

Institution: University of Stirling
Unit of Assessment: C23 Education
<p>Section 1. Unit context and structure, research and impact strategy</p> <p>Education at Stirling has been a part of the institution, and deeply engaged in research since the University received its charter in 1967. It is situated at the productive nexus of theory and practice, emphasised in the naming of the research group presented in this submission as Education Practice/Theory. The forward slash acts as a pivot neither conflating practice and theory nor producing a rift between them and is reflected in our distinctive approach to research in which theory is seen as deeply embedded in practice and practice is at the heart of theory. Our research and our educational practice embrace this philosophical stance.</p> <p>The Education Practice/Theory (EP/T) group adopts an interdisciplinary approach to studying social and educational practice in a variety of institutional settings, organisational contexts, life stages, and sites of inter-generational encounter. Our mission is to undertake research which provides evidence for decision-makers at every level of education (from the classroom to government and from the local to the global), to reframe professional engagement in practice, and to contribute to the conceptual development of the field of education. Strategic investment for success, support for staff across a range of disciplines, and nurture of new talent, have led us to become a sustainable centre of excellence in educational research. Education at Stirling produces research in the areas of Professional Learning, Leadership, & Governance, Curriculum, Educational Linguistics, Digital Learning, and Children's Rights and Participation. The EP/T group provides strategic support, offers cohesion across disciplines and themes, advocates for equality and diversity, and facilitates high-quality, cross-cutting research.</p> <p>Unit context and structure</p> <p>The EP/T group is located in the Faculty of Social Sciences (FoSS). One of the five academic faculties of the University, FoSS was formed by the integration of the Schools of Education and Applied Social Science in 2016. This reorganisation has created synergistic interdisciplinary relationships with other social sciences.</p> <p>Research governance is conducted through the Associate Dean for Research (Copland), and the Faculty's Research and Knowledge Exchange Committee (RKEC), which reports to the Faculty Executive, and to University Research Committee. One of seven research groups in the Faculty, EP/T creates collaborations across disciplines, and ensures staff and postgraduate researchers have a strong research identity. It is led by an experienced senior researcher (Watson) who sits on RKEC to ensure flows of information between it and EP/T. EP/T includes 24 staff (23.2 FTEs) and 57 post-graduate research students (at the census date).</p> <p>Research Strategy</p> <p>Over the last six years, we have made clear progress in meeting the goals of the Education research strategy laid out in 2014, which were to:</p> <ul style="list-style-type: none"> • increase research income • support high quality research and publications • increase the international significance of our work • invest in developing the socio-economic impact of our research. <p>Through strategic investment and planning we have made significant progress in meeting each of these four research objectives. Our staffing strategy has consolidated expertise in key thematic areas. Our rigorous approach to research is evidenced in both the quality of our research outputs, and our substantially increased research income: from just under £1,400,000 in the previous REF period to £4,200,000 in this. We have also enjoyed significant success in the development of</p>

doctoral programmes, and this has led to an increase in research students making timely completions. Currently, staff in Education supervise 57 students (F/T and P/T). A key theme of the 2014 strategy was to develop partnerships within and outside Scotland, and across a range of research users. In this submission, we highlight our successful collaborations with Scottish and Welsh Governments, regional agencies and local authorities, and national education agencies in Scotland and Ireland.

Research areas

(1) *Professional Learning, Leadership and Governance*. Research in this theme examines the changing nature of professional learning and leadership in educational settings. The work of the group contributes to the strategic aims of EP/T in building a sustained body of research aimed at promoting social improvement and reducing inequalities. Research in this theme has enjoyed success in research council funding, notably AHRC and ESRC, and has also made significant impacts on policy and practice in professional learning in Scotland and Wales. We work closely with end-users in the design of research, e.g. we work in partnership with Central Local Authority Stirling Partnership towards school improvement. A key outcome of research in this theme has been the development of 'Critical Collaborative Professional Enquiry' (CCPE), a model of professional learning which has influenced education policy and transformed teaching practices in Scotland and Wales, and which we report on in the impact case study, *Bridging a Policy-Practice Space in Professional Learning Through 'Critical Collaborative Professional Enquiry'*. The strategic objective to increase external research income through internal support has brought rewards. For example, research in CCPE has received funding from the Scottish Government, local authorities, and South East Wales Education Achievement Service, totalling £450,000. Strategic investment at Faculty level supported a successful bid for a 3-year, ESRC-funded interdisciplinary research project, 'Processes and practices of governing in further education colleges in the UK: How do governing boards realise the strategic aims of the organisation?' which aims to enhance colleges' abilities to meet the needs of students, employers and labour markets (2018-2021; £812,514).

(2) *Curriculum*. This theme has developed as a core strand of research, formalised in 2016 with the creation of the Stirling Network for Curriculum Studies. The network brings together international curriculum scholars from Europe, North America and Australasia, including formal partnerships with Western University (Canada) and Linnaeus University (Sweden). Activity has included hosting the European Conference on Curriculum Studies in 2017, taking on the editorship of the influential Curriculum Journal, and significant input to national curriculum policy and capacity-building work with schools and teachers in Ireland, Scotland and Wales. Curriculum research has generated new knowledge about complex patterns of curriculum making, including identification of barriers, drivers, and unintended consequences of policy. The Impact Case Study, *'Remaking the curriculum: policy and practice'* is related to this area. Funded research and knowledge exchange includes a Nuffield project on curriculum making in Scottish secondary schools (2019-21), and two British Council projects on the implementation of the new Croatian national curriculum (2018-2019). Colleagues from this area have taken a central role in the response to the Covid-19 pandemic, for example, leading the Scottish Government's Rapid Review of National Qualifications 2020 in the aftermath of the Scottish Examinations' COVID-19 controversy (Priestley).

