Scottish Council of the Deans of Education
Attainment Challenge Project

Developing pedagogies that work for Pre-Service and Early Career Teachers to reduce the Attainment Gap in Literacy, Numeracy and Health and Wellbeing.

Progress report towards university projects and Research Question 2:
Of our current practice, what do we do well and what could we do better?

March 2019
University of Aberdeen
University of Dundee
University of Edinburgh
University of Glasgow
University of the Highlands and Islands
University of Stirling
University of Strathclyde
University of the West of Scotland
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Reference Group meetings

The Reference Group has met twice since the December 2018 report.

The group met on the 28 January 2019 at the University of Glasgow. At this meeting it was agreed to submit a proposal for a session at the Scottish Learning Festival (25-26 September 2019) to inform and consult with the sector regarding the research agenda, the suite of projects and progress made. A proposal, ‘Beyond business as usual: Rethinking teacher education for the Attainment Challenge’, has since been submitted and we are waiting to hear whether it has been accepted. In addition, the group discussed and refined the design of the next stage of research in preparation for an application for ethical review.

The group next met on the 19 March 2019 at the University of Stirling. At this meeting, each university provided an update on progress in their respective projects. Moyra Boland provided a brief report on: a) the presentation of the first project report to Scottish Government and Learning Directorate representatives in February; and b) the tabling of the first report at a meeting of the Scottish Council of Deans of Education. Other possible opportunities to disseminate the research outcomes were discussed, with agreement to present at the Scottish Research in Education Association (SERA) Conference (2019) and the European Conference of Educational Research (ECER) in Glasgow 2020. With ethical approval granted by the University of Glasgow’s College of Social Sciences Ethics Panel for the next stage of collaborative research (See Appendix A), the group then discussed how to proceed to collect data in a consistent manner across each university’s network of alumni, staff and stakeholders. It was agreed to have all interviews and focus groups completed by 19 June 2019, to allow analysis to proceed.
RQ2 progress report

The second research question (RQ2) in the collaborative project asks:

*Of our current practice, what do we do well and what could we do better?*

Design

This project phase will undertake a sectoral scan seeking participant’s evaluations of teacher education programme **strengths and weaknesses** in preparing teachers to work productively in SIMD 1-40 contexts with staff in each of the participating universities collecting data within their networks. It will involve individual interviews of 30-45 minutes with **teacher education staff** at each of the respective universities (2 to 4 teacher educators in each of 8 universities, a total of 16 to 32 such participants), and focus group interviews of 45-60 minutes with **school partnership staff** such as mentor teachers and head teachers (3 participants for each university – a total of 24 such participants), **local authority staff** (2 to 3 stakeholders per university, a total of 12 to 18 participants) and **early career teachers** (3 to 4 newly qualified teachers for each university, a total of 24 to 32). The interviews and focus groups will be audio-recorded and de-identified using pseudonyms at the point of transcription such that no university, school, local authority or area will be identifiable.

It was agreed at the January reference group meeting that analysis of the transcripts will be informed by Shulman’s (1987) typology of teacher knowledges. This is classic work within the field of teacher education and professional learning which outlines various strands of knowledge that underpin teachers’ practice. The knowledge categories are:

- Content knowledge
- General pedagogic knowledge
- Curriculum knowledge
- Pedagogical content knowledge
- Knowledge of learners and their characteristics
- Knowledge of educational contexts
- Knowledge of educational ends, purposes and values, philosophical and historical grounds.

In this way, the analysis will code elements in the responses with reference to the type of knowledge implied, then trace which knowledge types are sufficiently or insufficiently supported in teacher education programmes in the participants’ accounts. There is also the possibility of identifying additional types of knowledge, or dispositions that participants consider necessary for effective practice in disadvantaged communities.

Ethical approval

An application for ethical approval for this research and the necessary documents for informed consent were lodged with the University of Glasgow’s College of Social Sciences Ethics Panel early February. Approval was received on the 18th March 2019 (see Appendix A).
### Indicative timeline for RQ2 research

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
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<tbody>
<tr>
<td>25 March 2019</td>
<td>Start to recruit participants, schedule interviews etc.</td>
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<tr>
<td></td>
<td>Commence data collection.</td>
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<tr>
<td>19 June 2019</td>
<td>Data collection complete.</td>
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<tr>
<td></td>
<td>Audio-files and key point summaries to project staff at University of Glasgow</td>
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<tr>
<td>July-August 2019</td>
<td>Code interviews according to typology, and document analysis</td>
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<tr>
<td>August-September 2019</td>
<td>Draft report on RQ2; circulate for comments; finalise report.</td>
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**Reference:**
University project reports

For the 19th March meeting of the reference group, each university was asked to prepare a work-in-progress report for their respective projects using a uniform outline. These have been compiled in this section.

