

Institution: Anglia Ruskin University

Unit of Assessment: 23

1. Unit context and structure, research and impact strategy

Unit context and structure

The Education research environment constitutes a thriving and inclusive community of researchers, dedicated to the production of high-quality research and making an outstanding contribution to society. Our teaching provision is informed by our research and contributed to our 2020 ranking in the Guardian University League Table as first in the country for Education. We provide staff at all stages of their careers and all research students with an environment where they can develop the necessary skills to produce outstanding and impactful research. The unit consists of eight education academics, seven of whom (Lee, Lithari, Luff, Mangafa, Moreau, Moula, Walshe; with former colleague Mimirinis, employed 2016-19) are primarily located in the School of Education and Social Care within the Faculty of Health, Education, Medicine and Social Care, (FHEMS). One member (Greig) is located in the Global Sustainability Institute (GSI), part of the Faculty of Science and Engineering (FSE) but is nonetheless closely involved in our research activities through ongoing research collaborations with other unit members (e.g., Walshe). Three unit members are ECRs (Mangafa, Moula and Walshe).

Our research activity is concentrated in three domains in which we have significant expertise and a critical mass of researchers: social justice in education, education for sustainability, and early childhood. The areas are closely aligned with the research priority areas identified in the ARU's Research and Innovation Strategy 2018-2022 and the University's newest priority research areas of social inclusion and marginalised communities, and sustainability and the environment.

Social justice in education

Our research in this area investigates a broad range of educational inequalities in schools and tertiary institutions. Some of our recent research looks at LGBTQ+ teachers negotiating heteronormative school cultures, gender issues in the teaching profession, and HE students and academics with caring responsibilities, the first and last of which underpin our submitted impact case studies. Social justice in education also represents a strong feature of our programme of research events. We run a broad suite of events related to this theme every year. We have established strong partnerships with national and international organisations including, for example, the European Commission, University College Union (UCU), Advance HE, and the Association of School and College Leaders (ASCL), reflecting our deep commitment to engaging with practitioners, policymakers and the wider public.

Education for sustainability

Current work in this area includes an AHRC-funded large-scale study of the link between art, outdoor learning and children's well-being. We are also lead partners in the establishment of an ongoing network of individuals interested in sustainability in primary education, working with a group of 20 stakeholders across the East and South-East of England to explore how we can make a more sustained impact on environmental and sustainability education across our region. Staff working in this domain also regularly share their research at events attended by the wider public, such as the Cambridge Festival of Ideas and National Creativity and Wellbeing week.

Early childhood

The longest standing group in the unit is the Early Childhood Research Group (ECRG). The group has strong local, national and international research connections. In particular, it maintains close relationships with education providers across the East and South-East of England. ECRG organises annual research visits with its Erasmus exchange partners, including trips to Bologna, Padua, Rome and Venice, Italy, and to Sofia, Bulgaria. The group also welcomes other international early childhood specialists from various parts of the world as visiting scholars who contribute to research and teaching activities. The ECRG runs an annual series of research seminars on the University's Chelmsford site and leads summer writing retreats for academic staff and postgraduate students.

Interdisciplinary research

Our research is overtly cross-disciplinary in nature, with unit members working at the intersection of several subject areas and maintaining research collaborations and co-supervision of research students across several other Faculties, with colleagues returned to Psychology (UoA4), Environmental Studies (UoA14), Social Work and Social Policy (UoA20) and Sociology (UoA21). The establishment in 2018 of the Faculty of Health, Education, Medicine and Social Care and a restructure, bringing Education and Social Care together, have provided further opportunities for collaborations across disciplines and units, and for building research capacity, particularly, with Social Care colleagues. Examples of our interdisciplinary working include Moreau's work with Sandu (UoA20) as part of a project funded by the Faculty exploring the educational and broader experiences of women refugees in England (2018-2019), in collaboration with the Cambridge Ethnic Community Forum. Lee is a member of the LGBTQ+ cross-faculty research group and Walshe works with Greig of the Global Sustainability Institute based in the Faculty of Science and Engineering. Lee, Moreau and Walshe co-supervise two PhD Students with staff based in the Faculty of Science and Engineering.

