Report of Year 3 of Pedagogies for educational inclusion of pupils living in poverty

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Executive summary

This report presents the findings emerging from Year 3 of the University of Aberdeen (UoA) project, Pedagogies for educational inclusion of pupils living in poverty. This three year project forms a funded part of a larger Scottish Council of Deans of Education (SCDE) project, Developing pedagogies that work for Pre-Service and Early Career Teachers to reduce the Attainment Gap in Literacy, Numeracy and Health and Wellbeing.

The UoA project supports the evidence-informed development of ITE programmes to prepare new teachers with the values, knowledge and skills necessary to support inclusive learning for all learners including those living in poverty.

Due to COVID-19 it was not possible to recruit any research participants to take part in Year 3 data collection as initially planned. As an alternative, Year 1 data collected from probationer teachers were revisited to explore in more depth their enactment of inclusive pedagogy in terms of what they can do rather than what they cannot. A cross-case analysis of seven cases was conducted to identify any replicating patterns in terms of eliciting a better understanding of the contexts the probationer teachers were working in and what they were able to do in relation to inclusive pedagogy. In addition, Year 2 student teacher survey and case study data were then combined with the Year 1 data to explore the lived experiences of student and probationer teachers to surface and highlight how they make sense of pupil differences while learning to enact an inclusive pedagogy in high poverty school environments.

Surfacing what probationer teachers can do creates an opportunity to identify and build their assets, to support a more positive narrative of their preparedness and progress in learning to enact an inclusive pedagogy, and in working with pupil differences. Such approaches provide authentic examples of the mobilisation of an inclusive pedagogy, highlighting a potential way forward to further develop pedagogies that support meaningful participation for all learners including those working in schools located in high poverty environments.

For the student and probationer teacher participants in this study, pupil differences were experienced as two, disparate, disconnected ideas (i) Developing awareness of differences in individuals (diversity) and (ii) Responding to learner differences. The participants were aware of the need to recognise difference and made efforts to get to know the children and young people as individuals, generally being positive about those differences and respecting them. However, it is insufficient for new teachers to simply know that the learners in the class are from different backgrounds as this alone does not guarantee access to education and full participation in learning.

The findings from this study suggest that perhaps more needs to be done to help student and probationer teachers to make sense of and to operationalise the concept of pupil differences in their classroom settings. To this end, it would be beneficial to develop a shared, evidence-informed, understanding, within Initial Teacher Education, of how knowledge of pupils' different backgrounds can support the enactment of an inclusive pedagogy, to address issues such as those highlighted in the Scottish Attainment Challenge, without marginalising or stigmatising learners.

List of abbreviations

ITE Initial Teacher Education

IPAA Inclusive Pedagogical Approach in Action
PGDE Post Graduate Diploma in Education

PGDE(P) Post Graduate Diploma in Education (Primary)

SAC Scottish Attainment Challenge

SCDE Scottish Council of Deans of Education
SIMD Scottish Index of Multiple Deprivation

UoA University of Aberdeen

Introduction

This report documents Year 3 of the University of Aberdeen's (UoA) project, *Pedagogies for educational inclusion of pupils living in poverty*. The overall purpose of the UoA project, is to contribute to the larger Scottish Council of Deans of Education (SCDE) project, *Developing pedagogies that work for Pre-Service and Early Career Teachers to reduce the Attainment Gap in Literacy, Numeracy and Health and Wellbeing.* The UoA project is designed to elicit insight into further developing knowledge to help teacher educators prepare new teachers to enact an inclusive pedagogical approach with a focus on schools in high poverty environments. By better understanding the lived experiences of student and probationer teachers undertaking practicum and their Induction Year in high poverty school contexts, the aim is to use this knowledge to inform and further develop initial teacher education to support the preparation of new teachers to enact an inclusive pedagogical approach.

Descriptions of activity at each year of the project are presented below.

Year 1 (2018/19) of the project aimed to surface the enablers and barriers to probationer teachers' enactment of inclusive pedagogy, during their Induction Year, in schools located in areas of social and economic deprivation. The insights gained from this investigation were then used to inform an intervention to support student teachers to operationalise inclusive pedagogy in their practicum. Data were collected via non-participant observation, follow up interviews and reflective diaries and explored probationer teachers' experiences of working with children and young people in schools located in areas identified as having a Scottish Index of Multiple Deprivation (SIMD¹) ranking 1-40.

Year 2 (2019/20) of the project centred on an intervention into an ITE programme at the University of Aberdeen. The intervention was planned with PGDE(P) tutors in November 2019 and was informed by the findings from Year 1. Data were collected from PGDE(P) students via a survey questionnaire and follow up interviews which explored student teachers' understandings of poverty, and their experiences of practicum. During this phase of the project, we aimed to further develop

¹ For further information about the Scottish Index of Multiple Deprivation – see https://simd.scot/2016/#/simd2016/BTTTFTT/9/-4.0000/55.9000/

our knowledge of how to support and prepare student teachers for enacting inclusive pedagogy for all children and young people, regardless of the SIMD ranking of the school.