University of Aberdeen

<table>
<thead>
<tr>
<th>Contact person/people:</th>
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<tbody>
<tr>
<td>Dean Robson, Archie Graham, Peter Mtika, Lindsay MacDougall</td>
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<th>Email:</th>
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<tbody>
<tr>
<td><a href="mailto:d.robson@abdn.ac.uk">d.robson@abdn.ac.uk</a>   <a href="mailto:a.graham@abdn.ac.uk">a.graham@abdn.ac.uk</a></td>
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<table>
<thead>
<tr>
<th>Project title:</th>
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<tbody>
<tr>
<td>Pedagogies for Educational Inclusion of Pupils Living in Poverty</td>
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<table>
<thead>
<tr>
<th>Focal Research question:</th>
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<tbody>
<tr>
<td>What are the enablers and barriers to induction year teachers’ enactment of inclusive pedagogy, in schools located in areas of social and economic deprivation?</td>
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<table>
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<tr>
<th>Progress to date:</th>
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<tbody>
<tr>
<td>• Ethical Approval granted</td>
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<tr>
<td>• Field site schools located (3 schools with high levels of poverty - 2 primary schools and 1 secondary school)</td>
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<tr>
<td>• Discussions held with head teachers and local authority representative</td>
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<tr>
<td>• Data collecting timeline and instruments developed</td>
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<tr>
<td>• Overarching project RQ2 integrated into data collecting instruments</td>
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<tr>
<td>• Data collecting instruments piloted and researchers trained in their use</td>
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<tr>
<td>• Initial agreement for participation by 7 probationer teachers.</td>
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<tr>
<th>Next steps:</th>
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</thead>
<tbody>
<tr>
<td>• Gain final voluntary informed consent from participants</td>
</tr>
<tr>
<td>• Begin data collection after Easter holidays</td>
</tr>
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</table>
Contact person/people:
Professor Teresa Moran, Professor Jim Scott, Mrs Mary Knight

Email:
t.r.moran@dundee.ac.uk; jimd.scott52@btinternet.com; M.J.Knight@dundee.ac.uk

Project title:
Teaching and Learning for Equity

Focal Research question:
How can early-career teachers be supported in improving their practice through participation in a research community involved in focused research on improving equity and attainment?

Progress to date:

- Initial research carried out within the school (with staff and students) to raise awareness of the project among colleagues, identify areas of strength (in supporting raised attainment and increased equity) in ITE and beyond and areas for further development.
- Good practice in preparing ITE students for work in a diverse or deprived community collated, along with areas where improvements are required.
- Framework for an ‘equity research community’ encompassing project students, ITE students, other postgraduate students (e.g. MEd, Into Headship, PhD students) and staff developed. An initial subset of this group worked with the course team to support the pilot ‘Teaching and Learning for Equity’ course.
- Pilot ‘Teaching and Learning for Equity’ course researched, developed and launched.
- Pilot course delivered.
- Successes and issues from pilot course identified and included in planning papers for subsequent cohorts.
- Initial summative research conference not held (due to change of LA link personnel, consequent withdrawal of teacher cover for student attendees.
- Sample of headteachers interviewed with respect to improving equity in their LA and school communities
- First pilot cohort completed research projects on improving equity, choosing a project from a range of equity-related themes.

Next steps (responsible individual/group in brackets):

- Further raise awareness of SAC and of this development across the school (staff and students) (TM, MK)
- Collate and report upon areas of research (e.g. demographic analyses, class issues and challenges, teaching strategies to address identified needs, learning approaches) carried out by first student cohort (DD)
- Collate issues and impediments to progress from first student cohorts (DD)
- Further consultation with staff, student groups, LAs and mentors (MK, DD)
- Develop revised implementation plan, ensuring previous issues are overcome (TM, JS +1)
- Build full integrated research community (ITE students, probationers, ECTs, other postgraduate students (e.g. MEd, Into Headship, PhD students), staff)
- Implement full equity research community.
• Implement second cohort of research-based “Teaching and Learning for Equity course - with complete research framework in place to support students and to launch research community (TM, JS + course staff)

• Plan, prepare for and implement first summative research conference

• Build integrated project team involving partner LAs (TM, JS, MK + LA reps.)

• Hold annual research conferences to provide focus for (and learning from) the work of the research community (ESW leaders + relevant staff + student reps)

• From the work of the integrated research community, further develop research themes related to equity (and attainment) (as above)
Contact person/people:
Dr Yvonne Foley, Professor Do Coyle

Email:
Yvonne.foley@ed.ac.uk;  do.coyle@ed.ac.uk

Project title: **Places and Spaces for Sustainable Learning: Pluriliteracies, Outdoor Learning, Health and Well-being**

**Focal Research Aims:**
- To explore the direct impact on attainment of young people in schools (socially, culturally and linguistically diverse) through designing innovative places and spaces.
- To expand our current approaches on our ITE programmes by providing opportunities for student teachers to develop the knowledge, skills and dispositions to address and meet the complex literacy needs of diverse pupils in deprived areas.
- To foster collaborative design – this will include the involvement of pupils, their teachers, student teachers and NQTs in participating schools, as well as university educators and researchers.
- To reconceptualise what is meant by raising attainment through the lens of pluriliteracies, health and well-being and outdoor education in order to broaden the knowledge base and pedagogical practices of participants in the project.

**Progress to date:**
1. **PhD Student:** We have successfully recruited a PhD student linked to the project who is making good progress.
2. **Research Assistant:** We have successfully recruited a part-time research assistant who will start working on the project with us from April 2019.
3. **Audit:** We have engaged in an audit of our ITE programmes. This included 3 focus group interviews with teacher educators along with gathering feedback from students that allowed us to explore how our current approaches support student teachers to work effectively with pupils from SIMD 1-40 backgrounds.
4. **Spaces for the Study:** We have secured the use of an innovative learning and teaching space (The Shepherd’s Welcome Hut) that will allow us to engage in a collaborative venture with schools involved in the project. The Shepherd’s Welcome Hut is one of the experiential models for interpreting outdoor learning and a way of being which can be analysed for its potential and impact on pupils learning and attainment. In line with our research aim: to foster collaborative design, we are creating a dedicated Shared Learning Space (SLS) within the School of Education in collaboration with student teachers and our partner schools. Simultaneously our partner schools are beginning to plan and develop Shared Learning Spaces within their schools. These SLSs are taking a variety of forms, with digital technologies being the tools that enable shared learning to be co-constructed with others in different locations. A research group consisting of researchers at Moray House and teachers within two of our partner schools has been developed, this team has started to identify ways of working and has utilised the Delphi approach as part of a bigger literature review process. A distilled version of the Delphi approach is being utilised by our pupil research team to inform the design and development of the SLS. Additionally we have conducted a focus group with student teachers to help inform the SLS design and practice. The next phase of participation for student teachers will be to engage in a SLS link with pupils at one of our partner schools, this event will provide a wealth of data on
the pupil, teacher and student teacher perspective. A pluriliteracies model for deeper learning will enable the spaces between curriculum goals and learner needs to be explored using an ecological lens. Whilst designing these spaces we are keeping abreast of previous and current research projects on the SLS topic, particularly focusing on fluid and flexible spaces that promote pupil ownership and belonging. We believe that sustainability is also about flexibility and therefore different shared spaces will be pioneered throughout this study.