Research integrity

The Faculty Research and Innovation Committee (FRIC) meets each term and governs research at Faculty level and reports to the University Research and Innovation Committee. Two members of the unit (Moreau and Walshe) are FRIC members and ensure that the relevant information is shared with other members of the unit at School meetings. All research goes through a rigorous ethical application process, managed by the Faculty Research Ethics Committee, which reports to the University Ethics Committee. Members of the unit apply ARU's ethical guidelines and also subscribe to the British Educational Research Association (BERA) ethical guidelines throughout all research phases. The University has developed the ARU Good Practice in Research Guide and subscribes to the Concordat to Support Research Integrity, with all unit members aware of and adopting the principles spelled out in these documents. All unit members have also successfully completed the online Epigeum Research Integrity (Concise) course, designed to support research active members of staff in their decision-making process throughout the duration of research projects.

Open Access and Open Research

Consistent with the University policy, journal articles authored by unit members are entered in the University institutional repository Anglia Ruskin Research Online (ARRO), within three months of acceptance. Full-text outputs deposited within it are available on an open-access basis. In 2014, the Deputy Vice Chancellor (Research and Innovation) established an Anglia Ruskin Open Access Fund to support 'gold' open access publishing costs. The fund is primarily intended for the publication of research outputs for which no other funding support is available. It is available to all Anglia Ruskin academic staff eligible for submission to the REF and has been used in the current

REF period to cover the publishing costs of two papers within the unit, while the publisher has waived the usual APC fees for two other papers. Staff also regularly contribute to open access journals as authors and editors. For example, Moreau is co-editor of *International Studies in Widening Participation*, a free, open-access journal based at the University of Newcastle, Australia. Consistent with the institutional research data management policies, unit members regularly use the Figshare platform, rolled out in 2019.

Together, ARRO, the Anglia Ruskin Open Access Fund and FigShare facilitate the dissemination of and access to our research data. This is consistent with the unit's concern for inclusiveness and our deep engagement with a range of stakeholders and the wider public. All staff in the unit who bear significant responsibility for research have received GDPR training and implement it throughout their research activities.

Research strategy

In 2018, a new Education research strategy (due for review in 2022), linked to the institutional and the Faculty research strategies, was developed by the unit in consultation with colleagues from across the University. The four main objectives for Education research are:

- 1) To improve the overall quality of Education research developed in the School (based on external and internal reviews of our research outputs)
- 2) To improve the research environment for staff and students and encouraging the development of research-led teaching, including
 - diversifying external research income and increase the level of bidding activity by 20%
 - increasing the number of doctoral students completing on time by 10%
 - improving the profile of research events
 - improving the proportion of staff involved in professional organisations and academic networks
 - establishing a research centre drawing on our three key areas of expertise.
- 3) To advance the impact and the reputation of Education research within and beyond the HE sector (including engaging local, national and transnational communities in our research activities and improving the visibility of our work internally and externally)
- 4) To ensure that our research activities are reviewed periodically and are consistent with the University R&I Strategy and the Faculty operational planning priorities (including establishing an Education Research Strategy Group and developing research leadership and research support).

Progress against our research strategy objectives

We have made considerable progress against our Research Strategy Objectives. Key achievements so far include:

- 1) Clarifying roles and responsibilities in relation to research leadership through the establishment of the Education Research Strategy Group (ERSG). This group has met monthly since 2018 to design and implement the unit's research strategy. The group includes a mix of junior and senior researchers, with a view to ensure sustainability and vitality across our campuses.
- 2) Establishing three key areas of focus: social justice in education, sustainability for education,

and early childhood; and concentrating our research efforts in these three areas, through institutional and unit-level investments. Funding allocated to our unit has been used to support the employment of a research facilitator; to develop writing skills, including the development of research proposals, through workshops run by ARU colleagues and by an external consultant; and to run events for academics, practitioners and the wider public in these specific areas.

3) Improving research support by establishing a monthly peer-review writing group (Write It Now or WIN workshops) open to all academic staff and doctoral students, yet specifically targeting ECRs. These workshops enable academic staff to present and discuss their draft research outputs or funding proposals with other researchers, proving an intellectually stimulating and supportive environment where the necessary skill sets can be enhanced and developed. As a result of the workshops, contributors have published articles in high-ranking journals.

4) Providing a formal and dedicated programme of mentoring to develop the research skills of colleagues in the early stages of their research career, which is run by our Honorary Visiting Professor (Epstein). To date, 11 colleagues have worked with Epstein. Several members of the first cohort have had an article published in high-ranking journals, with one having signed a contract with a publisher for a monograph.