This stage of the project was affected by the outbreak of COVID-19 and the subsequent closure of schools. The response rate to the survey questionnaire was low (n=13) and only two student teachers were willing to participate in follow up interviews. The impact of COVID-19 also required the original research design to be reworked to take account of the changing circumstances and general uncertainty across the education sector.

In Year 3 (2020/21) of the project, the original plan was to repeat the Year 1 research design but this time with probationer teachers who experienced the intervention into PGDE(P) practicum preparation course during academic year 2019/20. Revisiting the Year 1 research design was intended to provide an opportunity to explore the value added by the intervention for teachers in their Induction Year. However, due to COVID 19 this was not possible. Instead, Year 1 data collected from the probationer teachers was revisited to explore in more depth their enactment of an inclusive pedagogical approach in terms of what they can do rather than what they cannot. A crosscase analysis of seven cases was conducted to identify any replicating patterns in terms of eliciting a better understanding of the contexts the probationer teachers were working in and what they were able to do in relation to inclusive pedagogy. In addition, the Year 2 student teacher survey and case study data were then combined with the Year 1 data to explore the lived experiences of student and probationer teachers to surface and highlight how they make sense of pupil differences while learning to enact an inclusive pedagogy in high poverty school environments.

Research Questions

Year 3 (2020/21)

Two research questions underpinned the Year 3 activity:

RQ1 What aspects of Inclusive Pedagogy do probationer teachers focus on during their Induction Year? (Study A below)

RQ2 How do student and probationer teachers make sense of pupil differences while learning to enact an inclusive pedagogy in high poverty school environments? (Study B below)

Framing the Study

This section situates this UoA research project in the wider field of research on teacher education and inclusion.

The Problem

Inclusive education is viewed as a way of contributing to the creation and maintenance of equitable and cohesive societies and responding to broader, global, challenges associated with, for example, disability, poverty, and migration. In particular, schools located in high poverty environments present challenges for teachers, and by extension for teacher educators, that go beyond a focus on standard educational provision with teachers taking on increasing responsibilities to help learners participate meaningfully in school (Naven, Sosu, Spencer, & Egan, 2019). While the societal problem of poverty is not new, political recognition of its impact on pupil attainment is. For example, the Scottish Government (2015) launched its Attainment Challenge to tackle the poverty-related attainment gap in Scotland and improve achievement in literacy, numeracy and health and wellbeing. However, it is well known that many teachers feel unprepared to work with diverse

learner groups (Cochran-Smith, Villegas, Abrams, Chavez-Moreno, Mills, & Stern, 2016). Similarly, McNamara & McNicholl (2016, p. 374) highlight the fact that, "...little is known about the effective preparation of teachers to ameliorate educational disadvantage and little attention appears to be given to this in most teacher preparation programmes." Therefore, preparing and supporting new teachers to work inclusively with increasingly diverse groups of learners, including those from low socio-economic backgrounds, is a dilemma facing teacher education.

The National context

In Scotland, the General Teaching Council for Scotland (GTCS), sets the standards by which teacher education providers prepare programmes of study to produce new teachers. Two well established routes into teaching include university based ITE programmes for undergraduate students and the Professional Graduate Diploma in Education (PGDE) for graduates. A partnership approach is taken to practicum, with school-based teaching staff contributing to the assessment of student teachers. On successful completion of ITE a student teacher is awarded provisional registration by the GTCS and progresses to a guaranteed probationary year in a Scottish, local authority, school through the Teacher Induction Scheme (General Teaching Council for Scotland, n.d.). The teacher induction scheme operates in partnership with the Scottish Government and leads to full registration with GTCS on successful completion.

The National Framework for Inclusion (Scottish Teacher Education Committee, (STEC) 2014) identifies the values and beliefs, professional knowledge and understanding, and the skills and abilities, expected of student, probationer, and fully qualified teachers working in Scotland. Underpinned by the principles of inclusive pedagogy (see below), the Framework encompasses a broad definition of inclusion, and is aligned with Equality Act (2010) and the Curriculum for Excellence. The National Framework for Inclusion is used to support course and programme design and enables a coherent approach to inclusion across Scotland's ITE providers.

In many countries, including Scotland, it is a professional expectation that teachers will recognise and respond appropriately to diversity and learner differences. For example, the new 2021 GTCS Standards for both Provisional and Full Registration set out the mandatory requirements for student and probationer teachers. These standards require student and probationer teachers to "promote equality and diversity, paying careful attention to the needs of learners from diverse groups and in upholding children's rights." (GTCS, 2021, p. 5). While such professional standards can and do provide a framework for supporting the professional learning and development of new teachers, it is less clear how student and probationer teachers interpret and respond to diversity and pupil learning differences in their various practice settings including those that are undertaken in high poverty school environments.

