

Institution: University of Cumbria
Unit of Assessment: UOA23: Education

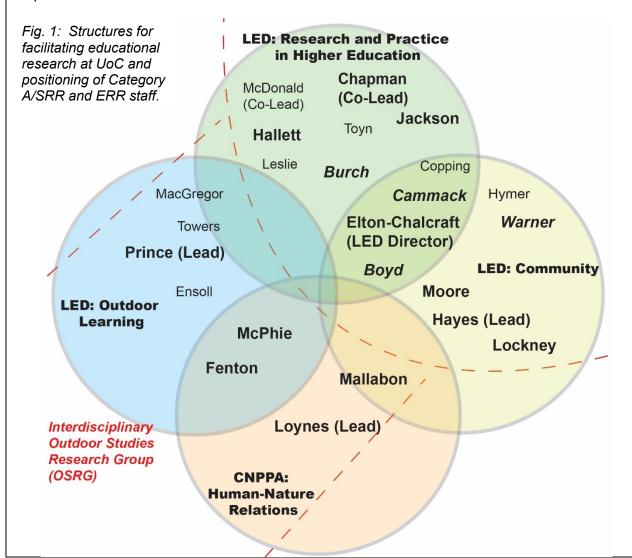
1. Unit context and structure, research and impact strategy

1.1 Institutional Structures and Research Themes

The University of Cumbria (UoC) draws on the signficant outcomes of educational training, research and pedagogy from its legacy institutions, St Martin's College and Charlotte Mason College, across campuses in Lancaster, Carlisle, Ambleside and London. Across 4.72FTE In REF14 (UOA25), 94% of outputs were 3* (internationally excellent) or 2* (internationally recognised) and 70% of impacts at 2* or 3*. For REF2021, 9.8FTE are being submitted in UOA23.

A cohesive physical and virtual research environment (see Fig. 1) is facilitated by the **Learning Education and Development (LED)** research centre and the **Centre for National Parks and Protected Areas (CNPPA)**. Four research themes embed interdisciplinarity, with submitted educational researchers representating three UoC academic institutes (REF5a, 1). An **Outdoor Studies Research Group** formalises interdisciplinarity across two themes in this area.

Researchers named in **bold** are Category A staff with 'significant responsibility for research' (SRR, see UoC REF2021 Code of Practice, 2.10) and those in **bold** and *italics* are individuals who left UoC during the REF assessment period. Individuals in plain are non-submitted UoC staff – including staff with 'emerging responsibility for research' (ERR, see UoC REF2021 Code of Practice, 2.12), Research Assistants (RA), Postgraduate Researchers (PGRs) and honorary/retired staff. Names followed by a number (e.g. **Prince1**) cross reference to REF2 outputs.





1.2 Unit Mission, Objectives and Research Themes

Between 2014 and 2017, educational research was facilitated by the Research Institute for Professional Learning in Education. To promote a wider and more inclusive research culture, the 'Learning, Education and Development' (LED) research centre formed in 2017 to provide three interdisciplinary themes for active and emergent educational researchers. The Centre for National Parks and Protected Areas (CNPPA) also formed in 2017, adding a fourth theme to this Unit, combining existing areas of research excellence in conservation, outdoor studies, forestry, geography and cultural landscapes.

By bringing this educational research community together, this Unit focuses on its mission to dismantle disadvantage and promote social justice by engaging in purposeful educational research grounded in practice. This aligns to UoC's mission outlined in the Strategic Plan: to raise aspirations and educational attainment and contribute to the social, cultural and economic well-being and prosperity of our communities. These missions have informed this Unit's strategic objectives for research to:

- Facilitate staff development through clear governance and support structures for setting individual research objectives that contribute to the four themes
- Increase capacity and capability of staff through training and development to produce high
 quality educational research outputs (and co authoring) from ERRs and SRR researchers
 with a particular focus on social justice and interdisciplinary work
- Grow income through research and enterprise projects enhancing staff capability in engaging externally, including with research users and beneficiaries to achieve impact and dismantle disadvantage and inequality in educational opportunity
- Develop partnerships with employers, charities and other organisations to add value to our research environment, reach and impact.

The Unit's four research themes are as follows with leads in brackets:

LED: Research and Practice in Higher Education (RPHE) (Chapman and MacDonald)
RPHE explores aspects of Higher Education and hosts two independent networks,
Assessment in Higher Education (AHE) and Teacher Education Advancement
Network (TEAN), both with an annual conference and international network of members.
TEAN and AHE faciliate collaborative research projects and nurture the development of
emerging staff. McDonald (appointed as Lead, September 2020) is a member of the
Institute of Health, and this appointment supports his trajectory from ERR to SRR.

LED: Community (Hayes)

This theme takes a transdisciplinary approach to research participation and engagement in communities, focussing on inclusion and effective ways to access and listen to community voices. It complements and collaborates with community research, participation and engagement activities across research centres, institutes and external partnerships.

LED: Outdoor Learning (OL) (Prince)

This theme focusses on facilitated experiences in the outdoors for a range of outcomes in health and wellbeing, personal, social and intellectual development and for enhanced relationships with nature and place for children and young people. It includes collaboration with the Institute for Outdoor Learning (IOL) in the UK, as the lead for the national network of research-practice hubs and comprises a number of experienced researchers with international roles in the field.

CNPPA: Human-Nature Relations (HNR) (Loynes)

This theme explores how the engagement of people with nature produces a landscape. Personal, social, economic and political actions interact with natural processes, habitats and species in dynamic relations, and this theme takes as its subject these relations. An examination of the informal and formal processes of engagement identify systems that contribute to social justice and sustainable human nature relations.



Collaborative thematic work supports the development of supportive networks to facilitate research, income generation and partnerships with stakeholders and communities. REF2 outputs reflect foci within the themes and the mission:

- **RPHE**: Higher education (HE) researcher identity in professional fields, assessment in HE and teacher education, with an emphasis on partnerships
- **Community**: schools and teachers, with an emphasis on values, beliefs, equality, inclusion and disabilities, and the wider community (children, young people and families)
- OL: schools and communities, adventure education and journeys, devleoping new methodologies to identify outcomes
- HNR: radical and innovative educational approaches for sustainability and inclusion.

