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Research in Action

Practitioner Research exploring the pedagogies and practices that inform the development of new and early teachers, their perceptions and teaching.

Issue 3 2018

Editor

Dr Ruth Pilkington, NTF, PFHEA, SFSEDA

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Editorial

Research in Action

Issue 3 2018

Editorial

Once again, the next issue of the journal *Research in Action* has gathered together a varied and interesting group of research studies exploring the pedagogies and practices that inform the development of new and early teachers, their perceptions and teaching. Through its postgraduate and CPD programmes, and Hope Challenge, the School of Teacher Education provides a focus in the Faculty of Education for students and staff to investigate and inform teaching practice and formation of teachers. Sharing outcomes from this work through the journal provides an opportunity for teachers across compulsory, further and higher education to share in the discussion and reflect on the outcomes from these studies. This issue does not disappoint.

This third issue unites practitioner research from students and staff. It encompasses an article addressing the impact of an experience abroad on initial teachers' pedagogy and confidence when teaching non-native speakers of English (Stevenson et al); and several articles investigating how self-efficacy and confidence is developed for initial teacher trainees through short projects and interventions (Liddy, Stevenson et al, O'Neill). It also incorporates a group of studies exploring aspects of literacy, for example spelling development and the impact of tests (Burke), reading development through a Hope Challenge initiative (O'Neill), and the development of maths literacy and problem-solving using the 'Singapore Maths Bar Model' (Hagan). The issue then rounds off with an exploration of the ways textbooks shape and inform initial teacher trainee perceptions of disability (Newport).

The articles reinforce the importance of research to inform practice, and in particular highlight the value of engaging in small scale studies when exploring shared and local pedagogic problems and questions, with a view to supplementing the professional knowledge base and enhancing our understanding as professional teachers. Within the context of the 'Hope Teacher' with its vision of professional excellence and critical, informed professional learning, the journal provides a valuable resource incorporating practitioner studies, literature reviews and short reports on work-in-progress that will stimulate discussion and reflection for student teachers and experienced practitioners alike. Readers are reminded that Literature Reviews and Bibliographies represent much work by the authors and should not be used by readers for their own work. In this collection on literacies, self-efficacy and teacher development we see the value of engaging in discourse and critique informed by theory and primary research to all teachers, contributing to educational debate and enhancement.

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What we are Researching

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The impact of an accelerated teacher training programme based on a pedagogy of enactment on trainees' self-efficacy

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ABSTRACT

The purpose of this study was to investigate the impact of a 'Pedagogy of Enactment' approach on trainee teachers' self-efficacy. Perceived self-efficacy has been defined by Bandura (1997) as, 'people's beliefs about their capabilities to produce effects' (p.7). In the current climate of education and Initial Teacher Training (ITT) there is much discussion about the importance of what it means to be an effective teacher. Self-efficacy, as the belief in one's own abilities, should therefore be considered an important trait for teacher quality and effectiveness.

Self-efficacy scores were collected from Year 1 trainees who had undertaken an accelerated ITT BA QTS Primary Teaching programme at Liverpool Hope University and Year 2 trainees who had experienced a less intensive programme. The scores were compared in order to determine if there was a significant difference between groups and to explore contributing factors. This project was quantitative in nature, using a standardised questionnaire to collect data: Norwegian Teacher Self-Efficacy Scale (NTSES) (Skaalvik and Skaalvik, 2007, 2010). Initial findings show that Year 1 trainee teachers have higher self-efficacy than trainee teachers in Year 2.

INTRODUCTION

This research project explores the extent to which a Pedagogy of Enactment approach can impact upon the self-efficacy of first year trainee teachers. In particular, the research focuses on aspects of module or curriculum design, which promote and impact upon self-efficacy in relation to trainee teachers' school-based practice. Recent changes to the curriculum design of the BA QTS Primary teaching degree means that a comparison can be made of Year 1 trainees who have experienced a year of the new programme. The degree incorporates a strand, 'The Hope Teacher', which explicitly links theory to practice. Year 2 trainees, undertaking the legacy degree, did not experience this approach.

ITT at Liverpool Hope University comprises university-based and school-based training, incorporating block placements in schools within the local area. The majority of school partners are in the Local Authorities of Halton, Wirral, Knowsley and Liverpool.

Knowsley and Liverpool are amongst the five local authority districts with the largest proportions of highly deprived neighborhoods in England, based upon data from the English Indices of Deprivation (Office for National Statistics, 2015). To change outcomes for pupils in these schools, the 'Hope Teacher' strand aims to encourage trainee teachers to discuss the most effective pedagogies of practice that lead to pupil progress.

The 'Hope Teacher' was identified by Ofsted as having distinctive qualities, namely a teacher who takes a full part in the professional life of the school and teaches the whole child with moral purpose. With this in mind, and the recent validation of Hope's new undergraduate degree, we had the opportunity to strengthen the formative learning experiences that we create to more fully articulate the moral dimensions that are essential in the formation of effective teachers. This is increasingly critical within our partnership schools in order to impact upon teaching and learning in respect of the whole child. The value of teaching trainees to teach with a moral purpose is supported by Michaels et al (2007), 'It is encouraging to think that if students are socialized early and intensively into these discourse norms in academic settings, they will internalize them and carry them into the civic sphere' (p. 256).

In response to this, the 'Hope Teacher' strand has been developed which incorporates some of the less tangible dispositions of moral commitment and values-based practice. This strand, part of our wider programme, involves a lecture followed by directed tasks or observations to be carried out on an attachment day in school, which are then reflected upon in the subsequent reflective seminar. This model or cycle (i.e. lecture- school attachment day- reflective seminar) allows trainees to explicitly link theory to practice (Valencia et al, 2009) and therefore consider learning as a subject to be created rather than a created subject, 'teacher educators should actively create situations that elicit the wish for self-directed theory building in their students' (Korthagen, Loughran and Russell (2006, p.1027). Vitality, it also encourages a collective, shared scaffold for reflection and opportunities to learn from peers during the seminar (Manouchehri 2002; Michaels et al, 2007; Lunenberg, Korthagen and Swannen, 2007).

It is a commonly held belief that university-based sessions provide the theoretical underpinnings of learning and teaching pedagogy (Goldacre, 2013) and that school-based training offers trainee teachers the 'environment' in which to apply these. However, this practice creates issues: perpetuating the assumption that expertise in learning and teaching only exists in schools and devaluing the rich opportunities offered through university-based training (i.e. valuable reflection and collaboration with a potentially large group of peers and teacher educators). As Korthagen, Loughran and Russell (2006) describe: 'They learn not so much by being taught by their teacher educators but by structured reflection on their experiences and discussions with peers. In this way the student teachers begin to construct their own professional knowledge (p.29).'

This research seeks to ascertain if there is a significant difference in trainees' self-efficacy scores, comparing those who participate in a programme that includes 'The Hope Teacher' strand, which seeks to encourage trainee teachers to construct their own professional knowledge, with those who have not participated in a course that incorporates this strand.

LITERATURE REVIEW

New understandings of children's learning, which may lead to important changes in teaching and pedagogy, are continuously emerging. As a result, teacher educators need to be flexible in approaching their university-based curriculum content (Lunenberg, Korthagen and Swannen 2007; Scott 2015). As trainee teachers are encouraged to be reflective of their own practice in school, it is important that teacher educators also model this approach. With this in mind, the 'Hope Teacher' strand can be seen as a pedagogical approach which scaffolds trainees to interpret new standpoints and theories of learning, translating these into effective classroom practice.

PEDAGOGIES OF ENACTMENT

From a pedagogical standpoint, teacher educators must consider how to plan opportunities for trainee teachers to connect theory and practice so that they are able to teach effectively, using theory to guide their action in the classroom. To make the university-based teacher education experience a meaningful and valuable one, the 'Hope Teacher' strand seeks to mirror the assertion of Korthagen, Loughran and Russell (2006) that, 'one does not learn through experience but through reflection on experience and through interaction with others' (p.1025). Reflection can be identified as the prime means for linking theory and practice. With this in mind, the traditional design of the seminar in Year 1 was reframed in order to encourage trainee teachers to become reflective practitioners. Opportunities for reflective conversations were incorporated into seminars, where discussion points were constantly, and flexibly, framed and reframed to foster a reflection-in-action approach to discussion (Schön, 1983).

A cycle of meaningful collaboration was developed in order for reflection-in-action to take place and for trainee teachers to search for the most effective learning and teaching approaches to employ in their particular classrooms, grounded in theory presented to them during university-based sessions (Korthagen, Loughran and Russell, 2006; McIntyre and Hagger, 1992). This was a far more ambitious approach than the traditional theory-to-practice model, whereby trainees translated a set of pre-determined strategies to the classroom, regardless of whether or not they were meaningful or appropriate to that particular setting. Key to this collaborative process were opportunities for peer discussion, which mirrored key pedagogical elements: thinking, communicating, inquiring and reasoning. Korthagen, Loughran and Russell (2006) stress the importance of working closely with peers either at school or at university in order to learn about teaching. They concurred with McIntyre and Hagger (1992) who stated that, 'collegiality has been demonstrated to be a critical factor in helping individual teachers to develop their classroom practice' (p.276).

Korthagen, Loughran and Russell (2006) considered the need for teacher educators to construct worthwhile opportunities for trainee teachers to engage in aspects of teaching pedagogy as the key focus rather than controlling pupils and ensuring specific learning outcomes dictated by a curriculum. Incorporating this into university-based training, without the conflicting demands found in a classroom, can be meaningful and informative for trainees. The value of this type of university-based training was explicitly shared with trainees, as they too can share the commonly held belief that the most valuable training takes place in the school environment. Linking reflection on practical experiences with theory, created situations where the pedagogical learning of the trainee teacher was embedded in their learning to teach. According to Myers (2002),

all too often the curriculum is the focus of teacher education institutions instead of teaching and learning. A reframing of course content would be necessary, as suggested by Korthagen, Loughran and Russell (2006), 'a subtle, but important reformulation is that this means helping student teachers to learn how to teach i.e. helping them to learn how to help children learn' (p. 1030).

CREATING A DISCOURSE THROUGH A COMMUNITY OF PRACTICE

Within the 'Hope Teacher' strand, tutors facilitate discussion on current pedagogical practices encouraging trainees to create their own theories and make sense, through peer discussions and reflection, of what has been observed or experienced during school-based practice. This discourse, through a community of practice (Lampert et al, 2013), provides trainee teachers with new insights and opportunities to gain from the expertise and experience of others (Putnam and Borko, 1997), rather than merely accepting what they experience first-hand for themselves whilst on school-based training. Terwel (1994) discovered that trainees could accept and develop narrow theoretical perspectives unless supported and questioned by peers.

Fellow peers and teacher educators become enablers in the 'Hope Teacher' seminars and take on the role of 'more knowledgeable other' (Vygotsky, 1978). The dialogic format encourages professional conversations with the aim of deepening and evolving trainees' understanding. For this to happen, trainees need to be engaged, with teacher educators acting as facilitators and posing questions that encourage trainees to think critically and reflect upon their own school-based practice. The interaction between teacher educator and trainee teacher is reciprocal and configures the perspectives of both, with a focus upon expanding their existing understanding of pedagogical practice in the classroom (Nystrand, 2012; Alexander, 2010). For it to become 'accountable talk' (Michaels, O'Connor and Resnick, 2007), trainees are encouraged to listen carefully and build upon each other's ideas, making sense of what has been observed in school. Thus there is a considered pedagogical approach at play in terms of deliberative discourse and reasoning that may involve a certain amount of risk-taking for the trainee teacher when considering how to improve outcomes for their learners.

The collaborative learning environment has high expectations of learners to articulate their stances and formulate or refine their ideas based upon reflection. They need to share their ideas with peers, explore different standpoints, question each other, seek explanation, and take part in higher-order thinking such as directing, classifying, critical analysis, applying, and problem solving. This collaborative discourse leads to new learning and greater depth of understanding.

CYCLE OF AMBITIOUS TEACHING

When teacher educators model this approach during seminars and workshops, their role changes and they move into a cycle of ambitious teaching where trainee teachers' beliefs are challenged: 'When supervisors posed open ended questions and pressed students to provide evidence for teaching decisions it was possible for the supervisors to move beyond supportive evaluative roles to challenge student teacher teaching beliefs' (Blanton, Berenson and Norwood, 2001, p. 241).

The challenge for tutors or teacher educators is to scaffold trainee teachers to construct their own professional vision of what it means to teach ambitiously (Long, van Es and Black, 2013). This cycle of ambitious teaching encourages teacher educators

to create opportunities that have the underpinnings of the theoretical content of the programme, explicitly linked to school-based practice. In this way, trainee teachers are given opportunities work on school-based problems in the university setting (Lampert et al, 2013).

THE INFLUENCE OF SELF-EFFICACY BELIEFS

Teachers' beliefs about their capability – their perceptions of self-efficacy - are thought to be determining factors of their commitment to teaching and outcomes for pupils' learning (Capara et al, 2008).

Efficacy beliefs influence whether people think erratically or strategically, optimistically or pessimistically; what courses of action they choose to pursue; the goals they set for themselves and their commitment to them; how much effort they put forth in given endeavors; the outcomes they expect their efforts to produce; how long they persevere in the face of obstacles; their resilience to adversity; how much stress and depression they experience in coping with taxing environmental demands; and the accomplishments they realize (Bandura, 2000, p.75).

