

Institution: University of Hull
Unit of Assessment: 23 Education
<p>1. Unit context and structure, research and impact strategy</p> <p><u>Achievement of strategic aims for research and impact since REF 2014</u> The School of Education (SoE) has surpassed the ambitious targets it set itself following a review of the 2014 REF:</p> <p>1. <u>Improving the quality and quantity of research outputs</u></p> <p>Following the 2014 REF and subsequent University-wide restructuring, we consolidated our areas of research strength and expertise, resulting in a smaller (from 15 staff in 2014 to 9 in 2020), more focused and active research cohort. Changes in academic personnel, including external promotions and retirements, rendered the post-REF 2014 research groups impractical and a strategic decision was taken to consolidate them under a new Centre for Educational Participation and Research (CEPaR). This strategy has increased opportunities for interdisciplinary research and established a structure that is more orientated to external impact and public engagement. All of these actions have engendered a significant increase in the volume and quality of research outputs.</p> <p>2. <u>Ensuring research impact awareness and activity is embedded from the beginning of all research activity</u></p> <p>The increased focus on research impact since 2014 is evident in the high volume of impact case studies available for submission in the current REF period. The two impact case studies (Burden iPAC and Jones Using Emancipatory, Participatory Action Research (EmPAR) to improve the educational and social experience of young people in care) were selected from a longer list of prototypes developed after 2014, including research around social justice and inclusion (e.g. <i>#thehullwewant project</i>, Hughes), gender inequalities in STEM (e.g. see <i>GIGS project</i>, Burden), intercultural global competencies (e.g. Jones, S.) and more recently, Citizen Inquiry in environmental education (e.g. <i>Plastics Citizen project</i>, Burden and Dean). Regardless of their career domain, all staff in the School are involved in public engagement and knowledge exchange and the UoA has been restructured to be outward-facing and impact-oriented.</p> <p>3. <u>Expanding our international reputation for research</u></p> <p>Post-2014 our strategic plan for research and impact activity prioritised international research according to the research themes that underpin CEPaR (see below), most notably the Social Justice theme that is reflected in the many research grants and projects we have established with partners across South-East Asia and parts of South America (e.g. Mexico and Colombia). In 2015, we established the East Asia Research Collaboration Network with research-intensive partners in China and Vietnam. This expanded to include research collaborations in Thailand and Cambodia (Burden, Shaw and Traunter) focusing on a range of societal and cultural challenges associated with the United Nation's Sustainable Development Goals (SDGs) including digital equity, young people's agency, environmental awareness, and STEAM education in early years. The evidence of our growing international reputation in South-East Asia is clear in our grant application successes (e.g. see Jones, <i>British Academy award, 2020</i> and Burden, <i>British Council awards, 2016, 2018, 2020</i>) and other indices of esteem including invitations to provide keynotes (e.g. Burden, Thailand 2017) fellowship invitations (e.g. Burden at the University of Hong Kong; Bottery at Hong Kong Institute for Education; Montgomery at Danang University, Vietnam). Europe and Australasia are the other geographic foci for international partnerships and research including nine Erasmus+ Strategic partnership projects with over 25 EU universities.</p>

4. Increasing competitive grant capture

We have increased our competitive grant income by 144% from approximately £450k in 2014 to £1.1m in the current REF submission. Not reflected in here however is the success of our strategies to lead on and increase competitive grant capture focused on collaborative research and shared grant income with our research partners. This directly links to the participatory values and principles we articulate below and the non-HESA grant capture mounts to approximately £2.4m.

5. Expanding interdisciplinary research activity linked to university wide priorities

Interdisciplinary research activity has increased significantly since 2014. CEPaR is engaged with researchers across all faculties and many research staff are members of the University research institutes that support interdisciplinary activity (see Section 2). This includes successful interdisciplinary grant capture including the recent £1.3m Leverhulme Water Cultures award in which **Burden** is a co-convenor and **Hughes** (CI) on the 'Risky Cities' project with EEI staff and MAGIC (a UKRI/Met Office, UK Climate Resilience Programme project) with the University of Sheffield. The SoE has established a strong reputation in the field of Citizen Inquiry (see **Burden**, Dean) as both a subject and research methodology generating significant interdisciplinary activity with colleagues in the Chemistry, Geography and Politics departments (e.g. ESPCR grant with Plastics Collaboratory, 2019 worth £49k).

6. Expand and enhance PGR provision

We have continued to promote and enhance our PGR provision and support, successfully attracting 31 EdD and 63 PhD national and international students with 71.3 successful doctoral completions (an 83% increase on 39 in the last REF). We have increasingly supported interdisciplinary PGR supervision through internal scholarship clusters and external funded-scholarships (e.g. the £1.3 Leverhulme Water Cultures).

Structure and Purpose of the UoA

The early part of the current REF cycle (2014-2016) was a period of expansion for the Faculty of Education (FoE) and one of institutional restructuring for the University as a whole with the FoE incorporated into a new Faculty of Arts, Cultures and Education (FACE) as a new School of Education (SoE). This led to a restructuring within the SoE, reflecting the values and strategic direction of both the Faculty and the University and saw the creation of a single research centre explained below.

Values and principles underpinning the Centre for Educational Participation and Research (CEPaR)

The University's Research Strategy (2018-23) describes a '*vision of a fairer, brighter and carbon neutral future*' that is challenge-led, impactful and transformative in terms of multiple global challenges. It encourages academics to engage externally and build strategic partnerships with a variety of organisations and stakeholders to shape research with significant cultural, economic and societal impact. In response to this, FACE has declared its intention to '*to become a Centre of Research Excellence in grassroots, participatory research that benefits the community, whatever its location or membership*' (2020-24). The values, aspirations and structures of CEPaR therefore reflect and instantiate many of the University and Faculty research ambitions but they also make an additional and unique contribution that maximises the disciplinary traditions and expertise of its membership. The Centre explores, theorises and operationalises participatory approaches to research and evaluation that are instrumental in supporting and enabling the University and Faculty's ambitions to reach out beyond the institution in ways that are transformative, impactful and interdisciplinary in nature.

The strategic achievements outlined above have been achieved partly by restructuring the UoA to maximise resources and ensure it is more closely aligned with the University and Faculty research priorities. CEPaR addresses all of these priorities and challenges by bringing together a blend of researchers and practitioners within and beyond the SoE to 'make our research more responsive to the ever changing social and environmental landscape, regionally, nationally and globally, and to ensure it is value-led and impact-driven' (SoE Research Strategy, 2021). All staff in the SoE are members of CEPaR, regardless of their contractual status, reflecting the equal value we place on both research and scholarship. CEPaR is constructed around a set of shared values and principles that seek social and educational change to enhance fairness, equity and social justice. The ethos and practices of participation are embedded within a culture that foregrounds participants as partners and experts in their lived experiences and who engage and take ownership of their learning.