The physical co-location with different members of research staff facilitates further interdisciplinary working. **PHE** and **Community** focuses engagement on campuses at Lancaster, Carlisle and London with **HNR** and **OL** focused at Ambleside.

1.3 Performance against REF2014 Objectives and Objectives 2021-2028

The strategic objectives outlined in REF2014 included:

- Creation of a new research centre for educational research
- Increasing focus on scholarly and research outputs in induction and appraisal processes
- Support for the development of new researchers, including increasing the numbers of staff registered for higher degrees, encouraging co-authoring of papers and mentoring
- Strengthening internal and external research networks and development of an online open access journal
- Appointment of honorary research professors
- Development of research networks and brokering of collaborative research
- Development of research areas including: Enhancing teaching, learning and assessment in Higher Education; initial and continuing teacher education; and enhancing school-based practice
- Encouragement and support for high quality practitioner research by lecturers, student teachers, and by teachers in our partnership schools.

A number of successes are evident in relation to achieving these objectives:

- The LED research centre has enhanced the research environment and infrastructure for those undertaking educational research.
- Induction and appraisal with Principal Lecturers and their staff around scholarly and research outputs has been improved via the research pathways (see REF Code of Practice 2.10-2.12).
- The number of REF eligible outputs has increased 82% between 2014 and 2019.
- Co-authoring with ERR staff and PGRs is apparent in REF2 (**Elton-Chalcraft2** with Copping) as well as with local teachers (**Boyd1** with Ash, **Jackson1** with Burch).
- Research networks have grown to incorporate TEAN, TEAN Conference and Journal, AHE Network, *Practitioner Research in Higher Education* Journal and Outdoor Learning Research-Practice hubs (Section 3.2).
- Utilisation of 12 honorary research positions, contributing to PhD supervision (4), keynotes (2), research projects (2), CPD seminars (2), academic writing retreats (1), and publications (2).
- Collaborative research projects with teachers in Europe via Erasmus funding, the Cathedrals Group, Practitioners in Sail Training and Outdoor Education, and other UK Universities (Newcastle, Stirling, Leeds etc.)
- Commissioned research with schools, educational business, charities, professional and educational bodies.



- Two European Regional Development Fund funded PhD studentships in this Unit (Section 3.1)
- Expansion of Unit research themes to reflect four discrete areas of research excellence (see Fig. 1). **Chapman** as Theme Lead, also represents the UoC Centre for Academic Practice, which has contributed to the development of **RPHE** since 2014.
- Practitioner research with schools including 'Learning Dispositions' and 'Learning Conversations'; 'Mathematical Mindset; Science and Religion; and partnering with schools to support Initial Teacher Education provision development and CPD.

1.4 Research Strategy 2021-2028

This Unit will carry forward its mission established in 2017 into the next REF cycle to **dismantle disadvantage and promote social justice by engaging in purposeful educational research grounded in practice.** The research strategy will continue to align to the objectives outlined in 1.1.2, and be additionally underpinned by the following KPIs:

- Increase in educational research outputs and co-authoring from all LED/CNPPA Early Career Researchers (ECRs), ERR and SRR staff.
- Improved awareness of 'Research and Scholarly Leave' (RASA) planning to increase capacity and capability, evidenced through increase in research plan submission.
- Increased activity for research and knowledge exchange bidding, and increase in secured funding to deliver projects with external partners
- Improved focus on 'research impact' from LED/CNPPA outputs by compiling impact information annually.
- Maintenance of the TEAN and AHE (Section 3.2).
- Improve the vibrancy of the Ambleside campus for students, staff and our community aligned to the CNPPA.

The University is consulting on a 2030 strategy across 2021, and this Unit's research strategy will be reviewed once this concludes to ensure ongoing alignment and complementarity.

1.5 Enabling Impact

Underpinned by UoC's clear strategic intent to "contribute to the social, cultural and economic well-being and prosperity of our communities", this Unit ensures that impact is integral to research activity. The Unit leads (Boyd 2014-19, Elton-Chalcraft 19-20) delivered a number of 'Identifying and Evidencing Impact' workshops across the assessment period for Unit staff. This supplemented the Impact workshops delivered centrally (REF5a, 4), and provided researchers with tools to demonstrate and evidence how their research has benefitted individuals and society, beyond academia. This Unit produced six Impact Case Study (ICS) drafts (inclusive of those submitted) across professional learning, international teacher training, philosophy in nature/outdoors for housing and nature engagement with young people.

This Unit's internal and external funding leverages impact. Professors Prince and Elton-Chalcraft serve on the management teams of their respective Institutes, and utilise these as vehicles for identifying and exploring research impact. This Unit's two submitted ICS's (in addition to the four reserves) have all been supported by an element of internal and external funding, including ECR grants, allocations from QR-Strategic Priorities Fund, and income from commissioned and/or grant-funded research.



1.6 Supporting Interdisciplinary Research

This Unit embeds interdisciplinary working across each of its themes. This is evidenced in the theme leads being representative of three academic institutes – Health, Education and Science, Natural Resources and Outdoor Studies. This enables the Unit to draw in colleagues from across UoC to support educational research. The Research Centre Directors, as well as staff within the Research and Knowledge Exchange Directorate, meet bi-monthly to facilitate interdisciplinary research. A spirit of interdisciplinarity is also prevalent through the postgraduate supervision provided by academics at UoC with eight staff on supervisory teams with colleagues submitted in other UOAs.

Across **OL** and **HNR**, the *Outdoor Studies Research Group* comprises researchers working in Outdoor Learning and Human-Nature Relations with complementarity through engagement in outdoor environments in a range of contexts including and out with education. In **RPHE**, the *Assessment in Higher Education* network is a multi disciplinary group of scholars from different disciplines, including from health/science, business and different educational contexts. Research in **Community** evidences interdisciplinarity, including **Hayes1**, a story-based approach drawing on original research, and incoporating geography, environment and nature, youthwork, experiential, outdoor and adventure education and child/adolescent development and play. **Lockney1** brings together scholars from a variety of disciplines drawing on poetry, the arts and geographic place to explore the significance of identity and place in education.