5) Designing and delivering a suite of engaging, outward-facing events, including an external seminar series. These are termly events, open to staff and students with high-profile speakers, which can be attended through videoconference from all three ARU sites. Speakers include Prof. Alistair Ross, Jean Monnet Chair of the European Commission; Prof. Justyna Deszcz-Tryhubczak, University of Wroclaw, Poland; Prof. Penny Jane Burke, University of Newcastle, Australia; Prof. Debbie Epstein, University of Roehampton, UK; and Prof. Keffrelyn Brown, University of Texas-Austin, USA.

6) Growing our portfolio of publication, by focusing on the development of outputs underpinned by rigour, originality and significance. This is facilitated by our suite of events, including the ARU sabbatical staff development programme and, at unit level, our WIN workshops and mentoring programmes;

7) Significantly increasing our research income compared with the previous REF period – from £405k (with nursing education, returned to UoA25 in REF2014) to £563k (without nursing education, which is returned to UoA3 for REF2021).

8) Establishing a research cluster (CERII, Cluster for Education Research on Identities and Inequalities), which brings together our research activities in a cohesive manner, while working towards the establishment of a research centre. The Cluster was set up in late 2020 and will be officially launched in 2021.

9) The full integration of research students and ECRs in all our research activities.

Research Impact

The production of high-quality research which translates into policies and practices which are effective, inclusive and sustainable is a key priority. Our approach to impact is to ensure that key stakeholders and research beneficiaries are consulted in meaningful ways from proposal design stage to project completion. We have developed strategic partnerships and collaborations with a

number of key stakeholders, including charities, policymakers and funders. For example, Moreau serves as an expert to three agencies of the European Commission (the Research Executive Agency, the Education, Audiovisual and Culture Executive Agency, and the European Institute for Gender Equality) and has produced research reports and art-based outputs for Advance HE. Walshe works closely with Cambridge Curiosity and Imagination, which provides art therapy designed to improve pupil well-being, as part of her AHRC-funded ECO capabilities project. Lee has advised the Department for Education (DfE) through two written reports on the leadership development of LGBTQ+ teachers in schools. With funding from the DfE, Lee has worked since 2016 with aspiring school leaders from across the UK to design and deliver Courageous Leaders, the UK's first LGBT leadership programme for teachers. Between 2016 and 2020, Courageous Leaders supported 60 LGBTQ+ teachers to achieve school leadership roles, positions they did not think they would have achieved without the support of the programme.

To achieve far-reaching and significant impact, we have adopted a multi-level approach. This includes extensive public engagement (e.g. through presentations at public events and writing articles and blog posts for the media and policy-makers), providing specialist workshops and consultancy to discuss the implications of our work for policies and practices to a range of educational institutions and national and transnational policy-making organisations, and the use of a variety of media, including Facebook and Twitter, to raise awareness of specific issues and bring about social change. We use a variety of formats in our dissemination and impact activities. For example, in 2018 Moreau produced a film based on her research with independent film-maker Tim Bernard (Carers and Careers in Education: What works?, Good Practice Award, Advance HE). The film, available on the Vimeo and YouTube platforms (totalling just under 1,500 views), has been screened at universities in the UK and Australia to academic and practitioner audiences and has been used to raise awareness of carers in academia and of good practice, to bring about change in the HE sector. In 2020, another Advance HE Good Practice award of £4k enabled Moreau to initiate a collaboration with Sally Campbell Galman, a Professor at the University of Massachusetts and a cartoonist. The project has led to the design of a series of large-scale illustrations based on Moreau's research on carers, with two exhibitions postponed to 2021 due to the current pandemic context (Cambridge, UK, Amherst, US). In 2019, the ERSG launched a briefing paper series, hosted in the School of Education and Social Care, with each paper providing specific guidelines and recommendations to policymakers in our areas of expertise. ARU hosts the Courageous Leaders Programme on campus, led by Lee and her school leadership partners. This has encouraged two teacher participants to apply for our own EdD programme and was also instrumental in securing a Vice Chancellor's PhD Studentship (Reynolds) to research career development of LGBTQ+ teachers. This student is supervised by Lee, Moreau and McDermott (based in the Faculty of Science and Engineering, returned to UoA4).

The unit benefits from the support of an Impact Coordinator working across all units and based in the central Research & Innovation Development Office (RIDO) (1FTE, from July 2019). The education unit also benefits from the support of a Research Facilitator (0.4FTE, from April 2019), whose work focuses on the organisation of public engagement activities and collecting feedback from partners and collaborators and beneficiaries of our research.