5. **Participants:** We have identified participants on the project and secured cooperation and involvement of 25 student teachers and 25 NQTs; 11 teacher educators across Outdoor Education, ITE and Language Education. We have also identified potential partners as we link with schools involved in placement activities for our new ITE programme (MSc Transformative, Learning and Teaching (TLT)).

6. **Preparation:** We have organised experiential events that have introduced the student teachers on the MSc TLT programme to the Shepherd’s Welcome Hut. This has set the scene and prepared them to develop an ‘insider perspective’ – which allows self-generating narratives to become curricular pedagogical resources situated outside the school’s compound as part of the data collection process.

7. All of this preparation work will allow us to go into the next academic year ready to collect data and work with schools, student teachers and NQTs.

Next steps:

1. **Sample:** We are currently confirming with the 2 Secondary schools and 3 Primary schools who will take part in the study.

2. **Within our study student teachers on MSc TLT and NQTs in participating schools will employ ‘assessment as inquiry’ as a part of their practitioner inquiry to explore the impact of the approach being used.**

In addition to this, we would like to foreground pupil voice as we focus on approaches used to support achievement. To achieve this, we will work with teachers and schools to identify young people who can be involved in the study. Participating young people in schools (from P5/6 and S1) will conduct, document and communicate their own experiences into their personal learning journeys, thus highlighting the importance of metacognition; reflection for and as learning, and the centrality of establishing a meaningful purpose and genuine audience for the extensive spoken and written communication that will be involved. We will ensure full ethical approval to work with pupils from the University ethics committee and from the parents and schools involved.

3. **We will meet again with the student teachers and early career teachers involved in the study to take them through the aims of the study and to introduce them to the overarching design. This series of teaching events will provide opportunities for student teachers and early career teachers to co-construct a shared understanding of key synergies between Outdoor learning, HWB and Pluriliteracies. This will allow us to facilitate an understanding of the overall pluriliteracies approach we are using in the project – places and spaces for sustainable learning.**
University of Glasgow

<table>
<thead>
<tr>
<th>Contact person/people:</th>
<th>Moyra Boland, Catherine Doherty</th>
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<tbody>
<tr>
<td>Email:</td>
<td><a href="mailto:Moyra.boland@glasgow.ac.uk">Moyra.boland@glasgow.ac.uk</a>; <a href="mailto:Catherine.doherty@glasgow.ac.uk">Catherine.doherty@glasgow.ac.uk</a></td>
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**Project title:**
Playing the long game: Building capacity in final year initial teacher education (ITE) and newly qualified teachers (NQT) to improve literacy and numeracy achievements and health/wellbeing outcomes for children in disadvantaged communities

**Focal Research question:**
- What learning can be gained and shared from practitioner enquiries undertaken in teacher education?
- Can such contextualised learning also generate decontextualized learning that could resource other teacher education students and the profession?

Practitioner enquiries are small scale, purposeful and contextualised enquiries conducted in a professional setting. Practitioner enquiry is an important pedagogy that forms part of teachers’ professional preparation and ongoing professional learning (Cochran-Smith and Lytle, 2009). As part of both their final year practicum and their probationary year programme, teacher education students in Scotland are required to conduct and document practitioner enquiries to encourage and cultivate an enquiring professional disposition. While beneficial for the person undertaking the enquiry in their immediate context, we are interested in whether such contextualised learning can also generate decontextualized learning that could resource other teacher education students and the profession more broadly. The project is informed by Bernstein’s (2000) concepts of horizontal and vertical knowledge structures.

**Progress to date:**
Ethics approval is now in place. We have addressed student cohorts about the upcoming research. An email with informed consent and participant information has been issued to student cohorts with invitation to participate. Currently answering queries, recruiting participants and collecting consent forms.

**Next steps:**
Semi-structured Interviews of about 20 minutes duration will be conducted with participating students on completion of their enquiries in their first practicum and again on completion of their enquiries in their probationary year to reflect on their learning over the process.

Compilation of first set of participants’ practitioner enquiries into format to be made accessible to student cohort.
### Project title:
The effective use of evidence by early career teachers, in rural settings.

### Focal Research question:
How can teacher education equip early career teachers working in rural schools, with the skills they need to effectively improve engagement and raise attainment for pupils from SIMD 1-40 backgrounds?

### Progress to date:
The researchers attended probationer events across the UHI region during August and September 2018. Working with Local Authorities the visits enabled base line discussions with probationers and recruited groups of probationers to work with over the year 2018-2019. A group of ten probationers from three local authorities were recruited.

Three reflective conversations have been carried out with these probationers, generating data which reflects on their experience relating to the Attainment gap and their use of evidence. Due to technical issues and the probationers’ busy calendar the attendance at these sessions has been quite poor.