1.7 Supporting an Open Access Environment

Journals hosted by this Unit within the **RPHE** and **Community** themes (TEAN, *Student Teachers Perspective* (STEP) and *Practitioner Research in Higher Education* (PRHE) journals are all open access publications. STEP journal papers include submissions from MA Professional Practice students (practising teachers) which supports direct application into school settings. The success of the TEAN journal is evidenced in **Jackson's** ability to recruit external editors.

As a direct result of the establishment of the Research Hubs with the Institute for Outdoor Learning (IOL) and its support for a PhD studentship, the *Outdoor Studies Research Group* worked with the IOL to make research more accessible to practitioners. This included the creation of a bespoke website with links to research papers and reports, and blogs on key topics via https://www.outdoor-learning-research.org/Research.

Across **OL** and **HNR**, members also write for professional journals such as *Horizons* (IOL) and the *Professional Mountaineer* (UK training, leaders and guides) The research group also hosts three groups on social media for: postgraduate students, the Research Hubs and the European Institute of Outdoor Adventure Education and Experiential Learning to share knowledge, outputs, projects and initiatives nationally and internationally. **Prince**, as Associate Editor of the key international journal in Outdoor Learning (the *Journal of Adventure Education and Outdoor Learning*) promotes 30-day free access papers in liaison with Taylor and Francis publishers.

1.8 Supporting Research Integrity

This Unit actively promotes research integrity by engaging with staff and PGRs about the Concordat. Evidence of active engagement includes *Cammack*, Elton-Chalcraft, and Mallabon serving (or having served) on the UoC Research Ethics Panel. This Unit utilises centralised resources for integrity (REF5a, 3.1), including Research Skills sessions delivered by eleven staff within this Unit. Supervisor training is provided to academics undertaking research supervision, and four colleagues in UOA23 delivered sessions. *Boyd* and now Elton-Chalcraft have also facilitated the Academic Writing Workshop & Retreat. Staff also contributed to the Vitae programme of research training and the Virtual Doctoral Training Network via GuildHE (**Prince**).



2. People

2.1 Staffing Strategy and Staff Development

The Unit's overall staffing strategy is as follows:

2.1.1 Enhance academic capability through successful recruitment, staff development and progression

To build capability and critical mass, staff are recruited with a PhD or with a commitment to achieve this. In OL, Fenton was recruited in 2016 from the University of Kent, receiving her PhD the same year, and McPhie achieved PhD in 2018. In HNR, Loynes works collaboratively with Prince to support colleagues to study to doctoral level, including Ensoll and Towers. In Community, Moore completed in 2020. Hayes joined UoC as a PGR in 2013, became a lecturer (2014), received the 'Vice-Chancellors Award for Early Career Research Excellence' in 2016, and was awarded PhD in 2018 (now supervising two PhDs). Hayes also won Royal Geography Society - Institute of British Geographers higher education group reflective essay postgraduate prize in June 2015 (PhD supervised by Prince). In RPHE, Warner, Toyn, Leslie, Copping, Burch (all with ERR) were provided with funding to take sabbatical leave and complete their PhDs or Professional Doctorates. In OL, Ensoll, MacGregor and Towers and being supported to undertake PhD study.

Professoriate members *Boyd*, **Prince and Elton-Chalcraft coordinate staff development, progression and publishing.** This includes ensuring that all staff plan Research and Scholarly Activity (RASA) time and ensure alignment to the four research themes. PPDR's and individual Research Plans are annually reviewed to identify opportunities for mentoring, training to support staff progression. Evidence of this Unit's success in these areas includes:

- 100% of this Unit's Category A staff are on permanent contracts, evidencing commitment to ensuring continuity of staff and of individual research areas.
- Facilitation of research mentorship within the Unit, which builds confidence and capacity
 across the four research themes with eight Unit staff serving as active research mentors
 (Boyd mentored up to seven colleagues before retirement in 2019).
- **Prince** and **Elton-Chalcraft's** progression to Professor in 2019.
- Elton-Chalcraft's progression to LED Director in 2019, succeeding **Boyd** (2017-19, appointed Professor in 2015 and Emeritus in 2019).
- Loynes' promotion to Reader in 2006, **McPhie** to Senior Lecturer in 2018 and **Mallabon** from Senior Lecturer to Principal Lecturer.
- Lockney's promotion to Programme Lead for in 2017.
- Hayes and McPhie contributing to reserve ICS's.
- **Fenton** as the only researcher globally in bushcraft received support to publish with two researchers of professorial standing (**Fenton1**).

<u>2.1.2 Ensure external relevance and impact through engagement with stakeholders and research users</u>

Staff within this UOA are encouraged to engage in exchanges between academia and industry or other professional bodies.

In HNR, staff are enabled to engage with strategic groups related to Natural England, the
Institute for Outdoor Learning, Council for Learning Outside the Classroom, and Historic
England. Opportunities for commissioned work are also supported, such as Loynes' work
with the Ministry of Education in Singapore (2015 and 2017) to support their development
of outdoor education policy and practice.



- In OL, Prince sits on the Education Advisory Group of the Eden Project North initiative, including outdoor curriculum development and research on impact for children in Morecambe Bay. She was commissioned by Lowe Alpine (Equip Technologies) to research and test a range of backpack designs for women and the CEO presented at the UoC Research and Enterprise conference as an example of an integrated enterprise, research and student enhancement project. Fenton has a global following after many years in practice following apprenticeship with Ray Mears, and this Unit enables her continued engagement in this emerging practice. This includes with military training for resilience, bushcraft shows, Sloyd education in Sweden, and establishment of a research base to the re-vitalised Wilderness and Bushcraft Society. She gave a Royal Geographical Society presentation entitled 'Bushcraft in Research: Research in Bushcraft' (2017).
- In Community, Cammack worked with international school inspectors on school efficacy and social justice, and Boyd upskilled teachers in use of Promethean Active Expression 'pods' (also providing opportunities for ERR researcher, Leslie). Staff have worked collaboratively with ORISIS Education to embed Growth Mindset theory into practice in Blackpool schools and Elton-Chalcraft led a project funded by the 'Cathedrals Group' of 14 Universities exploring this group's role in local community projects. Elton-Chalcraft's article with a local Headteacher was awarded runner up best article of the year 2019 in the Management in Education Journal, uncovering alleged racist and sexist attitudes in school leadership career progression (funded by an educational consortium).