2. People

The University has a policy to recruit members of staff with doctorates and research experience to senior lecturer positions. For those recruited to lecturer positions, colleagues in post prior to 2014 when this became a requirement, or those who were recruited with exceptional sector experience, the University encourages and supports them to join our PhD or EdD programmes and operates a

fee waiver scheme that funds their doctoral studies. All staff holding doctorates are given the opportunity to supervise research students, with new supervisors being paired with more experienced colleagues. Over this REF period, five Education staff have gained an EdD and two a PhD while employed by the University, with another five currently enrolled on our EdD or PhD programme.

All staff can apply for funding to attend conferences through the Faculty Research and Innovation Support Fund. Education colleagues have, over this REF period, presented their research around the world in countries including in Europe, USA and Australia.

Consistent with the ARU ECR Charter, funding is ring-fenced for the career development of ECRs and the unit subscribes to the principles of the Concordat to Support the Career Development of Researchers. Through RIDO, ARU offers an extensive training portfolio to researchers at all stages of their careers, including ECRs, consolidated in 2019 with the launch of the new Staff Researcher Development Programme. When post-doctoral colleagues start to undertake research supervision, they are supported by mentoring from experienced supervisors in the Faculty and through participation in the University-wide Supervisor Development programme provided by the ARU Doctoral School. Many also contribute to taught seminars in Stage One of the EdD programme, sharing their experience and expertise. All doctoral supervisors attend Faculty and University level professional development, including the biannual Supervisor Forums and the annual Supervisor Conference. The unit's WIN workshops have proved to be a useful way to support colleagues and ECRs in particular to publish their work, with several ECRs going on to publish their work in high-ranking journals in their field. ECRs also have the opportunity to receive additional guidance and support from the Professor and from visiting scholars. In 2019, a collective mentoring scheme targeting ECRs was launched and run by Professor Debbie Epstein on both the Cambridge and Chelmsford campuses. Seven members of staff attended in 2019-2020, four in 2020-2021, resulting in the identification of tailored research strategies and the publication of research outputs.

There are positive opportunities for internal promotion for staff excelling in teaching, leadership and research. For example, since gaining her doctorate in 2014, Lee has been promoted to Head of Department for Education and Social Care (2016), then Head of the School of Education and Social Care (2018), and Deputy Dean for Education (Student Experience and Learning and Teaching (2019) and Walshe, who joined the School as Senior Lecturer in 2017, was promoted to Deputy Head of School for Education and Social Care (2018) and is now Head of School for Education and Social Care (2019).

We offer one-term sabbaticals to staff who have been at ARU for at least two years. This includes 'doctoral sabbaticals' (i.e. for staff working towards doctoral completion, usually at write-up stage) and 'research sabbaticals', for staff holding a doctorate, to ensure that research and the related impact activities are developed as fully as possible. Over the REF period, three members of the unit have benefited from a doctoral sabbatical (Kanyal, 2014-15, Kitchin, 2016-17; Feist; 2014-15), three members from a research sabbatical (Holley in 2013-14, Luff in 2015-16 and Stock in 2014-15). These colleagues have each been supported for a duration of 15 weeks and a maximum £10,000 budget allocated to cover costs such as travel for fieldwork, as well as teaching cover. Staff taking sabbatical leave have all benefited from a mentor to avoid isolation and to support progress.

During this REF period, we have and continue to host two honorary research fellows (Dr Parven Akhter, 2015-2018; and Dr Hazel Wright, 2016-22), one honorary visiting reader (Dr Sue Brindley, 2018-2021), and three honorary visiting professors (Sir Paul Grant, 2015-18; Prof. Ian Rivers,

Unit-level environment template (REF5b)

2015-18; Prof. Debbie Epstein, 2019-2022). We have also hosted short-term and long-term visits from a number of Visiting Fellows and Professors including, for example, Prof. Penny Jane Burke in 2019. A number of Visiting Appointments are cross-units and subjects. For example, Prof. Vasiliki Spilotoulou's (Patras University, Greece) 2020 visit was jointly hosted by colleagues in Education and Social Care, while Prof. Justyna Deszcz-Tryhubczak (University of Wroclaw, Poland) was jointly hosted will colleagues from the ARU English Department. Visiting Scholars share their work as part of our Education Research Seminar Series, giving lectures and working collaboratively with unit members.