(3) *Educational Linguistics*. A series of public events, and Carnegie Trust funding for a Visiting Professor (Claire Kramsch, University of California, Berkeley) have established a highly visible academic profile for this interdisciplinary research area. A major international conference, 'Languaging in Times of Change', (2018), brought state-of-the-art expertise to discussions of interdisciplinary language research. Educational Linguistics also hosted two one day conferences: 'Who is the language learner' in 2017, and a Festival of Social Sciences event in 2015 on language learning in Scotland. In 2019, a two-day researcher development event, funded by the Scottish Graduate School of Social Science, delivered training in Linguistic Ethnography to 27 early- and mid-career researchers. Funding achievements include an ESRC grant, 'Supporting separated

migrant children to thrive during COVID-19' (£192,630); a British Council Widening Participation grant, 'English as a school subject: learning effective practices from low level primary English language Teachers' (£189, 834); two British Council English Language Teaching Research Awards (2015 and 2019, £36k); and AHRC/GCRF funding (2019) for a project which established network partnerships in Colombia, Lebanon, and South Africa. The network conducted intervention research in language policy and practice in Colombia, Lebanon, and South Africa. This network built on foundations laid in an AHRC/GCRF project (2018), 'Overcoming Barriers to University Education in South Africa', which, in collaboration with University of Cape Town, examined how translanguaging pedagogy provides success for disenfranchised students. AHRC has recognised the impact of the South Africa collaborative research as an AHRC Impact Case Study.

(4) *Learning for Complex Futures* is an interdisciplinary theme that focuses on judgment and decision-making in increasingly complex, often highly-technologised and rapidly changing local and international environments. . The importance of this theme has been recognised at University level through the Digital Society and Culture Research Programme (led by Thompson), and at Faculty level with the appointment of an ECR (Wilson), and support for the international Professional Practice, Education and Learning (ProPEL) network. Major completed projects in this theme include the 'oPEN' project (Scottish Government, 2014-2016, £146,000); and the 'CodeActs' seminar series (ESRC, 2014, £29,703). Progress towards meeting the strategic objective to increase research income is evidenced in a major AHRC award in partnership with South African universities, 'Water and Fire' (GCRF, 2019-2022, £998,611). which aims to improve individual and community responses to local environmental crises arising from climate change; and the 'Data Commons Scotland' project (EPSRC, 2019-2021, £364,000), which is developing ways to improve community action based on digital Open Data on waste and resources.

(5) *Children's Rights and Participation*. Research in Children's Rights and Participation examines how children and young people learn about their rights, and participate in decision-making about matters that affect their education and other services. The strategic objective to develop the socio-economic impact of our research has been met through funded collaboration with partners including Children and Young People's Commissioner Scotland (£26,362), and Education Scotland (£21,364). Research critiquing the role of the UN Convention on the Rights of the Child, and examining the link between participation rights and attainment, has resulted in significant changes to young people's lives, through raising attainment, improving child-adult relations, and advancing school-community links. This work is presented in our Impact case study '*Improving Children and Young People's Rights-based Participation in Decision Making in Scotland and Internationally*'. In addition, we conduct research in inclusion for children with additional needs for educational support, with a particular emphasis on those with language and behavioural difficulties. McCartney is a member of the international CATALISE consortium, whose definition of Developmental Language Disorder has been adopted by professional bodies including IASLT, RCSLT, and Speech Pathology Australia.

Fostering Interdisciplinary Research

The University's research is embodied in three research themes: Cultures, Communities and Society, Global Security and Resilience, and Living Well. Within this, twelve distinct Research Programmes encourage and support interdisciplinary working. Colleagues in the EP/T Research Group lead the *Digital Society & Culture* programme and provide expertise, for example, to the University's *Extreme Events*, *Digital Culture and Society* and *Global Food Security* Research Programmes. The EP/T Research Group also works across disciplines in a broad range of projects not primarily concerned with formal education, and seeks out collaborations both within the University and beyond. For example: Wilson is co-investigator on an EPSRC-funded project, 'Participatory Design and Open Data Platforms for a Data Commons in Scotland: case study – waste management', in collaboration with Communications, Media and Culture; Copland brings her applied linguistics expertise to the UKRI/ESRC project Designing for Ageing and Dementia International Research Network; Priestley was awarded funds by NASUWT to conduct the Teacher Workforce Survey in Scotland in collaboration with a colleague, Shapira, from Social

Surveys and Statistics. Interdisciplinary research in the Faculty is fostered through enabling EP/T members to contribute to the work of other disciplinary research groups (e.g. Galloway and Swanson are members of the Crime and Justice group; Watson is a member of the Governance research group; l'Anson contributes to Child Well-Being and Protection).

Future research strategy

The EP/T Research Group will continue to develop research capacity across its core areas, driving forward social change to address inequalities. Our first aim is to develop a mission-oriented approach to research, working across the Faculty, University and beyond on major societal problems, including addressing poverty-related attainment gaps in the education experiences of young people.

A second aim is to further develop interdisciplinary research which has strong impact potential. Investment into the innovation workstream of the Stirling and Clackmannanshire City Region Growth Deal, which is led by the University, provides an exciting new opportunity in this regard. EP/T is currently working with colleagues in Natural Sciences to ensure that the new Scotland's International Environment Centre (£22m government investment) is underpinned by an education remit linked to health and well-being, and that the proposed Intergenerational Living Innovation Hub (£7.25m) has a focus on education across the lifespan.

Our future research strategy also aims to increase research in international contexts, extending recent successes in winning UKRI research awards through the Global Challenges Research Fund, capitalising on international networks, and working towards the UN Sustainable Development Goals, quality education and reduced inequalities.