Four Unit's staff are recognised as research experts for Parliament and Government to advise on aspects of the impact of COVID-19 pandemic.

2.1.3 Develop staff skills and capacity to engage in research in a supportive and enabling environment.

A comprehensive programme of support develops staff skills and capacity. Two-day Academic writing retreats (3 times a year) for educational researchers were opened up in 2017 to all PGRs and staff. These provide a focused opportunity for participants to make significant advances in their research and scholarly writing. A series of fortnightly Lightning Talks via virtual platforms provide SRR and ERR staff with an opportunity to present research, for interdisciplinary discussion and feedback from experienced researchers and practitioners. These are available to researchers across all the themes. Educational research seminars across all campuses enable sharing, celebration and discussion of research. ERR staff are supported through internal funding to host conferences, seminars discussion groups and workshops with other researchers and professional partners (e.g. Outdoor Learning Symposia in 2018 and 2019, including MacGregor on her research in Initial Teacher Education).

Future research development within this Unit will utilise the strategy 1-3 outlined above. This will ensure that staff continue to progress in their research careers, leading to an increased proportion of eligible Category A staff across the next REF cycle. The immediate focus will be to develop ERR staff to SRR, whilst continuing to improve the infrastructure that enables an increase in research income, collaborations and impact. Alongside development of existing staff, this Unit will work with internal recruitment panels to strengthen appointments and attract experienced researchers to the institution.



2.2 Research Students

Across staff in this UOA, PhD completions over the REF2021 period stand at 19.00 FTE, compared to 6.00 for REF2014.

The Unit's training and supervision has developed a research culture into which PGRs are fully integrated and prepared for further research activity. PGRs align to the research themes and benefit from opportunities for engagement and interaction with experienced researchers in addition to their supervisory team. PGRs are invited to educational research events and attend the annual research student conference (REF5a, 3.2). Several full-time PGRs have organised research events to encourage PGR interaction across the research centres (e.g. Ackroyd in RPHE (recipient of a PhD bursary: dedicated PGR writing workshops) and experienced researcher/PGR interaction seminars (e.g. Harvey in OL). Academic writing retreats have attracted PGRs from other universities enhancing the Unit's research culture through wider engagement. PGRs deliver tutorials, mentor undergraduate students, and are provided with additional training to do this; able to deliver 30 hours in total. RPHE researchers deliver formal training to support this activity.

PGRs are provided with extensive opportunities to develop skills that prepare them for future careers. This includes publishing with more experienced researchers, presenting at, and organising, conferences and working on applied research projects. Within the Unit, experienced researchers publish with PGRs, for example, in **Community** and **RPHE**, **Elton-Chalcraft2** and **Boyd1**. PGRs also contribute to TEAN, including on Committee, and in presentation of research. *Warner* acted as a Research Assistant in a project contributing to Impact2301. **Boyd** engaged PGR Ash in a number of his externally funded programmes, including Mindset Theory, and Maths Mastery (Section 3.1).

In **OL**, PGRs have presented research at the International Adventure Conference in 2019, provided keynotes at the Institute for Outdoor Learning conferences (2019), and organised regional professional body conferences. PGRs have attended international conferences of the Association for Experiential Education (2019), the International Association for Environmental Philosophy (2018) and the Society for Phenomenology and Existential Philosophy (2018). **Prince** and **Loynes** provide opportunities for PhD students (staff and non-staff) to be involved in live projects. For example, Hordern on the REALISE project, Breeze on the Learning Away project, Hedges on the Research Hubs, and Council for Learning Outside the Classroom projects, and Harvey on the Penrith Place project. **Hayes** (as staff PGR) presented at the 20th International Play Association (IPA) Triennial World Conference in Calgary, Alberta, Canada (2017).

This Unit has encouraged career development, and PGR's in **Community** and **RPHE** have taken up roles as Department Heads and academic positions at the University of Southern Denmark, St Andrews, Glasgow University, Manchester Met, and Lancaster University. Successful PhD candidates in **OL** are now in positions including Head of Research at Brathay Trust, and Associate Head of School, Students and Nations (Open University). **Hayes**, as a PGR, featured in the postgraduate supplement in The Independent (23 March 2016) and was also commissioned by Plantlife to develop a pedagogical toolkit to be used for CPD purposes by practitioners who are working with SEN/D young people in outdoor spaces.

The Unit's monitoring and support mechanisms allow for PGRs with protected characteristics to contribute to the environment. Centralised policies are utilised to support PGRs (REF5a, 3.2). The Professoriate office for the *Outdoor Studies Research Group* is situated next door to the PGR study room, which enables frequent interaction, debate and response for those students in attendance, whilst virtual platforms are used extensively for those who study remotely. Following the Unit's mission to engage in purposeful educational research grounded in practice, our PGR community attracts candidates who are experienced education professionals with considerable contextual understanding of practice; recognising the value of evidencing their practice through research. Such PGRs coming from leadership and management roles may need enhanced support on their return to study as offered by the Unit and Graduate School (REF5a, 3.2). A high-level commentary on EDI data for this Unit's PGRs has been provided below.



Table 1. EDI Data for UOA23 PGRs		
	ration Unit Considerations/Actions	
36% <39; 43% 40- 49; 14% 50-59; 7% >60.	This represents an even balance. An older demographic reflects the fact that many PGRs study alongside practice. This creates a diverse research environment with a range of skills and experiences. The staff pool (see Table 2) is typically an older demographic.	
71% female and 29% male 7% BAME	Higher proportion of PGRs are female, compared to staff pool (see Table 2). All supervisors have completed unconscious bias training (UBT) Higher figure in comparison to staff pool, all supervisors have completed UBT.	
14% declared disability	Below institutional figure and staff pool. This Unit ensures that PGRs are made aware of institutional structures to support health and wellbeing, including signposting to Disability Officers.	
0% LGB	14% refused information, below institutional figures and staff pool. The Unit promotes institutional LGB networks to PGRs.	
29% part-time	Ensure that part-time PGRs engage with Unit activities, and if in practice, their experiences contribute to Unit vitality.	