School visits were carried out between October and January. During these visits wider perspectives were gathered through interviews with head teachers and senior staff. The findings have been reported to the Local Authority partnership group as part of ongoing partnership work and to develop their engagement with the project. A literature review identified that while internationally there is a wealth of research on rural education there is currently limited studies in the Scottish context relating to attainment or evidence. Drawing on the experiences of local practitioners and the local authority staff the research has generated a baseline observation of the challenges for rural schools in working with evidence and engaging with the attainment challenge.

### Next steps:
The reflective conversations with probationers will continue and data generated will be analysed in connection to the data generated from the wider school visits. This will be used to inform work with probationers in Year Two of the project.

Looking ahead toward recruitment for next year the project team are initiating preliminary reflective discussions with this year’s PGDE cohort. Further discussions are planned with the local authority partnership to build the collaborative elements of the project and explore potential for the project to be part of probationer provision, thus increasing potential recruitment as the project progresses.
Contact person/people:
John I’Anson, Alison Jasper, Sally Rouse

Email:
ji1@stir.ac.uk

Project title:
Making a Positive Difference: teacher professional judgement and the role of innovative pedagogies in promoting greater equity

Focal Research question:
How can mentors better support beginning practitioners’ engagement with pupil difference?

Progress to date:
The main focus to date has been twofold:

(i) working with the cohort of 10 teachers in relation to their Master’s level Promoting Equity professional leadership course. To date, following an introductory course on criticality, students are now undertaking the ‘Promoting Equity: theory, principles and critique,’ course and have to date participated in 3 day long sessions: an introductory mapping the field in relation to their present understandings and contexts; a session on thinking educationally about equity, followed by a further session that explored social theory (social capital, human capital and human capabilities) approaches. This problematized how equity is currently constructed in policy discourse, exploring how metaphor, acts of comparison and theory warrant particular constructions. Critical questions were raised re. the extent to which, whilst ethical in intent, current policy has ethical consequences in practice. Further sessions this semester will look at more creative arts-based approaches before students present a poster project on a particular theme of interest to them in relation to key themes addressed.

(ii) On-going work with Sally Rouse (Stirling based Ph.D. studentship) with her reading in relation to the research project, clarifying the particular focus, theoretical and methodological framing for her project etc. The focus of Sally’s work will be the mentoring relationships between the cohort teachers and beginning professionals and ways in which working with difference (through engagement with relevant theory as translated into practice etc.) is promoted.

Next steps:
On-going work with Sally re direction of project and choice of theoretical framing – most likely drawing upon linguistic ethnography. (9 monthly appraisal this summer and ethics approval autumn semester.)
Design of new module for the cohort’s empirical intervention (which takes place in Spring 2020).
Writing of journal article in relation to problematising the concept of equity.
### Focal Research question:

<table>
<thead>
<tr>
<th>Project title:</th>
<th>June Pisaneschi (EdD P/T)</th>
<th>Catriona Robb (PhD P/T)</th>
<th>Jenny Carey (PhD P/T)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In which contexts and by what means do early-career primary teachers experience meaningful learning in mathematics?</td>
<td>Students’ professional identities, attitudes and beliefs in Health and Wellbeing</td>
<td>How literacy teachers author their identity across pre-service and early-career teaching in Scotland: Perspectives of journeys across professional landscapes and experiences?</td>
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### Progress to date:

- Narrative literature review of research in the field of mathematics learning in ITE.
- Exploration of key concepts around identity, confidence, mathematics learning and equity.
- Thinking about methodological approach.
- Methods for working in partnership and creatively with students.
- Writing literature review.
- Developing my knowledge, understanding, skills and abilities in using statistics to analyse questionnaires.
- Ascertain whether or not an appropriate questionnaire already exists; otherwise create a bespoke one.
- Identify robust patterns in students’ professional identities, attitudes and beliefs in Health and Wellbeing in the literature.
- Ethics granted.
- Scoping of the field.
- Exploration of research focusing on teacher knowledge, agency and identity; ecological understandings of evidence use, the difference between practice and pedagogy; the learning affordances of place and context; and the potential professional networks for Mode 2 knowledge creation (i.e. knowledge that is situated and relevant).
- Connecting current research in this area to understand the domain of literacy may offer new insight into why literacy knowledge and practices in ITE and early career teaching frames what a teacher thinks, does, understands and values within literacy.
over the duration of ITE/prob years

| Next steps: | Initial methods thinking: mixed method design with 2 stages:  
|            | o Years 1 and 2 of the study: University and Placement Learning:  
|            | o Year 2 and 3 of the study: Practice Learning |
| Writing up of a piece around methodological intent | Ethics form | Writing up of literature review |
| Methods choices | Conduct a trial of the questionnaire with PGDE Primary and Secondary students | Plan and implement data collection starting in August – University and Placement learning (first trial went out November 2018, next steps will be look at emerging themes and issues relating to reliability/validity) |
| Ethics form | Analyse the trial questionnaire to determine whether or not the identified patterns continue | |
| Start data collection in August. | Carry out semi-structured interviews with those students during their professional practice | ||
Contact person/people:  
Dr Stephen Day

Email:  
Stephen.Day@uws.ac.uk

Project title:  
Exploring final year Initial Teacher Education students’ and probationary teachers’ ways of knowing and meaning-making through professional reflective practice.

Focal Research question:  
Are our early career teachers effective in improving the engagement and attainment of pupils?