We are committed to creating a sustainable and equitable group. We will do this through supporting all colleagues to attract research funding commensurate with their career stage, and through mentoring and including ECRs in research bids. We believe that a strong PGR cohort benefits the sustainability of educational research, and will work to ensure that all colleagues are supervising their current target of 2.5 students.

The four strategic aims will be reviewed biannually by the research group in conjunction with the Associate Dean Research and Impact Leader to ensure progress towards their fulfilment.

Approaches to Impact

The group has a well-developed impact strategy based on understanding, dissemination, and evidence. The EP/T impact team is led by Priestley. In order to develop understandings of impact amongst the group, the team holds regular seminars, contributes to the annual Research Away Day, and runs researcher development sessions on impact-related topics. It works with colleagues in the early stages of research proposal planning and development to ensure an alignment between research design and adoption of findings. The team also advises on collecting data which demonstrates research impact, and on how evidence can be gathered at different stages of research.

The production of research in collaboration with stakeholder groups across different subject areas and methodologies has been central to EP/T's impact strategy. *Professional Learning, Leadership and Governance* have co-produced research with local authority partners, and an ESRC-funded project on college governance is advised by an 'Impact Group' of key figures from government, further education, and employers. *Educational Linguistics* has worked with government and non-government partners in Colombia, Lebanon, and South Africa, who provide direct routes to influence language-in-education policy-making. Research commissioned by government policy makers (e.g. Welsh Government and the Irish National Curriculum Agency) has ensured that research findings inform national and local authority decision-making. Research with children and schools on rights and attainment has led to improvements in children's lives. An indication of the strong reputation of our curriculum research lies in the fact that Scottish Government invited

Priestley to conduct the Rapid Review of National Qualifications 2020 after COVID-19 forced a change in how students were assessed.

The impact lead, Priestley, supports and evaluates the impact of engagement activities, including writing for a wide range of non-academic audiences, and engaging with mainstream and social media. The University provides training in writing for media, blogs, Twitter and Facebook, and in media presentation skills. A dedicated events fund supports the EP/T group in promoting its research through knowledge exchange meetings; a further fund finances knowledge exchange and evidence gathering activities, including surveys and workshops. For example, Mannion organised 'Participation in decision making in Educational Settings?: beyond learner voice and pupil councils' for 80 attendees including practitioners, school managers, policy advisors, local authority personnel, curriculum designers and academics in 2018. Workload allocation encourages academic staff to engage in impact activities. Colleagues on teaching and scholarship contracts are encouraged to support impact activities. Each semester, Impact Workshops enable colleagues to work together on impact planning and development.

Targeted Faculty funding, peer mentoring, and a programme of researcher development leads to research with impact. Expertise with digital platforms, enhanced during the pandemic, enables us to build relationships with new and existing networks, as we ensure that end-users are involved in all areas of the research process. Our focus is on extending international pathways to impact, and ensuring effective costing of international impact activities in research grants. We are supported in this endeavour by Faculty investment. ,

Open Research

The University supports an ambitious publishing programme, and is committed to making outputs of research publicly accessible via the green and gold Open Access routes, in a manner which is compliant with funder and publisher, and with ethical and legal requirements. An Article Processing Charge Fund supports Open Access publishing via the gold route. Since 2014, 26 articles have been published by the EP/T colleagues via the gold route. The green route is the well-established institutional repository, STORRE, and all researchers deposit research outputs there within three months of acceptance for publication. Automated embargo mechanisms and the option of metadata-only records ensure the appropriate level of openness and sharing is fully supported. A persistent identifier and citation are provided.

Research integrity

All research proposals are subject to internal peer review. Larger proposals are given enhanced support at University level. This structure has the dual effect of ensuring proposals have the highest chance of success, and that methodologies and approaches are innovative, rigorous and robust.

The culture of the group promotes high levels of research integrity. Discussions of research ethics are central to EP/T meetings, and to the development of research ideas. International expertise in research with vulnerable groups means researchers in EP/T have significant experience of ethics in research practice, including expertise in appropriate elicitation of informed consent from vulnerable participants, such as unaccompanied migrant minors, in intercultural ethics, and in researching digital contexts.

Section 2. People

Staffing Strategy and Staff Development

The EP/T Research Group comprises 24 research active staff: seven Professors, five Senior Lecturers, and twelve Lecturers, including four ECRs, all of whom are on long-term contracts. A priority for EP/T is to sustain a research environment that facilitates high-quality research by academic researchers at different points in their careers. To this end, and in addition to the research support structures provided by the University via the Institute of Advanced Studies and

Research and Innovation Directorate, EP/T supports the development of research grant proposals, runs a seminar programme, mentors new researchers, provides supportive peer review, and organises writing workshops.

The aim of our staffing strategy is to build research capacity in the core areas of Professional Learning, Leadership, & Governance, Curriculum, Educational Linguistics, Learning for Complex Futures, and Children's Rights and Participation. It does so through: (1) recruiting established academics in these areas, (2) ensuring progression (3) supporting ECRs to plan successful academic careers, and (4) developing existing colleagues' research ambition and skills.