Research themes within CEPaR

To operationalise the activities of CEPaR, three interrelated **research themes**, each with a theme convenor (see Figure 1), act as the engine room for research activity including projects, grant capture, outputs, and impact.

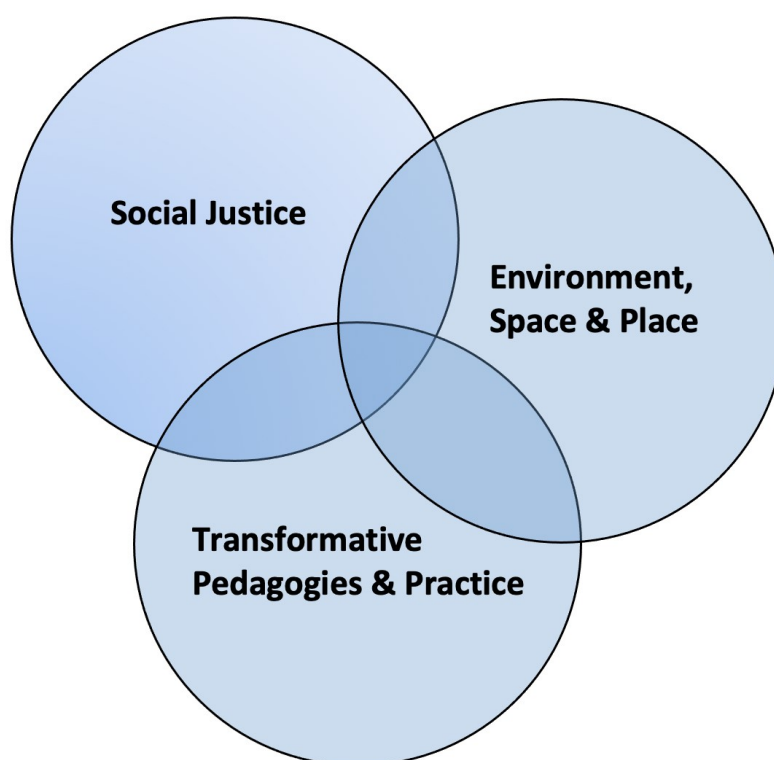


Figure 1: Research themes in CEPaR

The *Social Justice* theme (convenor: **Hughes**) and the *Transformative Pedagogies and Practices* theme (convenor: Gouseti) builds upon and amalgamates activity undertaken in previous research groups and clusters in the unit. However, the *Environment, Space and Place* theme (convenor: **James**) is a new theme that recognises an emerging stream of activity in the SoE such as Citizen Inquiry and research around climate change and the recent Hull City of Culture 2017 (see section 4). Although we identify three research themes, we promote their interdependence with many points and opportunities for convergence and synergy. The points of intersection between the themes are mapped to identify projects and clusters as exemplified in Figure 2 below:

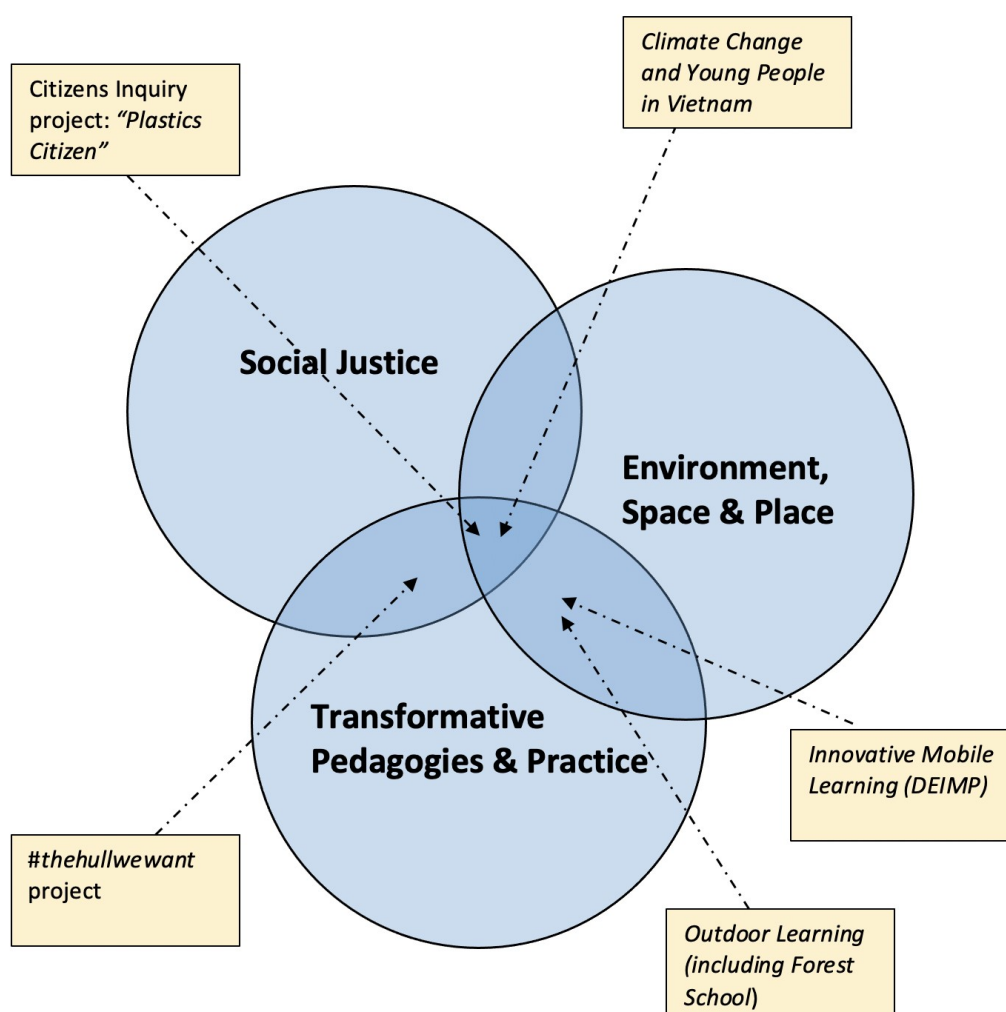


Figure 2: Some examples of active projects at the intersection of research themes

Our approach to interdisciplinary research

Since its establishment in 2017, the SoE has strategically aligned with the University's interdisciplinary research institutes by reaching out to the respective institute directors and demonstrating the added value that education can offer. This has been particularly effective with the *Energy and Environment Institute* (EEI) where we have established a firm reputation for work with young people around issues such as plastics pollution (cf. work of **Burden** and Dean on Plastics Citizens project) environmental education (cf. work of **Jones** in Vietnam); and flooding and resilience (e.g. the *Leverhulme Water Cultures PhD cluster*). We also forged networks with the *Culture, Place and Policy Institute* (CPPI) including supporting the evaluation of Hull 2017, UK City of Culture (see **Jones**, **Hughes** and Ploner) and the *Wilberforce Institute for the study of Slavery and Emancipation* (WISE) including training and education around modern slavery (**Jones** and Dunhill).