2.3 Equality, Diversity and Inclusion (EDI)

UoC has a centralised EDI policy and EDI steering group (REF 5a, 3.3) that actively works to ensure that UOA's culture is inclusive, prioritises staff and student wellbeing. The Professoriate and theme leads ensure that EDI is central to the Unit's research approach. Elton-Chalcraft and Lockney are members of the EDI Steering Group and academic representatives for UoC's Athena Swan self-assessment team. Lockney is the UCU Equalities Representative at UoC and with Elton-Chalcraft presented at the Race2B Black Lives Matter conference. They are working collaboratively with other stakeholders to make Cumbria Anti-Racist. This builds on Impact2301 through establishment of a Cumbria Race Equality network with a mission to raise awareness and celebrate the contribution of BAME people in Cumbria and to challenge and disrupt individual and institutional racist attitudes and behaviours.

Unit staff undertake research related to EDI. Elton-Chalcraft's research on Prevent includes foci on gender and race. McPhie's novel research addresses how mental health and well-being are distributed in the environment - politically, socially and ecologically (subject of his reserve ICS). Mallabon1 focuses on the psychological health and well-being benefits of physical activity in nature. Hallett1 & 2 deal with issues and perceptions of disabilities amongst children and young people in the USSR, where the existence of disability was effectively denied until the fall of communism.

Unit staff undertake other roles that support and promote EDI. Chapman works with new academic staff on the PgC Learning and Teaching in Higher Education as Personal Tutor, supporting with wellbeing and workload issues. The PgC programme includes inclusive teaching and learning and accessibility issues informed through working closely with our Accessibility Manager. Hallett supports Education programmes in SEND/Inclusion and SEND student teachers are invited to organise an Inclusion Conference. The 2020 conference secured speakers from the Universities of Exeter and Oxford. Hallett also chairs sessions at the Inclusion Network of the European Educational Research Association (EERA).

More broadly, the Unit utilised data from the Equality Impact Assessment exercise on output distribution and eligible staff to identify EDI actions (see REF Code of Practice, 1.8 for schedule). This has included working directly with the institution's EDI Officer to understand and interpret the data and identify mitigating actions. These actions have then been raised with the LED Research Centre Director and IoE Director, and also form part of our institutional approach to responding to these data (REF5a, 3.3). These considerations and actions are provided below (PNTS=Prefer not to say) in Table 2.



Category	%	Considerations	Proposed Actions		
Age					
30-39	0	OL professionals need to have	* Staff retention at London		
40-49	21	technical and academic campus qualifications. Thus, age profile for * Consider how younger states.			
50-59	43	research is skewed towards older age categories. Output pool mirrors			
>=60	36	age profile.			
Gender					
F M	43	Reflects institutional data. IoE staff predominantly female; OL staff predominantly male yet all OL female staff submitted to this Unit. Output pool mirrors gender profile.			
Orientation					
LGB+	7	Reflects institutional data. Output	* Promotion of networks available		
Heterosexual	79	pool mirrors profile.	to staff and encouragement of		
PNTS	14		input into working groups.		
Religion					
Religious	43	No conclusions	* Promote existing faith networks and external bodies.		
Non-Religious	36				
PNTS	21				
Ethnicity					
White	93	Below institutional data (5%	* Supporting researcher		
BAME	0	BAME). Few BAME researchers in	development in London. * Positive action statements in		
PNTS	7	OL in UK.			
Disability			recruitment.		
	0	Potential non dealeration (120/	*More support for stoff with LDs		
Disability Declared	U	Potential non-declaration (13% institutional data). Specific learning	*More support for staff with LDs. *Improved signposting to		
No Disability	93	difficulties (LDs) can make it	Accessibility Officer (in post from		
Declared		challenging to engage in research.	2018).		
Information	7				
Refused					
Contract					
Full Time	64	High numbers of PT and 100%	* Highlight strengths to Institute		
Part Time	36	permanent contracts are strengths Directors.			
(PT)		of this Unit. Output pool mirrors profile.	* RASA planning for PT staff.		



3. Income, infrastructure and facilities

3.1 Research income

Overall, the UOA has returned (to HESA) research income of £188,257.

3.1.1 OL and HNR

The strategy for generating research income has focused on 1) collaborations with industry and practitioners to extend and develop research on aspects of outdoor residential provision, and 2) engagement in knowledge exchange (KE) activities to facilitate research and development. Research income returned to HESA includes:

Table 3. OL/HNR HESA Research Income				
Learning Away Project		Improving outcomes for children and young people through residentials and creating an evidence base for long-term benefits.		
Outdoor Learning Research Hubs	£26,000 (Institute for Outdoor Learning)	Identifying the current and future research needs of practitioners in Outdoor Learning.		

Additional income returned as consultancy/regen supported further research and KE, including:

- An £11,000 commission from Ocean Youth Trust North
- £19,500 grant from the CHA-Invited Guest Fund for the REALISE project ('Researching Experiential Active Learning Initiatives for Staff/Student Engagement').
- A portion of an ERDF grant (£85,579) for two externally funded PhDs with the Institute for Outdoor Learning (Harvey) and The Lakes Currency Project as part of 'Eco Innovation Cumbria' (REF5a, 2.4).
- £2,500 from the Cathedrals Group for research into health and place.