Inclusive Pedagogy

As noted above Inclusive pedagogy supports the National Framework for Inclusion (STEC, 2014) and is concerned with achieving positive educational outcomes for all learners (Florian & Black-Hawkins, 2011). Underpinned by a commitment to addressing learner differences without marginalising or stigmatising learners, inclusive pedagogy is recognised in the literature as grounded on three assumptions: (1) difference between learners should be expected in any conceptualisation of learning; (2) teachers must believe they are capable of teaching all learners; and (3) teachers will develop creative and new ways of working with others.

Learning to enact inclusive pedagogy requires teachers to develop what Black-Hawkins & Florian (2012) refer to as 'craft' knowledge. Learned from experience, craft knowledge is developed over time, through a complex process involving a multitude of experiences including, but not limited to, teaching, reflection, problem solving and decision making. To date, only a few studies have explored teachers' craft knowledge in and for inclusive pedagogy (Florian & Spratt, 2013; Black-Hawkins & Florian, 2012; Florian & Linklater, 2010). A key message emerging from such work is a focus on how teachers make best use of what they already know to support learners experiencing difficulty in their learning (Florian & Linklater, *ibid*).

The studies reported below aim to add to this research base through (i) an exploration of what it is possible for probationer teachers to do in terms of enacting inclusion and (ii) an exploration of how student and probationer teachers make sense of pupil differences while learning to enact an inclusive pedagogy in high poverty school environments.

Inclusive Pedagogical Approach in Action (IPAA)

The Inclusive Pedagogy Approach in Action (IPAA) framework, designed by Florian & Spratt (2013), is used to address the methodological problem of context as a confusing variable in researching inclusive pedagogy by replacing judgements about what inclusion is and whether or not it has occurred by an exploration of the extent to which a principled stance is enacted. The IPAA links the three key assumptions of inclusive pedagogy to observable teaching practices and provides a way to document links between the principles and assumptions of inclusive pedagogy and their enactment. However, there is no expectation that practitioners will engage with all the illustrative examples presented within the framework.

In our studies into the lived experiences of student and probationer teachers we link the IPAA with an asset-based approach (Garven, McLean & Pattoni, 2016). For example, to explore probationer teachers' enactment of inclusive pedagogy in terms of what they can do rather than what they cannot. There are several aspects of an asset-based approach that are relevant to this work. A focus on assets adopts a values driven approach without disregarding the structural, social and economic challenges or circumstances an individual may be confronted with; it aims to unlock the potential of what people and institutions bring to a situation; it promotes the mobilisation of assets and recognises the importance of being sensitive to context.

Research Design, Analysis and Findings

In the following sections, the research designs adopted, the approach to data analysis, the findings emerging, and the conclusions drawn from Year 3 of the UoA study are presented. Study A explores probationer teachers' lived experiences of enacting an inclusive pedagogical approach in schools located in high poverty environments from an asset-based perspective, and Study B explores student and probationer teachers' enactment of the concept of pupil differences in schools located in high poverty environments.

Study A

An Asset-based Exploration of Probationer Teachers' Lived Experiences of Enacting an Inclusive Pedagogical Approach in Schools Located in High Poverty Environments.

Research Design

Three schools (School A, School B, and School C) were selected based on their SIMD rankings and their hosting of probationer teachers who had graduated from the PGDE programme from UoA. All three schools identified were in the same Local Authority.

The selected schools were committed to inclusion and the Presumption of Mainstreaming, as set out in the Standards in Scotland's Schools Act 2000 (Scottish Executive, 2000). All selected schools adhered to the Education (Additional Support for Learning) (Scotland) Act 2009 (Scottish Government, 2009) that places a duty on the school to identify and meet the additional support needs of children and young people taking into account their rights and the rights of parents. According to school documentation, School A and School C use a three staged intervention framework to help identify potential barriers to learning and participation, and to plan individualised support for pupils. Inclusion was not specifically mentioned in School B's handbook.

School A² was a non-denominational primary school serving an area of high socio-economic deprivation with approximately 80% of pupils from SIMD 1-40 backgrounds. Approximately 40% of pupils were recorded as having Additional Support Needs (ASN). The pupil teacher ratio was 16.3 to 1 with an average class sizes of 25 pupils. Attendance was improving but below the national average in 2018/2019.

School B was a non-denominational primary school serving an area of high socio-economic deprivation with approximately 90% of pupils from SIMD 1-20 backgrounds. Approximately 90% of pupils were recorded as having Additional Support Needs (ASN). The pupil teacher ratio was 15.1 to 1 with an average class sizes of 25 pupils. Attendance was below the national average in 2018/2019.

School C was a non-denominational secondary school serving an area of high socio-economic deprivation with approximately 80% of pupils from SIMD 1-40 backgrounds. Approximately 40% of pupils were recorded as having Additional Support Needs (ASN). The pupil teacher ratio was 13.4 to 1. No data were available for average class sizes. Attendance was below the national average in 2018/2019.