The unit also runs a postgraduate research degree and during the REF period has run four postgraduate taught programmes, (MA Education, MA Early Childhood Education, MA in Student Affairs and MBA Education Leadership and Management). External Examiners across our postgraduate provision report that our Masters students are well prepared academically to move on to doctoral level study and many do so. Masters students are included in the unit's research seminars, encouraging and supporting them to publish with a more experienced Education academic where appropriate. A total of 23 UG and PGT Education students have benefitted from research internships, a scheme enabling students to have short-term paid roles to support staff with their research, over this REF period, enabling them to work with 6 of our most experienced Education staff on a variety of research projects. The EdD programme, led by Howlett, is the largest professional doctorate programme (by student enrolments) in the University, attracting approximately 15 new students a year, with 57 students currently enrolled. During this REF period, and as noted above, we had funded three bursaries (a Faculty bursary, an Anglia Teaching and Learning studentship and a VC studentship). Over this REF period, we have awarded 20 PhDs in Education and 16 EdDs.

Tabular breakdown of PhD Prof Doc completions per annum

Year	Doctoral degrees awarded	PhDs awarded	ProfDocs (EdDs) awarded
2013-14	5	4	1
2014-15	6	3	3
2015-16	4	4	0
2016-17	7	2	5
2017-18	5	1	4
2018-19	7	4	3
2019-20	2	2	0
Total	36	20	16

PGRs are supported by a range of development opportunities, including applying for the Associated Fellow status of the HEA, regular training sessions and workshops coordinated by the ARU Doctoral School and access to the Staff Researcher Development Programme, and access to all the research events and workshops run by members of the unit. The majority of our PhD students attend and present at the annual University Research Student Conference and at the Faculty Research Conference. All have access to internal funding to support attendance and presentation at a national or international conference.

The ARU Doctoral School plays an important role in supporting Education PGR students with disabilities. Guidance for supervisors on managing these students, as part of the Good Supervisory Framework / PGR Wellbeing Strategy has been produced in conjunction with Student Services and Faculty Directors of Research Students at institutional level. Linked to this, two members of the unit (Lee and Lithari) have extensive expertise in supporting students with dyslexia and other learning disabilities and have taken a lead in developing good practice across the unit to support those students.

Equality and diversity

Equality and diversity features in our Education research culture in two core ways. First, it is a key area of expertise, as exemplified by staff's research around social justice in education (see section 1 above). Lee's work with LGBT teachers has been recognised nationally and in 2019 Lee was included in the *Independent* newspaper's Pride Power List as one of the top 100 LGBT people in the UK for her work to promote diversity in school leadership. The programme she leads was also shortlisted for a British Diversity Award in 2020, the outcome of which is postponed until later in 2021 due to Covid-19. Second, it is a key principle embedded in our practices and policies at unit, Faculty and institutional level. Access to research time, financial resources and research support is underpinned by a commitment to equality of opportunity. As part of the probation process, all new staff in the unit undertake compulsory diversity and equality training, with additional training required for those with line management responsibility and on recruitment panels.

ARU holds a number of awards which illustrate the centrality of equality and diversity matters to our research culture, including: HR Excellence in Research; Athena Swan Bronze; Stonewall Diversity Champion; Mindful Employer; Disability Confident; Working Families Employer Member; Committed To Being Inclusive employer; and RoSPA Gold. Members of this unit sit on various committees, including the Faculty-wide Athena Swan Bronze application committee, chaired by Kanyal. Linked to these institutional policies and awards, our unit adopts a flexible approach to work. Over the duration of this REF period, staff have been able to work from home and to use on-site video-conferencing equipment, in order to limit travel time and encourage collaborations between our three main sites. Part-time work is also supported, including among those in leadership and management roles, consistent with ARU's Athena Swan Charter and with the Faculty Athena Swan Bronze application. To avoid conflicting demands for carers, we run the majority of our research events at lunchtime or early afternoon, while a Faculty-wide staff well-being strategy discourages staff from sending work emails out of office hours. In recognition of staff's other commitments, e.g. caring responsibilities, they are able to attend events in full or in part. While women have been a significant presence in Education for some time, research shows that they are under-represented in management positions. This is not the case in our unit, with the current and outgoing Heads of School, the UoA Convenor and Co-convenor all female. Examples of flexible working include the current Head of School who worked 0.8FTE before returning to full-time work. Several members of this unit are part of the ARU's thriving staff inclusivity networks for: women; LGBT staff; BME staff; disabled; and part-time and flexible-working staff.

