

**Institution: UNIVERSITY OF EXETER**

**Unit of Assessment: EDUCATION**

### 1. Overview

Since 2008, the Graduate School of Education (GSE) has continued to demonstrate its role as a leading centre for educational research. GSE is committed to the generation of knowledge which makes a positive difference to understandings of teaching and learning, through illuminating and informing decision-making at every level: teachers, parents, community leaders, local authorities, educational consultants and commercial enterprises, and government ministers. Our goal is to generate research of the highest quality, drawing on a range of methodological, theoretical and disciplinary perspectives, transforming educational outcomes for young people, and promoting education which is democratic, participatory and inclusive.

In 2009, the School of Education and Lifelong Learning made a strategic decision to become a Graduate School of Education (GSE) to better focus on its research strengths. In 2010, as part of a university wide re-structuring, GSE joined the College of Social Sciences and International Studies to benefit from an interdisciplinary context, whilst retaining its own identity. To position ourselves confidently in the face of the uncertainties caused by government policy for Initial Teacher Education, we have clustered our research groupings more strategically into five Research Centres, each with identified key personnel attached to them. These are:

- *Centre for Research in Writing (CRW)*: **Myhill, Fisher, Jones, Wilson, Durrant, Watson.**
- *Centre for Science, Mathematics and Technology Education (CSMTE)*: **Mansour, Postlethwaite, Skinner, Hetherington, Fujita.**
- *Centre for Special Education Needs and Disability (CSEND)* **Norwich, Seale, Lawson, Anglin-Jaffe.**
- *Centre for Teaching Thinking and Dialogue (CTTD)* led by **Wegerif**, including **Larkin, Kleine Staarman, Li, Walshe** and Emeritus Professor **Burden.**
- *Centre for Higher Education (CHE)* led by **Robinson**, including **Lawy, Evans, Freathy, Haynes, Osberg and Mattick.**

In addition, we have two research groups which are growing, with strategic plans to achieve Centre status in due course: *Re-Place* (Global Education) led by **Martin** with **Allan, Schaeffer, Levinson** and **Meier**; and *CREATE* (Creativity) led by **Craft** with **Hall, Chappell** and **Hennessy**. The boundaries of these Research Centres and groups are permeable, and collaborative research across groups and across disciplines is encouraged. In addition, there are a number of research networks which have evolved spontaneously, including an Early Career Research Network, and several reading groups (eg Living with Difference; Post-Structural Theory; Teaching Thinking).

Research in the School is led by a Director of Research, supported by a dedicated Research Administrator, who supports the costing of proposals, writing bids and managing contracts. Three part-time administrative assistants support: research seminar series organization; distributing grant calls; journal editors; research groups; REF and output quality processes. At College-level, there is a post-award manager, supporting project and budget management, and an Assistant College Manager with high-level responsibility for budgeting and finance. A Research and Knowledge Transfer (RKT) unit, at university-level, gives support for large-grant bids, and for co-ordinating cross-College policy on initiatives such as Open Access or DTC applications. The university's legal team manages complex contract negotiations on grant awards.

PGR activity is led at School-level by two Directors of Doctoral Research; and at College-level there is a Graduate School administrative team, including a Doctoral Training Manager, an Assistant College Manager with responsibility for PGR provision, and a Director of Postgraduate Research. The College reports to Graduate Faculty Board led by a Dean for Postgraduate Research, who oversees doctoral provision from quality assurance processes, student satisfaction, and doctoral training centres to strategic development of PGR provision. This includes oversight of the Researcher Development Programme, which offers university-wide courses (including online) for research students, post-doctoral research staff and Early Career Researchers.

Overall academic responsibility for research in the College lies with an Associate Dean for Research and Knowledge Transfer. The infrastructure for research allows for strong disciplinary autonomy and innovation, but also offers the benefits of shared policies and shared good practice across the College.

## 2.0 Research strategy

**2.1** In our 2008 RAE submission we identified three strategic aims :

- (1) to continue to improve the quality, national/international visibility, and impact of our research;
- (2) to continue to build a sustainable research culture which provides a supportive and stimulating environment for researchers at different career stages;
- (3) to invest systematically in the next generation of educational researchers.