1. Researchers with established research profiles have been recruited to the group since 2014 (Blackledge, Copland, Creese, McCartney). These colleagues provide enhanced expertise and leadership and, with existing senior staff, support colleagues who are ECR or mid-career researchers.
2. During the REF period, we have supported colleagues to promotion. I'Anson has been promoted from Senior Lecturer to Associate Professor; Drew, Thompson and Mannion have all been promoted to Senior Lecturer.
3. ECRs with strong research potential have also been recruited (Hennessy, Lowing, Xenofontos). The EP/T Research Group protects their time, through reduced teaching and administrative workloads, in order that they can dedicate time to research. They also receive enhanced funds for conference and network meetings, and dedicated support with developing research bids. They are assigned a senior colleague to act as a mentor and critical friend to support their progress, including the development of grant proposals and publication and impact plans. Mentors also identify opportunities for interdisciplinary research, through connecting them with colleagues in the Faculty, and across University-wide research groups. ECRs serve a probationary period, with regular meetings to support achievement of an agreed research plan and address any concerns.
4. All staff develop research plans and a strategy for skills development through the University's annual appraisal scheme, Achieving Success. This is a key aspect of the Faculty Research Strategy and Equality and Diversity Action Plan. Achieving Success provides an opportunity for staff to discuss in detail with two senior colleagues their research careers in the short, medium, and long term, through: reflecting on their achievements over the year; developing research proposals in line with their career stage; and discussing publication and impact plans. During Achieving Success meetings staff are also encouraged to identify research training needs, to plan and apply for research leave, and to discuss promotion plans. Senior staff create a positive environment for Achieving Success meetings, noting successes, and offering support for research planning. Following our EDI action plan, all staff are asked about whether/how any protected characteristic might be impacting their success and how the Faculty might best respond.

The group also benefits from research staff on fixed-term contracts, who are supported at University level through the HR Excellence in Research Action Plan. The group maximises opportunities for development of these staff through supporting continuity of employment by: publishing job opportunities in the weekly newsletter; funding the Fixed Term Contract Researchers' Forum, which reports to RKEC; and including these colleagues in the Achieving Success process. The majority of staff on fixed-term contracts are women, and their continuing development is central to our commitment to equality and diversity.

The EP/T Research Group also continues to benefit from the participation of honorary and Emeritus Professors. Edwards, Fenwick, Field, and Humes are all members of the Faculty Peer Review College, which supports colleagues with producing high-quality publications. They are all regularly consulted for advice on research strategy, and their work continues to inform the group's impact activities.

We also pursue international development opportunities for staff. For example, Blackledge and Creese's recent awards of Distinguished Visiting Fellows at the Advanced Research Collaborative, The Graduate Center, City University of New York (2020) have led to international collaborations and the publication of a monograph.

Other research support

The University research leave programme means that staff can apply for 6 months leave after six consecutive semesters; after 12 consecutive semesters colleagues can apply for 12 months research leave. The Faculty awards research leave strategically and uses it to enhance research excellence with strong impact. Applications for research leave are developed during Achieving Success meetings, and target ambitious research funding proposals, produce high-quality outputs, and engage in research impact activity. For example, Watson's research on FE governance was enabled by research leave, together with funding from the Faculty to support travel of partners/participants, and training in advanced research methods. Since 2014, eleven staff from the group have benefited from research leave. In addition to the University leave programme, the group introduced (in 2018/19) an opportunity for an annual 1-4 week mini-research leave, for which colleagues must agree targets with the Research Group Leader (Watson). This allowance is particularly valuable for new members of the EP/T group, and ECRs. To date, five staff have benefited from mini-research leave.

All staff, including Contract Researchers, are encouraged to apply for funds provided by the Faculty to attend conferences. Group members can attend one national conference per year and an international conference biennially, supported by this funding.

Research training includes regular writing retreats (facilitated by Michael, who has developed expertise in writing support through Faculty investment), including 'First Friday Workshops', a forum for developing high quality writing in the social sciences. The Faculty has continued to develop capacity and training amongst postgraduate and early career researchers, particularly through mentoring and joint writing, and PGRs are encouraged to write for publication from an early stage in doctoral studies.

University of Stirling has been awarded the HR Excellence in Research Award by the European Commission, recognising its work towards implementation of the seven principles of the Concordat to Support the Career Development of Researchers. University-wide researcher development for staff and postgraduate students has been enhanced by the establishment of the Institute for Advanced Studies, which extends research training opportunities to the Faculty in methodology, ethics and data protection. The Faculty supports an annual seminar series, to which Education contributes, and a regular 'Research Bites' programme, which responds to specific research needs such as methodological training and developing research bids in response to specific calls.

Research Students

The group has a large international and interdisciplinary community of post-graduate research (PGR) students, across a number of Master's level and doctoral programmes. The group has focused on attracting greater numbers of high quality doctoral students over the last three years and currently there are 57 research students, from Brazil, Saudi Arabia, Japan, China, Italy, Malaysia, Turkey, Oman, Kenya, Malaysia, Spain, Thailand, as well as the UK. Training is provided to staff to reflect upon and adapt practice in a culturally responsive manner in the provision of doctoral supervision.

The table shows the number of doctoral completions:

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Number of research doctoral degrees awarded by academic year (PhD)	3	5	2.5	8.5	5.5	5.5	7.5
Number of research doctoral degrees awarded by academic year (EdD)	4	2	4	0	2.5	1	2

The group has highly structured approaches to support the development of PGR students. Master's research programmes are fully compliant with ESRC requirements for the provision of research skills training, and were commended in an audit by the Scottish Graduate School for Social Science in 2017. The 1+3, +3.3 modes, linked to the *MSc in Applied Social Research*, provide a rigorous grounding in research methods prior to commencing doctoral study, as does the PhD in TESOL Research and Applied Linguistics. All first year doctoral students join a wider cohort of social science PGRs, which builds community and identifies training needs. To promote inclusion these groups are accessible face-to-face or via synchronous video-conferencing, allowing part-time and distance-learning students to participate and benefit. Through the cohort programme students engage with the Research Group and broader Faculty, offer and receive peer support, and think beyond the boundaries of their own study. PGRs have high levels of civic engagement (e.g. applications for external funding to hold events, representation on national research bodies such as SERA/BERA). Mannion is the EP/T's appointed doctoral tutor, supporting PGRs and coordinating administrative processes.

