (also described in RAE2008) to study the progression of young people in post-compulsory education and training, and the factors that underlie choices and outcomes, investigated through a socio-cultural and cultural-historical activity theory lens.

2. Achieving impact and relevance through engaging with user communities: We have a long tradition of engaging with user communities throughout the research process, and since RAE2008 we have incorporated this explicitly into our strategy.

Almost without exception, our researchers started their careers as practitioners, and, through the Initial Teacher Education arm of our work, we have close working relationships with current practitioners in local schools and colleges, as well as with educational institutions and government bodies further afield. We communicate with education and medical professionals through a variety of means, such as our 'Centre for Policy Studies in Education' (CPSE) seminars, attended by senior educational professionals from across the region and workshops and presentations by LIME staff to medical professionals at all levels of seniority. As another means of ensuring that our research remains firmly rooted in and relevant to its user communities, the SoE actively seeks to recruit early career professionals, selecting people with a strong background in the practice of education in addition to excellent research potential.

There are numerous examples of our successful work with user communities. For instance, the Learning, Leadership and Policy team's series of projects on values and ethos in schools develops from and feeds back into some of the schools in our region. Our Childhood and Inclusive Education team researches and has published extensively on the role of SENCOs, work that is closely linked to the SoE's National Award for SENCOs program. A similar relationship between research and user communities exists in our EAL/ESOL research (see above), and is being strengthened with the launch of a new MA program for EAL practitioners. LIME has a collaborative project with Bradford Teaching Hospitals Foundation Trust researching simulation and medical training. These and other projects produce high quality research outputs as well as findings relevant to the communities and practitioners we work with.

3. Supporting a dynamic and collegiate research culture:
The UoA aims to provide the stimulating and supportive environment that we believe is necessary to enable theoretically important and socially valuable research.

Within the SoE, the four Academic Teams are central to this strategy, providing collegial units of senior, mid and early-career researchers. They also provide a setting for planning research, though the SoE also encourages cross-team projects.

There are a number of forums where colleagues meet to share research issues at various levels of formality. These include: writing workshops (see also below); several reading groups, on broad themes such as Activity Theory; a weekly Café Pedagogique focussed on issues around children; an annual staff research conference attended by the SoE and LIME staff as well as postgraduate research students; various seminar series within and across Academic Teams, such as a current series on Inclusion in Education and one on Professional Learning. Meetings also centre around specific projects; SoE policy is that research projects in development are reviewed and discussed regularly face-to-face by a small supportive group of colleagues from different Academic Teams and of different levels of seniority, from ECRs to professors. These meetings both strengthen the research project and are developmental for the colleagues reviewing it.

We frequently collaborate beyond Leeds, with other institutions. In this REF period these have included UCL, the Institute of Education, Birkbeck College and the Universities of Oxford, Oxford Brookes, Glasgow, York, Lancaster, Birmingham, Warwick, Leicester, and Northampton, among

others. The UoA also actively seeks researchers from outside to participate in its research culture. Around 15 international visiting scholars participate annually.

Evidence for the success of our strategy is Leeds' education's joint 27 position in the QS worldwide university rankings in 2013.

c. People, including:

i. Staffing strategy and staff development

Staffing strategy:

Our staffing strategy is closely linked to the third of our overall research strategies listed above: *Supporting a dynamic and collegiate research culture.* We aim to maintain and develop sustainable research excellence across the generations of researchers, and to provide a stimulating and equitable research environment. Strategy specific to staffing has three components:

1. *Providing equal opportunities for all staff to achieve their potential as researchers;*
2. *Providing effective and supportive research leadership;*
3. *Investing in the future.*

Providing equal opportunities for all staff to achieve their potential as researchers: The unexpected loss of senior academic staff from the SoE between 2008- 2011, which led to a temporary reduction in research capacity, has provided the opportunity to implement a policy of recruiting more early career researchers to ensure the long-term growth and sustainability of our research culture. Consistent with wider policy at the University, the SoE no longer appoints staff to teaching-only contracts. Only 2 staff (1.6 FTE) are now on such contracts (compared with 7 in 2008), with the expectation that all other staff are research-active. The support in place to achieve this, especially for early career researchers, is described below. As a result, our research income is growing strongly.