Through strategic investments, strong leadership and focused policy changes, we have made substantial progress in each of these aims with tangible outcomes, as outlined below.

*Improvement in the quality, national and international visibility, and the impact of our research:*

GSE achieved a strong quality profile in RAE 2008: however, the School has continued to strive for higher quality and research intensity. To address this, the School developed a series of interventions designed to support our shared understanding of research quality and to create a community of critical enquiry and shared engagement with issues of quality:

- 1) two critical friends (RAE panel members in 2008) have led a series of workshops opening up discussion and debate about publication quality, and in addition they have read and provided feedback on a sample of articles at regular intervals throughout the REF period;
- 2) each research group has discussed the relative quality of a set of articles relevant to their research area;
- 3) examples of annotated pdfs of articles signalling strengths and weaknesses have been discussed in research groups and posted on the staff intranet for research;
- 4) writing workshops have been run throughout the REF period, led initially by an external consultant, and subsequently by an internal colleague;
- 5) transparency and openness in grading processes were implemented, whereby colleagues know who has graded their work and receive formative feedback on why it has been given a particular grade.

A fundamental aim of these discussions has been to develop local understanding both of the 'trajectory of quality' in educational research, and to open up critical debate about the making of quality judgements within a community of practice. Our own internal grading suggests that these interventions have had a significant effect in raising the quality of research. As a consequence in 2008, we returned 65% of eligible staff; in 2013, with the entry threshold for inclusion set one whole grade point higher, we are returning the outputs of 79% of staff.

In addition, we have increased our national and international visibility by promoting research dissemination in a range of fora and actively supporting the nurturing of strong international partnerships. Nationally, we have encouraged staff to engage with policy makers and stakeholders and to improve our handling of the media: resulting in an increased level of stakeholder engagement (see 5.0 for detail). Equally, the international dimension is an important feature of research in the School. We regularly host visiting scholars from many countries around the world on teaching and research exchange programmes and by invitation (see 5.3). International collaborations have been supported by the University's Outward Mobility Fellowships, match-funded by the College, which have resulted in active international research partnerships (see 5.3).

*Building a sustainable research culture which provides a supportive and stimulating environment for researchers at different career stages;*

With an ageing demographic staff profile in 2008, alongside a strategic commitment to strengthening research-led teaching in all programmes, the School seeks both sustainability and vibrancy in its research culture. The development in research mentoring described in section 3.2 has been a critical part of this. In addition, the School has created a variety of supportive and stimulating opportunities for staff and students to engage with research. The School runs a fortnightly Research Seminar series: speakers are nominated by the Research Centres and typically include a mix of leading national and international figures (for example, Anna Sfard, Usha Goswami and Stephen Ball) and showcasing research by our own staff. These seminars are open and are attended by a wide constituency – academic staff; doctoral students, Initial Teacher Education students, and local teaching professionals. The Research Centres also run regular meetings each year which undertake a variety of research activities. These include: presentations of each other's research, guest speakers, reading research outputs pre-submission to provide

critical comment, sharing reading of relevant articles/books, and peer reviewing research bids. Our annual research student conference has developed into a student and staff conference which has facilitated staff-student communication and provided opportunities for ECR staff to gain experience with conference presentation: attendance figures have risen steadily from 80 in 2010 to 120 in 2013. The physical environment of the School has showcased staff research through well-designed and framed posters displayed across the campus, and display cases for recently-published books and articles.

#### *Investment in the next generation of educational researchers.*

Since 2008 a number of staff have taken standard and early retirements. We have developed a strategy to invest in new researchers, building capacity for the future, rather than to make short-term pre-retirement appointments of established researchers. This has borne fruit in the REF period. We have made four new external ECR appointments (**Kleine-Staarman, Li, Anglin-Jaffe** and **Durrant**), and our 'grow your own' strategy of nurturing excellent doctoral students has led to the appointment of **Mansour, Hall, Meier** and **Watson**. Two of these new appointments have won publication awards: **Mansour** won the European Association for Educational Research Best Paper Award for Postgraduate and Young Researchers in 2008, and **Durrant** won the Horowitz Prize for the best article published in *English for Specific Purposes* in 2009. Our first Ted Wragg Teacher Education Research Fellowships (TERF: a specially designed fellowship to support teachers making the move into teacher education and research) have enabled the Fellows to develop their research expertise and has resulted in the appointment of **Hetherington** as a full lecturer in GSE and the appointment of **Woolley** as Senior Lecturer at Christchurch Canterbury University. We have also appointed three additional TERFs in Maths (**Ralph**), Geography (**Rogers**) and History (**Webb**). The overall age profile of the School has decreased significantly (see 3.1) and the new ECR staff in the School are actively engaged in research: all, bar one on maternity leave, are included in our return of outputs.