Locating and recruiting research participants

The criteria for locating and recruiting the seven research participants (see Table 1) were guided by three principles (Cohen, Kahn, & Steeves, 2000): their experiences of place, here defined as schools located in areas of social and economic deprivation or in schools with significant proportions of pupils living in poverty; their experiences of events in time, here defined as graduates of the same ITE programme and participating in their Induction Year; ways of talking about their experiences, here defined as familiar with inclusive pedagogy. Four of the research participants were placed in two primary schools (School A and School B) and three were placed in the same secondary school (School C).

Ethical approval for this research phase was received from the UoA Ethics Committee and the participating Local Authority. Voluntary, informed consent was sought from all participants who agreed to take part in the study. All names have been changed to protect anonymity.

Table 1 Distribution of research participants across the selected schools.

² All data presented, here, for Schools A, B and C were sourced from the Scottish Government Education Analytical Services: Learning Analysis, School Information Dashboard, available at https://public.tableau.com/profile/sg.eas.learninganalysis#!/vizhome/SchoolInformationDashboard-Special/SpecialDashboard

	School A	School B	School C
	Primary	Primary	Secondary
Probationers (7)	Amy	Hilda	Colin
	Helen	Simon	Eve
			Hillary

Data Collection

Data collection involved non-participant observation, semi-structured interviews, and audio-reflective diary entries. Each participant's classroom practice was observed twice and after each observation, each participated in a follow up semi-structured interview. The non-participant observations and interviews were conducted by members of the research team. All seven participants kept an audio reflective diary for ten working days.

Analytical Approach

We adopted an exploratory multiple case study (Yin, 2018) to examine how probationer teachers learn to enact inclusive pedagogical approach in schools located in high poverty environments. Each of the seven participating probationer teachers served as their own case in terms of data collection. The purpose of examining multiple cases is to search for any replicating pattens with a view to strengthening the robustness of the findings (Yin, 2009).

All data were transcribed verbatim. Guided by RQ1: "What aspects of inclusive pedagogy do probationer teachers focus on during their Induction Year?", the analysis was divided into three phases. First, we conducted within-case analysis of each participant's data to understand the individual context and nature of their experiences. Secondly, a mini-case summary for each participant was constructed. Pertinent themes informed by the three key assumptions underpinning the IPAA framework (Spratt & Florian, 2013) enabled us to surface and identify examples of what the probationer teachers were able to do and to link these to the key assumptions to inclusive pedagogy. Finally, we conducted a cross-case analysis to identify any replicating patterns in terms of eliciting a better understanding of the contexts the probationer teachers were working in and what they were able to do in relation to an inclusive pedagogical approach.

Findings

Across the 7 cases we found examples of the probationer teachers practices that were consistent with the principles and assumptions of inclusive pedagogy. The examples surfaced in relation to teaching strategies (see Table 2), additional support (see Table 3) and working with others (see Table 4) were based on the probationer teachers' knowledge of their pupils and appropriate to their context rather than a one-size fits all approach.

Table 2 – Examples of teaching strategies used by probationer teachers to promote inclusion.

Teaching	Illustrative Example
Strategies	
Scaffolding	Hilda invites the children to recap what they were talking about the previous day. She uses positive language "we had a wonderful conversation about our new topic, and all of you were working so hard, the hardest I've seen". The children then chat to each other for a short period before Hilda refocuses them

	and invites the children to share what they can remember. She then asks them to draw a labelled diagram based on yesterday's work and using the ideas they have just discussed. (Hilda, Observation 1)
Encouraging	"pupils who struggle with their writing were actually doing a lot of verbal
learners to	work to get them to verbalise what they would like their poetry lines to be and
verbalise	then where possible getting them to practice and sound out some of the
their	simpler words. And discussing with them words that they're coming up with."
thinking	(Amy, Reflective Diary)
Revisiting	"So I do a week plan where it's introduction, build upon, build upon, build
previous	upon. And then the following week we can go back and revisit it just to make
learning	sure everyone's okay with it. So we did the introduction yesterday. I had a
	look to see how they were getting on, they were getting on really well so I
	thought, 'okay let's give them a challenge to see how they get on'. So they
	seem to have got on reasonably well with that but I realised from looking at it,
	it was maybe a bit, a step too far. So tomorrow I'll go back, I'll go over the
	basics again and then make it a wee bit harder and then try and build back up
	to that again" (Simon, Interview 1)
Making	"I think interdisciplinary learning intertwines quite nicely with science, they're
links to	always going to have to write a sentence or they're going to have to figure out
other	a maths equation in scienceso I think it's good linking them together because
learning	it kind of connects it all to help their understanding." (Helen, Interview 2)
overtly	
Experiential	"I set them homework to go into the shops and look at cards so that they had
learning	real cards to look at. And I said, go home and look out your birthday cards and
	your Christmas cards actually looking at cards, doing research about different
	styles of humour cards, Valentine's cards, birthday cards, and also looking at
	what the card market is." (Eve, Interview 2)
Chunking	There was a nice chunking of the lesson. We had a bit of a recap, we had a bit
lesson into	of writing, a bit of discussion and then we had a video clip. So there were
smaller	different activities that were short, snappy, quite focused and kept to the
parts	movement of the lesson We got through quite a lot for this class because due
	to their varying of abilities, some of them write faster than others, some of
	them take a little bit longer to process what we're doing. (Hillary, Reflective
	Diary)
	•