Members of our unit regularly contribute our research expertise to ARU networks in the field of equality and diversity. For example, in 2018-2020, Moreau and Lee have delivered a series of workshops and presentations on carers, gender and LGBT students and staff to the University-wide Part-time and Flexible Working Forum, to the ARU EDI committee, and as part of events organised by the University (e.g., International Women's Day and the Cambridge Festival of Ideas). Over the same period, Lee has also presented her research at the East of England HR

Consortia and to sixth form students at LGBTQ+ Pride Clubs across the East and South-East of England.

Equality and Diversity is a strong feature of our REF submission preparations. Our ERSG is diverse in terms of gender, 'race' and ethnicity, while also including staff who work part-time and at various stages of their career (e.g. from ECR to Deputy Dean and Professor). This enables us to plan succession strategically, to build capacity, and to provide development opportunities for all colleagues, including ECRs.

3. Income, infrastructure and facilities

Income

Generating research income is supported at institutional level by the Research, Innovation and Development Office (RIDO), with a Faculty-dedicated Research and Innovation Funding Manager. They support the Education unit by scanning for research opportunities and supporting us throughout research tendering processes. At Faculty and unit level, subject-specific bidding opportunities are circulated among colleagues weekly, with the support of the administrative team and research facilitator. Our key funding streams include UK Research Councils, the European Commission, as well as various learned societies and philanthropic bodies such as the Paul Hamlyn Foundation. Walshe was awarded £250k grant by the AHRC for a three-year project ('Eco-capabilities: Supporting Children's wellbeing through participatory art in nature, 2019-2022); Moreau was awarded £4k from Advance HE Good Practice Award (Fostering a sense of belonging for higher education staff and students with caring responsibilities, 2019-2021), £10k from the British Academy/Leverhulme Small Grant (Precarious Transitions? Doctoral students negotiating the shift to academic positions, 2020-22) and £10k for SRHE research award 'Care-free at the top'? Exploring the experiences of senior academic staff who are caregivers, 2018-19), while Mimirinis was awarded a SRHE Newer Researcher Award (Exploring undergraduate students' conceptions of 'teaching excellence': A phenomenographic study, 2017-18). In 2020, Moreau was contracted by the European Institute for Gender Equality (EIGE, an agency of the European Commission) to be national representative on a project led by the Public Policy and Management Institute (PPMI) in Vilnius on the development of the European 2020 Gender Equality index. Luff was awarded £103k from the Paul Hamlyn Foundation for a Creative Writing through the Arts project with Royal Opera House Bridge and 45 local schools from 5 Teaching School Alliances. This project created toolkits of resources for teachers to help improve the creative writing skills of primary school children in our region. Lee and her team of teacher leaders have received £29k (2016-20) from the DfE to research and deliver the Courageous Leaders programme. Pratt-Adams was awarded an Advance HE £7k grant (Impact of the Industrial Strategy on Learning and Teaching in Higher Education, 2018).

Internal funding has been generated through bidding for various schemes run by our Faculty, including the Seed Corn Grant, the Research and Enterprise Investment Programme and the Dragon's Den Fund, to support new research ideas. These small awards enable staff to produce exploratory, original pieces of work which can then develop into larger bids. A successful example includes Walshe's 2016 ARU Seed Corn Grant on place-based learning, creativity and wellbeing (£2k), which then grew into the submission of a successful larger bid (£250k) to the AHRC on a similar topic.

The rise in research income won from £405k (with nursing education, returned to UoA25 in REF2014) to £563k (without nursing education, which is returned to UoA3 for REF2021) reflects

our ambition and determination to build research capacity. To that end, research income targets are built into the appraisals of academic staff, with staff set different targets according to the extent to which their time is split between research, teaching and leadership. Research bids are also reviewed by the Deputy Dean (Research) and by members of RIDO prior to submission, with senior researchers encouraged to work on bids with ECRs to help them gain experience of the bidding process.