The UoA adheres to the University's Equality and Diversity Policy and Equality Objectives. The proportion of staff at professorial level (Grade 10) who are female is significantly higher in the UoA than across the University as a whole (36% of the professoriate in the UoA are female compared to under 20% in the University as a whole). Of 7 professorial appointments and promotions during the REF period, 3 were female. There is now a critical mass of female staff in senior positions, who are committed to mentoring female colleagues.

Providing effective and supportive research leadership: A key part of our strategy is to strengthen research leadership to realise the potential of our recruitment policy. To this end, since RAE2008, the UoA has made 3 external professorial appointments, all of whom bring proven academic leadership skills as well as international reputations as researchers in their fields. In addition, there have been 4 internal promotions to chairs and 1 to a readership. In combination with the 4 existing chairs in the SoE and 1 located in LIME, this provides a critical mass of high calibre, experienced research staff to lead and develop our research culture. Each SoE Academic Team now includes 2 or more professors. This team of senior research leaders meet biennially to review macro-level research strategy, in addition to committee meetings overseeing day-to-day research activity.

Investing in the future: The UoA is ensuring succession planning through our strategy of recruiting exceptionally promising early career researchers as lecturers. For each new colleague, a mentoring and research support package is put in place. Time and guidance are given as needed to complete doctorates, develop early publications from doctorates, and start working on grant applications, as appropriate to the individual. For colleagues new to research, the SoE workload model allows 160 hours per year in addition to the baseline allocation of 480 hours for research; i.e., nearly 40% of their overall workload is devoted to research. This ensures that early career staff are able to grow rapidly as researchers without overwhelming pressure from teaching.

Staff Development: Staff development policy and practice are focused on the related objectives of developing the UoA's portfolio of high quality research and of enhancing individuals' research capacity and career prospects. Development opportunities are offered within the Leeds-based community at academic team-, school-, faculty- and university-level, through formal and informal but structured mentoring and working alongside senior, more experienced colleagues. Junior staff are involved in a wide range of academic leadership roles such as PhD upgrade panels, in-house conference and seminar organisation, committee membership and peer reviewing and mentoring

of developing grant applications. Staff participate in two formal schemes: Staff Review and Development Scheme (SRDS), and the Annual Academic and Workloads Review (AAWR). SRDS uses one-to-one meetings with a line manager or senior colleague for performance self-appraisal, advice, and goal-setting. SRDS has a mentoring focus. AAWR is also annual, and involves a meeting with a senior colleague, normally the Academic Team Leader, and the Head of School. The purpose is to review performance and workloads, with the aim of ensuring that staff are meeting their own and the School's objectives, with equitable workloads that enable their career development.

We facilitate development opportunities for our early career researchers in the wider educational research and social science community. For early career academic staff, mentoring within academic teams provides support for their writing for publication and developing their ideas for research projects. Half-day writing workshops are held weekly, year-round, and are open to any member of academic staff; typically up to 15 attend, from early career researchers to professors. We have funded an annual writing awayday, attended by 17 staff in 2013, which from 2013-14 will become a twice-yearly event. University-wide opportunities are available to staff of all levels of experience. For senior colleagues, these include the University's 'Tomorrow's Leaders' programme (in which 9 members of staff have participated during the REF period), workshops for PIs and research team leaders, grant application-writing workshops, workshops on planning and managing research projects, and academic leadership programmes for new professors

ii. Research students

The SoE provides a welcoming and stimulating environment for postgraduate research (PGR) students, who form an integral part of our academic community, and contribute towards the vibrancy of our research culture. There are currently 101 PGR students in the SoE, of whom 8 are funded by ESRC and 5 by 100% SoE Scholarships; 9 are 50% SoE funded, 34 self-funding, and 45 funded by other means, for example their employer or Government. During the REF period, 69 doctorates were awarded, and we have had 13 ESRC funded studentships.

A range of support and skills development opportunities for PGR students are provided across the university, including Vitae events. The Leeds Social Sciences Institute (LSSI) fosters interdisciplinary and international collaboration and coordinates training and skills development, notably in methodological innovation. The LSSI also organises high profile engagement activities, such as a masterclass series that introduces different methodological perspectives and research design issues, and a 'big society/good society' round table, which allowed students to engage with leading experts on key contemporary issues.