 $\label{thm:continuous} \textbf{Table 3. Examples of strategies of providing additional support for all learners.}$

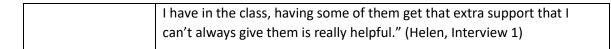
Types of	Illustrative Example
additional	
support	
Visual images	Then she shows a picture of Buddha, and says, "this is what people think he
	looked like, and this is how monks believe he looks like. We are going to
	watch a little videoso you can learn more" The video continues
	playingAfter the video, she shows a book." (Amy, Observation 1).

	he used rectangles to visually represent fractions (Simon, Observation 1). "I sort of try to think about ways that I could make it more engaging for them. For the girl who struggles with literacy and another child in the class who has English as an additional language, and has very little English I tried to make it very visual on the board" (Hilda, Interview 1) " I model out what I'm looking for so they can see an example of what it should look like and then they have a go themselves. So they have an idea of what my expectations are and then they try. And I, it is hard to leave them to try but you do kind have to let them have a go" (Eve, Interview 2) "Give them something a bit visual, if there's something written for them to back it up with. So you're sort of two-folding that knowledge, so if they can't remember the video then it's in writing in front of them, so that supports them that's a standard structuring of an English lesson a bit of visual, writing to back it up, answer the questions, debate them as a class." (Hillary, Interview 2)
"Teacher's station" to provide some additional support	"I do my teacher's station along with the worksheet station together. So I'll be doing the worksheet alongside them but now they become more independent I let them do the worksheet by themselves once I've gone through it. So that's then developing as children, they are now more grown up that they can do it by themselves." (Helen, Interview 1) " giving the ones who struggle to see an opportunity to be closer to the front, because there's a few of them that sometimes struggle to see, so it's managing to get more people that need that at the front" (Simon, Interview 2)
Concrete materials	"I find it useful starting off at the board because then you can show children clearly what you're wanting and expecting" (Helen, Interview 1) What worked well is all the children were able to access the materials. They were all able to get on to the Chromebooks due to their prior knowledge (Simon, Reflective Diary)
Provide nurturing experiences	I don't mind if you make mistakesit is tricky. It is okay to make mistakes we can always fix the mistakes and make it right. (Simon, Observation 1) " so I like to make sure that I notice them and that they know that I'm noticing that they need more support, even without them having to come up and say to me, because I like to have that relationship with them and I like them to feel they're not being missed out." (Hilda, Interview 2)
Targeted use of teacher time	"my kids can't sit and do a long period of maths doing one thing at a time so I find short ten minutes, fifteen minutes of concentration on one task I get better results from their work. And from that they end up getting more depth than they would if we were to sit and do a textbook work for thirty minutes." (Helen, Interview 1)

	when we go to our library time, I just make sure I'm in amongst the children with the books and quite often I'll have individuals who come and ask me to read to them if they're not so confident with reading themselves. (Hilda, Reflective Diary)
Providing sufficient time to support the pupils' understanding	There is a boy sitting next to Hilda. She is trying to talk with him using body language. Instead of writing the answers she is encouraging him to draw. Hilda puts her thumb up and then down to check the boy has understood. (Hilda, Observation 2) " give them enough time to understand what the subject content was then" (Eve, Interview 1)
Whole class reading, and using technology to look up words pupils do not understand	I read the questions off the whiteboard, so everyone was included. So the ones who couldn't read so well could listen to what was being asked for them and the ones that could read really well were just able to get on with the work which worked. (Colin, Reflective Diary)

Table 4. Examples of probationer teachers working with others.

Working with	Illustrative Example
others	
Intraprofessional Working e.g. In partnerships formed with teachers or other adults who work alongside them in the classroom	"generally with pupil support assistantI would ask them to focus on one groupI would actually have written down the instructions and also discuss it with them as to what I would like them to cover with the group that they're working with." (Amy, Interview 2) "the children will be with me at the carpet and then the PSA'II be listening along to what is going on with the lessonthen if there's pupils with thumbs to the side or thumbs down, I'll work with them whilst the PSA goes around and double checks everyone's getting on with their work. Or if they've got any questions or anything. And then by the time that happens, usually I'll try and get up and round and make sure
	everyone's doing okay" (Simon, Interview, 1) to make sure all the children were included I tried to include the children who are not so confident with reading and writing by using my PSA, my pupil support assistant in the class to support that group and sort of read through the questions with them. (Hilda, Reflective Diary) "when I do have the PSA in the classroom I try and make the most of her usually either to challenge pupils or she sometimes takes out groups that need support on something that I don't have time to do in class. For example, sequencing, times tables. So she has a lesson planned for them that I've given her the day before and she'll go away and do it with that group. And that's such a huge help because with the scale of differences