A major influence and significance as a source of self-efficacy beliefs is mastery experience (Bandura, 1997; Tschannen-Moran and Hoy, 2007): 'Successes build a robust belief in one's personal efficacy. Failures undermine it, especially if failures occur before a sense of efficacy is firmly established.' (Bandura 1994, p. 71). Hence, direct experience of mastering a task or controlling an environment leads to increased self-efficacy. Two other sources of influence include: (a) vicarious experience, which is based on observation of and modeling from an expert, and (b) social or verbal persuasion from reflective discussion with peers and experts (Bandura, 1997). Although considered to have lesser impact (Jordan, Schwartz, and McGhie-Richmond, 2009), the vicarious and social persuasion influences on self-efficacy highlight the importance of discourse opportunities, which encourage trainee teachers being able to reframe their position. As Gibbs and Miller (2014, p.614) note, 'It is through the interactions implicit within dialogue that alternative possibilities can be considered and developed.' Timing is also a significant factor. Woolfolk-Hoy and Burke-Spero (2005, p.344) state, 'Bandura's theory of self-efficacy suggests that efficacy might be most malleable early in learning, thus the first years in teaching could be critical to long-term development of teacher efficacy.'

METHODOLOGY

The current study sought to investigate the impact on trainee teachers' self-efficacy of an accelerated 'Pedagogy of Enactment' programme, structured around a Cycle of Ambitious Teaching and opportunities for discourse through a community of practice. A standardised questionnaire was used to collect data: Norwegian Teacher Self-Efficacy Scale (NTSES) (Skaalvik and Skaalvik, 2007, 2010). Self-efficacy scores were collected from Year 1 trainees who had undertaken the accelerated ITT BA QTS Primary Teaching programme and Year 2 trainees who had experienced a less intensive programme. The scores were compared in order to determine if there was a significant difference between groups and to explore contributing factors.

PARTICIPANTS

Trainee teachers following the BA QTS Primary Teaching programme completed the questionnaire in the same week of the Lent term 2017. Participants from BA QTS Year 1 (N=127) and Year 2 (N=98) completed the questionnaire individually, with no discussion, in a classroom setting at the university. All responses were anonymised. At this point of their training, both cohorts had experienced the same programme content but with the Year1 trainees on an accelerated programme with some course content material delivered through the 'Hope Teacher' strand of the programme. There was no 'Hope Teacher' strand in Year 2. Furthermore, all participants had completed a 6-week block of school-based training, with the same expectations that they should teach 40% of the timetable by the end of the placement.

MEASURES

The 'Norwegian Teacher's Self-Efficacy Scale- Section E' (NTSES) (Skaalvik and Skaalvik, 2007) consists of six components and a total of twenty-four elements. The six components exemplified by the twenty-four elements include: instruction and adapting it, composition of groups, ability to cope with change, motivating learners, cooperation with colleagues and parents, and maintain discipline which recognise the diversity and demands facing teachers (Avanzi et al, 2013). Sample items included: 'How certain are you that you can explain subject matter so that most pupils understand the basic principles?' (instruction); 'How certain are you that you can control even the most aggressive students?' (maintain discipline). Participants respond on a Likert-scale of one to seven with one indicating 'not certain at all' and seven indicating 'absolutely certain'.

The item construction within the questionnaire was based upon Bandura's self-efficacy theoretical framework (Bandura 1997, 2006 cited in Skaalvik and Skaalvik, 2010). Prior to 2010, the NTSES had been tested on small scale samples (Skaalvik and Skaalvik, 2007). The largest study to date included 2249 participants across Norway. Cronbach's alphas for the scales ranged from .77 to .90, indicating high reliability (Skaalvik and Skaalvik, 2010).

Originally used in Norwegian studies, the 6 components within NTSES are not culturally specific and so can be successfully applied in other cultural settings (Khezerlou, 2013; Avanzi et al, 2013). Indeed, there is potential, as the scale is used more widely, to use data for international comparisons of teacher self-efficacy, of both in-service and trainee teachers. It is intended that the questionnaire will be re-administered each year as part of a longitudinal study, during the final year of the participants' current course and into their early years as in-service teachers, following qualification.

RESULTS

The findings represent the averages of trainee teachers' responses to the NTSES (Skaalvik and Skaalvik, 2007) questions. Series 1 scores relate to Year 1 trainees (N=127) who received the 'Hope Teacher' model of lecture-school attachment day seminar incorporated into their instructional pathway. Series 2 scores relate to Year 2 trainees (N= 98) who had not received the 'Hope Teacher' strand. It is important to note that both year groups, at this point, had experienced the same school-based training and covered the same taught themes.

The findings demonstrate that Year 1 trainee teachers had a higher perceived self-efficacy, in responses to all of the questions, than the Year 2 trainees (see Figure 1). Indeed, although self-efficacy scores for the two groups follow a similar pattern and trajectory of responses, Year 1 trainees record higher self-efficacy in all six components of the NTSES.

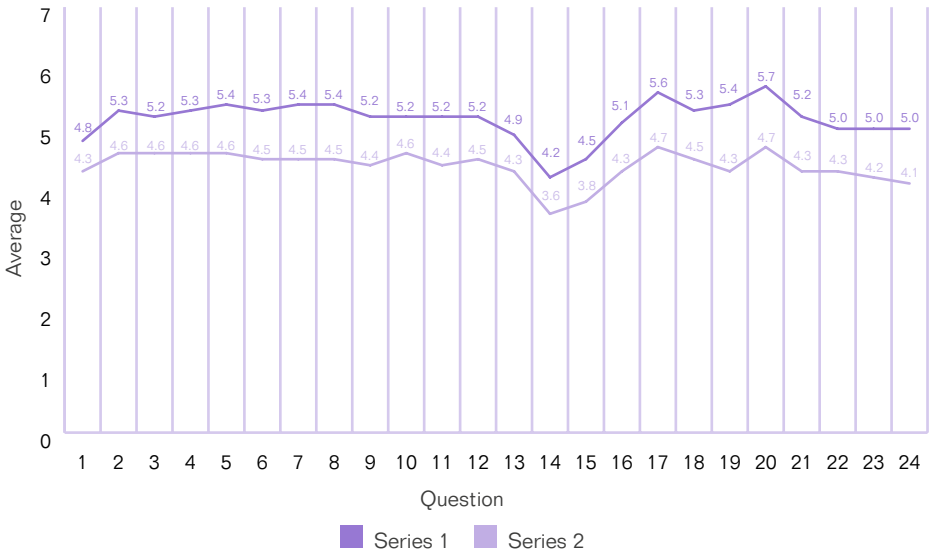


Figure 1: NTSES Survey Responses: Comparison of Y1 and Y2 Averages

Overall, considering responses to all twenty-four questions, Year 1 trainees have an average of 5.9, rating themselves between ‘quite certain’ (response of 4 or 5 on Likert-scale) or ‘absolutely certain’ (response of 6 or 7) on the 7-point Likert-scale (see Table 1). Y2 trainees have an average of 4.4, rating themselves as ‘quite certain’ (response of 4 or 5 on the 7-point Likert-scale (see Table 1).

Table 1: Average Response per Question

	Trainees	
	Year 1	Year 2
Total	142.5	105.4
Average	5.9	4.4

DISCUSSION

Improving the self-efficacy of trainee teachers is crucial in ensuring a resilient workforce and could be a means of safeguarding high retention rates once the trainee teachers have qualified. Questionnaire data suggests that ‘Hope Teacher’, as the only difference in programme design between the new degree and the legacy degree, has had an impact on trainees’ self-efficacy and has gone some way to create higher responses. In

the discussion below, a number of key programme characteristics are considered that may have contributed to this difference.

The structure and planning of the 'Hope Teacher' seminar is crucial in order to ensure that discussion is focused and leads to a deeper understanding, allowing trainees to reason. This concurs with Michaels, O'Connor and Resnick (2007, p.284) who state that 'sense making and scaffolded discussion, calling for particular forms of talk, are seen as the primary mechanism for promoting deep understanding of complex concepts and robust reasoning.' In 'Hope Teacher', trainees become active in discussion, drawing on their observations whilst on their attachment day, sharing and making sense of what they have experienced. In this community of enquiry, thinking and reasoning develops through interaction with peers (Lipman, 1976) and teacher educators who model critical and creative patterns of questioning to encourage active enquiry of complex ideas (Michaels, O'Connor and Resnick, 2007; Putnam and Borko, 1997). This then serves to support the development of trainees' personal philosophy and influences their self-efficacy beliefs whilst impacting upon pupils' outcomes in their placement classrooms.

However, attention must be paid to the fact the trainee teachers enter the course with preconceptions, which may differ from the new views of learning and teaching that teacher educators and school-based mentors may wish to develop within them. Initially, this might distort their understanding of new ideas as they may seek to assimilate them into their existing viewpoints (Putnam and Borko, 1997; Lunenberg, Korthagen and Swannen, 2007). Korthagen, Loughran and Russell (2006) suggest that learning about impactful teaching in the classroom requires approaches that may challenge the usual practices within a university culture and that change must begin within the pre-service training programmes. The 'Hope Teacher' module aims to do this through encouraging reasoning, collaboration and communication with peers, which leads to sensemaking of what is observed and experienced on a school attachment day or whilst on placement. This is achieved via a supportive discourse community of practice provided in the seminar.

The perceived self-efficacy of a trainee teacher at Year 1 is thought to be low, as they have not had the mastery, vicarious or social experiences (Bandura, 1997) that trainees further on in the programme will have via their greater experience in school. Therefore a more explicit approach is necessary in order to support Year 1 trainees in building their personal educational philosophy by initially helping them to make connections between theory and practice. Hence, the self-efficacy results detailed in this paper make a case for the continued inclusion of the 'Hope Teacher' strand in the training programme, with a focus on building a discourse community through verbal and social persuasion influences as detailed by Bandura (1997). This is supported by Tschannen and Wollfolk-Hoy (2007), whose findings revealed that verbal or social influences were a more important concept for trainee teachers than for in-service teachers. Thus, central to the 'Hope Teacher' strand are the opportunities to learn and develop one's own education philosophy through vicarious experience and social persuasion.

Therefore, taking the view of Bandura (1997), we are creating a cyclical approach that begins with vicarious experiences on the trainees' attachment days, then social / verbal persuasion through the 'Hope Teacher' seminar. This leads into a more considered approach to mastery experience whilst on placement, which is based upon the 'scaffold' of the 'Hope Teacher' strand and the trainees' own sensemaking.

CONCLUSION

This paper contributes to a new understanding of teacher education pedagogy and makes the case for a connected approach to university and school-based training. Considered within a cycle of enactment and discourse culture, the 'Hope Teacher' seminar has been shown to be effective in enhancing trainees' self-efficacy. Intellectual space was created for teacher educators and trainee teachers to develop collegial learning relationships, critically analysing school-based practice and sense-making from each other's constructs (Brown, Rowley and Smith, 2016). This helped to bridge the divide between theory and practice resulting in more informed, purposeful practice that should ultimately impact on trainees' performance whilst on school-based placements.

Future work could focus on probing trainees' answers to the 24 questions to identify specific areas of low efficacy and gain an understanding of the factors that may negatively impact trainee teachers' self-efficacy beliefs. The findings could also inform the further development of seminar content into years two and three of the programme in ways that would lead to the development of greater overall self-efficacy.

BIOGRAPHY

Emma Liddy taught as a primary classroom teacher for 22 years with recent experience teaching in an international school in Switzerland. During her time abroad, she held the posts of Head of Primary Physical Education, Primary Curriculum Coordinator and Deputy Head. As an experienced practitioner, she brings recent and relevant expertise to the BA QTS Primary and PGCE Primary courses and takes a proactive approach to the pastoral care of trainees within the School of Teacher Education. She is Head of Year 2 BA QTS and a member of the Primary PE and Primary Mathematics teams. Emma is currently completing her Master's degree at Liverpool Hope University.

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Does participation in the hope challenge school-based intervention programme based on the reciprocal reading model have a sustainable impact on trainee teachers' teaching practice?

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ABSTRACT

The focus of this research is to explore the extent to which participation in a school-based intervention programme based on the reciprocal reading model has a sustainable impact on trainee teachers' (trainees) teaching practice, specifically their teaching of reading comprehension skills. Descriptive data analysis is used to compare pre and post measures of self-efficacy. In order to build a richer picture, a qualitative approach was chosen, combining interview question responses, focus group discussion, and a case study of a single trainee to explore how participation in the intervention impacted the teaching of reading comprehension. The findings reveal that this intervention was sustainable and all trainees were able to incorporate elements into their teaching, with some implementing the reciprocal reading model fully.

INTRODUCTION

Based on experiences in school, it is clear that reading is much more than decoding. There has been considerable exploration of early reading, initially using the 'Searchlights' model (NLS, 1998) which was replaced by the Simple View of Reading (SVoR) from the Rose Review (DfES, 2006), which acknowledged the different components of reading (see Figure 1). The key difference between the 'Searchlights' model and the 'SVoR' is that the 'Searchlights' model did not distinguish clearly between decoding and comprehension whereas the 'Simple View' makes a clear distinction.