Doctoral students can study either full- or part-time, and have a choice of two pathways: PhD by research thesis, or PhD by publication. As well as traditional PhD study, there are two named cohort-based doctoral routes, the EdD and the innovative PhD in TESOL Research and Applied Linguistics, both including taught modules. All programmes are managed by academic directors, who take a proactive role in student development. For example, TESOL Research and Applied Linguistics has monthly meetings for PGRs, run by the students, at which they discuss data, work in progress, and other relevant matters. PGRs undergo Annual Progress Review from an independent panel to support their development, and to ensure that the supervision they receive is of excellent quality.

All doctoral researchers are invited to join the EP/T Research Group. Four PGRs sit on the group's organising committee. Through their participation they develop organisational skills, academic writing, and understanding of the funding, publishing and impact landscape. PGRs have a ring-fenced budget which they use to publish their work, attend training events, and present at national and international conferences. Students have presented at conferences including BERA, ECER, BAAL, and EuroACS. PGR students use dedicated funds to run their own events, and PGRs have led successful applications for external funding (e.g. BSA, BERA) for training events with invited high profile external speakers. Many doctoral students take up international or government placement opportunities (e.g. successful applications for Scottish Graduate School for Social Science internships), providing them with significant skills development, and preparation for future careers.

Facilities for PGR students are extensive. Doctoral students are allocated office space and a computer within the Faculty. The University provides a dedicated training room, the PGR zone in the University library, which hosts training events, and which is available to students. EDI

principles led to enhanced provision for PGR study space during COVID. PGRs benefit from the resources and training programme of the University's Institute for Advanced Studies and the institutional Research Compass System, which engages PGRs with the VITAE researcher development framework principles, enabling them to audit their training needs, and plan a strategic programme of training.

Numbers of full-time PGR students have increased steadily since 2014 (nine more doctoral students graduated in the current REF period than in the previous one). This reflects a proactive approach to recruitment (e.g. University PG Open Day, Find a PhD event, Live Chat event, attendance at professional conferences, and a new online applications process) as well as the research programmes offered by EP/T colleagues. The University's Careers and Employability Service provides dedicated advice. All academic staff receive supervision training, and each supervises PGR students, with a target of 2.5 students per FTE. A change since 2014 has been the introduction of a co-supervision system, with both supervisors fully involved and attending all advisory meetings. This affords opportunities for cross-disciplinary supervision (current examples include Education and Psychology, Environmental Science and Criminology), and for ECRs to be mentored in supervision.

The Faculty is an active partner in the ESRC Scottish Graduate School of Social Sciences Doctoral Training Partnership (DTP), a consortium of ten Scottish universities. Priestley was the Education Pathway Convenor from 2014-17. The Faculty's involvement allows all PGRs to access training and resources. EP/T Research Group members contribute to Scotland-wide doctoral training in the DTP, for example in advanced qualitative methods, visual methods, linguistic ethnography, interdisciplinary research, and educational theory. The EP/T Research Group has been successful in securing DTP funded studentships. Between 2014 and 2018, 12 were awarded to EP/T (Open competition, 7; Collaborative, 4; ESRC, 1). This represents nearly half of the studentships awarded in Education to the six eligible partner institutions during this period. Collaborative studentship partners include Education Scotland, and the Scottish Qualifications Authority. The EP/T Research Group has been successful in attracting other sources of external funding for PGR study. These include the Scottish Government (with match-funded studentships in the Stirling Network for Curriculum Studies), and a Commonwealth Scholarship.

PGR students also contribute to teaching on the undergraduate Education Studies and Sociology programmes. They supervise Master's dissertations and can team-teach with established academics. EDI principles inform the recruitment and selection of students for these paid roles. As a result of this rounded approach, our PGR students are highly employable. Many have progressed to academic and other careers, and since 2014, three have taken up permanent positions in the Faculty (Galloway, Michael, and Wilson).

Equality and Diversity

The Faculty established an Equality and Diversity (E&D) Action Plan in April 2017, and in 2020 was successfully awarded an Athena SWAN Bronze Award, recognising an ambitious strategic plan for improving equality, diversity and inclusion. Activity completed to date has focused on advancing gender equality. Future activity will be intersectional to ensure a supportive and inclusive research environment for all. Key actions of our E&D plan are addressing structural barriers to promotion and advancement from doctoral students through to Chairs (through, for example, allocating University funding to cover teaching for one semester after colleagues return from maternity leave) supporting continuing professional development for fixed-term research staff (most of whom are women); widening accessibility of training materials to doctoral students studying part time, and embedding equality discussions into all committees with decision-making power. As part of the E&D Action Plan, and in line with our commitment to the Researcher Concordat, EP/T reviewed its approach to mentoring, ensuring all ECRs on probation have a senior colleague, and that mentoring is extended to all researchers. Embedding equality and diversity in policy and practice is reflected in our approach to REF output selection. UoA strategy

determines that all staff should be supported to develop excellent research, and to generate high-quality outputs from this research for submission to the REF and it uses both annual appraisal, Achieving Success, and the EP/T Research Group to ensure that this happens.

Section 3. Income, infrastructure and facilities

Income

Since 2014, the EP/T group has been awarded over £4,200,000 in research grants (£1,247,468 expenditure in the assessment period). Ambition in this area has also increased. In 2014/15 colleagues submitted research bids to the value of £2,203,000; in 2018/19, the value of bids was £3,145,000, which represents an increase of 43%. In 2020, 16 of 24 Education colleagues were in receipt of external research funding, and a strategic research aim is to support all colleagues to attract research funding appropriate to their career level. To do so, EP/T is focused on investing in and supporting researchers to work collaboratively across disciplines and on enabling ECRs to become independent principal investigators. The University's investment in colleagues with histories of success in winning research council funds has strengthened the group's capacity to support the development of high-quality research proposals (e.g. Swanson received mentoring support from Blackledge and Creese as she prepared a successful ESRC/GCRF funding proposal, awarded £998,611 in 2019).