Progress to date:  
Frame of reference Teacher Professional Learning and Teacher Agency.  
The UWS project is well under way.  
1. We have applied for and been granted ethical approval for all aspects of our project.  
2. The three Data Literacy workshops have been designed and delivered to all final year ITE Students.  
3. We have developed and collected n = 230 Preschool experience attitudes towards the use of data in professional reflection questionnaires (110 from PGDE Primary; 71 from PGDE Secondary and 49 from BA4)  
4. We have conducted four semi-structured interviews (PGDE Secondary) and two focus groups (PGDE Primary and BA4) exploring themes emergent from the pre questionnaire data.  
5. Data Analysis and Interpretation of all of the pre-school experience students’ attitude towards the use of data within their professional reflection in questionnaires has been completed and descriptive and inferential statistics have been complied.  
6. Analysis of the pre questionnaires forms the basis for an abstract submitted to ECER entitled Exploring Final Year Initial Teacher Education Students’ Attitude towards the Use of Data within their Reflective Practice. The outcome of which will be known by 1st April 2019.  
7. Once the post questionnaires have been collected and analysed an Abstract will be submitted to this year’s SERA conference.

Next steps:  
Ongoing work over the next six weeks...  
• Collection of post school experience attitudes towards the use of data in professional reflection questionnaires to be completed.  
• Increase the number of semi-structured interviews and focus groups to cover a wider range of participants from the PGDE Primary and Secondary.  
• On March 20th I have a meeting with the first of our Local Authority Partners (North Ayrshire Council) to explore the second phase of our research looking at supporting probationary teachers. Other meetings are planned for May and June with our partners in South and East Ayrshire Council.  
• Preparation to conduct research relating to overarching Research Question 2 will need to be done.
PhD project reports:

The collaborative project has three embedded PhD studentships in different universities. Following are reports on the three doctoral projects.

University of Edinburgh

Student: Christian Hanser
Project title: A Scottish classroom beyond walls

My research frames the Scottish Attainment Challenge as a spatial societal challenge, corresponding to a metaphorical language used in the wider research scheme: closing a gap. According to conflicting viewpoints between policy-makers, teachers, students and other stakeholders, there is a lack of agreement about the way forward to tackle this measurable gap. The transdisciplinary focus of my research takes a starting point at the gap between student teachers’ ideals, visions and values and the stratified educational system that they will encounter when their theoretical training on transformative education meets a less activist school world order. This study will analyse how student teachers construct their own narratives for pathways into meaningful teaching and how teachers can make spatial attainment bridges emerge within their MSc placements. By weaving student teachers’ journeys into schemes of quantitative assessment for attainment, this dialogue between narrative and scores makes space for curricular hubs. Such hubs as disruptions inside the school help to investigate new spaces of collaboration, emerging from a teacher education curriculum open to children’s utopia and built on teachers’ hopes for educational change.

Research questions:
How can new models of teacher education help to close a gap between student teachers’ own utopia of facilitating ‘meaningful attainment’ in SIMD areas and the real-world pressures to conform to standards, traditions and formal boundaries of an indoors profession? In what ways can teacher education provide more enabling outdoor classroom environments to facilitate transformative learning within disabling systems of multiple deprivation?

Through the highly experimental use of a tiny house classroom as part of an outdoor curriculum, the research disrupts the spatio-temporal standards of teacher education and classroom interaction. Such deliberate provocations towards new forms of institutional dialogue are based on the understanding that teacher education routines have to be challenged and set in motion due to the pressing issue of an attainment gap that has not yet shown willingness to close all by itself. Student teachers and recent graduates from the MSc Transformative Learning and Teaching have already been introduced to the mobile classroom and shown enthusiasm to engage with this place-based experimental curriculum.

The use of the tiny house shepherd’s hut addresses three dimensions of the Attainment Challenge focus:
• Spatial literacies: Teaching critical pluri-literacies with a focus on enabling outdoor classroom spaces and a direct application of theory into school and community field work
• Temporal numeracies: Shifting teachers’ and students’ perceptions of time and timetabling from pressures for efficiency to awareness of slow science/balanced ‘screen time’
• Existential care: Framing the debate of children’s mental health and wellbeing in SIMD geographical areas around notions of ‘meaningful attainment’ and personal narrative of hope

Key studies:
Socially inclusive teaching (Gale et al, 2017); ecologies of teacher agency (Priestley et al, 2015);
Children’s geographies as sanctuary experiences despite psychosocial stress (Kraftl, 2014);
Ecolinguistics and the need for new narratives of sustainability in education (Stibbe, 2015);
Teacher burn-out and effects of teaching fatigue on children (Gastaldi et al, 2014; Shen, 2015).

Methods of enquiry:
The PhD adopts a highly participatory and student-led approach with a sample from the 2018 cohort of the MSc TLT (28 students) as well as participants from the 2017 cohort. The use of a tiny house shepherd’s hut as mobile and versatile research tool provides a methodological frame rooted in iterative arts-based and collaborative practitioner enquiry.

From October 2019 to May 2020, the study analyses experimental teaching units (spatial literacies, temporal literacies and existential care) woven into the overall MSc teaching qualification. For the purpose of this data collection, student teachers will use the mobile classroom in their school placements to deliberately enter the teacher profession with a space dedicated to their own ideas of outdoor and alternative pedagogies. Here, the PhD research adopts an ethnographic as well as co-designed approach within school and outdoor settings, relying on participant observation, focus groups as well as audio-visual collaborative research involving the children in SIMD postcode areas through narrative community arts (media pedagogies). Teachers reflect in a creative diary format on the possibilities and limits to the integration of their ideas into an existing set of school regulations and the potential for ‘disruption towards dialogue’ that their novel outdoor classroom can provide intra-muros.