The SoE is part of the White Rose/ESRC Doctoral Training Centre in social sciences (DTC). This was established in October 2011 and provides a wide range of support to social science PGR students from Leeds, York and Sheffield Universities. Education is one of 20 clusters of discipline-specific and cross-disciplinary training pathways supported by the DTC, offering our PGR students high quality training and opportunities to engage with Sheffield and York students through joint special events and provision such as summer schools, for which funds are available. The DTC hosts two annual conferences, including an induction conference for new students.

Higher Education Innovation Funding (HEIF5) has supported the Faculty's increased engagement with external partners in order to negotiate PGR placements. Transferable training skills programs are offered though our Staff and Departmental Development Unit (SDDU).

The SoE hosts an annual DTC-wide research student conference, organised by a student-led committee. This provides an opportunity for PGR students to organize an academic event, and to present their research before a critical yet supportive audience consisting of their peers from White Rose DTC Universities and staff of the SoE.

On an individual level, as is consistent with the post-Roberts agenda for doctoral education, PGR supervisors support their supervisees' development as early career researchers in the broadest sense. Supervisors provide mentoring in skills such as oral presentation, writing for publication, responding to journal reviewers' comments, and preparing for the viva. Within six weeks of registration, each PGR student negotiates a personal development plan with her/his supervisors, revised every six months in the light of progress made, combining mentoring and advice with structured development provision, drawing on the faculty and university resources described above.

All SoE PGR students are part of one of the four Academic Teams, and are invited to their

team's seminars and research focussed meetings, as well as to SoE, Faculty and University seminars. The SoE is currently investing in major building work to create and manage office space, so that PGR students can be physically integrated with their Academic Teams.

Our doctoral researchers have regularly attended conferences, seminars and workshops organised by groups including the Society for Research into Higher Education (SRHE), the British Educational Research Association (BERA) and the International Professional Development Association (IPDA). One of our doctoral research students won the IPDA's Professional Development in Education prize for 2011. PGR students are encouraged to publish, typically beginning by co-authoring with a supervisor (for example, Guerra-Ramos, Ryder & Leach, 2010; Wyatt & Borg, 2011; Avraamidou, Monaghan & Walker, 2012).

d. Income, infrastructure and facilities

Income: The UoA has had significant external funding success, although the total sum is lower than in RAE2008. This drop is due to three factors: (1) the more competitive funding climate that has impacted upon the UK's educational research community; (2) the loss, over the earlier part of the period, of senior academics with substantial research income-generating capacity and experience, and (3) a strategic shift away from large commissioned projects, towards funding that is more congruent with the research objectives of the SoE, that is, research that contributes to theoretical debates at the highest level. The strategy for regrowth described in section (b) above is now bearing fruit: bids for research funding totalled £5,778,474 in 2012-13, as compared to £2,696,849 in 2011-12.

Funding successes include Research Council grants, NHS grants, and grants from charitable organisations such as the Leadership Foundation for Higher Education (LFHE), Nuffield and The British Academy. Total research spending since August 2008 has been £1,778,700. Annual research income is in excess of £350,000 (approximately £11,082 per FTE returned).

Income includes **Clarke**'s Education Endowment Fund project (with UCL) researching interventions in reading in school students; **Ryder** et al's Interests and Recruitment in Science (IRIS) project, funded under the European 7th Framework Science in Society Programme; **Evans**' research on professorial academic leadership funded by the Leadership Foundation for Higher Education; **Simpson**'s British Academy funded research on mobile technologies and learning in India, and a suite of projects by **Borg** and others funded by the British Council.

Infrastructure and facilities: Research leadership is provided at four levels; through (1) Academic Team Leaders and the SoE professoriate, with Professor T. Roberts in LIME; (2) the SoE's Director of Research and Innovation; (3) the Faculty's Pro-dean for Research and Innovation, and (4) the Pro-Vice Chancellor for Research and Innovation.