The restructuring of previous research groups into more flexible and agile research themes make them better placed to engage in interdisciplinary research across and beyond the University. Research convenors are supported to explore opportunities for interdisciplinary research and grant capture by the School's Director of Research (DoR) and by the University's central Research and Innovation Office who meet every six weeks to brief convenors on research funding opportunities. This has enabled us to focus on projects and grant applications that transcend

disciplinary boundaries including bids with colleagues in history, English, biology, geography and engineering.

Strategies to ensure greater impact from research, post-2014

To increase the impact of our research, we have realigned activity around topics and themes that have a direct and identifiable societal impact. These include:

1. Restructuring existing research groups into interrelated themes that more clearly link to the emerging priorities and challenges facing the stakeholders and communities we serve. For instance, the *Environment, Space and Place* theme is well placed to address current interest around the green, environmental and sustainability agendas prevalent in our region and at national and international levels.
2. Proactively engaging external stakeholders and interested parties. We have, for example, instituted a monthly stakeholder research seminar series in which organisations, NGOs and other stakeholder groups present the challenges they face and what research they would find beneficial. Staff are encouraged to engage with the public and other partners to ensure research that is impactful with this ambition supported through small internal grant funds such as HEIF Impact Accelerator Funds and GCRF pump priming grants (to deliver benefit to developing countries). The success of this approach is exemplified by **Hughes'** appointment as one of three coordinators in Hull (one of the four UK pilot areas) for *The Ideas Fund*, a new £3.29m grants programme run by the British Science Association and funded by the Wellcome Trust that enables the UK public to develop/test ideas to help improve mental wellbeing. Another example is the development of the University of Hull Digital Technologies Network (<https://digitaltechnologiesnetwork.co.uk/>) in 2014, comprising the University's Federation of College partners and several NGOs. This network meets monthly and has undertaken several research projects (see for example the *SEPA360 EU Erasmus+ project 2019-22*) thereby ensuring impact is designed into research at its origins.
3. Ensure potential beneficiaries and participants in our research are engaged as partners and involved in the initial stages of research applications that are co-designed to meet their specific requirements. #thehullwewant project, led by **Hughes**, illustrates this principle (see Section 4).
4. Support staff to undertake and co-design research that is more applied in nature, linked to external partners' needs. An example would be the recent UKRI Citizen Science grant application (2019) submitted to create a Citizen Inquiry 'Centre of Excellence' at the University involving seven external partner organisations including Hull City Council, Yorkshire Water and several community NGOs.
5. Ensure our research is more aligned to real world issues that have a direct link to the work and activities of staff involved in **Teacher Education** which serves a significant number of potential beneficiaries. This is illustrated by **Jones'** impact case study about the education of young people in care developed in partnership with the East Riding of Yorkshire Council and supported within Teacher Education.
6. Focus on more applied research funding streams that embed impact as an essential element in the project design. This explains our strategic decision to prioritise the Erasmus+ Strategic Partnership EU funding stream in which 30% of an application score is awarded for impact. Between 2014-20 staff in the School have been awarded nine of these projects (Total value £2.6m) of which one (**Burden's** MTTEP 2014-2017 project) is the focus of an impact case study.

Our strategic approach to internationalisation

Internationalisation is a cross-cutting theme that pervades the work and activity of CEPaR, to broaden and extend the reach and impact of research in the UoA. In 2014 a strategic decision was taken to encourage and promote stronger collaborative partnerships with key international institutions and individuals to enhance the standing and recognition of the UoA and to build upon

the University's global strategic ambitions. These partnerships focus on quality rather than quantity, and on fostering strong, durable relationships that are mutually beneficial. Three geographic areas of the world - Europe, South-East Asia, and Australasia - have been identified to foster and nurture research partnerships through new and existing relationships (see section 4 for details). The SoE has prioritised the Erasmus+ Strategic Partnership fund (EU) as a gateway to establishing strong and enduring partnerships. To date, nine major EU research projects (+ 2 awaiting decisions due in March 2021) have been awarded to six academics in the School, amounting to in excess of £2.6m grant capture. This activity involves over 30 university partners across Europe and focuses on a number of topics including digital education, intercultural education, immersive and virtual worlds and mobile learning.

Main objectives and activities for the next 5 years

1. To advance our specific contribution to scholarship in participatory research and public engagement through the further development of CEPaR.
2. To increase grant applications and capture through UK Research Councils and other sources in order to overcome the loss of Erasmus+ generated income, following Brexit.
3. To build upon and expand our interdisciplinary international research presence and profile, working with our university research institutes in areas defined as institutional priorities including environmental education.
4. To integrate PGRs into CEPaR and align PGR recruitment strategy to CEPaR's themes.

2. People

Staffing strategy

The early part of the current REF cycle (2014-2016) was a period of expansion for the Faculty of Education (FoE) that saw a number of new appointments made to complement our research strengths with all recruited staff with research responsibilities employed on open-ended contracts. Following institutional restructuring in 2016, the FoE was incorporated into a new Faculty of Arts, Cultures and Education (FACE) and the new School of Education was created. This culminated in a new staffing strategy to complement the coherence of our research activity around the single CEPaR:

1. Focused on working more collaboratively and interdisciplinary with colleagues in other schools, faculties and research institutes (see Section 1).
2. Focused on staff development and 'growing our own' research staff (see below).

Within this REF cycle, the UoA has experienced significant staff changes, which have included promotions to other institutions and the retirement of staff including five professors with two becoming Emeritus (**Bottery** and **Martin**). The emphasis on 'growing our own' has been through concerted career development and internal promotions. There have been nine internal promotions, four to Professor and five to Senior Lecturer, and seven have been female staff (two to Professor, five to Senior Lecturer). Our current gender split for senior Category A staff in the SoE is equally balanced and we are fully engaged in the Athena Swan Charter process (currently Bronze) to ensure full gender equity is achieved. The University has joined the ECU's Race Equality Charter and has committed to 'Disability Confident'. The University published its Equality Scheme in 2017 and there are active LGBT* and Disability Staff Networks. Our staffing strategy is therefore underpinned by a commitment to inclusion, equality and diversity with mandatory training for academic staff, which is monitored and supported at School-level.

During the REF cycle, the University introduced the Academic Careers Framework (ACF) which is designed to support education, knowledge exchange and research excellence. In the new ACF, staff are aligned to a core career 'domain' (see figure 3), which best reflects their job role.