## **2.2 Main aims for research in the next five years and monitoring of targets**

Our main objective for the next five years is to sustain and increase world-leading research as evidenced by the quality and quantity of grants and publications, PGR numbers, and international research partnerships. Specifically we intend to:

- 1) continue to address the recruitment of high-quality research staff to secure sustainability over the next ten years. In RAE 2008, 23 members of staff were entered; our goal is to achieve a staffing base of 30 active researchers by 2018;
- 2) focus investment in new academic staff in the development of the Research Centres to ensure capacity and sustainable teams with critical mass; our goal is for each Centre to have a minimum of 5 Category A or C staff;
- 3) strengthen existing international research partnerships, and secure more international collaborative research grants; our goal is that each core research group will have at least one key international partner and will have secured an international collaborative grant;
- 4) strengthen the intellectual climate and research experience of our doctoral students, drawing on the benefits of the ESRC DTC and extending the current opportunities available in the School for PGR students; our goal is that PRES Student Satisfaction data will continue to rise;
- 5) develop greater understanding of impact, particularly how to plan for impact at the grant application stage, how to develop relationships with key stakeholders, and how to capture and record impact data effectively; our goal is that each Centre will develop its own Impact Strategy.

These goals are monitored at several levels: firstly, the School's Director of Research provides proactive ongoing support for and monitoring of these goals; secondly, the goals are part of the College of Social Science and International Studies Strategic Research Plan which is formally monitored annually by the Associate Dean for Research and Knowledge Transfer. Thirdly, the University holds an annual process of Research Output Monitoring, led by the Deputy Vice Chancellor for Research and attended by the Vice-Chancellor, which analyses research performance data at the level of both the Unit of Assessment and the individual staff member.

## **2.3 New and developing initiatives**

In 2011, the University launched a Humanities, Arts and Social Science Research (HASS)

## Environment template (REF5)

Strategy. This focuses on bringing together cross-disciplinary researchers into interdisciplinary teams which address major global challenges and map well into the priorities of major UK and international funding bodies. The University has invested £1.5million in this: £1m for staffing; £105k for discretionary funding; and £395k for project development funds. GSE is already well-represented. For example, a newly formed Creativity Systems Research Group consists of academics from Law, Business, Maths, Computer Science, Medicine, Politics as well as Education and is bidding to the EU for a large interdisciplinary grant led by **Craft**. The School is also receiving pump-priming funding to develop interdisciplinary research investigating migrant communities (**Levinson**) women's conceptions of success (**Allan; Haynes**); and intercultural learning (**Martin**).

### 2.4 Priority Development Areas

The Research Centres have stimulated intellectually coherent and collaborative research groups, which are the hubs of research activity in the School. As the strategic objectives above illustrate, a key priority for the school is to develop these Centres to act as the dynamos for research growth and excellence with critical mass and long-term sustainability. We intend to grow from our current position of strength to larger, more tightly-organised groups of researchers working together to create capacity for multiple bidding, co-authorship, international research collaboration, and strong-recruiting Masters programmes. This will also allow us to recruit PGR students to vibrant, close-knit research communities where they are better integrated into the intellectual research community.