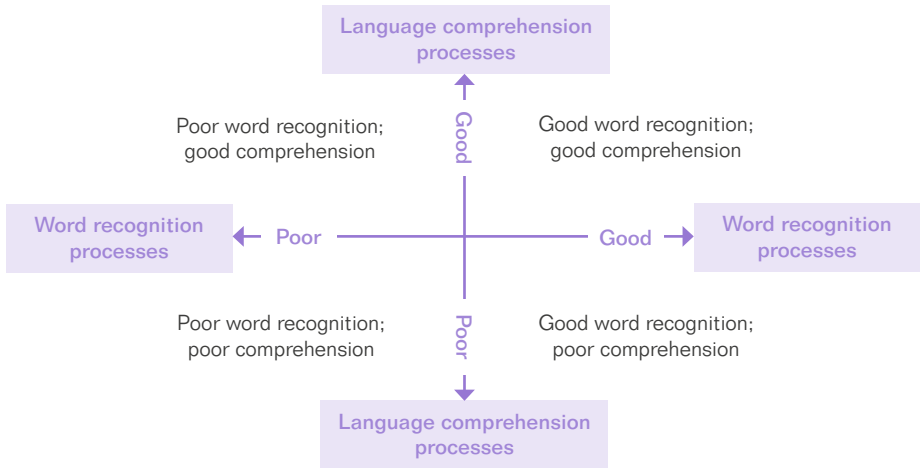


Figure 1: The Simple View of Reading (DfES, 2006)

However, although the Rose Review (DfES, 2006) emphasised the importance of SVoR, this was almost entirely eclipsed by its drive to teach systematic phonics. Durkin (1978, p. 482) describes this lack of comprehension instruction as 'mentioning' rather than 'teaching' comprehension skills. As the Cox Report (DfES, 1989) says, 'Reading is much more than the decoding of black marks on the page: it is a quest for meaning which requires the reader to be an active participant.' (DfES, 1989, p. 20). The Reciprocal Reading (RR) model improves comprehension for children who can decode but have difficulty comprehending text (Palincsar and Brown, 1984; 1985).

This paper explores how participation in the Hope Challenge RR intervention programme influences trainees' teaching of reading comprehension skills. The questions which guide this research are:

1. Does the intervention impact trainees' teaching practice beyond five weeks into PPL 4?
2. Which factors contributed to the sustainability?
3. What are trainees' perceptions of the programme on their knowledge of skills when teaching reading comprehension?
4. How does participation impact trainees' self-efficacy??

LITERATURE REVIEW

RECIPROCAL READING

Reciprocal Reading is a small group intervention with four to six children in ability groups reading an appropriate text. It is a researcher-developed instructional technique designed by Palincsar and Brown (1984) where children engage in four comprehension strategies, 'The Fabulous Four' (Oczkus, 2003): **predicting, clarifying, questioning and summarising** (Palincsar, 1991; Palincsar et al, 1989; Palincsar and Brown, 1984). Palincsar et al (1989) describe each strategy. Predicting can occur at any point, an ongoing interaction with the text, where children activate prior knowledge and

hypothesise about what will happen next. They then read to test their hypotheses. As only 5% of questions asked in school are by children (Walsh and Sattes, 1991), they need to see the value of question-generating in order to internalise this strategy and use it independently (Hashey and Connors, 2003). Clarifying involves identifying words and phrases children don't understand, thereby using metacognitive processes while monitoring comprehension (King and Johnson, 1999). Palincsar et al (1989) advise that summarising should be done last, since it is key to comprehension as children demonstrate understanding of the text by selecting key points rather than restating. Rosenshine, Meister and Chapman (1996) identify questioning and summarizing as the more effective of the four strategies. Significantly, Hattie (2007) ranks RR third out of 49 most effective teaching strategies.

The researchers suggest teaching one strategy at a time, albeit not in any particular order (Palincsar and Brown, 1984). Mosenthal, Schwartz and MacLissac (1992) found that pre-service teachers tend to use the set order of the steps every time. Cleveland et al (2001) contest this linear approach as effective readers are actually metacognitively going 'back and forth' (Latin '-reciprocus') (Babigian, 2002 cited in Hashey and Connors, 2003) and integrating all the strategies. Hashey and Connors (2003) recommend introducing the strategies one by one and then reviewing each strategy until children can monitor their own thinking and reading. If a child cannot summarise, then they are not comprehending and will need to address this through rereading or clarifying. In contrast, the original research found that children's comprehension abilities increased more when the strategies were taught as the RR intervention was in progress (Palincsar, David and Brown, 1989). However, these strategies are merely used to teach students to read for meaning and to monitor their reading to see if comprehension is occurring (Palincsar, 1986) as the goal is to understand the text.

SOCIAL CONSTRUCTIVISM

Scaffolding

RR aligns closely to social constructivism. Vygotsky (1978) believed that children need the assistance of expert practitioners to help them learn. This involves the child observing the teacher and then, under the guidance of the teacher, beginning to take some responsibility for the task. Myhill (2006) views this scaffold¹ as both a temporary and a supporting structure, as the ultimate aim is independence through internalisation of the scaffold. However, in RR, once the responsibility has been assumed by the child, it does not mean that joint responsibility cannot be resumed and greater scaffolding employed with a more challenging text. This 'gradual transition' stems from the Vygotskian Zone of Proximal Development (1978). Pearson and Fielding (1991) explore the gradual release of responsibility from teacher to learner. 'Proleptic teaching' describes how the teacher gradually releases the responsibility for implementing the RR strategies to the student (Seymour and Osana, 2003). As comprehension strategies are not usually overt, modelling by an expert is valuable. Palincsar (1991) confirms that scaffolding plays a critical role in promoting comprehension.

¹ It was Wood, Bruner and Ross, (1976) who explored the 'scaffolding' metaphor; Vygotsky never used the term 'scaffold'.

To offer some critique, Searle (1984) was concerned that if used incorrectly, the scaffold could become an imposed structure which was adult-driven, with the child as passive participant. However, RR is much more fluid as the children are active participants and the adult interacts with the child to move them towards independence. Moreover, supporting children's active position in their learning and assisting them in becoming self-regulated learners is at the heart of Vygotsky's concept of the ZPD and at the heart of RR.

Dialogue

Alexander (2005) defines 'dialogic talk' as collective, reciprocal, supportive, cumulative and purposeful, all of which are evidenced in RR as a series of dialogues to bring about a shared understanding. Scaffolding must be interactive, and it is dialogue through which support is provided and adjusted (Palincsar, 1986). The significance of this RR research is not the strategies but the means by which the children learn to internalise them, namely through dialogue. Vygotsky (1978) believed that moving into the ZPD is supported by dialogue with the teacher or with more capable peers, and this is exactly what happens in RR through collaboration with peers and adults. RR is about 'reciprocal conversations', initially modelled by the teacher but with children gradually taking over the role of 'dialogue leader' (Palincsar, 1986) to achieve a joint construction of meaning through interaction and dialogue. Mercer (2000) concurs with this idea of providing guidance to children. The dialogue flows because the children share the same goals of predicting, questioning, clarifying and summarising (Palincsar and Brown, 1984). By predicting, the children then also have another common goal to test their hypotheses which further encourages cooperative learning.

Interestingly, this social dialogue can be seen as a rehearsal for the internal dialogue employed by experienced readers. It is worth reiterating that RR does not necessitate any writing, it is solely about discussion. 'Think-alouds' (Oczkus, 2010, p. 22) allow the teacher to talk aloud about all four strategies in order to scaffold a reader's thought processes. These 'think alouds' can be modelled by the teacher in shared reading and writing, but also occur in RR.

HOPE CHALLENGE AND THE CYCLE OF AMBITIOUS TEACHING

The Hope Challenge (HC) is a response to concerns about how teacher training providers are supporting schools in challenging circumstances (Ofsted, 2015), primarily how trainee teachers should be best prepared to face the rigours of teaching in these schools. The HC is a collaborative project with Local Authorities, HMIs and head teachers, using 'bespoke learning interventions' to support schools facing challenging circumstances (Moore et al, 2015, p. 189). The HC was designed around the Cycle of Ambitious Teaching (see Figure 2), which structures teaching practice around four key strategies: modelling, learning, rehearsing and refining. To simply increase the amount of time trainee teachers spend in classrooms, will not by itself improve their practice (Valencia, et al, 2009). This practice-based curriculum is also recommended by Grossman (2005), using 'pedagogies of enactment', in addition to existing pedagogies of investigation and reflection, which involves enacting aspects of practice in increasingly complex settings (i.e. from small group to whole class instruction). Despite Scott et al (2013) raising the question of whether the competence that trainee teachers gain in a few instructional activities, practiced in a controlled setting, will transfer to other contexts, there is minimal research related to this question.

Lampert, Boerst and Graziani (2009) believe that trainee teachers can be prepared for ambitious teaching through 'ambitious and instructional activity' (IA). These IAs are key to both teacher and teacher educator knowledge building for ambitious teaching. The requisite jointly constructed visible process (Morris and Hiebert, 2009), as well as its highly scaffolded structure, make RR an appropriate IA for the rehearsal aspect of the cycle of ambitious teaching. Trainee teachers can, therefore, use this rehearsal to practise ambitious teaching interactions before enacting them in the classroom. 'Rehearsals' allow trainee teachers and tutors to work together to realise ambitious practices in the moment (Grossman, 2005). Feedback and discussion is interspersed throughout the instructional activity rather than at the end, thereby allowing trainees to reflect 'in action', as well as 'on action'. This collaboration provides 'communities of practice' for trainee teachers (Lampert et al, 2013).

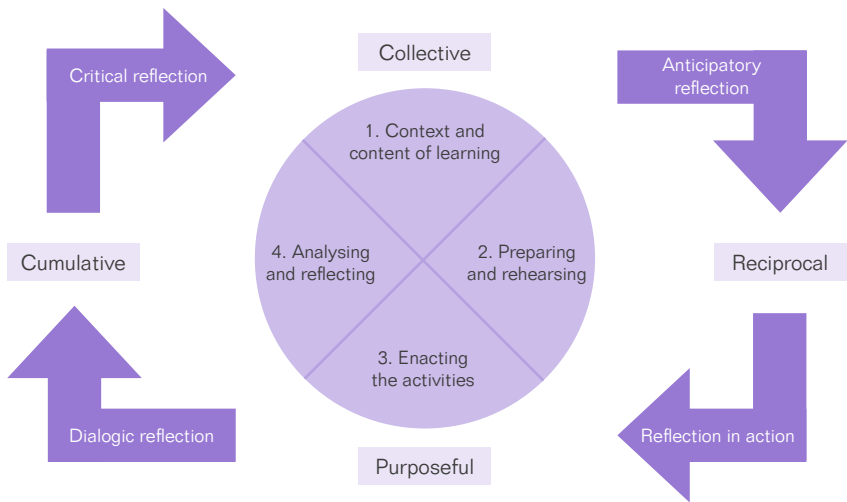


Figure 2: Hope Challenge Cycle for Ambitious Teaching (Moore, Pearson and Cronin, 2015)

SELF-EFFICACY

Self-efficacy (SE) is 'the belief in one's capabilities to organise and execute behaviours required to produce given attainments' (Bandura, 1997, p.3). Artino (2012) terms it 'task-specific self-confidence' (2012, p. 76). Both Schunk (1987) and Bandura (1986) acknowledge the importance of modelling in raising SE, as models can provide relevant information and motivation to observers (Schunk, 2001). Certain elements of this are pertinent to Hope Challenge: observing competent teachers and teacher educators perform a successful sequence shows the trainees how they can also be successful. Bandura, among others, suggests teachers implement instructional practices that encourage trainees to gain knowledge and skills but also promote the development of the necessary accompanying confidence; both are required in order to develop competency. Indeed, Bandura adds that observers must see the task as within reach, something they can successfully perform. Yet it is crucial that trainees have an accurate view of their ability to perform a task, as over-confidence can be detrimental if not accompanied by competence, and low SE can affect motivation to practise and

improve. Thus feedback is particularly important, especially when it is immediate and encourages trainees to evaluate the activity in order to improve (as seen in *The Cycle of Ambitious Teaching*).

A structured model such as the *Cycle of Ambitious Teaching*, with its opportunities for performance success, align with Bandura's (1977) emphasis on 'enactive attainment' (Bandura, 1977, p. 72) to provide self-efficacy information. Bandura also explores the role of motivation, which is crucial as trainees will only internalise the model if they consider it a useful skill (Bandura, 1986). In fact, he purports that SE is a more accurate predictor of motivation than is competence.

CONTEXT

The aim of the Hope Challenge 'Reciprocal Reading' Project was to improve the reading comprehension skills for an identified group of twenty Year 6 pupils in a primary school in challenging socio-economic circumstances (Pupil Premium below 25%). The project created an opportunity to develop pedagogies of enactment (Grossman, Hammerness and McDonald, 2009) using the cycle of *Ambitious Teaching* (Moore, Pearson and Cronin, 2015). School data from 2016 indicated that reading comprehension (particularly inference) was a focus for the Year 6 children. Moreover, at Liverpool Hope University, evaluations indicated that trainee teachers lack the confidence to teach reading comprehension and the emphasis on phonics has done nothing to rectify this.

Five year 4 BAQTS trainee teachers volunteered to participate in the project and then attended three hours of training. During training sessions, the *Reciprocal Reading* model was modelled by their teacher educator (who is also the researcher) before rehearsal, with each trainee taking on the role of the 'dialogue leader'. The group rehearsal allowed time for reflection, and trainees were able to anticipate some of the misconceptions and learning barriers their pupils may have. The project consisted of five sessions of one and a half hours, beginning with a short inference activity and followed by a RR session with the trainee scaffolding the strategies and gradually relinquishing responsibility and letting the pupils lead the session. The tutor's role was to prompt the trainees and also to guide the reflection session. It was decided to use a different text extract each week, thereby familiarising the pupils and the trainees with a range of children's literature. Opportunity for collaborative reflection after the project was provided each week, allowing trainees collaborative time to reflect critically and evaluate their experiences and the learning of both themselves and their pupils.

METHODOLOGY

Action research is 'a strategy...rather than a specific method' (Charmaz, 2006, p. 123). This action research will ascertain whether the Hope Challenge intervention will be beneficial to future cohorts, and which adaptations are necessary to improve the quality of the intervention. The *Cycle of Ambitious Teaching* means that the research feeds back into practice and is ongoing (Denscombe, 2010). Moreover, this is practitioner research as the research was undertaken whilst being actively engaged in practice (as 'insider research').