University research infrastructure helps to support our research innovation and output in the following ways: i) excellent library and computing facilities; ii) easy access to training through the SDDU; iii) regular review and planning exercises to ensure the development of a clear strategic research framework and the financial resources necessary to sustain it; iv) attention to academic performance enhancement through the SRDS and AAWR processes (see previous section); v) specific support for early career researchers including pump-priming grants; vi) specific support in the form of competitive scholarships and a dedicated Research Support Officer.

An example of the University's commitment to research effectiveness and efficiency is the recent introduction of a comprehensive web-based, research grant management system that brings together the processes of proposal initiation, submission, governance, financial management and reporting, and at university level, through a recently restructured Research and Innovation Service (RIS). RIS brings together research support with knowledge transfer, impact and consultancy, and provides financial and operational support in the preparation of larger and longer research proposals.

Dedicated research administrative staff at School and Faculty level support the processes of identifying funding opportunities, applying for grants and administering funds post award. The SoE has a full-time Research Support Officer; at Faculty level there is a research support team of 3.5 [fte] staff. SoE policy and practice support the production of high quality research through the following: i) a workload formula which recognises and rewards research-focused activity; ii) a research investment fund (RIF), which is devolved to academic teams to support pump priming new research ideas for future external funding, research impact, networking, research training, and conference attendance; iii) whole-school research seminars, focusing on theoretical,

methodological and cross-disciplinary themes; iv) an annual in-house research conference that serves partly as a forum for refining our vision and strategy; v) an annual research student conference; vi) a four-year cycle of research leave; vii) a grant application internal review, mentoring and feedback process; viii) research application workshops. The SoE's location within the Education, Social Sciences and Law (ESSL) Faculty and LSSI facilitates its interaction with and contribution to the broader social sciences research agenda.

e. Collaboration or contribution to the discipline or research base
Collaboration and contribution to the research base
Within the SoE, each of the four Academic Teams has contributed substantially to their fields.

The *Science and Mathematics Education* team has made major contributions in the areas of *science curriculum policy*, *mathematics pedagogy* and *the use of large-scale quantitative data sets*.
Science curriculum policy: **Ryder** led the Enactment and Impact of Science Education Reform (EISER) project (2008-2012), a major three-year study funded by the ESRC with co-funding from the Gatsby Charitable Foundation, with colleagues **Banner** and **Homer**. The project examined national reforms to the secondary science curriculum. EISER work has provided a major theoretical contribution to the field through the extension of the concept of 'boundary objects'. **Abrahams** has published significant work on the use and effectiveness of practical work in secondary school science classrooms, resulting from three finished projects, funded by DCSF (2009-11), Gatsby (2012), Nuffield (2012) and one ongoing, funded by Wellcome.
Mathematics pedagogy: **Monaghan** has developed an extension of Valsiner's 'zone theory', theorising student-teacher development using empirical classroom studies.
The use of large-scale quantitative data sets: The team have pioneered the use of the National Pupil Database dataset in science education research. They have utilised simple non-contextualised techniques and more complex fully contextualised multilevel models. The work was funded by ESRC and Gatsby Charitable Foundation (as part of EISER, see above), and by the Nuffield Foundation. This research enables analysis between school science course types in terms of their added value rather than just analysis of school and student level factors. It has highlighted an enduring gender and socio-economic imbalance in science attainment and participation rates despite curriculum reform initiatives.

The *Language Education* team, together with **Dyer** from *POLIS*, makes significant contributions to *the study of language*; *language pedagogy* and *language teacher education*.
The study of language: **Deignan**'s corpus linguistic research has led the use of naturally-occurring language data in the study of figurative language. This work continues to be very influential within this branch of cognitive and applied linguistics, and her developing research focuses on the topical issue of variation in language use according to context. **Baynham**'s work on oral narrative, particularly migration narratives and narratives of professional learning has had significant international impact, evidenced by international invitations to visiting professorships, and by his keynote presentations.
Language pedagogy: **Lamb**'s and **Chambers**' work has advanced understandings of the nature of motivation in language learning. **Lamb** is especially concerned with motivation in relation to identity, social relations and autonomous learning behaviour. With **Wedell**, **Lamb** is currently working on a British Council funded project researching teachers considered 'inspiring', in China and Indonesia. **Chambers** has investigated Modern Foreign Language learning in the transition from primary to secondary schooling in the UK. **Dyer** researches learning and literacy in mobile pastoralist communities. **Baynham** and **Simpson** have made a leadership contribution nationally and internationally in defining and leading the research agenda for adult ESOL, while **Conteh**'s work in ESOL/ EAL takes an ethnographic approach to multilingual children's learning in UK schools. She currently has funding from the Paul Hamlyn Foundation to develop this research with children, their families and primary school teachers.
Language teacher education: **Borg** conducted the first and largest systematic international analysis of language teachers' engagement with research. The results of this programme of research have had significant impact on the design of teacher research projects sponsored by the British Council in South-East Asia and Pakistan. **Wedell**'s work in teacher education focuses on TESOL change and has provided original empirical insight into the interrelationships among various factors in the change process. This provides a theoretical framework within which TESOL change projects can be conceptualized and evaluated. This work has been recognized, for