### 3.0. People, including:

#### 3.1 Staffing strategy and staff development

As noted above, a key strand of the GSE research strategy has been to re-balance the demographic profile of the School, to build for sustainability, and to focus new recruitment within the Research Centres. Overall, category A staff numbers have reduced in the REF period, due to the financial impact of policy change in ITE. However, early in the census period, the School invested in developing the next generation of educational researchers, and staffing analysis shows a 120% increase in lectureship appointments. A strong post-doctoral culture has seen a steady flow of research fellows into the school as successful researchers in their own right. Since joining a College structure in 2010, this investment strategy has been sustained. In the period since 2008, six Category A members of staff have retired (**Cunliffe; Hunt; Bayliss; Macleod; Burden** [now Emeritus]; **Maun**), and five have moved to new posts elsewhere, including three overseas (**Richardson; Avramidis; Murphy; Wood; Rich**). Twelve new Category A appointments have been made (**Li; Hall; Durrant; Meier; Hetherington; Allan; Mansour; Evans; Kleine-Staarman; Lawson; Watson; Seale; Fujita**), of which 9 were appointed to their first full lectureship. In addition to meeting significant teaching needs in TESOL, these appointments were strategically designed to strengthen the Research Centres and generate sustainability and capacity. In 2005, the average age of staff in the School was 54; in 2013, it is 49 and all full and part-time Category A staff are on permanent contracts. This re-balancing of the staffing profile for sustainability has been achieved in spite of the impact of policy changes in Initial Teacher Education.

The School instituted a research mentoring system in 2003, and as the University formed into Colleges in 2010, its underlying principles were adopted across the University through the establishment of Academic Leads. Every member of academic staff has an Academic Lead who leads on each person's annual Performance and Development Review. In GSE, the role of research mentor has been retained within this role. The Academic Lead supports research through reading and commenting on publications pre-submission, offering guidance on appropriate journals for submission, providing formative feedback and REF grades on published work, supporting grant bidding, and acting as peer-reviewer on bids, where appropriate. Academic leads also support the promotion of staff through discussing career ambitions, planning activities and opportunities which will help to achieve them, and supporting the preparation of promotion applications. Academic Leads meet regularly with the Head of School to discuss how to support individuals in achieving their planned research outputs or goals: this includes informing decisions on individuals about Study Leave and workload allocations, but also identification of further training and support needed for groups. For example, in 2008-9, the appointment of two critical friends to discuss research quality was a response to concerns about summative grading of individuals' research with no

formative feedback, and in 2012, the Head of School developed with the University's Professional Development Manager, a bespoke academic leadership course for middle managers, identified by Academic Leads as potential leaders of the future. In addition, the School has funded and given research time to established staff to allow them to undertake doctoral programmes. In the census period, six members of established staff have successfully completed their PhD/EdDs (**Maun; Bowker; Rich; Walshe; Richards; Murphy**) compared with one in the previous eight years. Part-time staff have the same rights to research support as full-time staff in all respects, and where research careers are interrupted, for example, by maternity leave, Academic Leads actively support the return to work and planning for resuming research activity.

The Academic Lead system articulates with the University's five-year Professional Development Programme (PDP) for all new staff appointed at Lecturer level. This involves a systematic programme of support, development and target-setting with three review points, culminating, if successful, in permanent appointment as Senior Lecturer. Attainment of international quality research outputs is key to this and progression to permanency is not universally achieved; however, all GSE's PDP staff have progressed to Senior Lectureship at the end of the programme. Research time is recognised in the College's workload model according to a formula that reflects contributions to research, but also protects the time of Early Career Researchers who receive a minimum of 30% research time.

In addition to the PDP programme, further specific support is provided for Early Career Researchers and Category C staff in line with the *Concordat to Support the Career Development of Researchers*. GSE has an ECR Network Group, open to Research Fellows, and run by the group themselves. Staff on the PDP programme have access to the M level Professional Certificate of Academic Practice (PCAP) course, which is led by GSE, which helps new academics set their research in the broader context of Exeter University and of HE in the UK. All Category C staff have a Performance and Development Review mentor who is not the PI on the project in order to ensure a critical, but supportive discussion about career development. The University's Effective Researcher Development Programme is open to both Category C staff and ECR staff, and the Deputy Vice-Chancellor for Research chairs the Career Research Staff Steering Group which meets twice a year to discuss priorities for future support for research staff. In addition, the University co-ordinates Development Centres for Research staff, based on six competencies sought after in academia and industry. Participants have the opportunity to undertake a series of activities and psychometric tests, leading to one-to-one feedback.