In 2018 the Faculty introduced a Peer Review College. All grant applications are now submitted for rigorous critical feedback before they are signed off by the Dean. ECRs in particular have benefited from this process. University investment in a professional grant-writing service has also supported colleagues in research proposal writing skills, e.g. Watson's successful bid for ESRC funds (awarded 2018: £812,514) received useful critical commentary from the grant-writing service at the development stage.

The group has established strategic research links nationally and internationally, leading to inter/transdisciplinary synergies, and ensuring benefits of scale. Much of this work has been enabled by the University's GCRF *Spark*, *Connect*, *Connect +* and *Escalator* schemes, which we use to fund networking and seedcorn activity. For example, in 2017 Copland brought academics from India, Malawi, Mexico and UK to Stirling to work on an international research council bid through this scheme; in 2019 Creese, Copland, and Blackledge were funded under this scheme to bring researchers from South Africa and Mozambique to Stirling to collaborate on a GCRF research proposal.

International and interdisciplinary work is particularly suited to the development of larger research consortia. For example, the University of Cape Town and University of the Western Cape are partners on the *Water and Fire* project, and colleagues from universities in Bangladesh, Malawi, Mexico and Uzbekistan are partners in the *English as a School Subject* project.

Infrastructure

The research infrastructure supports all staff to produce high-quality research. In terms of organisation, research is supported by both a top-down and bottom-up approach. University Research Committee makes decisions, following consultation, about research strategy. The Associate Dean Research (Copland) sits on this committee, along with another EP/T professor (Blackledge), and they disseminate key information to the Faculty via the Research and Knowledge Exchange Committee and weekly Faculty Newsletter, which has a dedicated research space. The EP/T Research Group meets monthly to nurture and support research activity. Research and Knowledge Exchange Committee ensures effective communication between the concerns of the EP/T Research Group and University Research Committee. Academic staff are supported by Research and Innovation Services, who dedicate staff to work with individual Faculties. These colleagues ensure a steady flow of information about research funding

opportunities to the Faculty, support the Research and Knowledge Exchange Committee and management of funded projects. and administer the Conference Travel Fund. Conference/event planning and organisation is provided by Professional Services Staff in the Faculty.

The structure of planning and investment for research in the group is designed to build distinctive areas of work:

- Investment in three professors and an ECR in the field of Educational Linguistics demonstrates the Faculty's commitment to establishing Educational Linguistics at Stirling on the global stage. This has brought rewards in research funding, and has established a significant critical mass of researchers. The research group provided resources to host a course in Linguistic Ethnography, funded through the SGSSS Scottish Doctoral Training Partnership, which attracted doctoral and early career scholars from universities across Scotland.
- Investment in the Professional Learning, Leadership and Governance cluster has generated innovative research impacts, notably with the development of the 'Critical Collaborative Professional Enquiry' (CCPE) model of professional learning.
- Investment to establish The Stirling Network for Curriculum Studies has brought together international curriculum scholars from Europe, North America and Australasia, and acted as host for the European Conference on Curriculum Studies. This group was supported in providing significant input to national curriculum policy and capacity-building work with schools and teachers in Ireland, Scotland and Wales.

All research staff hold a *Worktribe* account. Introduced in 2018, Worktribe is a comprehensive research management system which records research activity (e.g. publications, projects, impacts) and guides the development of bids through collaboration between Research & Innovation Services, the Faculty Research Manager, and academic staff. This infrastructure provides an efficient environment for writing and managing research proposals.

Facilities

All members of the EP/T Research Group are offered private offices: office doors signal membership of the EDI committee, and when on leave the EDI committee signpost queries to other members of the EDI team. There are ample meeting rooms. The Iris Murdoch Building, part of the Faculty, is a dedicated conference space which holds 160 people, and has break-out rooms. It is frequently used by the EP/T Research Group for research, knowledge exchange, and impact events. EP/T takes advantage of the Faculty's Common Room to host seminars and guest speakers. Doctoral students and visiting scholars are all provided with workstations, and there is provision for them to book rooms to host research events. The University provides a large dedicated space in the library for the exclusive use of doctoral students. All buildings are fully accessible for disabled staff and visitors.

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

Collaboration with communities, practitioners, and decision-makers is fundamental to the approach to research which underpins the work of the EP/T group, informing the production of high-quality research which has clear implications for impact in educational contexts locally, nationally, across the UK and internationally. We do so by: leading and participating in research collaborations and networks; fostering interdisciplinary research; and contributing to policy and practice through engagement with research users

Research Collaborations and Networks

Locally, research collaborations are characterised by depth, and achieved through close participation and collaboration with key end-users. Partnerships have been built with local

authorities, including a formally constituted partnership with Central Local Authority Stirling Partnership. This partnership has led to government-funded research in teacher professional education, with ensuing societal benefits. This has significantly enriched the research environment, ensuring the relevance and impact of research outcomes. In Scotland, leadership of initiatives and collaboration with other academics in research include projects funded by Carnegie Trust and the Scottish Universities Insight Institute, which stimulates knowledge exchange. Research partnerships with other universities in Scotland, across the UK, and internationally are a regular feature of funded research projects.