3.1.2 RPHE and Community

This strategy for generating research income has focused on 1) utilising an extensive network of school partnerships for research in schools and 2) opportunities for research with industry, local authorities or HE partners. Research income returned to HESA includes:

Table 4. RPHE/Community HESA Research Income				
Evaluation of	£16,251	An international project aiming to create tools and		
School	(Erasmus)	strategies for evaluation of school leaders and teachers,		
Leadership and		bringing together school Inspectors from Basque Country,		
Teaching		Lithuania, Romania, Portugal, Italy, with teacher		
Practice		educators from the Open University, Cyprus and Cumbria.		
'Learning	£3,690	Primary school curriculum development and evaluation.		
Dispositions'	(Primary			
R&D	School)			
'Learning	£13,675	Teacher practitioner research project exploring early years		
Conversations'	(Teaching	teachers' professional learning, conversational expertise		
	Alliance)	and children's speech and language development		
Studio School	£3,587 (St	Investigating school values and curriculum development.		
R&D	Christopher's			
	Trust)			
Developing	£14,860	To survey and describe curriculum approaches related to		
Learner Skills in	(Cumbria	'developing learner skills' in Cumbrian primary schools.		
Cumbrian	County			
Primary Schools	Council)			



Table 4. RPHE/Community HESA Research Income cont.				
Mindset	£12,722	Practitioner-research projects to investigate and evaluate		
Courses	(School	applications of mindset theory in Blackpool schools.		
	Improvement			
	Fund)			
Learner	£50,000	Investigating how 36 primary school teachers mediate a		
Response R&D	(Bowland	newly introduced classroom learner response technology		
	Trust)	system to shape classroom learning environment.		
'Mathematical	£9,000 (Deep	Professional development research project 'Mathematical		
Mindsets'	Learning	Mindsets.'		
	Alliance)			
Other	£13,058	Including research with Britain's Energy Coast University		
Educational		Technical College; the National Institute for Christian		
Research		Education Research and evaluation of BAME and Women		
Projects		into School leadership projects.		

In addition, this Unit received a portion of an ERDF grant (£8,362 returned as regeneration income from Eco Innovation Cumbria, see REF5a, 2.4) for an externally funded Master's evaluating a school neuro-development programme delivered by PGR Raven and supervised by **Hayes**. Across all Unit themes, external funding has been used to provide opportunities for PGR students to engage in live projects (Section 2.2).

The forward strategy for research income will focus on:

- Strategic grants which facilitate a step change in our work with partners and collaborators
- Prioritisation of funding evidencing strong alignment to the themes and Unit mission.
- Utilising theme leads to identify opportunities, circulate to relevant staff and coordinate bid and project development.

3.2 Commercial income and Unit infrastructure for researcher development

The annual **TEAN conference**, emerging from the **TEAN Network** of 900 international teacher educations, has additionally generated £311,199 of non-HESA Unit income between 2014 and 2020. This supports investments in educational research and staff development, and funds the LED Research Administrator, who provides capacity for conference and event organisation, for research and KE project costing, bidding and contracting, and internal/external reporting.

The **TEAN conference** supports this Unit's infrastructure more widely, by attracting more than 150 delegates, with internally funded places for ERR staff to attend and present research. We estimate that 40% of newly appointed university-based UK teacher educators (lecturers in teacher education) have attended TEAN academic induction workshops. In 2019 TEAN's governance has been further developed to consist of an executive committee with academics from 10 UK universities (current president from the University of Manchester). The TEAN committee includes **Elton-Chalcraft**, Leslie (Chair) and **Boyd**.

The open access **TEAN Journal** publishes papers concerned with innovative practice in teaching and teacher education, with editors and peer reviewers facilitated across LED and the TEAN network. It has had 22 issues since 2010 and considerable reach with 33263 abstract views and 17843 downloads in 2019. The **STEP Journal** is an online journal, published by TEAN, showcasing excellent research and scholarly activity from student teachers. These journals support this Unit's infrastructure by providing opportunities for staff to gain publishing experience.

The **Assessment in Higher Education (AHE) Network** focuses on developing research-informed practice in assessment and feedback in higher education. The AHE Conference has genereated income of £249,141 of commercial income. Growing from a one day campus-based event in 2012, an annual event now attracts 220 world-leading researchers and academic developers from over 25 different countries. An annual AHE webinar is also offered in collaboration with the 'Transforming Assessment' special interest group based in Australia.



The organisational infrastructure for online delivery (REF5a, Covid annex) has been effectively utilised to deliver a number of entirely online events, including:

- LED Research Centre monthly Lightning Talk Webinars (April 2020-ongoing)
- Assessment in Higher Education (AHE) Webinar (July 2020)
- University of Cumbria Erasmus+ Conference Practical Solutions to Educational Inequality (May 2020)
- LED Research Conference (December 2020)

3.3 Research income in support of impact activities

This unit has utilised research (and other types of income) to generate impact.

- In OL and HNR, Prince and Loynes have worked collaboratively to develop Impact2302, and this has been underpinned by income related to the Learning Away Project and Outdoor Learning Research Hubs.
- In Community, Elton-Chalcraft, and Hayes received internal funding (2019) from the
 institutions QR-Strategic Priorities Fund allocation in support of impact. Hayes utilised
 funding and engagement in the ERDF programme, to explore the impact on outdoor
 education/play (becoming a reserve ICS). Elton-Chalcraft received Research Assistant
 time (PGR Hempsall) in support of engagement with stakeholders and beneficiaries from
 the research, informing this Unit's Impact2301.
- In RPHE, Cammack's Erasmus funded research contributed to his work around school leadership, the subject of a reserve ICS. **Boyd's** funding for 'Learning Conversations' and work in Everton on adult-child dialogue was also a reserve ICS.

3.4 Campus investments and staffing infrastructure

Researchers and PGRs in **OL** and **HNR** are based at Ambleside and since 2014, the University has invested in total ~£10.3M on facilities and infrastructure to support research undertaken by the Unit. This includes significant capital investment to update and expand the Ambleside Campus, developing a suite of four new laboratories, library facilities, dedicated PGR offices, as well as providing student social working spaces and residential accommodation.

OL and **HNR** also draw upon a large field equipment pool within the Institute of Science Natural Resources and Outdoor Studies, supported by 2.1 FTE of field technical support and ~£0.24M investment in equipment since 2014. This supports environmental research in UOA14, but also comprises an extensive portfolio of expedition, climbing, caving and water-based equipment and boats, kayaks and canoes for working in outdoor settings. The Group benefits from access to minibuses to access locations and to transport clients and user groups as appropriate. Support for researchers using the latter equipment is provided by 1.5 FTE of specialist outdoor demonstrators.