Our findings provide concrete examples of how probationer teachers extend what is ordinarily available in the class by adopting teaching practices to include all learners. For example, they made efforts to provide scaffolding; encouraged learners to verbalise their thinking; provided opportunities for experiential learning; and chunked lessons into smaller parts. They also created opportunities for learning so that all learners could participate in classroom life as illustrated by practices such as: the use of visual aids; concrete materials; targeted use of teacher time and whole class reading to support access to the planned learning.

Our data also shows the importance of probationers developing intra-professional working to help bridge the principles of inclusive pedagogy with their classroom practices. These intra-professional working practices were found to be mainly with pupil support assistants.

While such examples demonstrate the range of assets that are ordinarily available to probationer teachers for enacting an inclusive pedagogical approach, they also highlight an implicit inclusion orientated relationality between the probationer teachers and the learners.

Discussion and Conclusion

Our main insight emerging from Study A is that that an assets-based approach coupled with the Inclusive Pedagogical Approach in Action (IPAA) framework can help identify some of the possible ways through which probationer teachers can begin to enact an inclusive pedagogy in high poverty school environments. Surfacing what they can do creates an opportunity for probationer teachers to recognise, articulate, explore and build upon their individual assets. Such an approach may help new teachers to reframe their feelings of unpreparedness and adopt a more positive narrative of their progress in learning to enact an inclusive pedagogy and to work with diverse learner groups.

All the probationer teachers demonstrated practices in keeping with inclusive pedagogy and they did so in different ways. These examples have potential to be mobilised to support others e.g. student teachers trying to imagine what inclusive pedagogy might look like in practice. Our study highlights a potential way forward for supporting new teachers to recognise they are making progress in developing pedagogies that support meaningful participation for all learners including those working in schools located in high poverty environments.

Study B

Exploring Student and Beginner Teachers' enactment of the concept of Pupil Differences in Schools Located in High Poverty Environments

Research Design

Data were collected from student teachers to explore their experiences of working with children attending school in an area identified as having a low Scottish Index of Multiple Deprivation (SIMD) ranking. Questionnaires and semi-structured interview data were used to produce two case studies. The reason for the small sample was COVID-19 which seriously impacted on the number of student teachers able to participate in the study. The research design including the data collection points for Study B can be seen in Figure 1.

The student teachers were recruited from the PGDE(P) Initial Teacher Education programme and carried out their practicum in primary school settings. The probationer teachers were those participating in Study A and all from the same PGDE ITE programme. Four of the probationer teachers were placed in two primary schools and three were placed in the same secondary school. Prior to COVID- 19 data were collected from probationer teachers via classroom observations, reflective diaries and semi-structured interviews to produce seven case studies (see Study A above for further details). All the research participants were familiar with inclusive pedagogy and were aiming to enact educational inclusion in their practice setting.

Ethical procedures aligned with those enacted for Study A. Voluntary, informed consent was sought from all participants who agreed to take part in the study. All names have been changed to protect anonymity.

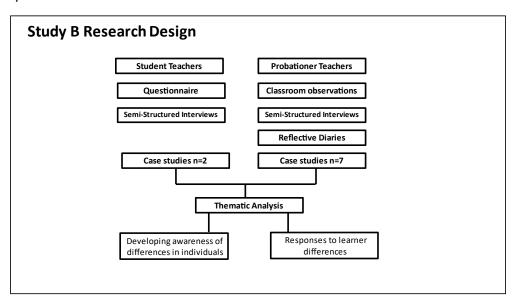


Figure 1: Study B Research Design Data Collection Points and Data Analysis

Analytical Approach

A data framework was developed from the IPAA (Florian & Spratt, 2013) and used to thematically analyse the student teacher questionnaire and the cross-case analysis (Yin, 2009). Guided by RQ2: "How do student and probationer teachers make sense of pupil differences while learning to enact an inclusive pedagogy in high poverty school environments?", data from each data collection point were analysed using Nvivo software to identify key findings. Two key themes emerged from this analysis: (i) developing awareness of differences in individuals and (ii) responding to learner differences.

Findings

Five key findings emerged from our data analysis and provide concrete examples of how the participants made sense of pupil differences while learning to enact an inclusive pedagogy in high poverty school environments.