Background:
My BA (Hons) in Media (Journalism and Communication Studies with French) culminated in a dissertation on community narratives and citizen media from within the French multiple deprivation areas (banlieues/quartiers prioritaires) after the 2005 youth riots. The MSc Adult and Continuing Education at the University of Glasgow allowed me to conceptualise itinerant learning spheres as informal outreach hubs for proximity with communities. I worked 8 years as founder and coordinator of what then became the Welcome Hut project across the EU. This NGO work allowed the transfer of my educational utopia written up in Glasgow into a practice model that has been funded by the French government, citizen foundations and social work bodies. I also worked as permanent staff in three primary schools during the implementation of the French primary school reform on temporality (http://www.education.gouv.fr/pid29074/rythmes-scolaires.html). I have trained as a counsellor in Germany specialising in existential pedagogies. I recently won the Young Researcher Award at Abertay University’s International Conference on Pluralistic Counselling and Psychotherapy for best presentation (2018) and the best abstract award for the International Social Work and Mental Health Conference, University of York (2019).
What is the research problem I'm interested in within the larger project?
The attainment gap is an extensive and complex problem that educational research has consistently reported of discrepancies in school achievement between advantaged and disadvantaged groups as contributing factors. The Scottish Government is currently tackling these issues through The Scottish Attainment Challenge 2015 which focuses on targeted improvement in literacy, numeracy and health and wellbeing, and is supported by the Attainment Scotland Fund of £750million to work to close the attainment gap through initiatives such as the Pupil Equity Fund (PEF). To tackle these issues by informing pedagogy and practice though research I am interested in the reflective practices of teachers and whether by building their capacities in their preparation and improving levels of teacher professionalism improvements can be made. Research by Hargreaves and Fullan (2012) suggests that through a focus on promoting, developing and reinvesting in teachers’ professional capital, improvements can be made. My research will build from models of reflection to create an asset-based, problem-solving culture where teachers are continuously reflecting on their own experiences and altering actions to improve contextualised practice. Exploring how practitioner enquiry can be re-thought with early career teachers (final year ITE and induction year) to improve practice and increase levels of teacher professionalism as part of the larger UofG project is where my research will be situated.

My background and how it pertains to this project
I have a BA Community Development form the University of Glasgow and a MDes Design Innovation & Citizenship from the Glasgow School of Art. This combination led me to a strong interest in how education provides the foundation of social justice and equity and how by using person-centred and asset-based approaches while deconstructing large scale wicked problems, we can reimagine and reconstruct a preferable future that does not discriminate on the basis of socio-economic position. I currently lecture at a Further Education Institution where I teach in the Performing Arts department building on my previous career of working in technical theatre. In this job, I work with disadvantaged people with typically poor outcomes in formal education who respond well to the project-based pedagogy I use. I am interested in the potential of the creative and collaborative value and ethos of the arts, and project-based learning in particular, as both means for producing positive effects on student outcomes and as tools to build confidence, capacity and learning opportunities in an inclusive and participative way. My interest in project-based learning resonates with the pedagogy of practitioner research in teacher education (Cochrane-Smith, 2009) with its attention to the relationship between knowledge and practice to inform educational change. This idea of practitioner research being a more collaborative tool to share knowledge with others in a larger intellectual movement to affect social change and social justice builds from the ideas of practitioner enquiry. New developments in practitioner research could produce effective methods to use with ITE teachers in Scotland to close the attainment gap in literacy, numeracy and health & wellbeing by improving levels of teacher professionalism.

What is my research question?
How can practitioner enquiry pedagogy be re-designed to build professional capacity, professional community and innovative responses to the poverty-related Attainment Gap?

What are some key studies in the relevant field of literature?
Practitioner enquiry, as defined by Cochrane-Smith and Lytle consist of five themes (2009, p11): “(1) the emphasis on issues of equity, engagement, and agency; (2) the development of new conceptual frameworks; (3) the continued growth and reinvention of inquiry communities; (4) the use of
practitioner research to shape school and district reform and educational policy; and (5) the persistence of efforts to alter the relationships of research and practice in universities.” It is an investigation whereby people working in a field become active researchers by using reflective methods to critically analyse their own experiences, and through collaboration, share their knowledge with the wider community to affect positive change and develop practice within an organisation. The defining aspect is that the knowledge becomes more than personal reflection or personal enquiry but part of a larger body of knowledge to be used for transformative purposes.

Donaldson (2010), through collating the Teaching Scotland’s Futures report, examines how career long learning of quality and skills can build twenty-first century teachers and leaders. The report looks at ways to support teachers to become more engaged with research, to support their own learning and pupil experience. It is an approach where teachers have an enhanced role as they become evaluators of their own teaching. This type of learning is formed when teachers see learning through the eyes of their students and become agents in their own learning and the teachers will adjust their methods accordingly. The development of existing strengths of continuous professional development, maximising relevance and impact of career-long learning to produce accomplished teachers and strong leadership is now considered normal practice in the education system due to the uptake of this document as policy into practice.

Ian Menter, Dely Elliot, Moira Hulme, Jon Lewin, & Kevin Lowden (2011) co-authored A Guide to Practitioner Research in Education which offers a rigorous approach to developing teacher professionalism through adopting an enquiring approach to their practice, and investigation with rationale and approach that can be explained and defended. This produces a rigorous design for reflective practice. The approach of practitioner research has been embraced by the Scottish education system but is perhaps now due to be re-visited and re-designed for current challenges such as the attainment gap and the changing nature of future employment needs of an innovative new world.

Hulme, Baumfield and Payne (2009) conducted research around and produced a paper on The Scottish Schools of Ambition which was a network of 52 schools receiving additional resources to target school improvement with an interest in collaboration, innovation and professional development. The research approach asked how teacher enquiry can be used as a research tool and explored the need to address power structures and the importance of mutually beneficial collaboration, reciprocity and genuine interest amongst partners.