In support of **RPHE** and **Community**, the Sentamu Building (£9m, funded by Lancashire Local Enterprise Partnership) was built in 2017 and accommodated the LED launch and other LED conferences to date including the Extremism and Fundamental British Values conference. Shore, (LED administrator) works with central services to collaboratively deliver the AHE and TEAN conferences. LED lightning talks are streamed to all campuses and include engagement from Honorary/Visiting Staff and Emeriti Professors. Dedicated spaces for PGRs on all campuses facilitate peer support and many staff PGRs use these spaces to demarcate PhD research from their substantive roles.



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

4.1 Illustrative of our engagement in purposeful educational research grounded in practice, UOA staff have been involved in research collaborations, networks and partnerships:

- Staff in HNR and OL collaborate internationally. Mallabon with the Queensland University of Technology, Australia, developed a dynamic theoretical systems framework for therapeutic outdoor applications; Loynes with colleagues from the Norwegian School of Sport Science, Oslo and Phillips University, Marburg, Germany through an Erasmusmundus transcultural master's programme, developed a new model for excursions and coedited a key text. Visiting scholars from the Universities of Alberta, Waseda, Utah, Canterbury (NZ) and Monash have collaborated on joint research projects and elected UoC as host for the next International Outdoor Education Research Conference (2022). Graduates from this programme are now publishing their own research as a result of the training and networks we provided, thus illustrating a substantial multiplier effect. Fenton collaborated with Westcott (University of Idaho, US) on ethnobotany and indigenous knowledge to ground research in the Global Bushcraft Symposium. In respect of PGR training, Loynes led international research seminars at the University of British Columbia, Cape Breton University, Canada and the Institute of Technology, Tralee, Ireland.
- Also in OL, Prince collaborates nationally with Fletcher (Newcastle University) in joint research projects on sail training with invited presentations for practitioners at the Association of Sail Training Organisations national conference and international conferences (Sail Training International, 2017). McPhie has collaborated with Clarke (University of Edinburgh) to develop progressive theoretical frameworks for practice in new materialisms and outdoor environmental education and presented 'Doctoral studies in environmental and sustainability education: contextualising the process' at the University of Cambridge Summer School (2016).
- In RPHE, Elton-Chalcraft2 included collaboration with Canterbury Christchurch, Gloucester and Huddersfield, underpinning Impact2301. Elton-Chalcraft has also contributed to seminars at Warwick University and at the European Centre for Educational Research (Istanbul) and was Regional Coordinator for the Cambridge Primary Review Trust with the mission aim to dismantle inequality in education. Chapman is a Member of Organising Committee for OU's Widening Participation through Curriculum Conference.
- In Community, Lockney is a member of Initial Teacher Education committee for the National Association for the Teaching of English. Hayes is Conference Officer for the Geographies of Children, Youth & Families Research Group, part of the RGS-IBG International annual conference, and co-convener of new special interest group within BERA: Nature, Outdoor Learning and Play.

4.2 A strength of this UOA is the impact of research of staff beyond academia, and collaborations with key research users, beneficiaries and audiences:

- In HNR, with a strong interest in student wellbeing and training in counselling, grounded in her research, Mallabon worked with MIND to review their outdoor therapy programme through interviewing practitioners and clients. She produced the first review on outdoor therapy in the UK that has supported the development of 'green' MIND initiatives. McPhie, in addition to the Arts Council, and the Kendal Mountain Film Festival, worked with Homes UK and an Eindhoven-based housing association on the design and development of housing schemes 'for living' (reserve ICS).
- In **OL**, much of **Fenton's** collaborative work with practitioners through her research has inspired changes to education and therapeutic approaches globally. For example, her presentation at the 8th International Therapy Conference in Sydney, Australia (2018) on Sloyd education and greenwood carving has contributed to discussions of the curriculum of folk schools in the US and Sweden. She has been asked to write a book for the popular authoritative market using her research on bushcraft and indigenous knowledge as part of the Berghahn series *Studies in Environmental Anthropology and Ethnobiology*.



• In Community, Hayes was invited (2019) to join Natural England Strategic Research Network for Learning in Natural Environments and Outdoors for All, and in RPHE, Boyd has acted as a Research Mentor supporting teacher researchers at the Deep Learning Teaching School Alliance, Wirral; Robert Ferguson Primary School, Carlisle and the North Liverpool Teaching Alliance impacting on the mindset of teachers and young people to improve life chances particularly for disadvantaged groups. Moore contributes to the Slovenian National Commission for UNESCO, drawing on his research into Archaeological Heritage and Education.

4.3 Reflecting our mission an important aspect of our research has been with underrepresented communities and EDI.

- In **OL** and **HNR**, some of this has been through our work with deprived families (PGR Breeze) and sex workers (PGR Maynard) and with trans and non-binary participants (**Prince** and Bren, in review). We have worked with 'hard to reach' young people (REALISE project) and PGR Harvey (ERDF funded project) in disadvantaged communities.
- In **Community**, **Hayes** was interviewed by the 'I Newspaper' (2016) for an article title 'Kids need to fall over. That's part of being alive'; raising awareness about appropriate risk taking. **Lockney** is a member of the national development team for 'Poetry by Heart' and acts as a consultant and author for BBC Bitesize poetry resources, drawing on her experience of working with young people through poetry.
- In **RPHE**, TEAN has improved the quality of teacher training by collecting resources within the TEAN Storehouse and holding teacher education events and conferences, **Jackson** led TEAN until 2019. Boyd's 'Becoming a teacher educator' workshop at TEAN conference, accompanied by the 'Guidelines for induction' published by AdvanceHE, provides (on a national level) academic induction for ~500 recently appointed teacher educators since 2009.

4.4 As an indicator of wider activities and contributions to the research base, economy and society, staff have contributed to the sustainability of educational research through engagement with national initiatives.