In order to build a richer picture through descriptive data, a qualitative approach was chosen which combined the following methods:

1. interviews with individual trainees exploring their perceptions of Hope Challenge;
2. analysis of trainees' work (including session planning and reflective notes);
3. a focus group with four of the five trainees to explore the impact of Hope Challenge on their knowledge and skills;
4. a single-person case study with a trainee who had used RR during placement.

This range of methods enabled an exploration of the way in which participation in the intervention impacted trainees' teaching of reading comprehension and also their knowledge and skills. Measuring progress over a short time period is difficult, so the qualitative method is appropriate to explore the perceptions of the trainees and the influence of the Hope Challenge project.

The Reading Teaching Efficacy Instrument (RTEI) (Szabo and Makhatari, 2004) was used to measure trainees' efficacy in the teaching of reading. This scale measures trainees' feelings about their ability to teach reading (self-efficacy) and their beliefs about their ability to impact children's reading development (outcome expectancy). Although adopting a primarily qualitative approach, the RTEI was an effective way of measuring confidence, alongside descriptive data.

As this was 'insider research' (Sikes and Potts, 2008) within my own setting, there were considerations about my subjective positioning and the credibility of the knowledge claims, as well as the need for me to be aware that my involvement might inhibit the trainees from being honest. By using multiple methods to obtain data from trainees, triangulation between-methods was used to increase confidence in the credibility of the findings (Denzin, 1970). On the other hand, an insider researcher has a 'unique perspective' due to their knowledge of the culture, history and actors involved (Sikes and Potts, 2008). Advantageously, it meant my research reflected the naturalness of the setting, so unexpected data could be captured more easily. However, the dual role, which Denscombe (2010) describes as 'the passion...of full participation...and the cool detachment associated with research observation' (Denscombe, 2010, p. 212) can be difficult to maintain.

RESULTS & DISCUSSION

IMPACT ON TRAINEES' SELF-EFFICACY

Trainees completed the RTEI using the Likert scale before they began the project and at the end, before starting placement (see Table 1).

Trainees	Reading teaching efficacy (RTE)		Reading teaching self-efficacy (RTSE)		Reading teaching outcome expectancy (RTOE)	
	Pre	Post	Pre	Post	Pre	Post
R	LOW	HIGH	LOW	AVERAGE	AVERAGE	HIGH
K	LOW	AVERAGE	LOW	AVERAGE	LOW	AVERAGE
D	AVERAGE	AVERAGE	AVERAGE	AVERAGE	LOW	AVERAGE
J	LOW	HIGH	LOW	HIGH	AVERAGE	AVERAGE
H	LOW	HIGH	LOW	HIGH	AVERAGE	HIGH

Table 1: Trainees' Pre-Post Project Reading Efficacy Scores.

Four out of five trainees showed pre-post project increases in self-efficacy and a belief that they could teach reading effectively. H and J, who went on to use RR in school, showed the biggest increase, and H, who fully implemented RR, showed the most significant increase in all areas. This seems to indicate that those whose scores increased most were most open to using the model in school. In line with Bandura’s (1977) theory, a high score on the reading teaching self-efficacy (RTSE) means that teacher candidates are highly confident about their ability to effectively teach reading. According to Stein and Wang (1998, cited in Szabo and Makhatari, 2004, p. 66), these trainees are ‘more likely to be open to new ideas and more willing to experiment with new methods to better meet the needs of their students than their low scoring peers’ which aligns with the data. D, who was unable to implement RR because the school had their own systems, showed the least increase in RTSE.

IMPACT ON TRAINEES’ KNOWLEDGE AND SKILLS

The key themes identified through coding of interview data show that trainees had understood the key principles which underpin RR (scaffolding, dialogue), as well as the four strategies (predicting, clarifying, questioning, summarising). Key components of the cycle of ambitious teaching and pedagogies of enactment were also referred to. All the trainees agreed that participation in the project had increased their confidence in teaching reading comprehension using RR. Indeed, the word ‘confidence’ was mentioned ten times (see Table 2), which also substantiates the findings from the RTEI.

R	K	D	J	H
training	knowledge	training	training	experiment
pedagogy into practice	supportive	support	classroom	guidance
classroom	reflect	collaboratively	rehearsal	tutor
reflect	collaboration	reflect	classroom	focus
practice	practice	classroom	child-led	tutor
group	improve	model	feedback	model
collaboratively	scaffolding	guided reading	feedback	re-enact
improve	training	focus	reflection	good practice
feedback	microteach	dictionary	collaboration	classroom
scaffolding	whole class	clarifying	tutor	collaborate
questioning	questioning	ownership	text	reflect
teaching	generate questions	focus	hook	feedback
model	modelling	strategies	real classroom	formulaic
child-led	question types	questioning	apply	engaged
facilitator	modelling	generate-questions	classroom	focus
role	strategies	questioning	questioning	confident
questioning	training	scaffolding	highers	well-equipped
self-generated questions	sentence starters	insight	confident	resources
questioning grid	modelled	texts	scaffolding	confidence level
	strategies	knowledge	support	adapt
			differentiate	children’s needs

<p>model prompt ask questions dialogue impacted practice strategies predicting questioning clarifying summarising focus questioning question starters inference confidence engaging</p>	<p>predict question clarify summarise scaffold confident creative</p>	<p>confidence roles focus collaboratively ownership child-led curiosity questions team work confidence peers talk flexibility high ability low ability positive</p>	<p>scaffold support independent higher ability lower (ability) clarifying dialogue roles engaged on task whole class collaborate different books class differentiation structure confidence flexible mould</p>	<p>predicting modelling gradual responsibility models discussions ownership child-led hooks model active participation strategies predicting clarifying questioning summarising modelling hooks action drama confident confident strategies flexible curriculum</p>
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Table 2: Key Words from Interview Data for Individual Trainees²

Data suggests that using pedagogies of enactment allowed the trainees to rehearse RR, so they felt more confident about implementing it in the classroom. As one trainee said, 'It wouldn't have been the same doing it in a workshop, but because I was able to do it with children, I remembered it better.' Every trainee acknowledged the value of being able to 'reflect and improve our own practice through collaboration'. The increased confidence levels are also testament to the benefits of using the cycle of ambitious teaching: 'The training session prepared me and then I was able to put this pedagogy into practice in the classroom because it made more sense because we had tried it.'

'I suppose I have used the strategies without even thinking of it.'

'The scaffolding in the training really helped me to remember the model.'

'It's definitely given me confidence, or a different way to approach reading comprehension.'

² Reciprocal Reading and reading comprehension are not included as they comprised the question.

'I found that the children were using inference without even realising. I just had to model the sentence starters and the children started to use it.'

Reference was also made to engagement through creativity and use of quality texts. All trainees viewed themselves as 'facilitators' – stating that scaffolding and the gradual release of responsibility playing a key role in ensuring that the children were able to take ownership and lead the dialogue.

'It has given us more of an insight into texts. I wouldn't have had a clue which texts to use with year 6 but it gave us a lot more scope and ideas for books to use. I feel that I have a better knowledge of children's books.'

There is a risk that the prescriptive nature of the RR model could take away from engagement and creativity; however, this was counteracted by using quality texts as a hook, so the pupils read a range of authors. All trainees stated that this had also helped to extend pupils' enthusiasm. As reading for pleasure is paramount, this an important outcome of RR.

IMPACT ON TRAINEES' TEACHING PRACTICE DURING PPL 4

Two out of five trainees who participated in the project implemented RR with their class when on placement; one student did some RR with the whole class but only one trainee fully implemented RR as a model with her own class and also disseminated this to other teachers in her placement school. This trainee made adaptations to the model for KS1 and introduced creative approaches to teaching the strategies.

Creativity is a word that is rarely associated with RR, but one trainee implemented adaptations to make it appropriate for KS1. It was found that using dramatic play helped the children's understanding, a point made by Owocki (1999, cited in Myers, 2005). Although Seymour and Osana (2003) calls these 'lethal mutations', the trainee reported that they actually enhanced the teaching of comprehension skills, ensuring high levels of engagement. By having actions for the strategies, the children can recall the steps and respond to prompts from the trainee. This aligns with Myers' (2005) research, which suggests using puppets (Clara Clarifier, Quincy Questioner, the Wizard to predict and Princess Storyteller to summarise). It was found by the trainee that modelling was used more extensively, with much more 'think alouds' and active teacher involvement: 'I decided to focus each session at the beginning on solely one step in order to build both confidence and familiarity with the process'. This concurs with the views of Oczkus (2010) and also Coley et al (1993). The trainee emphasised the hook, using props to develop inference and predict what would happen. QR codes were stuck into books with children's summaries, so that others could listen. She also used the higher ability readers, who were 'flying', to be dialogue leaders and scaffold for the lower ability.

One trainee adapted the model to use with the whole class through a shared read: children were still active participants, using the four strategies collaboratively to understand the text. Kohn (1996, cited in Oczkus, 2010) favours this sense of community support to reinforce RR strategies and share ideas through a common text. The trainee also tried using teams, scaffolding each strategy and modelling how to generate questions. This alternation of whole class and small group teaching corresponds with research showing that because whole class teaching cannot cater for individual needs, a solution is to alternate whole class and groups (Oczkus, 2010), as long as it is structured correctly in whole class teaching.

FACTORS CONTRIBUTING TO SUSTAINABILITY

Findings from the focus group revealed that there was commonality amongst the trainees' responses in terms of the barriers to sustainability. The main factors which prevented trainees using RR in their placements were time, SATs and whole class teaching. Three trainees were on placement in Year 6, which meant that they were involved in SAT preparation, and it was not possible to work with a group doing RR. Although reading comprehension was a focus area, the emphasis was on practice papers. One of the trainees did talk about using the four strategies alongside SAT paper questions to make it more creative and encourage the children to use the strategies when answering. As all trainees needed to be building up to whole class teaching, taking a small group was not always feasible. Nevertheless, though trainees could not find opportunities to teach the RR model, they were still able to use the key principles in their teaching:

'Although I have not been able to use RR, I do think it has impacted on my practice generally.'

All four trainees mentioned their increased confidence when teaching reading comprehension and how it had changed their approach to this. The adaptability of RR was mentioned, as well as its flexibility: using it in different year groups or curriculum subjects and using all or just elements of the model. Indeed, questioning emerged as particularly significant and impacted most on trainees' teaching practice. Trainees all talked about using the questioning grid provided during the pre-project training to help children generate questions, and modelling this to encourage inference. Several of the trainees also commented on how they had effectively used questioning as an assessment tool.

The descriptive data from the interviews also indicated that RR could be used across the curriculum. For example, trainees mentioned using the model in Maths when talking about shapes using key terminology. These findings support research by Van Garderen (2004) showing how RR could be used in Maths to solve word problems by using predicting, clarifying, questioning and planning; children can also draw diagrams, underline key words and use a Maths dictionary.

CONCLUSION

This action research was 'based on action and reflection with the intention of improving practice' (Ebbutt, 1995, p. 156, cited in Charmaz, 2006), so it is important to consider the implications on practice. This exploration confirms that participation in a school-based intervention programme based on the Reciprocal Reading model does have a sustainable impact on trainees' teaching practice. Certain barriers existed such as time, SATs and whole class teaching, but these were not insurmountable due to the adaptability of the model. The principles of scaffolding, questioning and dialogue, in particular, were transferable to other subjects.

In future, it would be interesting to use the Hope Challenge RR project with different year groups, including KS1. Making it more creative by using hooks, drama, and technology (e.g. Morfo, QR codes), which would potentially add to the engagement of the children. Focusing on one strategy at a time, to build up competence, would be a better approach across KS 1 and KS2. Connections also need to be made to encourage

the transfer of strategies. For example, strategy teaching should permeate whole class reading and should be included during activities such as listening to children read, discussing Maths problems and with non-fiction texts across the curriculum.

The project successfully allowed trainees to plan, practice, enact and receive feedback on their teaching before using it with children (Grossman et al, 2009). *This pedagogical cycle reinforced teaching as an interactive and experiential practice* (Scott et al, 2013) by conducting teacher education inside real classrooms. Using pedagogies of enactment meant that the trainees felt well-prepared and confident about using RR in the classroom. The project certainly helped to increase confidence, and all trainees plan to use RR when they have their own classes next year.

BIOGRAPHY

Katharine is a professional tutor in Primary English at Liverpool Hope University and has recently assumed the role of Professional Placement Lead for Primary PGCE. She also delivers training on grammar, guided reading and reciprocal reading through Hope CPD.

Katharine has twenty years teaching experience across the primary phase, which included eight years as Assistant Head and a term as Acting Headteacher, in addition to her role as English subject leader. In her ten years as an English Advanced Skills Teacher, she worked in various Wirral schools supporting staff with the teaching of reading and writing; moderating writing; mentoring teachers and NQTs.

Katharine has a National Professional Qualification for Headship and an executive coaching award. She is currently studying for a MEd in Professional Practice.

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Teachers' and pupils' perceptions of the teaching and assessment of spelling in primary education

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ABSTRACT

This study examined teachers' and pupils' perceptions of the teaching and assessment of spelling in a primary school in the North West of the United Kingdom. Using written responses and verbal discussions with both pupils and teachers, this study highlights shifts in pupils' attitudes towards spelling within primary education, and also damaging routines in practice that can often become detrimental to children's learning of spelling. This study also provides further evidence that the testing of spelling alone does not support children's development in spelling. Results suggest that the traditional weekly spelling test routine does not support children's learning of spelling and transition into becoming lifelong spellers.