Infrastructure and facilities

University investment has brought an improved physical environment for researchers. The majority of unit members are based in the William Harvey building on the Chelmsford campus or in the Young Street building on the Cambridge campus. Both buildings have extensive facilities. An open office environment has been established to encourage collaborative work, with four bookable offices on each campus for independent study. The Chelmsford campus offers a dedicated room for PGR students, as well as a specialist Early Childhood Research Resource Room, developed through Kanyal's participative doctoral research with students and staff. This remains an important facility for research in early childhood and supports the linking of research to practice on early childhood courses. On the Cambridge site, researchers and PGRs are situated together in an open office. On both campuses, the majority of individual rooms are equipped with state-of-the-art video-conferencing equipment, to encourage collaborative work between our campuses and with external collaborators. Our honorary visiting scholars have access to the same facilities as academic members of staff employed by the University. Since the pandemic, staff and students have benefitted from the digital facilities available to ensure the vibrant learning community and collaborative working was protected, with all our events now taking place online and the setting up of weekly online 'research café' meetings for staff and research students.

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

Members of the unit are actively engaged in a range of collaborations and contribute to the research base in the following ways: 1) taking up key roles in national and international professional organisations and academic networks; 2) sitting on editorial and advisory boards; 3) giving keynotes and invited seminars in the UK and abroad; 4) developing close collaborations with other HEIs, key stakeholders, schools, and the wider public, in the UK and abroad.

1) We occupy a range of positions, as officers, trustees, governors, council members and fellows of professional bodies. Luff is UK President of OMEP (World Organisation of Early Childhood) since 2017. Since 2014, Moreau has worked as an Expert to the European Commission (EC) and three of its agencies (Research Executive Agency (REA); Education, Audiovisual and Cultural Executive Agency (EACEA); and the European Institute for Gender Equality (EIGE)), providing guidance on research funding allocation, on the dissemination of research funded or conducted by the EC, and assessing the quality of research over the course of the projects. In 2018-19, Moreau was part of the group who developed the revised Vitae Concordat to Support the Career Development of Researchers. Since 2018, Walshe has been Secretary of the Geography Education Research Collective with International Geographical Union Commission of Geography Education (GEReCo with IGU-CGE), Co-convenor of the Environmental and Sustainability Education Research (ESER) network of European Educational Research Association (EERA), and Fellow of the Royal Geographical Society-Institute of British Geographers. In 2018, Mimirinis became a member of the Society for Research in Higher Education (SRHE) Research and Development Committee.

2) We are involved in an array of editorial and advisory boards. Moreau is editor (with Bennett and Zacharias, Newcastle and Deakin, Australia) of *International Studies in Widening Participation* (2017-present) and editorial board member for *Teaching in Higher Education* (since 2018), *British Journal of Sociology of Education* (2016-present), *International Studies in Sociology of Education* (2014-2017), *Gender and Education* (2016-present). She is also editor (with Nany Niemi, Yale, and Penny Jane Burke, Newcastle, Australia) of the newly established *Bloomsbury Gender and Education* book series (Bloomsbury Publisher) (2020-present). She is also a member of the International Scientific Committee, *Genre à Lire et à Penser* book series, Presses Universitaires de Rouen et du Havre (PURH) (since 2014).

Walshe is a GEReCo (Geography Education Research Collective) Committee Member, a Fellow of the Royal Geographical Society with the Institute of British Geography, and a member of the *Research of International Geographical Education Online* (RIGEO) Editorial Board. Greig has been a member of the Editorial Boards of the *International Journal for Environmental Research and Public Health* and new Springer Nature Journal *Circular Economy and Sustainability* since 2020, as well as Topic Editor of the Journal *Sustainability* since 2020.

Greig has been Chair of PSRB Accreditation Panel for the Chartered Institution of Water and Environmental Management (CIWEM) nationally and internationally (since 2004). She is a member of Committee Advisory Board of ISCN, member of Responsible Futures Advisory Board (2014-2016); and member of National Union of Students Education for Sustainability Advisory Board (2015-present). Greig is also a member of the GUPES network - Global University Partnership on Environment and Sustainability (2017-present).

Kirkman is editorial board member for *Dialogic Pedagogy* (since 2013) and for the *International Journal of Philosophy* (since 2020). Pratt-Adams was a member of the editorial board of *International Journal of Early Childhood Education and Education* (2016-2020) and Editorial board member of the *International Journal of Early Childhood Education and Care* (2016-2020). Lilly is Co-Chair of Staff Educational Development Association Services and Enterprise Committee (2014-present).