All research-active members of staff are eligible to apply for study leave, funded by the School, after a minimum of 3 years of service; this is aligned to both individual research aspirations and strategic goals of the School, supported through the Academic Lead system. An annual process of open application is followed by review and initial decision-making at School level, which is then endorsed by the College Executive and the University Vice-Chancellor's Executive Group. Staff are accountable for productive use of their Study Leave through a post Study Leave report, approved by the Associate Dean for Research and the Dean. Since 2008, 8 members of staff have had a term's Study Leave (**Norwich; Wegerif; Lawy; Martin; Levinson, Evans; Osberg; Freathy**) and two (**Craft, Lawson**) had a month's Study Leave. Staff are encouraged to present at international conferences to enhance research dissemination, collaboration and networking, and to enable direct access to cutting-edge research. Support for conference attendance is £1000 annually. Staff can also bid for small research grants (up to £2,000) from the School's Small Research Grant budget or up to £5,000 from the College Associate Dean for Research Discretionary Fund. Further financial support is available for collaborative work with other Universities on applications for externally-funded research.

### 3.2 Research students

GSE's doctoral programmes have continued to strengthen since RAE 2008, both in numbers, with a 26% increase over the REF period and a PGR per staff FTE of 4.3, and in the quality of the doctoral experience. Students on our doctoral programme conduct their research in a wide range of areas, but are increasingly closely linked to our research Centres and developing research groups. The school offers three doctoral programmes, the PhD, the EdD, and the DEdPsych. Over

## Environment template (REF5)

the census period, 211.5 doctoral degrees were awarded, and GSE has the highest successful completion rate in the university, at 82%. The full breakdown of awards is below.

Degree type	2008-9	2009/10	2010/11	2011/12	2012/13	Totals
Professional Doctorates	9.0	21.0	20.0	17.0	34.0	<b>101.0</b>
PhDs	9.0	19.0	17.5	13.0	29.0	<b>87.5</b>
Total	18	40	37.5	30	63	<b>188.5</b>
EdD Dubai*	1	7	5	6	4	<b>23</b>

\*wholly international; thus not included in HESA data

The largest programme within our EdD provision is in the area of TESOL, which is taught in both Exeter and Dubai. The DEd Psych programme has 10 places annually funded by NCTL. The School is part of the South West Doctoral Training Centre, a partnership between the Universities of Bristol, Bath and Exeter and prior to that was an ESRC-recognised centre. 16 ESRC studentships have been awarded to the School and these have been deployed strategically to strengthen the research groups, and support close-knit research relationships between students. In 2009, the School was awarded its first CASE studentship, sponsored by BT, and linked to the Centre for Research in Writing. In addition, in 2012, **Robinson** was awarded an HEA studentship, linked to the newly-established Centre for Higher Education. We have also used ESRC studentships as a strategy for building the staffing base for the future: An ESRC project studentship taken up by **Watson**, has led to her appointment in 2012 as a new ECR lecturer.

As a graduate school, supervision is a central element of our academic work. All Category A staff act as doctoral supervisors and students are supported by two supervisors and a mentor responsible for pastoral support. An electronic system, MyPGR, was introduced by the University in 2010 which creates a shared space to: keep records of supervisory meetings; upload written documents; maintain a portfolio of training events attended; appoint viva examiners; and request interruptions or extensions. This has substantially supported both the efficiency and the transparency of the supervisory process. Research training is provided through several complementary mechanisms: the MSc in Educational Research, open to MPhil/PhD students, and available as a fully online provision; and as a core element of the EdD and DEdPsych taught programme. In addition, students can access the specialist training available within the South-West DTC: for example, in 2012 a group of students attended DTC training sessions in Bath, and we are hosting a DTC research day for students across the SW on issues in researching gender.