First, pupil differences were recognised by most participants as a feature of all classrooms and awareness was further developed by fostering positive relationships with pupils through discussions with pupils either as individuals or during class activities. Some illustrative quotations included,

[I] made an effort to get to know each child personally and to find out about their lives outside of school in order to help build a trusting relationship with them. (Student Teacher)

There was a range of ethnicities and cultures in the class. This was often discussed by exploring different countries on Google maps, zooming in to see where individuals were from. During specific holidays we explored cuisine and celebrations around the world. (Student Teacher)

I've taught them for a year now so I know what they're capable of and I know what they struggle with. So...trying to work around that and give them help and scaffolding. (Probationer Teacher)

Second, when difference was mentioned, it was seen largely in terms of equality, and diversity in relation to protected characteristics, including cultural diversity. However, some participants highlighted challenges when trying to recognise differences in individuals (diversity) within their classroom setting.

In terms of equality, and diversity in relation to protected characteristics, including cultural diversity, illustrative examples included,

The class consisted of diverse ethnic and national backgrounds and genders... In terms of sexual orientation..., multiple students spoke about the possibility of identifying with a LGBTQ+ label. (Student Teacher)

My supporter teacher was very informative about the children's backgrounds and would give me an insight into their home lives. I was able to notice such diversities such as race and class through the image of the children. (Student Teacher)

In a school like School C, not every child will go to University. Some might want to, some might not because their parents have never been so it's a bit of a cultural thing." (Probationer Teacher)

In terms of challenges highlighted when trying to recognise differences in individuals (diversity) within their classroom setting the following examples are provided by way of illustration,

Diversity is sometimes harder to spot when everyone is dressed the same (uniform) and speaks the same "brand" of English, meaning you have to dig a little deeper to get an insight into people's diversity, especially as children get older and just want to conform. (Student Teacher)

Some differences are not visible to the naked eye. (Student Teacher)

A further challenge was noted by the participants whereby they stressed the need to demonstrate sensitivity when addressing issues surrounding diversity as illustrated by the following quotation,

It is difficult to drill down too hard into differences between pupils' backgrounds, classes, etc. because often pupils are very aware that their home life may be different in a way that affects them negatively. This can be very stressful for students. I try to recognise diversity and difference in these areas without linking it directly to the students, as I feel this is unethical and would put them on the spot/other them. (Student Teacher)

Third, we found no examples of participants making use of their understanding of differences in individuals (diversity) to inform and support their planning to address pupil learning differences.

Fourth, pupil learning differences appeared to be based on an understanding that the pupils in their classrooms had a range of abilities.

[There was a] wide range of abilities and interests. (Student Teacher)

A large attainment and motivation gap. By choosing seating randomly the groups were mixedability, however, often that led to an off-balance during group work - both for learning experience and engagement. (Student Teacher)

I found maths particularly difficult as the variation of level in learners was vast and many learners require one on one support in order to fully internalise a concept. (Student Teacher)

I would have broken up my time more between like the lower ability ones to help them along because I think that they all need to be involved. And if it means that I have to go and help them a little bit more then I think that's okay as long as I'm telling the, the slightly higher ability ones what I want... (Probationer Teacher)

I seat them four around a pod. So four's quite good cause then they can work in pairs, they can work in four and then they can work by themselves. So it gives me a good like level of differentiation between them. (Probationer Teacher)

Fifth, dominant school cultures normalised grouping by prior attainment or setting based on ability to respond to learner differences, in relation the teaching of maths and English language in primary schools and setting in some secondary school subjects. However, in wider curricular areas, participants grouped the learners by mixed abilities.

In terms of dominant school cultures illustrative examples included,

The school preferred ability groupings for numeracy and literacy. The range of ability between the one group (from end of first level) and the other group (working towards the end of second level) meant it was difficult to know how to create a lesson which would encompass all the learning needs in a way which was not ability grouped. (Student Teacher)

They were grouped by ability. The whole class never did a maths lesson together. (Student Teacher)

The way we do it at School C is we set them. So like all the kids in that class were like the same ability level. So it makes it easier for us to plan one lesson rather than five or six ones. So they've all got around about the same adjust score." (Probationer Teacher)

This class that you observed got more handouts cause they're a lower ability class....So they're 1.7 which is like a middle set. Whereas my other class, my other first year class was 1.4 which

is the top set. So the top set class got a little bit more work, like writing, you know, a bit more thinking. Whereas these guys got more handouts. (Probationer Teacher)

In contrast, there was more scope for flexibility in other curricular areas, for example,

In subjects such as HWB or science or topic, children worked together in mixed ability groups. They would discuss questions, solve puzzles, create posters different activities. (Student Teacher)

Lessons which were planned for the whole class using mixed ability groups, incorporated a variety of activities in order to make them accessible to all pupils. (Student Teacher)

So today's lesson in terms of inclusion, the idea of the lesson is that they're working in teams so the teams have been decided through some randomisation and some ability matching. So this way that some of the lower ability pupils will be matched with some of the higher ability pupils and therefore they'll be able to help each other. (Probationer Teacher)

Discussion and Conclusion

Getting to know learners and getting to know what they need to know about learners that is relevant to teaching and learning is complex and integral to the enactment of an inclusive pedagogy. It underpins pupil-teacher relationships and supports teachers, including student and probationer teachers, to plan meaningful learning opportunities for all learners.