INTRODUCTION

During its formation the modern day English language has been influenced by developments in science, technology, contemporary culture and words adopted from foreign languages, which have added to its complexity. Although the complexity of spelling words is acknowledged by many academics, so is its importance (Dodd, 1987; Treiman, 2008; Alderman and Green, 2011; Crystal, 2012). Spelling assists the learning and development of reading and writing (Alderman and Green, 2011) and also helps strengthen the connection between letters and sounds, (Gentry, 1982) making it a vital process in every child's schooling (Gentry, 1982; Alderman and Green, 2011).

The introduction of Key Stage 2 (KS2) Spelling, Punctuation and Grammar (SPaG) assessment includes statutory requirements for the teaching of spelling which has brought an increased focus on the teaching of English in primary education. Due to my personal interest in the subject of English and ongoing developments concerning spelling within the primary national curriculum, I investigated pupils' and teachers' perceptions of the teaching and assessment of spelling within a local primary school where I currently work. This Primary School has a two form entry and is located in an affluent suburb in Liverpool. The school's 2015 results from the SPaG test were 81% level 4 and above, (National average 80%) 59% at level 5 (National average 55%). The 2016 Scholastic Aptitude Test (SAT) results showed that 81% of pupils are at Age Related Expectations (ARE) for spelling, which is just above the national average for SPaG assessment. Although test results suggest that the school is successfully

developing pupils' spelling, as a teacher at the school I am aware that there are still significant concerns regarding spelling accuracy within written work.

As a result of the heightened expectations in relation to the assessment of writing in 2016 and the introduction of spelling within the writing moderation, pupils' writing and spelling is now a priority area within the school (Standards and Testing Agency, 2016).

LITERATURE REVIEW

There is a wealth of literature relating to spelling strategies and the teaching of spelling, but very limited research into pupils' and teachers' perceptions about the teaching and assessment of spelling. By adding to the knowledge base, with examples from practice, and investigating the strategies used for the teaching and assessment of spelling, the current research will support the development of teaching spelling in the school and the improvement of assessment strategies.

The teaching of how to spell words correctly has been a prominent aspect within schooling since the beginning of the 19th century (Trieman, 2000). The importance of accurate spelling has been debated on a regular basis within education (Shaw, 1946; Weber et al, 2012). Some hold 'spelling proficiency as a cornerstone of academic success because it links to advance in general literacy' (Alderman and Green, 2011, p. 599) while others argue that a person's ability to spell correctly should not determine whether someone is literate (Smith, 2008). This debate amongst educational researchers together with policies from the Department for Education has caused the importance of spelling to shift endlessly within the national curriculum (Dearden, 1968). However, since the introduction of the new SPaG test in 2013 (DfEa, 2013), spelling has become increasingly important within primary education (Dearden, 1968). Consequently, the teaching of how best to support primary pupils in acquiring key spelling skills is now more prominent.

The practice and effectiveness of the independent learning of spelling has been a particular focus for many researchers. Lujan and Di Carlo (2006) note that there should be an increase in the independent learning of spellings and argue that 'there is too much teaching and not enough learning' within the classroom and that 'we should help students become active, independent learners and problem solvers' (p. 116). The encouragement of independent learning can be observed throughout Gentry's five developmental stages of spelling (Gentry, 1982) (see Figure 1).

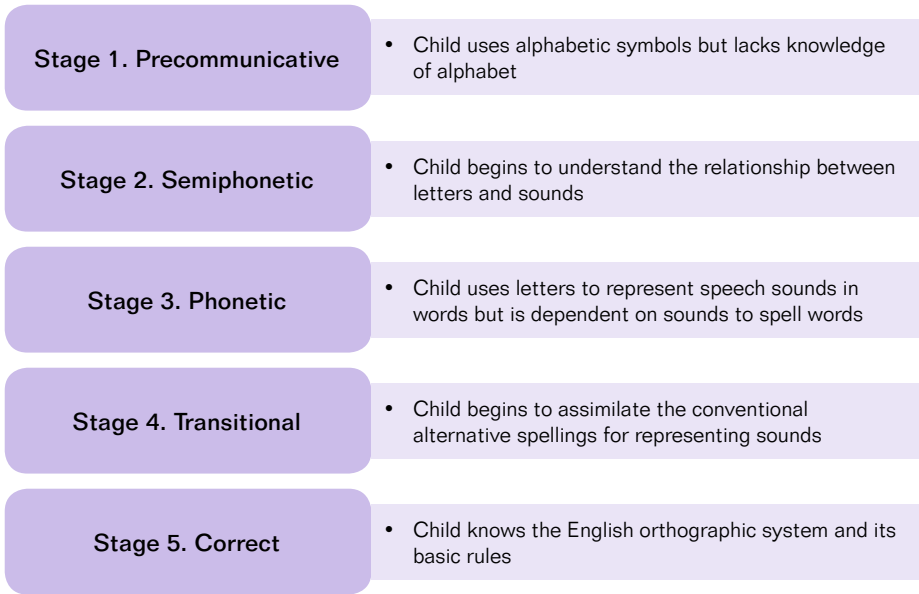


Figure 1: Gentry's (1982) Stages of Spelling Development

However, it is not until Gentry's final correct stage that the suggestion of practice combined with 'formal spelling instruction' is noted. Gentry's suggestion of 'formal spelling instruction' being used to facilitate pupils' spelling growth once they get into the transitional stage leads to the question of what is meant by the phrase 'formal spelling instruction.' In Fisher and Frey's (2014) research on teaching adolescents spelling, they draw attention to common formal approaches to spelling that are ineffective, or even harmful, to the development of spellers. Fisher and Frey (2014) suggest that many teachers continue to believe that children develop spelling naturally. Moreover, they question the effectiveness of the 'Monday – Friday routine', which comprises giving students a list of words on Monday, asking them to practice (i.e. write out words repeatedly) and ultimately testing their knowledge on Friday (Fisher and Frey, 2014). Fisher and Frey suggest that such approaches may have negatively affected children's perceptions regarding the learning of spelling (Fisher and Frey, 2014). Although Fisher and Frey's (2014) research focuses on the teaching of spelling to adolescents it is important to take their findings into account for all teaching after Gentry's (1982) fourth transitional stage.

METHODOLOGY

A Case Study approach was used to seek an understanding of the teaching and assessment of spelling at the Primary School, to use teachers' opinions regarding the practice and assessment of spelling to 'seek to understand their perceptions of events' (Cohen et al, 2007, p. 253). It is hoped that this investigation would also provide insight into why pupils' spelling within their written work does not correspond with successful SPaG results.

Six focus groups were held to explore pupils' perceptions of the learning of spelling within their school environment. Each focus group included four pupils from year groups one to six. Pupils were asked to mind map their thoughts regarding the learning, teaching and assessment of spelling.

Three teachers were also questioned about their perceptions concerning the teaching of spelling. Informal interviews were designed specifically to investigate if the allocated time spent on spelling sessions was both efficient and effective. The formative assessment techniques of spelling that were being used within the school were also examined to question if these were most beneficial to pupils' spelling development. The school's English policy was also analysed, as the school did not have a standalone spelling policy.

Both pupil and staff interviews were transcribed and analysed. Key themes were identified and entered into summary charts, alongside supporting evidence. The combination of the written mind maps, verbal responses, teachers' professional perceptions of spelling and an analysis of the school's English policy enabled contextualized understanding of the teaching and assessment of spelling at the school to emerge.

RESULTS & DISCUSSION

In the section below, key findings will be presented for each of the three main areas of focus: pupils' perceptions of spelling, the pedagogy of spelling and the assessment of spelling.

PUPILS' PERCEPTIONS OF SPELLING

During discussions with pupils concerning the learning of spelling it became apparent that there was a divide between positive and negative perceptions. Many pupils in key stage 1 reacted positively when discussing the learning of spelling. Pupils responded with ':)' (Reception pupil) and remarks such as 'I like spelling because it helps me spell and learn new words' (Year 2 pupil) and 'I like spelling because it's challenging.' (Year 2 pupil). However, higher up the school negative perceptions of spelling were apparent in pupils' responses. Responses included phrases such as 'spelling is frustrating,' (Year 4 pupil) 'I'm not good at spelling, it looks right but then you still get it wrong,' (Year 5 pupil) and 'I don't like spelling because once you do it wrong, you do it wrong again' (Year 5 pupil). This marked a clear division of attitudes towards learning spelling between key stage 1 and 2. When pupils in key stage 2 were asked how they best developed their spelling skills, they responded with spellings tests and copying words out in the back of their book three times when they got a word wrong.

Once discussions with pupils were completed, key recurring themes were entered into a summary table and presented to teachers during their interview. The data was used to begin discussions, with teachers asked how pupils' responses compared with their own.

The teachers' responses to pupils' feedback was varied. Teacher 1 from KS1 commented that she was 'happy that pupils in Key Stage 1 have given positive feedback' and that 'looking at this it seems as though something changes in Key Stage 2 to make the pupils dislike learning to spell.' The Head of English shared the same surprise as Teacher 1 regarding the children in KS2's negative perceptions of spelling. She stated that 'it surprises me just how negative pupils in Key Stage 2 are, "I don't like spelling because once you do it wrong, you do it wrong

again” breaks my heart to read.’ However, when Teacher 2, who works in Key Stage 2, was interviewed she stated that ‘it surprises me how positive children in Key Stage 1 are’ and that she ‘thought that spelling was consistently disliked throughout the school’ remarking that she was surprised that any children within the school thought positively about the learning of spelling.

On the whole, all teachers were happy that pupils in KS1 had given positive responses when asked about spelling. However, they were mindful that the practice of spelling in KS2 might need to be reviewed in light of the negative responses from these pupils.

PEDAGOGY OF SPELLING

Regarding the learning of spelling, there were a number of inconsistencies between pupils’ and teachers’ responses. To explore these further, teachers were asked to comment on the finding that pupils didn’t mention the use of learning aids such as word banks, dictionaries, spelling displays, spelling journals which are mentioned in the English policy. Teacher 2 responded by addressing the use of displays, stating that ‘unless displays are kinaesthetic or working walls they just become part of the scenery’ as a possible explanation as to why pupils had failed to mention the use of spelling displays as a learning aid. All teachers were surprised that the use of dictionaries as a learning tool was absent from pupils’ responses. Teacher 2 commented that she was ‘surprised’ pupils didn’t mention dictionaries as ‘they should be present in every class.’ Teacher 3 also reiterated this surprise commenting that she ‘thought they’d at least mention the use of dictionaries’ during her discussion.

Although some learning aids were absent in pupils’ responses, they did mention the use of technology to enhance their spelling skills: ‘I like it when we can use the iPad’s in class’ (Year 4 pupil) ‘I go on bug club at home with my mum to practise mine’ (Year 5 pupil), and the use of ‘computers, games and bug club’ were all present within pupils’ written response. The use of technology to enhance spelling skills was, however, absent in all discussions with teachers.

Inconsistencies between the different learning aids amongst classes were also highlighted in a discussion between pupils (see Table 1).

Interviewer	Great, how about in school, what do you do in school?
Pupil B	Spelling journals or spelling tests.
Pupil C	What are spelling journals?
Pupil B	What we write our spellings in. What do you use?
Pupil C	We just write them in the back of our books if we get them wrong.
Pupil D	Yeah and sometimes Miss X writes a silly sentence on the board and gets us to correct it for her, that helps me.

Table 1: Pupil Discussion of Learning Aids

The use of spelling journals appeared to be prominent in one pupil’s learning of spelling whereas another pupil in the same year group seemed confused by the mention of a spelling journal. In the school’s English policy, the use of spelling journals is named as strategy to enable independence in spelling; however, it is just one of many strategies listed. When asked further about the use of these strategies, Teacher 1 commented that the policy ‘suggests using those tools but teachers know and understand their class and what they respond best to’. However, Teacher 2 had a different perspective, suggesting that the inconsistency between classes indicates ‘that there needs to be

more consistency throughout our school' implying that inconsistency between different classes could be problematic.

Although there were inconsistencies between pupils and teachers about the use of displays, dictionaries and technology there were also similarities in responses when asked about the learning of spelling. The use of etymology appeared consistent in both responses with a year 5 pupil stating that she 'enjoyed learning spellings' when she 'did the Romans in year 4' and they learnt a bit about the Roman alphabet. The use of etymology to strengthen spelling skills was also mentioned by Teacher 1 who highlighted that 'the history and etymology of words could be combined with the teaching of learning challenge curriculum' suggesting a way of developing this strategy further.

The teaching of phonics was also highly regarded by both pupils and teachers. For example, a Year 1 pupil stated that he 'learns how to spell through phonics' and that he 'enjoys phonics lessons.' The link between learning to spell and phonics was also emphasised by Teacher 1 who specified that 'phonics vastly improves their spelling', suggesting that phonics is vital for pupils' spelling development.

THE ASSESSMENT OF SPELLING

When asked to discuss ways in which pupils learn how to spell, the use of spelling tests was raised by one pupil and then questioned by another (see Table 2).

Interviewer	Great, that's fab, now can you think of how you best learn how to spell and how you practise and develop your spelling skills?
	10 second silence
Pupil A	Spelling tests help us learning spelling.
Pupil B	Do they?
Pupil A	Yes, because it makes you practise or Mr X isn't happy. You just don't like them because you always get a bad score.
Pupil B	I hate tests. I go on bug club at home with my mum to practise mine.

Table 2: Pupil Discussion of Spelling Tests

Pupil B questioned the use of spelling tests to increase spelling skills (Table 2), whereas pupil A responded to this by suggesting that pupil B was only questioning if they worked because he 'always gets a bad score' in spelling tests. This suggests a conflict between the children's thoughts regarding the use and outcome of spelling tests.