Research networks

Internationally, EP/T academic staff have major roles in a wide-range of national/international collaborative research networks, including the European Education Research Association Curriculum network; the European Association for Curriculum Studies; European COST Actions: Interventions for children with difficulties learning their first language ; Citizen Science to Promote Creativity, Scientific Literacy, and Innovation throughout Europe; the International Congress on Mathematical Education Topic Study Group - Equity in Mathematics Education; the Visual Sociology Research Group of the International Sociological Association; International Consortium on Language and Superdiversity. The international research network ProPEL was founded by EP/T colleagues, and now supports a biennial international conference.

Academic researchers in EP/T are regularly asked to examine doctoral theses. Since 2014, around 100 theses have been examined in the UK (including at the Universities of Warwick, Exeter, Bristol, Birmingham, York and Newcastle) and overseas (Australia, the Netherlands, Norway, South Africa, and Sweden).

Leading and participation in organisations aimed at furthering research in the discipline

The research expertise of EP/T Research Group staff is recognised and valued in the UK and internationally. Members of EP/T Research Group hold positions as visiting scholars in the UK and internationally. Copland is Visiting Professor at the University of York, St. John; Gardner is Visiting Professor at Queen's University Belfast and Adjunct Professor at Dublin City University; Husband was Visiting Scholar at the University of Tasmania in 2019; Priestley was Visiting Professor, Linnaeus University, Sweden, 2018-19. Thompson is Adjunct Professor, Faculty of Education, University of Alberta (2013-present), and Swanson was International Research Associate, Nelson Mandela University (2013-2016), and Visiting Research Fellow, Moore Institute, National University of Ireland, Galway (June/July, 2016).

Members of the group are regularly invited to contribute to the discipline through assessment of research funding proposals. Within the UK, Fenwick was appointed to the ESRC Council between 2013-2016 and currently sits on ESRC-FCDO Raising Learning Outcomes assessment panel (2018-2021). Creese, Edwards and Watson are members of ESRC's Peer Review College. Colleagues also review for Carnegie Research and National Institute for Health Research, College of Experts in the UK and internationally they review for research councils in , Australia, Austria, Belgium, Canada, Hong Kong, South Africa and for grant awarding bodies in Portugal. Watson has contributed to South Africa's research quality assessment processes. Colleagues are able to bring their experience of assessment to the UoA to support colleagues who are writing research bids through feedback in the Faculty Peer Review College.

Learned Journals

Priestley is the Editor of the *Curriculum Journal* and is also on the board of Curriculum Inquiry. Ten EP/T members sit on the following editorial boards: *British Educational Research Journal* (Watson: Chair); *Anthropology and Education Quarterly* (Creese); *Language and Education* and *Language Teaching* (Copland); *Studies in the Education of Adults* (Galloway); *Research in Post Compulsory Education* and *Journal of Teaching in Lifelong Learning* (Husband); *British Journal of Religious Education* (l'Anson); *The Sojo Journal: Educational Foundations and Social Justice*

Education, Comparative and International Education Journal, Journal of European Curriculum Studies (Swanson).

Learned Societies

Our contribution to the research base is evidenced by the active participation of 20 EP/T members in a wide range of learned societies. Particularly noteworthy are fellowships awarded to Gardner (Fellow of the Academy of Social Sciences, Fellow of the British Computer Society and Fellow of the Chartered Institute of Educational Assessors); Creese (Fellow of the Academy of Social Sciences), and McCartney (Fellow of the Royal College of Speech and Language Therapists). Other notable contributions include: Associate of Royal College of Science (Watson); former President and Vice-President of the British Educational Research Association (Gardner); member of the BERA Council from 2013 until 2017, and Chair of the Academic Publications committee from 2014-17; current Vice-President of the European Association for Curriculum Studies (Priestley); member of the British Association for Applied Linguistics Executive from 2014 – 2017 and current a member of the British Council English Language Advisory Board (Copland); Member of the European Institute for Outdoor Adventure Education and Experiential Learning (Mannion); Convenor of the EERA Network 25 (Children's Rights in Education, 2010-2017 (l'Anson)); President of the Association for Research in Post Compulsory Education (Husband).

Conferences and seminars

Conferences and seminars are key strategic means of fostering and enhancing academic capacity. Significant resource is made available to encourage staff to host and attend international conferences and seminars. Annually, EP/T Research Group staff attend key conferences including AERA, BERA and ECER, and make a significant contribution through leading and participating in Special Interest Groups. EP/T members have presented their research at over 300 conferences since 2014.

Presentations

14 EP/T members have been invited to deliver keynote lectures at prestigious conferences and seminars in the UK and internationally. Highlights include: International Conference on the Sociolinguistics of Immigration, Rapallo (Genova), Italy, 2016 (Blackledge); 53rd Annual Congress of ASOCOPI, Cartagena, Colombia (Blackledge and Creese); 2nd and 4th Young Learners Conference (2017 and 2019), Chile (Copland); 3rd International conference of ARPCE, Oxford University, 2018 (Galloway) and Centre for Assessment Research and Policy in Education, Dublin City University, 2017 (l'Anson). Mannion was keynote at conference: 'Existing evidence about the effects of Udeskole - an international perspective', Denmark (2018), and Priestley presented the keynote at 'Teachers Matter - But how?' Conference, Linnaeus University, 2014, and at 2nd European Conference on Curriculum Studies, 2015, Porto. Swanson delivered the plenary address at the 69th Conference of the International Commission for the Improvement of Mathematics Study and Teaching, Berlin (2017).