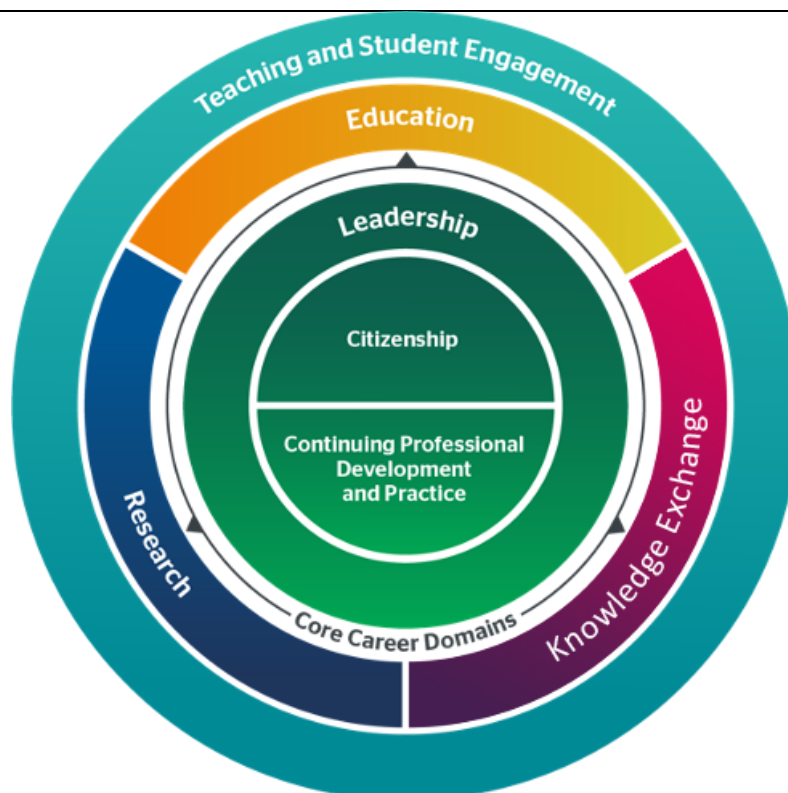


Figure 3: The University of Hull Academic Career Framework.

Staff on the research domain have a basic allocation of up to 40% of their time for research activity and are all returned in their respective REF UoA with a clear expectation of contributions in these four research areas:

- Publication of high-quality outputs.
- Generation of research income.
- Dissemination and impact of research beyond academia.
- Nurturing a vibrant PGR community.

Our staff return for REF includes all staff in the SoE on the research domain as well as colleagues from outside of the SoE whose research is educationally-focused (**Scott** on higher education pedagogies and **Burwood** on educational philosophies). However, given our research and impact strategy all staff in the SoE, regardless of career domain, are involved in public engagement and knowledge exchange in a unit restructured to be outward facing and impact-oriented. To this end, this environment statement draws upon and values all staff contributions to our wider research culture and therefore not only includes current category A staff on the 'research domain', but also includes former category A staff as well as staff on the 'education' and 'knowledge exchange' domains. The ACF also supports 'transition' periods for staff to move between the domains with guided support and there are transparent criteria for promotion in each domain and opportunities to explore these in annual Staff Performance Development Reviews (SPDR).

Staff development

The University has signed the revised Concordat to Support the Career Development of Researchers, joining 30 other organisations and institutions across the UK illustrating the University's commitment to engaging with systemic challenges, including ways to provide more employment security for researchers and flexible criteria for maternity/paternity benefits. A steering group, comprising representatives from all faculties, oversees the adoption of the Concordat supporting the career development of researchers. Research Integrity training is mandatory for all staff engaged in research/engagement activity and all staff can access research development training offered centrally including seeking research opportunities through a range

of systems (e.g. Grantfinder). Research funding opportunities are regularly shared at faculty and university level and at a school level these are targeted to staff research interests through the DoR and theme convenors. The Faculty also publishes monthly research newsletters which celebrate staff achievements including publications, grant successes, research opportunities and impact/engagement activity.

All staff can access the faculty-wide research-mentoring scheme (choosing a mentor in the SoE or beyond). At school-level there is a REF reading group offering critical but supportive feedback for staff in relation to written (published) outputs. This consists of all members of the School who are entered for REF and reading takes place at least three times per year. We have recently implemented a complementary formative reading system that provides feedback prior to submission to support all staff and especially ECRs. The School also hosts a bi-weekly research seminar series during Trimesters 1 and 2 for both staff and PGR speakers and attendees including invited local, national and international speakers such as Dr. Martha Hoff (University of Rochester, USA), Professor Sandy Schuck (University of Technology Sydney) and Dr. Heydy Robles (University of Barranquilla, Colombia).

Research (study) leave and internal funding

Research leave policy operates at faculty level and applications are expected to be closely aligned to strategic priorities at school, faculty and university level (with all three of these nested). Applications from SoE staff must link to CEPaR and align with interconnected themes with applications first reviewed by the DoR and the Head of School (HoS). Rather than submit a form to illustrate achievements during study leave, a more meaningful and formative feedback process has been introduced at faculty-level with staff returning from research leave now presenting to a panel. During the current REF period eight staff in the SoE have been awarded study leave. All staff, regardless of domain, including ECRs can apply. Staff can also apply for research support funding at faculty-level to cover research-related activity including conference attendance. ECRs in particular are encouraged to make use of funding to develop their personal networks and collaborations.

Support for Early Career Researchers (ECRs)

Our commitment to 'growing our own' is focused on nurturing a vibrant and sustainable research culture. This has meant significant investment in staff and especially ECRs including both funding and allowing workload for staff to complete doctorates (12 staff in the SoE were funded to undertake a PhD/EdD in the REF cycle). This is particularly important for Education where many staff join us after previous careers.

In addition to the Faculty mentoring scheme, FACE also introduced an inclusive model to support staff during the first five years of their academic careers. An Early Career Academic Coordinator, working closely with the Faculty's Research Office team, to identify any skills gaps and training needs of individuals during regular one-to-one conversations. Within the School, more senior colleagues actively involve ECRs in projects and grant proposals to develop skills, build capacity, and to support in developing internal and external networks. A 'critical friend' system of informal peer reviewing for grant applications and outputs also operates. The SoE has also been successful in enhancing ECR support for international collaboration networks through three British Council/Newton Early Career Research Grants (approx. £140,000 income) that each brought together 50 ECRs including 10 from Hull, 10 from other UK-based HEIs and 20 ECRs from Cairo, Egypt (2015); 20 ECRs from Monterrey, Mexico (2015) and 20 ECRs from Thailand (2017). In 2016, the School also hosted *'Travelling scholars and digital nomads – Early career academic mobilities and lifestyles in the digital age - a European perspective'* (Ploner and Gouseti, EPSRC funding through Balance Network).

The development of research leadership

The UoA is working hard to embed a culture of development and support for research leadership that is more participatory to engage *all* staff in outward-facing, impact-led research and engagement activity. Research leadership has become increasingly collaborative and distributed under the steer of the DoR, with the Deputy DoR, the three theme convenors, Director of PGR and the HoS all involved as the research leadership team who work together on strategy, implementation, staff development and support. This enables the development of research leadership capacity and models the collaborative and participatory ethos at the heart of CEPaR to support the sustainability of an active and inclusive research culture with this leadership made up of staff with differing levels of seniority and on different career domains.