Hattie (2009) defines ‘visible learning’ as an attention to setting challenging learning intentions, being clear about what success means, and an attention to learning strategies for developing conceptual understanding about what teachers and students know and understand. This approach highlights the quality of teaching as the most significant within-school factor influencing pupil performance. It is an approach where teachers have an enhanced role as they become evaluators of their own teaching. This type of learning is formed when teachers see learning through the eyes of their students to become agents in their own learning and adjust their methods accordingly. Teacher-centred methods such as visible learning with a didactic approach contrast and provide tension with the person-centred approaches that promote asset-based, problem solving methods which I am planning to investigate in my research.

**What kind of theoretical tools am I interested in working with?**
Reflection and action models are the main tools I am interested in for developing new approaches to pedagogy and cultivating reflection, with action based on theoretical tools such as:
• Donald Schon’s ‘Double Loop’ (1978) has been influential in design studies. This model uses goals and decision-making skills to modify behaviour by recognising a problem, solving it and then using this knowledge in future situations.

• Brookfield’s ‘Four Lenses’ (1998) helps firstly to better understand how power underpins and distorts educational processes, and secondly to question assumptions and practices. The four lenses are: the lens of one’s own autobiography as teachers and learners; the lens of students’ eyes; the lens of colleagues’ experiences; and the lens of educational literature. The understanding of hegemonic structures is important in this model which could be beneficial for the asset-based, problem-solving culture I wish to investigate. Examining these theories with a perspective of contemporary teacher education and the challenges involved in reducing the attainment gap through a teacher-led responsive approach.

• In their theory of Legitimate Peripheral Participation, Lave and Wenger (1991) understand learning as a contextualised social phenomena where participation in a community of practice can focus on sharing knowledge and self-evaluation. I feel this would be a pivotal approach to my research as it accommodates my interest in reflexive practice tools and project-based learning methods.

• Problem-Based Learning is similar to Project Based Learning but students are usually asked to solve specific problems and have a limited amount of instruction in particular areas to help achieve this rather than free rain from the beginning. Originally a medical education approach to teach student doctors how to solve an ill-defined problem. Medical educator Howard Barrows developed this system in the 1980’s as an innovative technique for assessing clinical skills.

• In contrast Project Based Learning is a student-centred pedagogy where through active exploration of real life problems and challenges students can explore curriculum as interdisciplinary subjects by using self-direction, collaboration and manage their own learning journey. Project Based Learning can be traced as far back as the works of John Dewey in the early 1900’s where he supported learning by doing as a method, but beyond this the literature is varied between the many disciplines that use it as an approach and there are many variations in what constitutes it.

What kind of methods and enquiry am I thinking about?
I plan to conduct a design-based research project. Barab and Squire (2004) define design-based research as drawing from multiple theoretical perspectives and research paradigms so as to build understanding of the nature and conditions of learning, cognition and development. It is an interdisciplinary method born from the learning sciences, but derived from educational research, which involves developing solutions to problems and then testing them as interventions. The wider University of Glasgow project is tracking student teachers learning through practitioner enquiries. I will be looking at practitioner enquiry pedagogy from a more critical perspective. I would like to use a design-based methodology to reconfigure the experiences and perspectives of the participating ITE teachers and use project-based learning as problem-posing and problem-solving by drawing from multiple knowledge sources in a personally reflexive and collaborative process.

References
What is the research problem and how does this relate to the Scottish Attainment Challenge Project?
The attainment gap is a recognised discourse within Scottish education and although it has various narratives, this research is interested in exploring the attenuation of the gap through a greater understanding of the interpretations and practices of equity within the forum of mentoring practices within Scottish schools. The mentoring dialogues are not only integral for beginner teachers’ professional development and support but also enable a researcher, an outsider, to access a breadth of cultural information about a school through the ethnographic study in one transactional situation. Furthermore, this stage may be integral for the inhibiting or facilitation of the equity journey for not only the professionals involved but their students and the wider school environment, because school cultures are within themselves recognised as complex entities (Harris et al, 2015). In essence, within the school context, mentoring dialogues are an opportunity for exploring interpretations and translations of theory and knowledge with a view to impacting practice. This research, with the focus of equity is not a pedagogical study per se but a study about the prelude to the enactment of pedagogy.

Research Questions:
Below are the pertinent research questions raised from existing reading around the themes of mentoring and equity. These may evolve with further research and appraisal of literatures and narratives.

1. What implicit understandings of difference/equity are in play in mentoring conversations?

2. How and to what extent are conversations reconstructed, co-constructed and embodied by mentees for professional practice?

What are some key studies in the field?
There are two main thematic areas unequivocally implicit for an understanding of the above research questions; that of equity and mentoring, including its various models, within an educational context, whether national (Scottish documentation) or internationally derived (OECD, 2008; Gomendio, 2017). However, this is not to disregard the many strands of literatures which inform aspects of equity from an interdisciplinary stance, for example, attitudinal research (Van den Bergh et al, 2010), teacher expectation and teacher identity (Dall Alba, 2009). Equity as a situated or relational construct is also embodied in established literatures on communities of practice (Wenger et al, 2002; Wenger, 2010; Handley et al, 2006). However how equity develops, shifts and evolves is under-researched within the context of teacher mentoring in Scotland.

Mentoring is integral for new practitioners to have sufficient support in their initial years within a challenging profession and also for educational change (Achinstein & Athanases, 2010) and although it is acknowledged that there is not one successful combination of mentor/mentee (Harrison et al, 2005), there may be elements of professional relationships which foster equitable approaches, which in turn have the potential of being translated into classroom practice. Therefore, approximately 6 experienced mentors from Scottish schools with advanced knowledge of equity acquired from a 2 year part time course, MSc Professional Education and Leadership at Stirling University, will be participants in this qualitative and interdisciplinary study.
Furthermore, recent research (l’Anson & Jasper, 2017) found beginner teachers struggle with translating theory and values into practice, so focussing research on the relational context between mentor and mentee will contribute to a further understanding of theory and values at this point of exchange as mentioned earlier.