During discussion with teachers, when asked if they agreed or disagreed that spelling tests improve children's ability to spell, Teachers 1 and 2 questioned their use and stated that spelling tests help pupils remember spellings 'short term but not really long term' (Teacher 2). Both also stated that the use of weekly spelling tests contributes to making pupils dislike spelling. Teacher 3 did not indicate if she thought weekly spelling tests helped enhance spelling skills but instead commented that 'the SPaG assessment includes a spelling test' and that weekly spelling tests 'help to equip them for that.' This comment suggests that although spelling tests may not benefit pupils' ability to retain the correct spelling, being able to pass a spelling test is a skill that pupils should acquire.

CONCLUSION

This research had three key aims: to discuss with pupils and teachers their perceptions of the learning and teaching in the field of spelling, to analyse if allocated time spent on spelling sessions was both efficient and effective, and to question assessment techniques used within spelling in order to improve the practice of spelling. This investigation has added to the existing knowledge base relating to spelling strategies and the teaching of spelling, with an in-depth case study of the teaching and assessment of spelling. Specifically, it has addressed a gap in literature by exploring pupils' and teachers' views about the teaching and learning of spelling in the current policy landscape (e.g. SPAG tests, etc. ...) in one particular primary school.

The findings indicated that both pupils and staff approved the use of phonics and etymology to develop pupils spelling skills. The approval of the practice of phonics by pupils and teachers supports the Department of Education's claim that when 'phonics is taught in a structured way it is the most effective way of teaching young children to read' and begin to develop their spelling skills (DfE, 2013b, p. 1). The fact that both pupils and teachers commended the use of etymology supports Crystal's research suggesting that 'even the most notorious of spelling difficulties can be explained through etymology' (Crystal, 2012, p. 168). Even though teachers acknowledged the usefulness of etymology in helping the development of pupils' spelling skills, they did not use spelling displays as a learning tool to communicate the changing meaning of words. Indeed, the use of displays to support learning was absent from pupils' responses, implying that there was little, if any, pupil engagement with them. Teacher 2 suggested that this could be because classroom displays were not kinaesthetic or 'working walls'. Indeed, the Primary National Strategy (PNS) states that unless displays are working walls, which enable pupil to see how their 'learning process develops over a period of time' (DofE, 2009, p. 4), they are ineffective within the classroom environment. This may be something to be considered when reviewing the learning environment with the classroom.

The absence of dictionaries as a spelling learning aid was also apparent in pupils' responses. The benefits of pupils using dictionaries was highlighted by Horsfall (1997) who argued that dictionaries provide self-teaching opportunities for pupils and contribute to developing independent learning. As such they are 'both a teaching aid and a learning aid.' (Horsfall, 1997, p. 7). Indeed, the use of dictionaries as a learning aid remains prominent in the English curriculum and was acknowledged by teachers, who expressed surprise that pupils had not recognised their value. The reason as to why pupils did not mention the use of dictionaries is unclear, however the use of dictionaries would be something to consider within the school's English policy.

The use of technology to enhance spelling proved an interesting point within my findings as it was mentioned by pupils but absent in teachers' responses. Using technology to develop pupils' spelling skills supports Crammer and Hayes' (2010) research which suggested that technology could 'bridge the gap between in-school and out-of-school technology use, both in policy and practice' (p. 38). Welschler (2000) also recommended the use of learning apps to develop pupils' spelling skills. The fact that pupils mentioned the use of technology to develop spelling skills but that teachers did not, suggests that this is an area which could be developed as an alternative teaching strategy within the school.

RECOMMENDATIONS

The school would benefit by further examination of why pupils' attitudes towards spelling appear to change after Key Stage 1. A step towards maintaining this level of enthusiasm in Key Stage 2 would be to move away from asking pupils to repeatedly write a word out as a form of correction, as pupils perceive this as punishment. Another step would be to exercise positive encouragement of pupils who are attempting to spell words correctly. The school might also examine ways of making learning fun as there is strong evidence that the combination of fun and learning assists in memory retention.

The school English policy could be revised with the introduction of a standalone school spelling policy. Within the spelling policy English specialists might consider the more frequent use of technology, specifically within Key Stage 2 to help develop pupils' spelling skills. This could include the use of computers, tablets and spelling applications. The use of spelling displays could also be revisited within the spelling policy to ensure that displays are fully utilised by pupils as kinaesthetic working walls. Dictionaries might be present within every classroom; however, pupils may need to learn how to use them to advance their spelling skills.

Finally, weekly spelling tests are still occurring within the school. This practice ought to be revised as there is a substantial amount of evidence to suggest that pupils do not retain information by testing alone.

LIMITATIONS OF THE STUDY

Although this research has provided insight into its stated aims, there have been some inevitable limitations. Adopting a Case Study approach, this study has provided an in-depth understanding of the teaching and learning of spelling based on the perceptions of pupils and teachers from one school in the North West of the UK. As such, the extent to which the findings can speak to the experiences of other schools is necessarily limited. Another possible limitation is that only teachers who specialised in English were included in the investigation. Interviewing other, non-specialist, teachers may have led to new and deeper understandings.

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What is the impact on problem solving of Introducing the singapore maths bar model to year 4?

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ABSTRACT

The purpose of this research is to discover the impact of introducing the Singapore Maths Bar Model on the problem solving of a Year 4 class. Insight will be gained into how effectively children use the model when solving a mathematical problem and the impact on their confidence and enjoyment of maths. Data is collected through participant observation and pre-post bar model pupil questionnaires. These methods were used to explore the ways in which pupils used the model and its impact on their attitudes towards maths. The use of participant observation was relevant to the research design as the researcher wanted to gain an understanding of the activities of pupils in a naturally occurring setting (i.e. her own Year 4 classroom).

Pre-post questionnaire data indicated that after being introduced to the bar model pupils felt more confident when problem-solving and had greater enjoyment of maths. With teacher scaffolding, pupils were able to use the model effectively, i.e. making links, identifying patterns and using manipulatives and key questioning to 'unpick' the problem. However, when problem solving independently pupils tended to resort back to an algorithm solution by rote, rather than utilising the bar model strategy. Moreover, the few that did attempt to use the model became slightly confused.

Given these findings, while the data highlights the potential of the Singapore Maths Bar Model to improve problem solving it suggests that further exposure to the model, with time spent implementing and practising, is needed for children to become more confident and to find more accurate solutions with greater independence.

INTRODUCTION

The researcher has an interest in this area of study as problem solving is an important aspect within the new national curriculum, which requires children to solve a wide range of problems that grow in complexity (DfE, 2013). Moreover, as a maths subject leader she is also aware of the level of difficulty children encounter when problem solving. This raises concerns regarding the approach children use when tackling problems and how, or if, they utilize the abundance of mathematical understanding and skills that they already possess, particularly those who demonstrate aptitude in the subject area. Statutory Programmes of Study are suitable for some but not for many others

(Voderman et al, 2011). The Voderman report states that all children are entitled to understand mathematics and to experience the confidence boost that comes from it. (Voderman et al, 2011). Children must learn to make connections between all aspects of mathematical understanding - connections between concrete experiences, pictures, symbols and language - as the more connected experiences become, the more secure and useful the learning.

Upon analysing a sample of assessment data from the researcher's school from Autumn term it was found that more than half of the children in Year 4 lost up to 3 marks on problem-specific questions, indicating a lack of confident, resilient, competent problem solvers within the year group. Further to this, December analysis of the results of National Foundation for Educational Research (NFER) testing in Maths indicated problem solving as an area of concern. Multi-step problems emerged as a particular area needing development. Sixty-five percent of children in Year 4 did not complete the problem-solving question, which could suggest that they were unable to solve the problem, ran out of time due to the (lack of) competency of approach, and/or gave up due to lack of resilience. Given these results, the current research explores the potential of the Singapore Maths Bar Model to equip children with the knowledge and skills to answer problem solving questions systematically, using prior learning and building upon current understanding. The model was designed in the 1980s to enhance mathematical fluency by providing a clear visual representation in order to support children in identifying the underlying structure of word problems. Children learn to think mathematically as opposed to reciting algorithms that they don't understand, which diminishes the need for rote learning.

The research is a relevant issue within current education as the Department for Education (DfE), the National Centre for Excellence in Teaching Mathematics (NCETM), the National Curriculum Review Committee and OFSTED have all emphasised the pedagogy of bar modelling (MathsNoProblem, 2016).

LITERATURE REVIEW

The focus of this small-scale research project was to introduce the Singapore Maths Bar Model to a Year 4 class and examine how effectively the children use it to develop their problem solving skills and conceptual understanding. Key authors, research and ideas that have previously been carried out in this field are identified, highlighting main issues and controversies.

What is a problem? Burns (2007) states that a problem is a situation in which a person is seeking some solution and for which a suitable course of action is not immediately apparent. In the context of the mathematics curriculum, a problem is a situation requiring that mathematical skills, concepts, or processes be used to arrive at the solution. Therefore, teaching arithmetic in isolation rather than in the context of problem solving makes little sense as children need to translate the situation into an arithmetic problem and then perform the necessary calculation. In previous years, children have been encouraged to identify the key information within a problem and focus on the language used in order to support them in choosing the correct calculation to find the solution. However, England (2010) agrees that this approach can mislead children in their understanding of operations, particularly in more complex problems. When research studies examined why children's ability to solve word problems falls far below their ability to compute, they found that children's difficulties are not caused primarily

by poor computation skills or insufficient reading ability. Rather, when given a word problem, children simply do not know how to choose the correct operation to apply. Both Burns (2007) and Englund (2010) agree that children have to connect the suitable arithmetic processes to the contexts presented in the problem. Although children can calculate accurately, they do not always understand the meaning of the arithmetic operations in ways that enable them to make these connections (Englund, 2010).

According to results from the Trends in International Mathematics and Science Study (TIMSS, 2015; TIMSS & PIRLS, 2016), Singapore is one of the top performing countries in mathematics in the world. Indeed, achievement in Singapore has continued to excel since 1995, with 41–50% of children reaching the advanced benchmark (TIMSS, 2015). NCETM (2014) states that the content and principles underpinning the new mathematics curriculum reflect those found in high performing education systems internationally, particularly those of east and south-east Asian countries such as Singapore. The Organisation for Economic Co-operation and Development (OECD) suggests that by age 15 students from such countries are on average up to three years ahead in maths compared to 15-year olds in England (NCETM, 2014).

The Singapore Maths Bar Model was designed to help children ‘make sense’ of word problems by identifying the mathematical structure in the problem, promoting conceptual understanding gradually and systematically. The model uses a Concrete-Pictorial-Abstract (CPA) approach that is aligned with Jerome Bruner’s notion that people learn in three integrated modes of representation: by handling real objects (enactive), through pictures (iconic), and through symbols (symbolic) (Hoong et al, 2015) (see Figure 1). The National Centre of Excellence in the Teaching of Mathematics (NCETM, 2014) agrees that the model supports the transformation of real life problems into mathematical form and can bridge the gap between concrete mathematical experiences and abstract representations, which children find difficult.

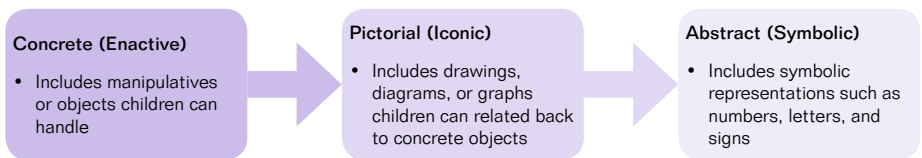


Figure 1: The Singapore Model’s CPA Approach

The model supports a ‘mastery’ approach to teaching, reinforcing the expectation that all children are capable of achieving in mathematics if given sufficient time. It ensures that teaching is underpinned by a methodical curriculum design with carefully crafted lessons and resources that foster deep conceptual and procedural knowledge (NCETM, 2014). As such, the model works to eradicate teaching mental and written methods as an algorithm, procedurally, as a series of steps to follow, without fully understanding mathematical operations (Burns, 2007; TIMSS, 2015). Conway (2014) agrees with the use of manipulatives within the classroom but disagrees with spending less time teaching abstract concepts in fear that children may lose sight of the mathematics. Not all concepts can be related in concrete form, thus children should still learn how to problem solve, calculate, and think abstractly. However, Maths Hub research (Maths

– No Problem, 2017) states that bar modelling is a strategy increasingly being used by teachers in the delivery of the new national curriculum to help pupils visualise the calculations they are solving so that the bar model (pictorial) sits alongside the equation (abstract), facilitating the development and expansion of pupils' conceptual understanding of arithmetic.

METHODOLOGY

The methodological design of the research has a mixed-method approach, with data collected through participant observation and questionnaires. Such approaches to data collection were used in order to explore the ways in which Year 4 children responded to the influence of using the Singapore Maths Bar Model approach to problem solving and their attitudes towards maths. The use of participant observation was relevant to the research design as the researcher wanted to capture the social meanings and activities of participants in a naturally occurring setting (i.e. her own Year 4 classroom) (Bartlett and Burton, 2006). Denscombe (2007) supports the use of questionnaires as a research tool as he believes they do not change people's attitudes or provide them with information; their purpose is to 'discover things'. Observations and questionnaires were carried out in order to collect data in such a way that the researcher did not impose bias.

Questionnaires were created by the researcher and administered to a selection of Year 4 children. This strategy, known as purposive sampling, offered some means of validating the data. Plummer (2001) believes that how informants are chosen is more important than how the data is collected. Study participants were selected due to the nature of the classroom setting, the delivery of an age-related curriculum, and the particular qualities individuals possessed. Each of these factors were believed to be relevant to the topic of the research, thereby providing the best information. The participants were also a representative cross-section of the class, which added to the validity of the data collected.