Hosting conferences

EP/T Research Group members have hosted international conferences, with the support of the facilities of the Iris Murdoch Building. For example, in 2019 Blackledge, Copland, Creese and Lowing hosted an international, interdisciplinary conference at Stirling, 'Languaging in Times of Change', which attracted more than 100 researchers from 23 countries. In addition, colleagues have chaired conferences held in other institutions. Copland launched and chaired the first three Ethnography, Language and Communication Conferences and chaired the BAAL Annual Meeting (2015); Galloway hosted the EU-funded Recognition For Adult Educators Conference (2015), the Standing Conference for University Teaching and Research in the Education of Adults, in partnership with the Scottish Government's Strategic Forum for Adult Learning (2018) and 100 Years of Radical Adult Education in Scotland: Building Hope for the Future (2019); Priestley hosted the European Association of Curriculum Studies conference, 2017, which attracted 150 international curriculum scholars. Husband organises and leads the biennial international conference of the Association of Research in Post Compulsory Education.

Prizes and other recognition.

Watson won the Sage Sociology Prize for Innovation and/or excellence in 2016 and Fenwick the Critical HRD Award from the USA Academy of the Academy of Human Resource Development in 2020. Published papers by EP/T Research Group members have achieved top rankings on journal impact measures. For example, a paper by Drew, Priestley, and Michael was chosen by the Emerald group as one of the 50 most impactful articles of the last 50 years; a paper by Priestley, Minty, and Eager appeared in the Routledge Education Class as the most read article in 2015; an article by Creese & Blackledge in *Modern Language Journal* received the most citations from 2016-2019 for any article in the journal; an edited collection by Copland and colleagues was a runner up for the BAAL Book Prize, 2016. An Honorary Professor in Education, Humes, was awarded the highly prestigious John Nisbet Fellowship by the British Educational Research Association in 2019, for his 'outstanding contribution to educational research, and its application for the improvement of practice and public benefit'.

Wider contributions to the economy and society

EP/T Research Group makes a significant contribution to the development of policy and practice in several research areas. In Scotland, for example colleagues have:

- Worked in partnership with the Scottish Government bringing expertise to the national programme of school headship preparation and with the General Teaching Council for Scotland, developing and revising national teacher competence frameworks (Drew)
- Contributed to government consultations, and appeared as expert witnesses at the Scottish Parliament (Priestley; Watson).
- Presented to the Scottish Parliament Goodison Group, a charity dedicated to lifelong learning, in the Scottish Parliament (Gardner).
- Provided representation on: the Scottish Government Children's Rights and Participation Research Group, National Implementation Group on Outdoor Learning, the Advisory Group on Intergenerational Learning and Education Scotland's Empowering Learners Policy Writing Group (Mannion); New Scots Refugee Integration Strategy Evidence Group (Copland); the National Strategic Forum for Adult Learning (Professional Development (Galloway); Education Scotland Professional Learning and Leadership and the National Design Group (Drew); Scottish National Committee Self-evaluation Framework for Initial Teacher Education (Xenofontos).

In the UK more widely, Blackledge reported to the *Everyday Entrepreneurs Inquiry of the All Party Parliamentary Small Shops Group* at the House of Commons. He was also invited to speak at a round table discussion with the Department for Communities and Local Government and the Home Office. Swanson was invited by Rt Hon Minister Alistair Burt, DfID, to contribute to the Development Education Roundtable, Whitehall, in 2017. Creese participated in a Guardian/British Academy Live Q&A online debate: *How can we better support community languages?* (2015). Watson is working with the Association of Colleges, Colleges Wales, Colleges Scotland, and the Chartered Governance Institute (ICSA) to ensure the impact of her research on college governance. In Wales, Priestley is a member of the Welsh Government Curriculum and Assessment Advisory Group, and Drew has substantially influenced the development of policy and practice for teacher professional learning.

Internationally, Blackledge and Creese conducted research in collaboration with Universities South Africa, which informed changes to language-in-education policy in higher education in South Africa. This research was selected by AHRC as an Impact Case Study (2019). Swanson is on the International Advisory Board: UNESCO Chair in Democracy, Global Citizenship and Transformative Education. Drew was invited by European Commission (TAIEX) as an International Expert on School Leadership to the SRSP Workshop on reform of school leadership organised in co-operation with The Lithuanian Ministry of Education, Science and Sport. Copland was part of a delegation of young learner experts invited to engage with the Chilean Ministry of Education (2016). Xenofontos is a member of the Executive Committee of the Greek Society of

Researchers in Mathematics Education (ENEΔIM). Priestley has regularly advised and written policy papers for the Irish National Council for Curriculum and Assessment.

Members of EP/T engage with policy makers, headteachers, teachers and education academics through a range of media. Priestley's blog is widely read; it attracted nearly 30,000 visitors in 2019. The post 'What do the Pisa results tell us about Scottish education?' and 'Curriculum narrowing in Scotland's secondary schools: what exactly is happening?' were reblogged by *Times Educational Supplement*. Mannion, Priestley and Watson have all written for *The Conversation*: Mannion's piece on 'Mud pies and green spaces' was tweeted 533 times and received over 20,000 likes on Facebook. Mannion has also been interviewed by BBC Radio Scotland about the effects of greenspace on learning. Watson was an invited Guest on *Thinking Allowed* (Radio 4) to talk about humour as a methodology for social sciences (2015).

Concluding comments

Since REF 2014, the Education research group at Stirling has achieved its research aims and has met with considerable success in bidding for awards, including major grants from UK research councils. The Education Practice/Theory Research Group consistently influences policy and practice in Scotland and beyond. Academically, it has produced award winning research articles and supported ECRs to publish regularly and ambitiously. Even in these uncertain times, the group has flourished and has been awarded significant funding to carry out research into the educational impacts of COVID-19. Our ethos has always been to deliver research with tangible benefits to society, focusing on inclusion and equality, and going forward we are well-placed to deliver challenge-led research which will have a positive social impact.