example, by the British Council, who have developed a handbook for change facilitators which draws heavily on **Wedell**'s work. **Chambers** researches the experiences of student teachers on initial teacher education programs in the UK state context.

The Childhood and Inclusive Education team undertakes research recognized nationally and internationally on *The new sociology of childhood*; *Deafness, language and learning*; *Inclusion in schools*; and *Motor development*.

The new sociology of childhood: Research by **Christensen**, **Prout**, **J. Pike**, **Parry** and **Walker** has contributed to the theoretical understanding of various dimensions of childhood, and to work with children and young people in schools and the community. **Prout** has contributed influential publications developing and critiquing the new sociology of childhood, and has investigated the role of toys and technology in childhood in an ESRC funded project with researchers at Stirling University. **Christensen**'s funded research has impacted on the planning of local community facilities, such as play areas for older children and youth clubs. This is extended by her current ESRC funded research into new sustainable communities. **J. Pike** has researched how school meals are situated within a sociological context, and has advised the Scottish government and the Westminster All Party Parliamentary Group on school meals; she has also developed training for teachers in over 80 Local Education Authorities through the Children's Food Trust. **Parry**'s work highlighting the central role of film and media in developing children's literacies and identities informs contemporary debate about curriculum. This work is complemented by **Walker**'s work on digital technology and children's learning.

Deafness, language and learning: **Swanwick**'s ESRC and Nuffield Foundation funded projects involved deaf children's early literacy experiences in the home and the role of sign language for deaf children with cochlear implants. Her British Academy project developed approaches to critical thinking and reflective practice across the national training provision for teachers of the deaf. **Swanwick** and **Clark**'s Deafness and Reading for Meaning (DReaM) project pilots a methododology for working with practitioners who support deaf children to develop their reading comprehension. Their collaborative model is currently being cascaded to European and USA partners to develop an international training network. **Clark** conducts research in the assessment and intervention of reading in children with different personal resources, such as Down Syndrome and autistic spectrum disorder. She is part of the Centre for Reading and Language network led by Hulme (UCL) and Snowling (Oxford University), and is working with them on a two year Randomised Controlled Trial funded by the Education Endowment Foundation to examine the effectiveness of interventions designed to improve the reading skills of approximately 500 Year 7 pupils.

Inclusion in schools: **Pearson**'s research in inclusion has had particular influence in the work of SENCOs. She coordinates a university-based SENCO network and leads a strand of the HEIF funded Social Care Innovation Hub at Leeds related to pupils and young people in challenging and/or vulnerable circumstances. This work is now cascaded internationally, for example in Japan and Portugal.

Motor development: **Sugden** and colleagues have led the ecological study of children's typical and atypical movement development, exemplified in Impact Case Study 1: The Movement Assessment Battery for Children: a universal standard of assessment and intervention to improve the lives of children showing movement difficulties. From 2013, **Sugden** has been working on the USA National Children's Study, a longitudinal study of 100,000 children funded by USA federal government. This ongoing stream of research projects has had long-lasting and international influence on researchers, practitioners and the public, evidenced by citations in the academic and professional literature and in material for families of affected children.

The *Learning, Leadership and Policy* team makes an international and national contribution to research on *Social justice and education*, *Learning in the professions*, and *Post-14 education*. The focus has been to build applied, interdisciplinary knowledge of high public utility through engagement with practitioners and policy makers.