In the case of the participants in this study it was evident that they were developing awareness of differences between the learners in their classroom settings in terms of protected characteristics, socio-economic backgrounds and cultural diversity. Supporting student and probationer teachers to know the school contexts and to foster positive relationships with the children and young people in their care is a key feature of Initial Teacher Education and the Induction Year. "Building and fostering positive relationships in the learning community which are respectful of individuals" is also integral to student and probationer teachers meeting the standards for provisional and full GTCS registration (GTCS, 2021, p.4).

Yet for the participants in this study, they did not appear to make use of this developing awareness to inform their pedagogical approaches to learning differences or educational inclusion. **Pupil differences were experienced as two, disparate, disconnected ideas (i) developing awareness of differences in individuals (diversity) and (ii) responding to learner differences.** The participants were aware of the need to recognise difference and made efforts to know the children and young people as individuals, generally being positive about those differences and respecting them. However, it is not enough for teachers to simply know that the learners in the class are from different backgrounds (Florian & Black-Hawkins, 2011).

The findings from this study suggest that perhaps more needs to be done to help student and probationer teachers to make sense of and to operationalise the concept of pupil differences in their classroom settings. Whilst programmes of ITE prepare new teachers effectively to develop relationships to establish knowledge of learner differences, it is important to be able to harness that knowledge to respond to, and tangibly support, learners in particular contexts. The evidence

suggests that, going forward, more needs to be specifically done to help new teachers to make sense of (meaning making), and operationalise, the knowledge they develop. To this end, it would be beneficial to develop a shared, evidence-informed, understanding, within Initial Teacher Education, of how knowledge of pupils' different backgrounds can support the enactment of an inclusive pedagogy, to address issues such as those highlighted in the Scottish Attainment Challenge, without marginalising or stigmatising learners. For example, questions such as, what aspects of understanding pupil differences can be tapped to support educational inclusion of all learners and are possible for student and probationer teachers to enact in their classroom settings?

Discussion and Conclusion

The key insight emerging from both Study A and Study B above is that the student and probationer teachers were aware of diversity and learner differences and were positive about these. They recognised and valued getting to know their pupils. However, they did not appear to know what to do with this knowledge to plan for, and work with diversity, at a pedagogical level.

In the classroom setting, practices, common across both Study A and Study B, were groupings, scaffolding and targeted support, but these were in relation to perceived differences in terms of pupil ability. Ability was seen as the main 'accepted' form of difference at a structural level, as evidenced by the 5th finding in Study B, "Dominant school cultures normalised grouping by prior attainment or setting based on ability to respond to learner differences." However, even then, how schools responded to ability appeared to be reductionist, with setting in maths and English. Therefore, responding to difference is not enough, it needs to be the right type of response.

Although other forms of difference, such as protected characteristics and cultural diversity, were acknowledged, even celebrated, though albeit in superficial, stereotypical ways e.g. cuisine, world maps and festivals, there appeared to be less evidence of participants further embracing and embedding more inclusive pedagogies within their practice. This suggests a 'professional hesitation' around how to know how to respond to diversity, in a sensitive and ethical manner e.g. as one respondent noted, "I try to recognise diversity and difference in these areas without linking it directly to the students, as I feel this is unethical and would put them on the spot/other them."

Moreover, it does not seem to be clear to the student and probationer teachers how to draw on knowledge of diversity to enhance learning and teaching opportunities for all. Learning and teaching approaches still seem to be bound to difference as linked to attainment and this seems to be the dominant narrative in schools. Across both studies the gaps at the planning stage regarding how to plan with others in support of others, and how to plan for others in support of learning and teaching, appear to be missing. There is a need to better understand the nuances of how student and probationer teachers can work with others, and how new and creative ways of working together might be realistically operationalised in the classroom setting. For example, student and probationer teachers might discuss and explore identified learner differences with colleagues and jointly plan programmes of work to make use this information to enact an inclusive pedagogy for positive educational outcomes. Student and probationer teachers must be pre-prepared to work with others to encompass their knowledge of diversity and learner differences and how this can be used to enact an educationally inclusive pedagogy beneficial for pupils living in poverty. Importantly, it should be recognised that student and probationer teachers cannot know everything, and this 'not knowing' should be seen as an opportunity for working more creatively with others to address inequalities.

Taking ideas forward: Emerging questions for teacher preparation

- What does working together mean in and for teacher education?
- What types of working together are possible for student and probationer teachers to engage with to support inclusive pedagogy?
- What might ITE further develop to support the transition to the Induction Year in terms of preparing new teachers for working together to support inclusive pedagogy?
- What might ITE change/stop doing to support the transition to the Induction Year in terms of preparing new teachers for working together to support inclusive pedagogy?

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