3) We deliver presentations at national and international conferences, including keynotes and invited seminars in the UK and other countries including Australia, Belgium, China, France, India, Ireland, Switzerland, Turkey, and the United States. Unit members have also been guest editors for a number of academic journals (e.g. Kanyal: Guest editor for *Journal of Management in Education*, 2014, Early Childhood Education: Participation in Policy and Practice; Moreau, Guest Editor for *Gender and Education*, Special Issue Gender, Knowledge and Power, 2017, with Epstein).

4) We maintain close working relationships with other HEIs, key stakeholders, schools, and the wider public. We have an ongoing collaboration with the Silesian University of Venice (IUSVE) and active Erasmus partnerships with University of Bologna, Italy and Sofia University, Bulgaria, as noted above. Over the current REF period and since joining ARU in 2018, Moreau has held Visiting Scholarships at the University of Newcastle, Australia (Centre of Excellence for Equity in Higher Education) and University College Cork. Mimirinis was an external collaborator to a research project based in the Department of Education, Uppsala University, Sweden (Doctoral students' conceptions of University Teaching, 2016-19). He was a visitor at the University of Texas in Austin (January 2019), where he contributed to a project on Black students' conceptions of university teaching. Pratt-Adams is a Visiting Professor, Shanghai Youth College of Management (2016-present).

We have extensive collaborations with a number of research users and key education-focused organisations outside academia, for example Advance HE, the Society for Research in Higher Education, the Department for Education (DfE), the National Association for Able Children in Education, National Union of Students, University and College Union, and various agencies of the European Commission (REA, EACEA and EIGE), the 15 Essex Teaching School Alliances and OMEP (the World Organisation for Early Childhood Education). Walshe's AHRC-funded Eco Capabilities project is delivered in partnership with CCI, a local arts charity (2019-present). Lee works closely with the DfE as co-creator of the DfE funded Courageous Leaders Project supporting LGBT+ teachers into senior leadership roles. Luff was involved in the Creative Writing through the Arts project, in partnership with Royal Opera House Bridge and Billericay Teaching School Alliance (2018-19). Lee is an adviser to the British Council for a film on LGBTQ teachers (2019-present). She is also on the Board of Trustees at Hearts Academy Trust, Chelmsford Cultural Development Trust and the KITE Trust, a charity supporting LGBT young people and their families.

In 2019, to facilitate the transfer of our research into policies and practices, we launched a School of Education and Social Care policy briefing series, with three briefings published so far drawing on the work of unit members under the topics of *Creating Inclusive Spaces for Students in Higher Education with Caregiving Responsibilities*; *Creating Inclusive Spaces for Academic Staff with Caregiving Responsibilities*; and *Guidelines for Creative Approaches to Embedding Environmental and Sustainability Education in Primary Initial Teacher Education*. Briefings are finalised in consultation with key external stakeholders and widely disseminated to research users.

We maintain close links with early years settings and primary and secondary schools in the East of England. This is consistent with ARU's strategy in terms of regional engagement. For example, Lithari and Luff have developed close links with the Billericay Teaching School Alliance where they have conducted the Collaborative Inclusion project investigating the primary to secondary school transition (2017). Since 2016, Dr Catherine Lee has worked closely with schools across the UK to design, lead and deliver the UK's first LGBT leadership programme for teachers. School leaders have co-presented research based on LGBT teacher inclusion at national and international conferences and under Lee's leadership, 12 teachers have contributed to a book (*Courage in the Classroom: LGBT Teachers tell their Stories*. John Catt publishers, 2020). Walshe is Director on the Board of Trustees of Cam Academy Trust, Co-chair of the Standards and Effectiveness Committee and Chair of the Local Governing Body at Jeavons Wood Primary School. Lee is a trustee of Hearts Academy Trust in Essex (since 2018) and has also been a Governor at Ormiston Academy in Suffolk (2016-17).

We regularly run events open to the public, including the 2019 Cambridge Festival of Ideas where Lee and Walshe organised workshops based on their recent research (respectively the experiences of LGBT teachers in schools and sustainability in education) and the 2019 National Creativity and Wellbeing week. Public engagement is also supported by extensively writing for a general audience. For example, we have published articles for the general public in newspapers and for high-profile policymakers including Advance HE, the Wellcome Trust, WonkHE, and Times Higher Education. Members of the unit maintain an active presence on social media platforms including Twitter, facilitating the effective dissemination of our research to lay audiences.