- In HNR and OL, McPhie has also hosted local events to enhance public understanding of his research, as well as 'walks in the park' (Mcphie & Clarke, 2015), funded by the Arts Council. Fenton is part of a network of leading bushcraft practitioners globally (The Association of Survival Instructors) and raises awareness of her new unique contribution to research in this area through TV, radio and the tabloid press (e.g. Radio 4 Women's Hour; BBC Countryfile magazine podcast on taking a woodland walk to learn bushcraft, tracking and survival; Interview with Russell Band on Radio X, Consultancy for Apple TV 'SEE' Blockbuster). She is an invited contributor to the Bushcraft Journal on 'Living by Nature' and was instrumental in its re-launch. Staff have wider influence in their research across Europe through visiting lectureships: Philipps University, Marburg, Germany (Prince, Loynes), Tampere University, Finland (Loynes), University of Santiago de Compostela, Spain (Prince) and as a visiting professor Norwegian School of Sports Science, Oslo, Norway (Loynes).
- Community and RPHE expedite the Unit's mission through their wider educational research roles, with Elton-Chalcraft and Hayes being special interest leads for British Educational Research Association. Hallett is convenor of SEND for the European Educational Research Association and Elton-Chalcraft has been North West lead for the Cambridge Primary Review Trust.



4.5 Across the Unit, staff are renowned international speakers in the discipline and many of these presentations outreach to key research users:

- In **HNR** and **OL**, **Fenton** was keynote speaker, at The Global Bushcraft Symposium, Alberta, Canada. 'Bumping heads: Bushcraft and its cognate domains' (2019), considered by the field and profession as highly influential. **Loynes** was keynote speaker at the Innovation Education Conference, Szczecin, Poland. 'Learning without walls: the many faces of outdoor education' (2015), at the Natural England International Conference, London, 'Learning Away. Lessons Near and Far' (2015) and at Outward Bound 20th Anniversary Conference, Helsinki, Finland. In respect of the wider research base in academia, **McPhie** was keynote speaker at the 5th International Adventure Conference, Tralee, Ireland 'The Wasp, the Cave and the Lamppost' (with Dykes, 2016) and at the 6th Conference on Outdoor and Adventure, Treuchtilingen, Bavaria, Germany (2018). **Prince** was an invited speaker at the 8th International Outdoor Education Research Conference, University of the Sunshine Coast, Queensland, Australia, 'Publishing: Pitfalls and Possibilities'. **McPhie** was an invited speaker to: 'The Environmental Arts Collaboratory: Shifting atmospheres, pedagogies, and temporalities', Biosocial Research Lab, Education and Social Research Institute, Manchester Metropolitan University (2019).
- Similarly in RPHE, Hallett was keynote speaker (2019) at nasenLive a one-day SEND CPD conference and exhibition and Elton-Chalcraft has given keynotes at Bishop's College Kolkata, and on fundamental British values at Limerick University. Boyd has been keynote speaker at the Maths Mastery Leadership conference (Dubai) and Assessment in MENA (AIM) conference at the University of Abu Dhabi. Boyd is a Visiting Professor of Academic Development at Newman University.
- In recognition of contribution to OL research nationally with impact on practice, Prince was awarded the Institute for Outdoor Learning Research Prize (2019) and McPhie's student, Butler-Eldridge, was awarded best student dissertation prize (2019), presenting at the 4th World Congress of Psychogeography, University of Huddersfield (2019). In Community, Hayes received the 2018 Anna Craft 'Creativities in Education' Prize from the British Educational Research Association (BERA).

4.6 Extensive key texts have been published across the research themes:

- In OL, Prince has made a substantial contribution through her International Handbook of Outdoor Studies, 2016; Research Methods in Outdoor Studies, 2019; and the forthcoming Outdoor Environmental Education in Higher Education: International Perspectives, (2021).
- In **HNR**, **Loynes** through his role as Chair to 2018, currently Vice Chair, of the European Institute of Outdoor Adventure Education and Experiential Learning co-edited *The Changing World of Outdoor Learning in Europe*, 2018; **McPhie** published *Mental Health and Wellbeing in the Anthropocene: A Posthuman Inquiry*.
- In Community and RPHE, Elton-Chalcraft has published key texts for teacher educators, including Professional Studies in Primary Education (2020, now 4th Edition), Teaching RE Creatively (2015) and has been an invited panel member for the International Professional Development Association conference on ethics, and extremism. Boyd, Hymer and Lockney published Learning Teaching: Becoming an Inspirational Teacher targeted at new teachers. Moore has contributed to Teaching History Creatively.

4.7 Staff in the UOA are active journal editors and reviewers across the themes (selected examples below):

 In key OL and HNR journals, for example: Journal of Adventure Education and Outdoor Learning (Prince, Associate Editor, Loynes, McPhie reviews); Journal of Environmental Education Research (McPhie, Editor double Special Issue), Journal of Outdoor and Environmental Education (Loynes, McPhie, Prince reviews). To contribute more widely to educational research, staff also review for Education Sciences (Prince), Education 3-13 and British Education Research Journal (Loynes reviews).



- In Community and RPHE journals Jackson was Editor of TEAN and STEP Journal and Cammack is a Member of Editorial Advisory Board for the Journal of Global Education and Research. Staff are active in BERA, for example Jackson Conference reviews. Hallett is Editor of the British Journal of Special Education and a reviewer for the Journal of Research in Special Educational Needs, promoting best practice internationally for children with Special Needs.
- In RPHE, Boyd served as Editor of Practitioner Research in Higher Education (Chapman, Cammack and Elton-Chalcraft have reviewed). The journal aims to disseminate evaluations and research of professional practice which give voice to all participants in higher education based on ethical and collaborative approaches to practitioner enquiry.

Conclusion

This Unit's active, strong and vibrant research culture reflects the commitment of its constituent researchers to its mission, to *dismantle disadvantage and promote social justice by engaging in purposeful educational research grounded in practice* for the needs, interests and inclusion of its key research users and beneficiaries. Its positioning across four themes in two research centres enables interdisciplinary work, reflecting robust and exciting educational research outcomes for regional, national and international impact. The Unit's infrastructure within a cohesive and expanding institutional environment, ensures security of research endeavour and the sustainability and development of further high quality educational research at UoC.