Social justice and education: **M. Pike**'s work on ethical learning, in part funded by the AHRC, makes a significant theoretical contribution to the field relevant to policies surrounding the 'Big Society'. This breaks new ground by seeing how the development of virtue, character and social responsibility may be achieved in different institutional, curricular, and policy-contexts, the ways in

which these aims relate to wider cultural, historical and religious beliefs and the effects of these upon student values, learning and attainment. **Farnsworth** and **Hayward** have also made important contributions to this theme, investigating young people's life choices and the 'Big Society' in a developing series of exploratory and position papers and projects.

Learning in the professions: **Evans** has made a central theoretical contribution to understandings of professional learning and leadership. Focussing on researcher development and the development and leadership of research cultures in Higher Education, this work provides a range of important conceptual and taxonomic tools.

Post-14 education: **Farnsworth**, **Hayward** and **Higham** have published important work on KS4 and post compulsory education and training. Major projects include 'The Nuffield Review of 14-19 Education' and the ESRC funded 'Degrees of Success' projects, both directed by **Hayward**. This work has provided significant new theoretical insights and empirical results, for example in relation to vocational curriculum design, employer engagement and the importance of student and tutor identity within Vocational Education and Training (VET) communities of practice. In addition, it has demonstrated how in hierarchical systems VET offers only limited progression opportunities into and out of Higher Education. **Hayward**'s work has also challenged the dominant discourses around young people described as NEET.

Leeds Institute of Medical Education (LIME) has significant research strengths in the *assessment of medical competence* and *transitions in medical training*.

The assessment of medical competence: Work on assessment by **Homer** and **T. Roberts** has produced several key papers and technical guides. It has also lead to international workshop provision at the foremost medical education meeting nationally, and invited workshops in the only global advanced assessment course in medical education.

Transitions in medical training: In the area of transitions, work by **Kilminster**, **Quinton** and **T. Roberts** has been funded by two ESRC grants. This work has fed into the General Medical Council's position on supporting doctors throughout training. This led to the award of an ESRC seminar series entitled "Changing forms of professional responsibility: Exploring workplace pedagogies in transitions". Six seminars have involved practitioners and academics from four professions (medicine, police, psychotherapy, and social work), and have contributed new insights about learning and transitions in high-risk professions.

Collaboration and contribution to the discipline

Our contribution to the discipline occurs through a variety of activities, including: roles within learned societies; visiting professorships; external examining; journal editorship; organisation of events such as conferences and seminars; advisory roles; reviewing responsibilities, major speaking engagements; and collaborations outside the UoA.

   Leeds staff play leadership roles in learned societies nationally and internationally, for example: **T. Roberts** is the immediate past Chair of the Association for the Study of Medical Education (ASME) and President of the Association for Medical Education in Europe (AMEE); she is a council member of the Royal College of Physicians and a College Censor, and she chairs their Academic Quality Management and Research Committee; she was recently awarded an Honorary Fellowship of the Academy of Medical Educators; from 2008-2011 **Baynham** was co-convenor of the International Applied Linguistics Research Network on Language and Migration, organising a series of international seminars and publications on language and migration; **Monaghan** is Chair of the British Society for Research into Learning Mathematics and a member of the Joint Mathematical Council of the UK; **Ryder** is a member of the executive board of the European Science Education Research Association (ESERA); **Farnsworth** has been a convenor of the BERA's 'Socio-cultural and Cultural-historical Activity Theory' SIG since 2008; **Evans** is the invited founding convenor of the Society for Research into Higher Education international research and researchers' network; until 2010 Evans was the convenor of BERA's 'Educational Leadership and Management' SIG. **Dyer** chairs the British Association for International and Comparative Education.

   Contributions to the wider discipline have also taken the form of postgraduate training and development. For example, **Clarke** led a session on being a successful early career researcher within an event organised by Vitae's Yorkshire and North East Hub: 'Realising the Potential of Researchers', and **Evans** has contributed to the SRHE's research development workshop

programme for newer researchers, leading full-day interactive workshops on developing theory from research.