GSE has led innovation in research training across the College. Since 2012, we have held a Research Methods Festival as part of the MSc, which was opened to students across the College in 2013, and in response to student requests, we have also led the introduction of a College Skills Training programme for doctoral students. This comprises a series of practical workshops linked to the methodological expertise of staff across the College (for example, workshops on ethnographic methods; elite interviews; corpus linguistics, and multi-level modelling). We have also developed a Postgraduate Café, a space for PGR students to discuss their own research and informally network; and are developing a peer mentoring system where PGR students mentor students in the MSc year of the 4 year PhD. All students have access to one-to-one specialist support on research methods, as well as to library and ICT facilities. To enrich the provision, we have created an online research methods resources depository within our VLE, providing all our students with access to a comprehensive range of resources. These are constantly updated: for example, all of the TED talks and film clips from a mock viva that we ran as part of the Research Methods Festival in 2013 were uploaded. The School provides students with equipment for data-collection, and specialist software for qualitative and quantitative data-analysis. Students have dedicated study space, accessible 24 hours a day, and which increased in size in 2012, and a recently-refurbished social space. PGR students can access the University's *Effective Researcher Development Programme* and can take the *Learning and Teaching in Higher Education* (LTHE) qualification. Plans are in place to hold a research employability event in 2014, where invited speakers will talk to our MSc and PGR students about research employment opportunities. The latest PRES survey indicates that 86% of GSE PGR students rate their supervision positively,

ahead of sector and Russell Group ratings.

Research students are fully integrated into the research culture in the School and are invited to participate actively in School seminars, special interest seminars, ESRC seminars, research groups and the annual student-staff conference. One of the core activities of our Research Centres is to actively support research students and supervisors. For example, *the Centre for Special Educational Needs* runs 3-4 meetings per term with PGR students discussing research, reading papers, inviting outside speakers to talk about initiatives, and has links with Child Health Unit students in medical school. *The Centre for Research in Writing* holds a coffee morning every Monday in term time for informal conversation, and offers internships to PGR students, allowing them to work alongside or shadow academic staff for a short time on funded research projects. Students are systematically inducted into full participation in the research community first through presenting in research groups, then our staff-student research conference, and finally they are financially supported to present their work at national and international conferences. During the census period many students have successfully published articles and chapters, single-authored or co-authored with their supervisors (for example, in the *International Journal of Science Education; Research Papers in Education; Thinking Skills and Creativity*) and a student group is currently in the process of establishing an in-house journal for doctoral students, supported by staff, which will give PGR students experience in reviewing, writing for publication and editorial work.

#### 4.0 Income, infrastructure and facilities

One important aspect of research sustainability, as described in 2.1, has been managing and adapting to the new financial drivers for research. We have focused sharply on reducing dependence on QR income and increasing research grant income, and since 2008, we have been awarded £6,237,629 in research grants. In the five year REF period we have achieved a total income of £4,951,000: a mean of £990K pa (compared with £623Kpa during the RAE 2008 period), and a 44% increase in income between 2008 and 2013. This is a significant achievement, especially given the overall staff reduction in the period, and is attributable to strategic structural and cultural changes. Firstly, we have ensured that staff have understood the changing financial parameters of research funding and have altered our model for allocation of research time to incentivize securing research income. Secondly, we have invested in administrative support for research bidding, and we now have a high-level professional team, alerting colleagues to relevant research possibilities, supporting bid development, undertaking project costing, and managing IPR or contract issues. Thirdly, we have established a supportive peer review system for bids, which involves early identification of a peer review for a project and generates critical engagement which helps to shape the bid; this has improved GSE's grant success rate from 20% in 2010 to 41% currently. Since 2008, the School has secured major grants from the EU (**Wegerif; Young**); AHRC (**Craft**); ESRC (**Myhill; Martin**); the British Academy (**Robinson**); EEF (**Myhill**) and Esmée Fairbairn (**Norwich**).

The School's library has undergone a one million pound refurbishment in the REF period, improving stock layout, creating modern learning spaces and introducing 24/7 access. It continues to be one of the largest specialised education libraries in the country and has sustained investment in online access to journals and other resources. The School has access to nearly 500 specialist education journals, of which half are available online. The collections are supported by specialist staff, including a subject librarian who offers bespoke group and 1:1 training for education researchers, at their desks, online, or in the library as required. An *Open Exeter* project, funded by JISC, has helped to develop the institutional repository (ORE: Open Research at Exeter) and to foster academic understanding of Open Access. University investment in an Open Access and Data Curation team has given GSE access to support and practical assistance with Open Access publishing and data management requirements, including support for Data Management Plans required for RCUK applications.