**What kind of theoretical tools might be used?**

Although the research will conform to ethnographic principles, with empirical observation of mentors in practice, it will be adapted with a hierarchical focus approach to elicit detailed insight of all relational exchanges, transitions and transformations. To capture nuances, it is anticipated that language analysis may be utilised to explore these relational transactions at a deeper level which is in line Vygotskian theory of language being central to individuals making of meaning (Vygotsky, 1978). This epistemological stance, using language also permits the participants the most authentic capture of their voices not only for evidential purposes but it adheres to an ethos of social justice, a prerequisite of the SAC Project.

There is a substantial literature corroborating that discourse contributes to individuals’ experiences, from Heidegger to Sapir & Whorf, in addition to the pivotal role of metaphors to ‘reconceptualise world views’ (Ana, 2002, p38) including the attainment gap (McCluskey, 2017). What is generally accepted is the interpretation of equity is multitudinous and often synonymous or conflated with diversity and inclusion and a language study may permit a greater unpacking of meaning and interpretation of equity to enhance the SAC Project’s findings.

**What kinds of methods and enquiry are being considered?**

At this early stage in the research process, at just 4 months, the elements of method are still tentative, but one consideration is the exploration of the research questions through language analysis which would permit the unpacking of meanings which may be unintentionally obfuscated or misinterpreted in dialogue. Through an ethnographic approach, the research will describe and explore the mentor/mentee interactions at conversational level using language analysis to enable the capture of any implicit attitudes or subversive discourses. The combination of ethnography and language analysis is designed to capture the hidden discourses beyond the usual ethnographic approach of perhaps thematic identification as with grounded theory for example. Fundamentally, linguistic ethnography will permit nuances of relationships and dialogue to be captured. It is suited for disentangling and establishing meaningful notes and interpretations from the complexities of the mentoring exchange. The combination of observation and language analysis will detect inconsistencies which may occur in usual method combinations of interviewing or self-completed questionnaires.

Finally, within the Stirling University Faculty there are a number of specialists in linguistic ethnography: Professor F Copland and Professor A Creese for advisory support beyond the named supervisory team.

**Researcher background and how it pertains to the research**

I have a background in teaching English in secondary and A level schools (PGCE, MA in Lit, TESOL) and within these roles mentored new staff in addition to sitting on various teaching and learning committees, all of which affords a greater understanding and empathy of teachers and their contexts and culture. Within my roles I have witnessed and experienced many aspects of the demands of the profession which enable me to not only relate to teachers of various levels but converse with experience and knowledge. My background also affords me an ability to converse with all those attached to the profession which is necessary for this research.

Within the academic realm, I have worked as a researcher on a project on investigating the diversity of senior females in HEd and on a HEFCE funded Islamic studies programme so both embrace the central role of attitudes and the importance of social justice, which is also key to the SAC Project.
More latterly, I have completed a MSc in psychology in which my dissertation involved a qualitative approach of semi-structured interviews with firefighters in various stages of rehabilitation from work-related injuries and serious illness. A study where engaging and gaining trust of individuals quickly was necessary and key to the success of findings for the project, as will be the case with my current research.

Finally, although this research is still at the scoping stage, being only 4 months in, the above conveys the current position, outlining some of the emergent themes which will evolve and develop over the duration of the research.

References
Petersen, E. R., Rubie-Davies, C., Osborne, D., & Sibley, C. (2016) Teachers’ implicit prejudiced attitudes to educational achievement: Relations with student achievement and ethnic achievement gap. Learning and Instruction, 42.
Appendix A – Ethical approval for RQ2 Research.

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Dear Prof. Doherty,

College of Social Sciences Research Ethics Committee

Project Title: Developing new approaches in teacher education to tackle Scotland’s poverty-related attainment gap. (ps on the resubmission document the name has been replaced by the application no.)

Application No: The College Research Ethics Committee has reviewed your application and has agreed that there is no objection on ethical grounds to the proposed study. It is happy therefore to approve the project, subject to the following conditions:

- Start date of ethical approval: 15/03/2019
- Project end date: 30/12/2021
- Any outstanding permissions needed from third parties in order to recruit research participants or to access facilities or venues for research purposes must be obtained in writing and submitted to the CoSS Research Ethics Administrator before research commences. Permissions you must provide are shown in the College Ethics Review Feedback document that has been sent to you.
- The data should be held securely for a period of ten years after the completion of the research project, or for longer if specified by the research funder or sponsor, in accordance with the University’s Code of Good Practice in Research: (https://www.gla.ac.uk/media/media_430311_en.pdf) (Unless there is an agreed exemption to this, noted here).
- The research should be carried out only on the sites, and/or with the groups and using the methods defined in the application.
- Any proposed changes in the protocol should be submitted for reassessment as an amendment to the original application. The Request for Amendments to an Approved Application form should be used:
  https://www.gla.ac.uk/colleges/socialsciences/students/ethicalforms/staffandpostgraduatesearchstudents/

Yours sincerely,

Muir Houston
College Ethics Officer

Muir Houston, Senior Lecturer
College of Social Sciences Ethics Officer
Social Justice, Place and Lifelong Education Research
University of Glasgow
School of Education, St Andrew’s Building, 11 Elcan Street
Glasgow G3 6NH
0946-141-530-4899 muir.houston@glasgow.ac.uk