The design of the questionnaire was based on the premise of gathering information by asking participants directly about the points concerned within the research. Denscombe (2007) argues that the preeminent way to find out something regarding people and their attitudes is to simply ask them what you want to know. However, Sharp (2011) explains that questionnaires can have their limitations depending upon how questions are constructed, with consistent use of closed questions potentially leading to shallow and meaningless answers that never quite capture the contexts in which things operate. Moreover, many participants can be left feeling frustrated at not being able to express themselves more openly and fully (Sharp, 2011). A consequence of consistent use of closed questions is that the interpretation of meaning from the data can become problematic. Therefore, a questionnaire was created so the content and form of response was determined using a variety of questions. A 5-point Likert scale was used to determine participants' attitudes towards Maths. A dichotomous question was also integrated into the questionnaire which required the participants to choose 'yes' or 'no' regarding whether they enjoyed Maths or not.

According to Bell (2005) and Sharp (2011), observation is commonly employed when the aim is to collect data about what people do by watching and listening, e.g. gaining an insight into how effectively children deploy the taught Singapore Bar Model approach when problem solving. Sharp (2011) continues to explain how he believes

observation is a productive way of investigating the dynamics and complexities of teaching and learning during normal classroom-based activities. Therefore, the researcher taught a lesson introducing the bar model to explore interactions and behaviours within the lesson in detail. A semi-structured participant observation was carried out so that the usual running of the lesson was not impacted. The researcher also disclosed the purpose of the research to the class as Sharp (2011) strongly advises to openly discuss what the researcher intends to do and why with those involved from the outset in order to avoid any ethical issues.

The researcher used triangulation to authenticate the knowledge claims. Denscombe (2007) supports this approach and believes that the authenticity of findings can be checked by using different sources of information. The combination of methods allows the data to be analysed from a variety of perspectives, as a means of comparison and contrast. Each method approaches the same topic but from a different angle; thus allowing the researcher to confirm or challenge the findings of one method with those of another (Salehi and Gotafshani, 2010). For example, from a teacher led and supported lesson to independently working on a text-based question.

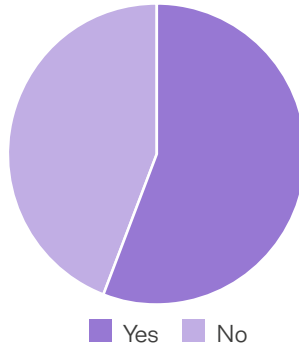
To conclude, the researcher believes that appropriate aspects of the process of conducting educational research have been taken into account and an ethically acceptable position has been reached in which actions are considered justifiable and sound (BERA, 2011; Wyse et al, 2017).

RESULTS & DISCUSSION

The focus of this small-scale research project was to discover the impact of introducing the Singapore Maths Bar Model to a Year 4 class, and to explore how effectively children used it to develop their conceptual understanding of problem solving. The research findings are presented and discussed, and the relationship to evidence cited in the literature review is highlighted, raising key issues and establishing major points.

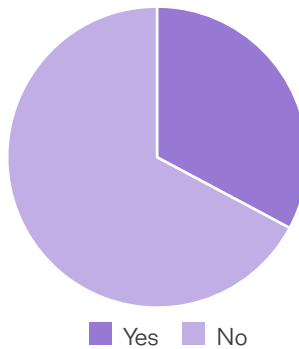
PRE-INTRODUCTION

Of the 30 questionnaires distributed only 18 usable questionnaires were returned, giving the research project an effective response rate of 60%. Pre-introduction to the bar model, questionnaire data revealed a range of confidence and enjoyment within the subject area of mathematics (see Figures 2 & 3).



Do you enjoy problem solving in maths?	Response (Frequency and percentage)
Yes	10 (56%)
No	8 (44%)

Figure 2: Participants' ratings of their degree of enjoyment when problem solving in maths.

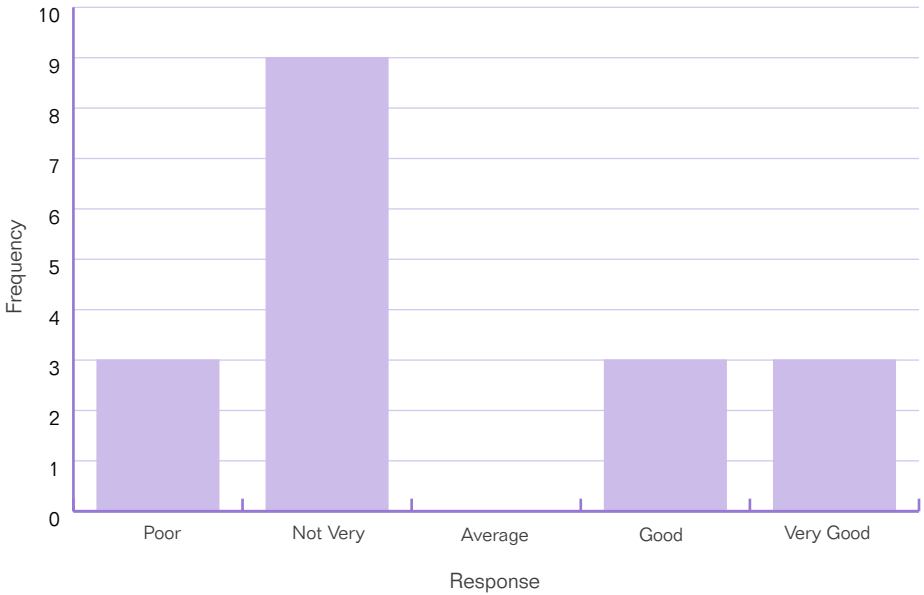


Do you feel confident problem solving in maths?	Response (Frequency and percentage)
Yes	6 (33%)
No	12 (67%)

Figure 3: Participants' ratings of their degree of confidence when problem solving in maths.

Out of the 18 usable questionnaires, 13 children (72%) identified problem solving as an area they considered to be a weakness (see Figure 4). When given the opportunity to discuss their enjoyment and confidence in problem solving, the participants indicated that they 'sometimes' found it difficult to understand what they had to do and that the language can be 'confusing'. One participant explained why: 'because there are lots of synonyms for the word'. This supports the research of both Burns (2007) and England (2010).

How good are you at explaining maths ideas and answers?



How good are you at explaining maths ideas and answers?	Response (Frequency and percentage)
Poor	3 (17)
Not Very	9 (50)
Average	0 (0)
Good	3 (17)
Very Good	3 (17)

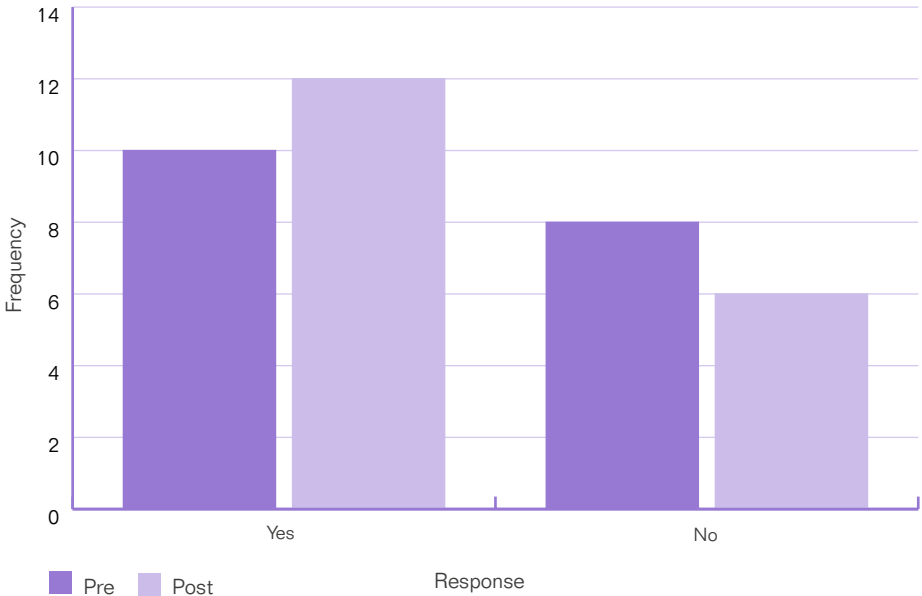
Figure 4: Participants' ratings of their competency when explaining maths ideas and answers.

Key findings of the Ofsted (2011) report on good practice in primary mathematics, stressed the importance of providing and making good use of opportunities for developing mathematical language so that pupils learn to express their thinking using the correct vocabulary. When the participants explained how they solved problems, pre-introduction to bar modelling, they stated that it was important to read the problem to 'understand' what it was asking them to do and 'pick out the key information'. Participants' responses also coincide with Ofsted's (2011) key findings of children choosing traditional algorithms over other methods. A small proportion of respondents made reference to using 'RUCSAC' (Read, Understand, Choose, Solve, Answer Check) – a strategy for solving word problems. Hart (2014) states, if children practise solving problems in this way, they only get better at analysing the superficial structures of the problems - a near useless strategy when problems become more complex.

POST-INTRODUCTION

Post-introduction to the bar model, questionnaire data revealed improvements in pupils' confidence and enjoyment within the subject area of mathematics.

Comparison of enjoyment in problem solving, pre- and post-introduction to the bar model

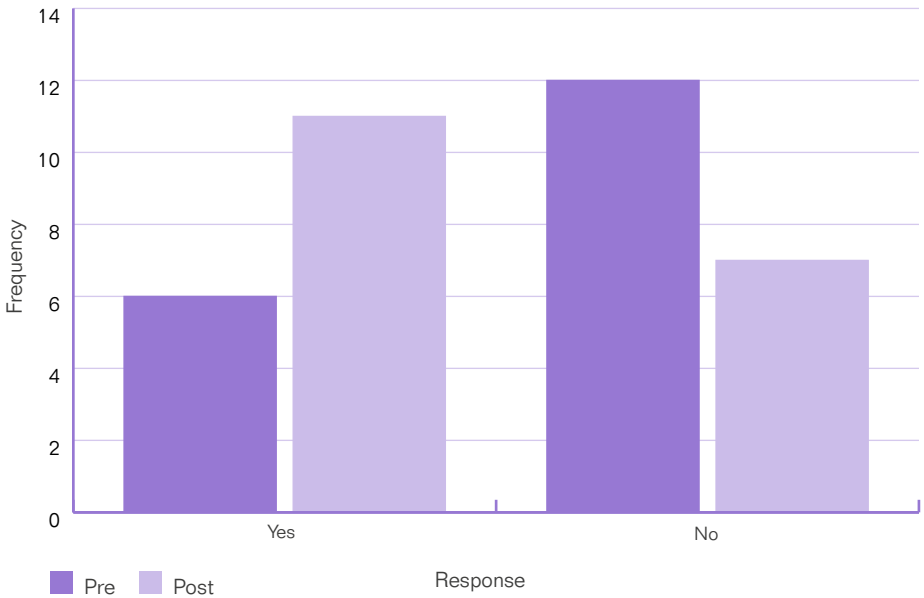


Do you enjoy problem solving in maths?	Pre-introduction	Post-introduction	Increment (Frequency and percentage)
Yes	10	12	2 (11)
No	8	6	2 (11)

Figure 5: Comparison of enjoyment in problem, pre-and post-introduction to the bar model.

Two participants (11%) felt that they enjoyed problem solving more post-introduction to the Singapore Bar Model (see Figure 5). Eleven participants felt more confident when problem solving post-introduction to the bar model (see Figure 6), with pre-post comparisons indicating an increment of 28% from the response in the pre-bar model questionnaire.

Comparison of confidence when problem solving, pre- and post-introduction to the bar model



Do you feel confident when problem solving in maths?	Pre-introduction	Post-introduction	Increment (Frequency and percentage)
Yes	6	11	5 (28)
No	12	7	5 (28)

Figure 6: Comparison of confidence when problem solving, pre- and post-introduction to the bar model.

The research shows that respondents' lack of confidence in mathematics does not detract from their enjoyment of problem solving in its entirety; a characteristic the researcher did not expect to find, as they believed a relationship would emerge in relation to level of confidence and enjoyment. The findings support Voderman et al, (2011) in their view that enjoyment and confidence can be developed over time at a level in which children are working to foster deep conceptual and procedural knowledge.

Post introduction to the bar model approach, the researcher expected the participants to utilise the Bar Model strategy in order to problem solve successfully and accurately. However, some results indicated otherwise. This suggests that children are more familiar with algorithms than the Singapore Bar Model approach, as found by Ofsted (2011). Therefore, when problem solving, they unconsciously resort back to an algorithm solution by rote – for this problem in particular. Respondents indicated post-introduction to the bar model that they could use the strategy when problem solving, but provided little, if none, explanation as to how. The findings indicate that although a new strategy had been introduced which respondents have shown a greater awareness of, it does not mean that it will be readily and immediately used. Perhaps if children

were taught to use the Singapore Maths Bar Model to support problem solving from an earlier age, they would more readily utilise this tool when introduced to a wider range of more complex problems throughout their school life; therefore, demonstrating a more confident, resilient and competent problem solver.

Although a selection of the participants did not use the bar model approach with accuracy when revisiting a question independently, some attempted to. As found by Conway (2013) some respondents became slightly confused when using the approach. However, with further exposure to the bar model, and time spent implementing and practising, the findings suggest that children will become more confident in using the strategy and find more accurate solutions with greater independence. Ofsted (2011) emphasises that successful practice has been demonstrated in the consistent use of visual representation to aid conceptual understanding.

Observational data suggested that the bar model encouraged children to make links and identify patterns; using and applying understanding, promoting higher order thinking skills to draw on fluency and reasoning. It supported children in visualising questions and identify key information methodically. However, using iconic representations independently proved difficult and insufficient to some currently not working at age related expectations. Teacher scaffolding was effective in the use of manipulatives and key questioning to support children to 'unpick' the problem in order to calculate the solution in a less superficial way than previous strategies. This support was necessary to meet the needs of the participants at their current stage of learning in relation to the bar model.