PGR students

We have a vibrant and successful culture of supporting PGR students with 71.3 doctoral student completions in this REF period, (up from 39 at the last REF), an increase of 83%.

	2013	2014	2015	2016	2017	2018	2019	Grand Total
Total EdD	2	2	3	3	2	0	5	17
Total PhD	5	8	5.5	5	8	12	10.8	54.3
Grand Total	7	10	8.5	8	10	12	15.8	71.3

Table 1: Doctoral Degree Completions by year

PGR recruitment during the REF period benefited from an excellent reputation internationally for supervision (particularly in the Middle East) and from our successful EdD programme recruiting both nationally and internationally. During this REF period, there has also been significant emphasis on interdisciplinary co-supervisions with Law, Geography, Politics, Psychology, Computer Sciences, Engineering, History and Medicine with many of these collaborations focused around the interdisciplinary research institutes, particularly WISE, EEI, CPPI and Hull/York Medical School (HYMS). The University has invested heavily in funded PhD Scholarship clusters to support research excellence in key areas of interdisciplinary expertise, often aligned to research institutes and centres. Staff in the UoA have both led and been a part of securing several of these clusters (through rigorous internal competition), notably:

- *Richard Hoggart Centre* (Nickson, **Hughes**, Ploner)
- *Freedom to Learn* (Hope with Montgomery),
- *Learning in Virtual Environments* (LiVE) (**Martin**);
- *Mobile Learning and Third Space theory* (**Burden**),
- *City of Culture* (**Urbina-Garcia**, **Hughes**, **Jones**)

The SoE has recently been integral in the Leverhulme Doctoral Scholarship Centre for Water Cultures (£1.3million) bringing in a total of 6 PhD scholarships matched with equal funding from the University itself (**Burden** a theme co-convenor/supervisor; **Jones** supervisor). Our PGR recruitment strategy remains focused on interdisciplinary expertise, pursuing external scholarship funding and on recruiting high quality (over quantity) applicants.

Support for PGR students

To complement university-wide provision, the SoE's own monthly writing retreats, initially established to support the EdD community, was opened up to all PGR students and all staff to foster a participative research culture. Doctoral students can access seminar opportunities (attendance and presentation) at School, Faculty and University level, for instance attending the annual university-wide PGR conference, attending the faculty-wide, PGR-led, Culture and Community seminar series and presenting in the monthly SoE Research Seminar series. All departments and schools in FACE open up their seminar series to all PGR students fostering a

commitment to interdisciplinarity and community. PGR students also have dedicated workspaces located both within the SoE, near staff and in the library as part of the significant investment in the library. All support and access described here has remained in place wherever possible (including moving to virtual where appropriate) during the Covid-19 pandemic.

All PGRs have a principal and second supervisor and have a minimum of 12 supervision sessions per year (6 for part-time) with six and 12-month mandatory progress reviews (with independent chairs for the latter). Pastoral and academic support at unit level is provided by the Director of PGR with a strong holistic focus that includes monthly coffee afternoons for PGRs and staff also attended by the HoS. PGRs can apply for external conference funding at least once (with the Faculty and Doctoral College match-funding). PGRs are encouraged to share their research through seminars and teaching opportunities, often at Masters level; those who opt to do so, are supported through the PGTS Passport to University Teaching module, which includes HEA Associate Fellow status. PGRs are encouraged to publish with their supervisors and are supported and mentored in first authorship (see **James, Wright**, Ploner, Montgomery). This has been a successful strategy for developing writing skills and confidence, including for a number of staff completing doctorates after first careers outside of academia. PGR students are encouraged to apply for Roberts Funding and using this fund, staff hosted a doctoral conference in 2015 entitled *Operationalising Postgraduate Research: real journeys, real voices*, (Gouseti and Ploner). PGR students are invited to engage with research themes (and previously groups) and co-creation activities with staff. This has led to PGRs becoming PDRAs after thesis completion (e.g. Dean) and PGRs as named co-investigators in successful charitable grant applications (e.g. inclusion of three PGRs on Ferens grant linked to the Hoggart Centre led by **Jones** with Nickson, **Hughes** and other staff in the School/Faculty) thus supporting capacity development in grant writing, research collaborations and networking.

3. Income, infrastructure and facilities

Research Income

The UoA has significantly increased both the volume and breadth of competitive grant awards compared to 2014. In 2014 the unit reported approx. £450k of HESA grant income compared to approx. £1.1m in the current return, an increase of 166%. The following exemplify the breadth and nature of the awards achieved with the total funding received:

- 2020-22: **British Academy**: Youth-led adaptation for climate change challenges in Vietnam: social action, intergenerational and intercultural learning, £296,502
- 2019-22, **European Commission**: *Supporting Educators Pedagogical Application of 360 Video*, €420,000
- 2019-22, **European Commission**: *Developing Teachers' Digital Critical literacies*, €450,000
- 2019-22, **European Commission**: *Building a Research Infrastructure for School Teachers*, €399,000
- 2019-20, **UKRI/Biotechnology & Biological Sciences Research Council**: *Citizen Inquiry, Barriers, Challenges and Opportunities*, £20,000
- 2019-20, **Engineering & Physical Sciences Research Council**: *Evolving a Circular Plastics Economy*, £49,000
- 2017-2020, **European Commission**: *Designing and Evaluating Innovative Mobile Pedagogies*, €450,000
- 2015-2017, **AHRC**: *Research Engagement through Virtual Immersion* (with Glasgow School of Arts), £31,000
- 2016-17, **British Council/Newton Fund**: *Learning without barriers: exploiting the potential of mobile technologies in research*, £45,000

Over the period of the current REF cycle funding has been awarded by twenty-five different funding agencies (see Figure 4).