#### 5.0 Collaboration or contribution to the discipline or research base

##### 5.1 Interdisciplinary research

As noted in 2.3, the School is actively involved in the University's HASS strategy for interdisciplinary research, and is already active in other interdisciplinary research in a number of ways. A particularly rich collaboration is with medicine: we supervise doctoral students interested in medical education (eg **Shrewsbury; Lake**); we support medical/dental practitioners in their

## Environment template (REF5)

research (eg **Akram/Postlethwaite**), we are developing joint bids with medical education colleagues (eg **Mattick**: on the use of science by prospective doctors at school, and through their medical education careers) and we are supporting a research project on medical revalidation, funded by the Health Foundation, through membership of the project's advisory board. **Norwich** is CI on a project, with the Medical School, examining whether attending the Incredible Years Teacher Classroom Management course can increase teachers' skills in classroom management, and improve behaviour and learning; and **Evans** is working with a medical team on enhancing assessment feedback. In addition, **Martin** is part of a group of researchers across the university exploring research in sustainability issues. A study on the Art of Narrative Theology in Religious Education, funded by the Bible Society, is being undertaken by **Freathy** and an academic in the theology department and seeks to develop a pedagogy of RE based upon a narrational framework informed by both narrative theology and narrative philosophy.

### 5.2 Engagement with users

The School has a strong track record in working collaboratively with users of research, and in using research to inform policy and practice. Many of our research projects involve working closely with practitioners (eg **Craft** and **Rolfe's** *Dance Partners for Creativity*; **Wilson's** work with The Write Team; **Postlethwaite** and **Skinner's** ARIELS project on Learning in Science) or undertaking research for policy-makers or other stakeholders (eg **Fisher** and **Myhill's** evaluation of the *Every Child a Writer* project for the DfE; **Wood's** commissioned literature review *Equity Matters* for Education International; **Richardson's** report on Technical and Vocational Education for the Edge Foundation; and **Hennessy's** reports for the Royal Opera House and the Orchestra of the Age of Enlightenment). An ESRC Seminar Series, led by **Seale** (Towards equal and active citizenship: pushing the boundaries of participatory research with people with learning disabilities) involves practitioners and people with learning disabilities as both presenters and participants. The Lesson Study MLD project led by **Norwich** worked with 100 teachers in 40 schools. The School's first CASE studentship, involves working with BT and The Communication Trust to explore how the scenarios of collaborative talk in the workplace can be used to develop students' confidence and competence in collaborative talk.

Staff are regularly involved in advisory or consultancy work (see Impact Statement). **Craft** developed a framework for creativity in the curriculum with QCDA, acted as QCDA advisor and as official government advisor on creative and cultural education and her collaborative research on possibility thinking was drawn upon eg by Garrick et al 2010 in feeding into the Tickell review of early years foundation stage (EYFS) which recommended continued inclusion of creativity in EYFS. **Evans** secured a Cambridge Primary Review bid in 2011 and has worked in partnership with local schools to enhance the quality of learning and teaching in schools leading to innovative practice. **Levinson** provided evidence on the education of traveller children to the National Strategies in 2009 and 2012. **Fisher** has contributed to a working party led by the Schools Minister, addressing the training of teachers to teach phonics. **Myhill** was research consultant to the National Strategies English team in producing the DVD *Teaching Speaking and Listening*, distributed to all secondary schools, and she has led the writing of the grammar strand of the revised National Curriculum for English, and given advice to the Minister for Schools on Primary and Secondary English. **Hennessy** was appointed as consultant to the TDA to develop Generalist Music teacher training modules. **Norwich** gave an invited paper about the SEN category for the House of Commons Select Committee.

### 5.3 International collaborations

The School regularly hosts international visitors: this includes internationally-esteemed researchers such as Professor Helen Haste, Harvard University in 2009; Dr. Keith Sawyer, University of Washington; and Professor Kieran Egan of Simon Fraser University in 2010, but also junior researchers seeking to benefit from the research environment at Exeter (for example, Consuelo Mameli, University of Padua, 2011 and Juan-Ann Tai, Tainan University of Technology, Taiwan, 2011). Our own staff hold, or have held, Visiting Professorships in a number of international institutions (**Norwich** – East China Normal University, Shanghai; **Myhill** – University of Wollongong, Australia; **Wegerif** – Universidad Nacional Autonoma de Mexico; **Evans** – Trinity College, Dublin). Since 2008 we have developed an increasing number of international