Our research has involved collaborative partnerships with other institutions, nationally and internationally. In this REF period, such collaboration has included the following. **Evans** and **Homer** have worked with Oxford Brookes University and the University of Warwick in two successive projects on professorial academic leadership, funded by the <u>Leadership Foundation for Higher Education</u>. **Homer** works closely with the <u>ESRC</u>-funded PLASC-NPD User Group at Bristol University. **Simpson** leads a partnership with Sardar Patel University in India, and other Indian HE institutions, in a <u>British Academy</u> funded project on mobile technologies for language learning in rural India. **M. Pike** worked with collaborators from Warwick University on an <u>ESRC/AHRC</u> Religion and Society Programme research project. **Borg** has worked as an advisor to research projects at the University of Stavanger, Norway, Universita' del Norte, Columbia, and the International Graduate School of English, Seoul, Korea. **Deignan** has worked on collaborative research projects with the Free University, Amsterdam on projects funded by the <u>Netherlands Scientific Research Organisation</u>. **Conteh** has collaborated with the London Institute of Education and the <u>National Research and Development Centre for Adult Literacy and Numeracy</u> on case studies for the <u>TDA</u>-commissioned 'Developing a strategy for the EAL workforce'. **Dyer** works with the <u>Swedish Committee on Afghanistan</u> advising on nomadic education strategy. Within Leeds, **Clarke** has collaborated with the Leeds Institute of Psychological Sciences on an <u>EPSRC</u> 'Bridging the Gap' funded project, a school-based intervention for children with developmental co-ordination disorder.

High profile visiting professorships have been held by five senior members of staff. **Sugden** held the distinction of being only the second British academic to be invited as the Pease Family scholar-in-residence at the Iowa State University during September 2010. **Baynham** was visiting professor at the University of Sydney in August 2011 where he gave the inaugural Michael Clyne memorial lecture. **Monaghan** served as visiting professor at the University of Agder in Norway (2012–2014). In 2011, **Evans** was visiting professor at *l'Institut Français de l'Education*, *l'Ecole Normale Supérieure de Lyon*. **Borg** served as visiting professor at the University of Vienna in 2010. The UoA has also hosted distinguished visiting researchers and professors from many countries, including Japan, Australia, Denmark, Spain, Thailand, Brazil and China.

Our staff have played key roles in academic conferences. Since January 2008, staff have presented more than 15 invited keynote addresses at international conferences. More than 40 additional invited plenaries have been presented by staff from the UoA, in the UK and internationally, in countries including Ireland, the USA, China, South Korea, Japan, Brazil, Turkey and most European and Scandinavian countries. The UoA has hosted various conferences and seminars, one example of which is the first International Visual Methods Conference (2009) (International Visual Methods 3 will be held in September 2013 in New Zealand). This conference was ground-breaking in that it drew together, for the first time, researchers in a wide range of disciplines who are interested in using Visual Research Methods. It has led to the development of a continuing and growing network of visual researchers.

Our staff undertook key evaluation and advisory roles, including the following: **Monaghan** was external evaluator of the <u>EU Comenius</u> Project 'EdUmatics' 2010-12; **Evans**, **Farnsworth**, **Ryder** and **Monaghan** serve as members of the <u>ESRC</u> peer review college; **Wedell** and **Borg** were reviewers for the <u>Qatar National Research Foundation</u>; **Evans** reviewed for the <u>South African National Research Foundation</u>; **Baynham** acted as external reviewer of research performance at Monash and Macquarie Universities.

During this REF period, Leeds researchers have played leadership roles on journal editorial boards, including *Studies in Science Education*, *Science Education* and the *International Journal of Science Education* (**Ryder**), the *Journal of Asia TEFL* (**Wedell**), *Metaphor and Symbol*, *Metaphor in the Social World* and the *Annual Review of Cognitive Linguistics* (**Deignan**), the *Journal of Research in Special Educational Needs*, the *British Journal of Special Education* and *Support for Learning* (**Pearson**), *TESOL Quarterly* and *Language Teaching Research* (**Borg**), the *Journal of Deaf Studies and Deaf Education* (**Swanwick**, up to 2011), the *Journal of Moral Education* (**M. Pike**), *Educational Studies in Mathematics*; *Technology, Knowledge and Learning*; *Teaching Mathematics and its Applications*; the *International Journal for Technology in Mathematics Education*; and *Research into Learning Mathematics* (**Monaghan**).