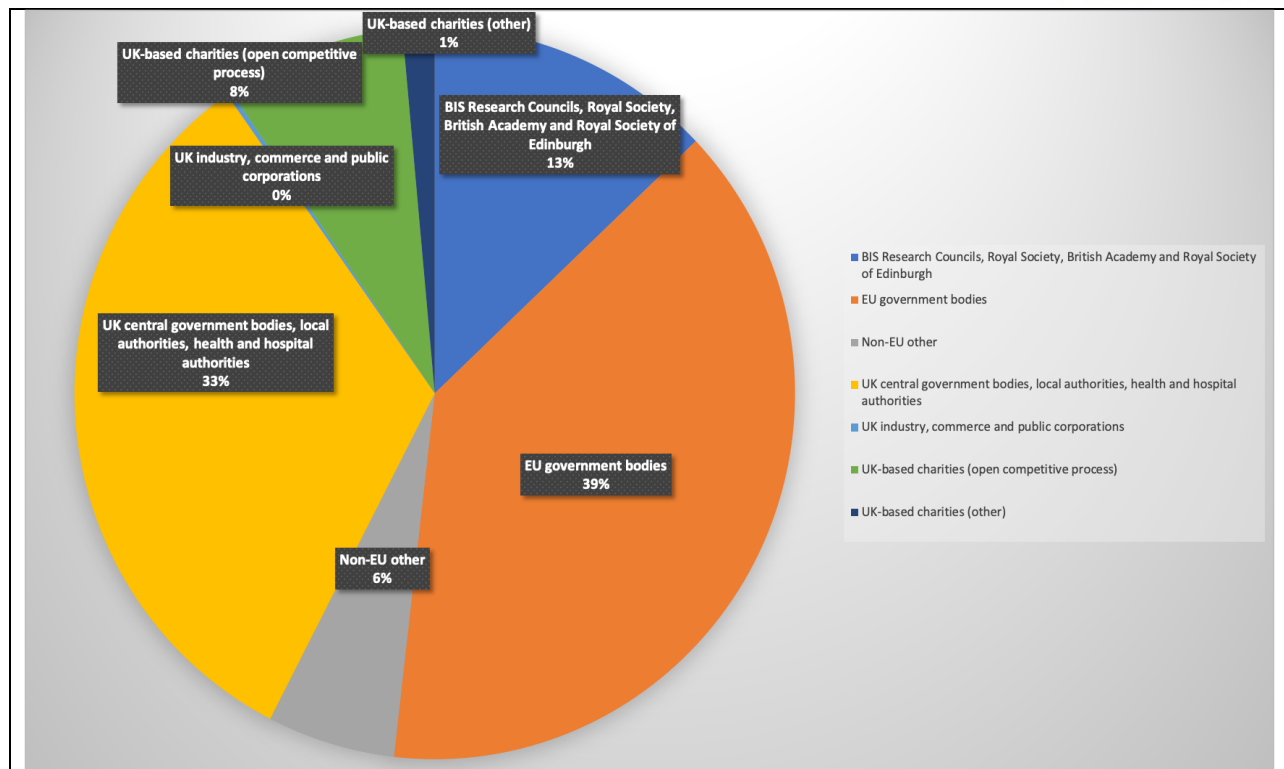


Figure 4: Competitive grant capture by funding source, 2020 REF

The single largest source of funding during this period is from **EU government bodies** (£452k /39%) and consists primarily of nine Erasmus+ Strategic Partnership projects (**Burden** = 4; Jones, S. = 3; Gouseti = 1; **Martin** = 1) designed to fund research, development and innovation in schools and universities across Europe. These include partners in Germany, Norway, Sweden, Belgium, Netherlands, Cyprus, Poland, Finland, Greece, Italy, Austria, Australia and USA. The income generated from these awards has been used to engage with colleagues in Teacher Education (7 of the 9 projects) with the potential to generate high quality societal impact in schools (in line with University policy) and indeed one of the impact case studies submitted for this REF (see **Burden**: iPAC) originated as an Erasmus+ project in 2014. On average each of these projects has generated three high quality publications (cf. **Burden** and **Martin**), and enabled the School to fund a number of PDRAs and purchase significant capital research equipment (e.g. 32 iPads). Additionally, these projects have established strong and enduring networks with leading European university partners that have supported and nurtured other research relationships, particularly for colleagues in Teacher Education and for some ECRs in the School. The MTTEP Erasmus+ project (**Burden**, 2014-2017) was recently awarded 1st prize at the prestigious European e-learning awards (Copenhagen, 2019) in recognition of its impact on schools and teachers using mobile digital technologies.

Our second largest source of research income is from **UK government bodies** (£379k/33%) consisting primarily of awards from the British Council/Newton Research fund. This includes three Institutional Researcher Links projects with Thailand (**Burden**, 2020) and Vietnam (Montgomery, 2014; **Burden**, 2016), and three British Council/Newton International Research Workshops for Early Career Researchers in Mexico (Montgomery, 2015), Egypt (**Burden**, 2015) and Thailand (**Burden**, 2017). These projects illustrate the strategic decision to expand international research collaborations in South-East Asia and other developing areas of the world as part of our **Social Justice** and **Transformative Pedagogies and Practice** research themes (see Section 1: Strategy).

Other income sources include **BIS/Research councils** (£149k/13%) which include a significant number of interdisciplinary and collaborative research projects with colleagues outside of SoE, such as **Jones'** recent British Academy project with colleagues in the EEI and partners in Vietnam (£296,502k); **Burden** and Gouseti's collaborative project on digital immersive 3D objects with

colleagues in the Glasgow School of Arts (AHRC, £79k) and a growing number of Citizen Inquiry focused projects such as **Burden's** UKRI Citizen Science Exploratory grant (BBSRC, 2019, £20k) and that with partners in the EEI, Chemistry, Geography and Politics departments (**Burden**, EPSRC Citizen Inquiry project, 2019, £50k). Although still relatively modest in monetary value, these projects reflect a decision to focus on collaborative grant capture with partners across and beyond the University, targeted at research councils beyond those traditionally associated with the social sciences such as EPSRC and BBSRC.

Given the size of the UoA research income is a significant achievement that underlines the vibrancy of the unit and the strategic decisions implemented in the light of the 2014 REF.

Strategies and infrastructure to raise income generation

The increase in research income described above is attributable to a number of factors at School/Faculty and University level. At **School level** we appointed several experts in external grant income capture to share advice, provide guidance and work with individuals on developing applications. These include Professor Peter Gilroy (ex-PVC, Manchester Metropolitan University) with particular expertise in UK Research Council funding and Ray Kirtley, an EU Specialist, to advise on EU funding. In line with the Faculty wide internal peer-review process for grant applications introduced in 2016, the School has identified individuals with strong track records in grant capture to be part of a peer review panel that provide guidance and advice to staff developing project applications. All staff considering grant applications are required to discuss this with the DoR who assigns a mentor/critical friend (from the review panel) to support them through the process before official sign off by the HoS and ADR, ensuring the process is carefully monitored and evaluated. This has made a significant contribution in increasing both the number of staff applying for grants and the overall quality of applications.

Professional Staff Support

The School and UoA have benefitted extensively from substantial central investment in the Research and Innovation Office including the appointment of two Research and Innovation Development Managers (RIDM), a RIDM specialising in international funding and an extended REF Management Team. The DoR and research convenors meet regularly with the RIDMs to share knowledge and monitor the progress of grant applications and awards.