## Environment template (REF5)

collaborative research projects (for example, the EU funded *Science Education for Diversity* with university partners in India, Turkey, Lebanon, The Netherlands and Malaysia). **Myhill** and **Jones** are collaborating in research with a parallel team in the University of Wollongong, Australia. We have established a formal partnership with East China Normal University (ECNU) in Shanghai, focusing two areas, Special Educational Needs and Language Education, led by **Norwich** and **Li**. An Outward Mobility Fellowship, co-funded by the University and the College, enabled Li to secure a collaborative grant with ECNU on models of knowledge construction, funded by the National Office for Education Sciences Planning, Ministry of Education, China. Another Outward Mobility Fellowship allowed **Lawson** to visit Florida State University, which led to a GAP (Global Academic Partnership) award, and a subsequent joint bid to the Spencer Foundation. A further Outward Mobility Fellowship enabled **Evans** to work with Kozhevnikov and Kosslyn, at the National University of Singapore and University of Hong Kong to provide a reconceptualisation of cognitive style through development of coherent theoretical framework. More informal but active research links exist with a wide range of Universities and research institutions, including in the Netherlands, Belgium, Germany, France, Italy, Spain, Denmark, Norway, Sweden, Finland, Canada, the USA, Australia, New Zealand, India, Turkey, and Poland. **Craft** continues to collaborate with researchers at Harvard University on wise creativity and applications of multiple intelligences. **Martin** is International Associate to the Environment, Education and Sustainability research group at Monash university, Melbourne and also has active research links with Gandhigram Rural University, Southern India. Funded by the Chinese Ministry of Education and in collaboration with Hunan University, China, **Li** is conducting research on online learning. **Mansour** leads (2010-date) the research group of the teacher professional development of Science and Mathematics at the Excellence Research Centre of Science and Mathematics Education at King Saud university in Saudi Arabia. **Wegerif** has collaborated closely with HUJI, Israel and other partners on EC-funded education technology projects. **Wegerif** was funded to visit ECNU to build technology links leading to a funded reciprocal visit from Professor Gu of ECNU, and two research studies in China have been conducted within his EU funded *Metafora* research project. **Fujita** and **Wegerif** are also working on education technology and mathematics research with Shinsu University in Japan.

#### 5.4 Contribution to research dissemination and development

Ten international research journals are housed in the School, *Music Education Research*; *Research in Dance Education*; *Research Papers in Education*; *School Psychology International*; *Teaching in Higher Education*; *Thinking Skills and Creativity*; *Complicity: An International Journal of Complexity and Education*; *International Journal of Historical Learning, Teaching and Research* and *The Philosophy of Mathematics Education Journal*. The School has hosted two ESRC Seminar Series since 2008, **Craft's** Educational Futures seminar and **Wilson's** Poetry and Writing seminar. We regularly host international conferences, including the *International Conference for Research in Music Education in 2009 and 2011*, led by **Hennesy**; the *Gender in Education* conference in 2011, led by **Allan**; the *Association for University Lecturers in Religious Education* conference in 2009, led by **Walshe**. In 2011, the *European Association for Learning and Instruction (EARLI)* biennial conference, led by **Wegerif** and **Myhill**, was hosted at Exeter. This is the largest educational research conference outside of the USA with over 1600 delegates and the first time it has been hosted in the UK.

Our staff hold positions of national responsibility with subject associations or learned societies: **Martin** was President of the Geographical Association (2011-12); **Norwich** chairs the SEN Policy Options group (funded by NASEN and Pears Foundation) which arranges national policy seminars and publishes policy paper – a recent event involved the Shadow Minister of Education. **Myhill** is Secretary and Treasurer of the European Association for Learning and Instruction; **Young** is Chair of the European Network of Music Educators and Researchers of Young Children; **Hennesy** is Past President of European Association for Music in Schools (2009-11) and Chair of the Orff Society UK. **Burden** is a Trustee of the British Dyslexia Association, and **Evans** is President of Education, Learning, Styles, Individual differences Network (ELSIN), an international cross disciplinary group. **Li** is a member of the Executive Committee for British Association of Applied Linguistics. **Seale** is a member of the research committee of the National Association for Learning Technology.