The School and Faculty offer several **rewards and recognition** to incentivise grant capture including workload allocation for bid writing; 'buy out' of teaching for successful grant winners (subject to Faculty guidelines) and the use of a proportion of grant allocation for research related activity, such as conference attendance (subject to funder guidelines). Additionally, the University recognises research excellence, including grant capture, in its annual staff awards and as part of its promotion criteria for staff on a research domain. Finally, the School has made a considerable effort to ensure a sustained 'pipeline' of grant applications and funding by supporting ECRs in this process. Over the course of the current REF period, 18 ECR staff in the School (and a further 12 across the University) were awarded places on the British Council ECR Workshops described in Section 2. These workshops, with partner universities and ECRs in Mexico, Egypt and Thailand, focused on a variety of topics to enhance the career chances of ECRs including extensive support for grant application. At least five SoE staff attending these workshops have been successful in international grant application (see for example, **Jones; Urbina-Garcia**, British Council, Thailand).

Other infrastructure facilities and support

The Faculty Research Office supports academics in the SoE with a range of activities and mechanisms that include support for the REF reading group (see below), coordination of all PGR activities, record keeping and day-to-day administrative support for ongoing research projects.

The office also supports the promotion and dissemination of internal and external research news like Faculty and the SoE Research Seminar Series to all staff through its monthly newsletter.

The SoE has benefited directly from central university research support in the form of internal and pump-priming grants to encourage research applications and activity, particularly amongst ECRs. These include a number of successful applications to the Ferens Research Fund for starter grants of under £5k (e.g. **Urbina-Garcia**; Dean; **Jones**) and HEIF-supported funds such as Impact Accelerator Grants (**Burden**, **Jones**; **Hughes**) and internal Global Challenge Research Fund grants (**Burden**; Jones, S, **Urbina**). Additionally, internal pump priming grants from University Research Institutes, such as the award made to **Burden** and Dean (Plastics Citizen project, £49k) through the Energy and Environment Institute (EEI) and the Plastics Collaboratory have supported staff in pursuit of external funding applications. They have also supported more experienced research staff to move into grant capture across new disciplinary fields such as the recent UKRI Citizen Science award for **Burden**/Wurzel that originated in an internal EEI pump-priming award.

4. Collaboration and contribution to the research base, economy and society

Our research is characterised by strong regional, national and international networks and partnerships designed to generate high quality outputs that have significant societal impact. This is highlighted in our two impact case studies that focus on schools and teaching (see **Burden**: iPAC and **Jones**: using EmPAR to support young people in care's educational/social experiences). As a small UoA, collaborations ensure we maximise our staffing resources by working in partnership. This is evident internally with our strong emphasis on interdisciplinary collaborations, and externally with our many European projects and partners and those we are developing across South-East Asia. The principle of partnership is fundamental to the activities of CEPaR which is designed to enhance the impact and real-world relevance of our research by embedding it in the work and lives of our external stakeholders. In order to achieve this we have adopted a two-part strategy:

- Prioritise collaborations that best promote the activities of CEPaR and its three research themes (see below).
- Focus on specific geographic areas aligned to University priorities. These include South-East Asia and Europe, enabling us to concentrate on a portfolio of projects that is manageable but expandable.

Collaborations, networks and partnerships

Internal interdisciplinary research with other faculties and research institutes

In Section 1 we highlighted the strategic decision taken by the research leadership team in the UoA to forge new partnerships with the University Research Institutes. The following examples illustrate and provide an insight into the value of this activity in terms of research impact.

- Interdisciplinary collaborations through the University Plastics Collaboratory

In 2019, the University was successful in securing a £1.2 million EPSRC project ('Evolving a Plastic Circular Economy') that funded the establishment of a multidisciplinary Plastics Collaboratory featuring 45 academics from 14 departments/schools to address the issue of plastic waste and pollution. Under the leadership of **Burden** (named CI on the project) staff in the SoE (e.g. **James**, Shaw, Traunter, Dean) have played an integral role in this initiative, working with colleagues in Chemistry, Environmental Sciences, Politics and Logistics to better understand the pathways and interactions of plastics in the environment. The SoE has received in excess of £49,000 in competitive internal funding from this initiative to lead on public engagement with schools and young people. This has provided the stimulus and resources to create the Plastics Citizens project (<https://www.plasticsinquiry.com/>) which is an engagement project with schools, young people and other interested stakeholders across the University region and with a partner local authority in Bremerhaven, Germany (**Burden**, Wurzel, **James**, Gouseti, Dean, Dockerty and

Shaw). The outcomes and expertise developed during this interdisciplinary project enabled staff (**Burden**, Dean and Wurzel) to win UKRI funding to undertake exploratory interdisciplinary research into the barriers and benefits of Citizen Inquiry (**Burden** and Wurzel, 2019, £20k).

- Projects with the EEI

Closely linked to our interdisciplinary collaborations through the Plastics Collaboratory is our link with the University's Energy and Environment Institute (EEI) led by Professor Parsons. **Burden** and Parsons have collaborated on a number of projects and grants including two GCRF funded projects in Vietnam, Cambodia and Thailand associated with flooding, resilience, education and Citizen Inquiry (2018). **Jones** has recently received British Academy Youth Futures funding (£296k) to develop youth-led participatory action research exploring Indigenous knowledges to mitigate climate change in the Red River Catchment, Vietnam in collaboration with Co-investigators from the EEI, Vietnam National University (VNU) and Newcastle University. **Burden** and Dean are currently working with colleagues in the EEI to support teacher educators in Khon Kaen University (Thailand) to develop a citizen inquiry model to research and develop greater resilience to flooding with young people and teacher educators (British Council 2020, £71k) and this work is complemented by the research of colleagues working in teacher education who have undertaken work with the EEI in Can Tho University, Vietnam to develop early years provision in teacher education (Shaw and Traunter, 2019).

External research collaborations and networks

- Hull City Council/East Riding of Yorkshire Council

The SoE fulfils the University's Research Strategy goal to 'engage externally and build partnerships', in several ways. Two projects exemplify this; *#thehullwewant* led by **Hughes** and *Just like our lives* (JLOL) led by **Jones** (also submitted as an Impact Case Study). In 2019, the chair of the Health alongside the Wellbeing Board and Public Health Director, (Hull City Council) invited *#thehullwewant* to work with Public Health and the local authority to challenge established, top-down processes and practices. **Hughes** was invited to be part of the development of a Fairness Commission for the city utilising *#thehullwewant* ethos. This also encapsulated the transformation of the culture and practices of engagement approaches utilised by the Health and Wellbeing Board to refresh its future engagement strategy in 2020. In JLOL, young people in care co-created an original poem that was the focus of an award-winning animated film with a local arts company and produced associated materials for training teachers/other professionals working in children's services. JLOL also raised awareness and enhanced understanding of issues faced by young people who are looked after as a means to encourage action/change.

- the Global Digital Research Network (GDN)

Our research excellence and prominence in the field of educational technology (**Burden**, **Martin**, Williams, Gouseti, Jones, S., Hopkins) demonstrate strong external and interdisciplinary research activity. The GDN was established in 2018 by **Burden** to bring together researchers from across and beyond the University to explore the impact and use of digital technologies for learning. This includes researchers from each faculty in addition to external partners including the heritage sector (e.g. Hull Museums) and Hull City Council. It focuses on new and emerging digital technologies and brings together a critical mass of researchers resulting in several significant Erasmus+ awards to investigate the potential value of 360 video in Higher Education (**Burden**, 2019), the issues and challenges associated with the use of social media in schools (Gouseti, 2019) and the value of digital technologies in supporting intercultural skills and competences for teachers and teacher educators (Jones, S., 2019). The GDN is also a named partner in the recent successful University application to establish an Institute of Technology. The expertise in immersive learning and immersive technology also brings together researchers from the SoE led by **Martin** (including **Burden**, Williams), psychology and computer science and has resulted in a number of successful research applications including an Erasmus+ grant (**Martin**, 2017) with computer science.

- East Asia Research Collaboration Network

The SoE has developed a strong research presence through partnerships across South-East Asia which focus particularly on policy, internationalisation and mobilities in Higher Education (Montgomery, **Flippakou**, Ploner) and the use of digital technologies in Teacher Education (**Burden**, Hopkins, Gouseti). In 2015, the Faculty of Education (now the SoE) established the University of Hull East Asia Research Collaboration Network with research-intensive university partners in China and Vietnam. This network involves the regular exchange of academic staff between the respective partners, the sponsorship of PhD candidates in each partner institution and a number of high-profile international conferences and symposia (e.g. Society for Research in Higher Education symposium, Dec 2015). The network was instrumental in a number of successful grant applications including a British Council Institutional Research Links grant with the University of Hanoi (**Burden** and Hopkins, 2017). Based on the success of this network further connections and partnerships have been established in other universities across Vietnam (e.g. Da Nang, Can Tho and VNU) to support research in the field of digital education (**Burden** and Hopkins) and teacher education (Shaw and Traunter). More recently these partnerships have extended to work with universities and academics in Thailand including a partnership with Sukhothai Thammathirat Open University (Bangkok) to support the development of Early Career Researchers in digital education (funded through the British Council/Newton fund) and a newly established partnership with Khon Kaen University in north east Thailand which explores the use of Citizen inquiry methodologies and digital tools to address environmental issues such as plastics waste in water courses (**Burden** and Dean, 2020).

Indicators of broader influence and recognition by the wider research base

Visiting Fellowships

A number of academics in the School have undertaken short-term appointments as visiting fellows and professors at universities in the UK and around the world and these invitations are reciprocated by the School. These have included:

- **Burden:** University of Hong Kong (2016), UTS (2012 and 2016) and the Universidad del Norte Barranquilla, Colombia (2018; 2019; 2020). In 2018, he was awarded a distinguished visiting professor at UTS, making the inaugural keynote lecturer at the launch of their STEM Futures Research Centre (<https://www.uts.edu.au/node/251076>).
- **Martin:** visiting professor University of Hong Kong; University of Saint Joseph, Macau; Future University, Hakodate, Japan; Yokohama University, Japan; and Bern University, Switzerland.
- **Bottery:** visiting fellow Education University of Hong Kong (2015; 2016)
- **Flippakou:** Visiting Fellow, Hellenic Open University; Research Fellow, Oxford Centre for Higher Education Policy Studies (OxCHEPS), New College, Oxford.

To further foster international collaborations the School supports visiting academics from around the world including a number of visiting academics from University Technology Sydney (Australia) (Schuck, Aubusson, Kearney and Maher) and visiting professors from Mexico (Professor Benilde Garcia - Cabrero).

Invited keynote presentations and lectures

Staff in the SoE have been invited as speakers including keynote presentations and inaugural lectures by a wide range of prestigious institutions and organisations, both in the UK and internationally. These include:

- **Burden:**
 - Regularly invited by Apple UK and number of their partner universities to give keynote presentations.

- To address UNESCO at their annual mobile learning conference in Paris on mobile learning (2016).
- To present inaugural library lecture (November 2017) and inaugural keynote presentation at launch of STEM Education Futures Research Centre (February 2018), University of Macau, China.
- To deliver keynote presentations at Mobile Technologies in Teacher Education (MITE) conference, Galway (2016); Festival of Mobile Learning, Hong Kong (2017); and at launch of Future of e-Books conference in Hanoi, Vietnam (sponsored by the British Council and Vietnamese Ministry of Education).
- **Jones** invited speaker at Centre for Higher Education and Equity Research's (CHEER) 10th Anniversary event on class inequalities, University of Sussex (2017).
- **Hope** invited keynote at Education Transforms Symposium, University of Tasmania (2017).
- Ploner keynote presentations on Hull UK City of Culture 2017 for Leicester University (Tourism and Place conference, June 2018) and University of Warwick (Nov 2017).
- Traunter: keynote address for Hong Kong QESS Opening Conference (2018).

Leading editorial positions, reviewers and subject associations

Academics across the SoE play an active role as University citizens through their work as editors and reviewers for national and international journals and as reviewers for research council grant applications. A number of staff have been editors/co-editors for prestigious international journals including:

- Journal of Education for Teaching (Gilroy editor; Montgomery co-editor).
- Educational Research and Evaluation (**Martin**: editorial board).
- Technology, Pedagogy and Education (**Burden**: reviewer).
- Journal of Tourism and Cultural Change (Ploner: co-editor).

Flippakou also served as a Council Member, R&D Committee Member and Theory Network Co-Convener for the Society for Research into Higher Education (SRHE). Staff in the School have served on the governing bodies of SRHE (**Flippakou**, Ploner, Montgomery); UCET (**Bottery**; **Burden**); Mexican Society of Psychology (**Urbina-Garcia**). **Hughes** is also a Fellow of the Royal Society of Arts.

Doctoral examining

A significant number of staff in the SoE undertake doctoral examining for universities in both the UK and abroad. These include **Burden** (Northumbria, Bath Spa, Wolverhampton, Hong Kong Galway, UTS), **Hughes** (University of the West of Scotland) **Bottery** (Hong Kong University), **Jones** (University of Manchester, Newcastle University); **Martin** (Newcastle University; Durham University; Greenwich University; Kingdom of Saudi Arabia).

Finally, staff across the SoE play an essential role in leading and organising national and international conferences. **Burden** is a founding member of the first mobile learning in teacher education conferences (MITE) and was a member of the organising committee for both the Los Angeles and Sydney annual conferences. He was also a founding member of the MTech conference which held its inaugural conference in Guilin, Guanxi, China in June 2018. **Martin** is the founding member of the International Virtual Environments Research Group and the iVERG conference which brings together leading academics in the field of immersive and virtual learning from around the world. As an ECR Gouseti and Ploner jointly organised the Digital Scholars in a Mobile World, A one - day symposium exploring work/life balance in academic life, funded by Balance Network UK (2016).