CONCLUSION

The focus of this small-scale research project was to assess the impact of introducing the Singapore Maths Bar Model to a Year 4 group when solving mathematic problems and to explore how effectively children used it to develop their conceptual understanding. The key findings are now considered alongside the implications of the research both personally and professionally.

From both the quantitative and qualitative data collected relating to participants' confidence and enjoyment, academic experiences, and attitudes to learning findings reveal that the Singapore Maths Bar Model has had some positive impact on children's approach to problem solving.

In relation to the relevance of the research question to the focus of study, key findings emerged that were consistent with the findings of prior research; thereby, supporting the validity of the findings. The researcher found the relationship between the way in which respondents approached problems post-introduction to the Singapore Maths Bar Model to be particularly interesting. Participants who said they felt confident with their mathematical ability and showed a particular skill within fluency and reasoning, but did not particularly enjoy problem solving as they 'sometimes don't know what to do', were able to overcome this barrier to learning and enjoyment. Post-bar this group could visualise the problem through pictorial reference; to draw on embedded fluency skills and use reasoning to make connections to the abstract concept, using known operations. This finding supports key research points made by Burns (2007) and Englard (2010). The participants developed understanding through the introduction of this method, which brought some enjoyment an enthusiasm to children who were

becoming more resilient with problems increasing in complexity; not more complex due to their understanding of the problem, but more due to the fluency skill needing to be drawn upon.

REFLECTIONS

The results of this research has enabled me to reflect on my practice and the impact of pedagogical decisions made in relation to introducing the Singapore Bar Model to Year 4 children. Through this research, I have discovered the importance of concrete experiences to enable children to gain conceptual understanding. The data has also highlighted the potential difficulties in bridging the gap between concrete mathematical experiences and abstract representations. I feel that the bar model approach would be more effective if placed within the School's Calculation Policy and used as a whole school approach to problem solving, to be built upon each year at an appropriate age to cognitive development. The next steps from this study, in my role as Maths Subject Leader, is to continue to raise standards in mathematics, challenge children's attitudes and approach towards problem solving through enhanced delivery of the new national curriculum at all key stages through use of the Singapore Maths Bar Model. As a direct impact of this research, I will support School Improvement Liverpool in whole school training on bar modelling, addressing a school priority included in the School Development Plan.

BIOGRAPHY

Abby Hagan undertook this research as part of the CPD module on Aspiring Leadership she studied at Liverpool Hope.

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Teaching in Poland: an initial teacher education initiative to develop skills in meeting the needs of learners with English as an additional language

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ABSTRACT

In this paper we report on research arising from an innovative project in which secondary pre-service teacher trainees at an English university are offered an experience of teaching in Polish schools, through a collaborative arrangement between Liverpool Hope University, Liverpool, UK and colleagues at Nicolaus Copernicus University, Torun, Poland. The project is an enhancement of the PGCE course and is offered to all trainees across nine subject disciplines. In 2017, the project involved 64 trainees and 6 staff from Liverpool Hope, students and staff from Nicolaus Copernicus University, and teachers and pupils in 12 schools in Torun.

The impetus for this project arose due to the requirement for teachers in England to be trained in techniques to teach speakers of languages other than English and the limited opportunities to put this into practice in the Merseyside area due to local demographics. The rationale for this approach is supported by Putnam and Borko (2000) (Situative Theory) and Dewey (1938) (active deliberate engagement with problematic situations for learning).

During the project, a carefully designed programme of planning, teaching, and evaluation provides a sophisticated and powerful pedagogical model. Trainee teachers work in small teams co-teaching in pairs, observed and supported by peers and a tutor. Teams meet on a daily basis to discuss and evaluate their teaching. Reflection is led by the trainees, with tutor support.

Our research indicates that benefits to trainees arise from having opportunities to:

- reflect upon and improve their teaching in a challenging but supportive context,
- observe peers teaching, and learn from each other both within and across subjects,
- teach whole classes of pupils whose first language is not English.

As a result of participation in the project, pre-service teachers' confidence and communication skills are enhanced, especially in relation to clarity of talk and instruction in the classroom.

INTRODUCTION

The Poland project evolved out of a geography conference in Torun, Poland, where initial contacts were made, and has grown from just 12 secondary geography trainees in 2006 to a maximum of 79 trainees in 2015. In 2009, numbers increased due to the addition of science trainees, and in 2014 the enhancement was made available to the whole secondary PGCE cohort of 9 subjects (see Table 1). Outcomes of earlier visits are reported in Gadsby, Charzynsk and Stanczyk (2008), Gadsby and Bullivant (2011), and Gadsby and Rowe (2011). Findings indicate that participation in the Poland visit enabled trainee teachers to critically re-evaluate taken-for-granted pedagogical practices and to develop their intercultural awareness. Key themes emerged relating to their understanding of effective pedagogy, English as an Additional Language (EAL) teaching, and collaborative teaching. This paper builds upon this by reporting upon research carried out with the 2017 group of 64 trainees.

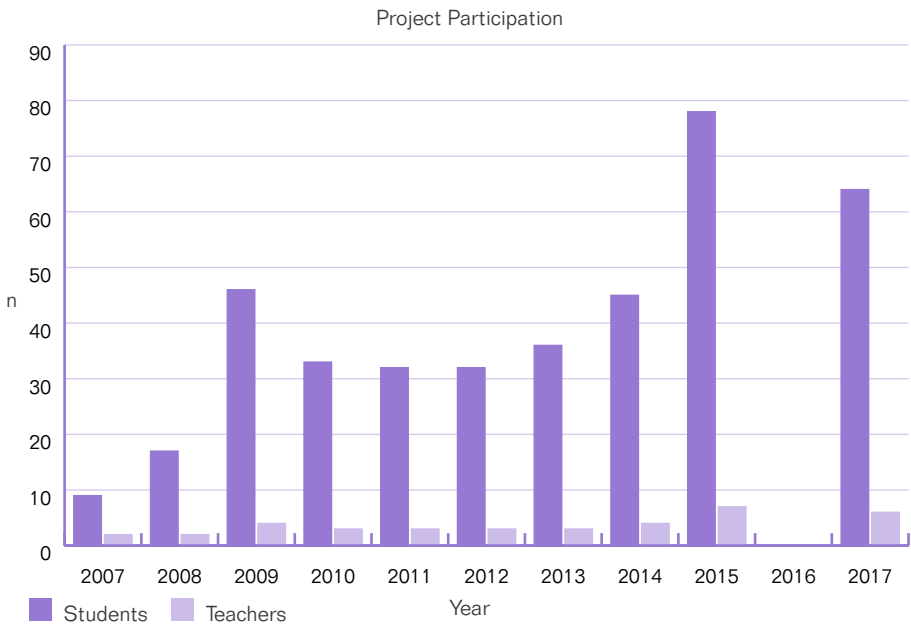


Table 1. Numbers Participating in the Poland Project Over Time
(Table provided by Charzynsk, P. (2017))

PEDAGOGICAL MODEL

A carefully designed structure of planning, teaching, and evaluation provides a pedagogical model which is sophisticated and powerful. The trainees spend one week in Torun and teach on three of the five days. They teach in subject pairs on a topic of their choice, in a different school each day. The pupils' age and level of English varies each day depending on the school. The lessons planned by trainees, therefore, have to be very adaptable. Trainees can only use the resources they take with them, and no ICT facilities are available; many schools only have blackboards. There is structured

preparation pre-project, including initial planning and detailed briefing of trainees, covering pedagogical issues and cultural awareness. Input on Content and Language Integrated Learning (CLIL) (Coyle et al., 2009) is led by Modern Foreign Language (MFL) trainees, with guidance from MFL tutors. Trainees gain confidence in their lesson planning by working together and refining practice both in advance and over the 3 days in school.

Trainees are placed in the schools in cross subject teams with an accompanying Liverpool Hope tutor. This allows them to observe teaching outside their subject area, which helps them to develop their knowledge of a wide range of teaching strategies. While in the schools, the trainees also act as teaching assistants to each other, which enables them to learn how to deploy additional adults in their classroom. At the end of the day there is a feedback session where the trainees and tutor have a reflective developmental discussion of each lesson and make adaptations for the following day's teaching. Trainees write reflective commentaries in their pairs, which develop into a detailed reflection of their learning, and contribute to the final evidence base for their teaching qualification. Thus, a cumulative and supportive feedback and feed-forward process develops through the week. This process impacts on trainees, on the tutor team, and on trainee-tutor relationships, resulting in closer collaborative working after the project. The initial aims of the project were to enhance the trainee teachers' understanding and skills in teaching pupils with English as an additional language. As the project developed it became clear that, while supporting this aim, the impact on trainees was much more wide-reaching, as we report below.

WIDER IMPACT

An important feature of the project is that, over time, several of members the Liverpool Hope secondary tutor team have accompanied the trainees at least once. This has allowed for significant collaboration between and across subject specialisms. It has led to a shared understanding of different teaching pedagogies and different approaches to giving feedback as well as active developmental discussions around structure and content of the course and trainee progress.

Many of the Polish schools involved in the project have been doing so for 10 years. The Polish pupils and teachers have the benefit of participation in creative approaches to learning, which are often different from traditional Polish approaches to pedagogy. This offers an enhanced and stimulating experience. In particular, Polish teachers are interested in developing strategies for active learning, which is a well-developed pedagogy in England. Collaborative working with Polish colleagues at Nicolaus Copernicus University creates space for tutors to discuss teacher education in an international context, including the role of international league tables and the impact of different pedagogies and policies in other European countries. English and Polish university students have the benefit of meeting and working collaboratively and sharing good practice.

Further links were developed when a maths tutor from the university ran a workshop at a maths conference for teachers organised by one of the participating Polish schools. Further, in 2017 an ERASMUS agreement was signed between the two universities to enable future collaborative work.

EXTERNAL ENDORSEMENTS

The project was praised by OFSTED in their inspection of Initial Teacher Education at Liverpool Hope University:

An increasingly effective strand of training is developing trainees' skills and strategies for teaching pupils for whom English is an additional language. For example, science and geography students spend a week in Poland, teaching in Polish schools. (OFSTED, 2012a, p.17)

The project has also been highly rated by external examiners:

'EAL placements and teaching opportunities in Poland were rated very highly by the students'

'Course strengths: EAL provision – the Poland trip and EAL placements'

(Gault, 2010)

LITERATURE REVIEW

EXPERIENTIAL LEARNING AND SUPPORTING EAL LEARNERS

The continued movement of people around the world due to globalization and free movement within the European Union has changed the landscape of classrooms in the United Kingdom. Social, political and economic factors have made UK schools rich culturally and linguistically. The Department for Education (DfE) and the National Council for Teaching and Leadership (NCTL) acknowledge the need for all trainee teachers and existing in-service teachers to be prepared for teaching pupils who have English as an additional language (EAL) (Department for Education, 2013).

It is an essential requirement for trainee teachers, Newly Qualified Teachers (NQTs) and in-service teachers to grow in confidence when adapting their teaching to respond to the needs of all pupils, including those with EAL (Bourne and Flewitt, 2002). Teaching Standard 5 asserts teachers should know how to:

T5: Adapt teaching to respond to the strengths and needs of all pupils have a clear understanding of the needs of all pupils, including those with special educational needs; those of high ability; those with English as an additional language; those with disabilities; and be able to use and evaluate distinctive teaching approaches to engage and support them (DfE 2013, p.12).

The ever-growing multicultural classroom in the UK requires teachers to be responsive to themes such as bilingualism, second-language-acquisition research and the integration of pupils from diverse social, cultural, linguistic, religious and ethnic backgrounds and traditions. Training teachers for diversity explicitly forms part of the Teachers' Standards (Butcher et al., 2007). The managing of teaching of EAL is seen 'as a generalist skill desired of all teachers' rather than just a skill for language specialists (Creese 2004, p. 190).

It is important to distinguish between different groups of pupils whose mother tongue is not English. The acronym EAL is widely used in many contexts. In UK classrooms and according to OFSTED (Office for Standards in Education, Children's Services and Skills), an EAL pupil refers to a learner whose first language is not English. It is

recognised that pupils may speak several languages in addition to English and that English could be their third, fourth or even fifth language. The term ESL is used for English as a Second Language speakers such as those whose mother tongue is Welsh or Gaelic who have English second language for communication. The term EFL denotes English as a Foreign Language and applies to students learning English but living abroad (OFSTED, 2012b).

The Poland enhancement initially aimed to develop trainees' EAL skills in accordance with the Teachers' Standards set by the DfE. However, it soon became apparent that this experience enabled trainee teachers to broaden their adaptability across many areas of their professional practice (Mahan and Strachowski, 1992). We find that the Poland experience provides trainees with skills that will enable them to understand and acknowledge the interaction between language, culture and practice, and consequently be more confident when dealing with EAL pupils in today's UK classroom (Roose, 2001).

This short academic sojourn (temporary stay abroad for a specific purpose such as academic study, Ward, Bochner and Furnham, 2001) leads to numerous practices for meaningful and transformative learning which are connected to Experiential Learning Theory (ELT) and transformative learning theory (TLT) (see Figure 1). The relevance of ELT in the Poland sojourn refers to what Kolb describes as 'the process whereby knowledge is created through the transformation of experience' (Kolb, 1984, p. 41). Passarelli and Kolb (2012) noted that ELT '...provides a model for educational interventions in study abroad because of its holistic approach to human adaptation through the transformation of experience into knowledge' (p. 138).

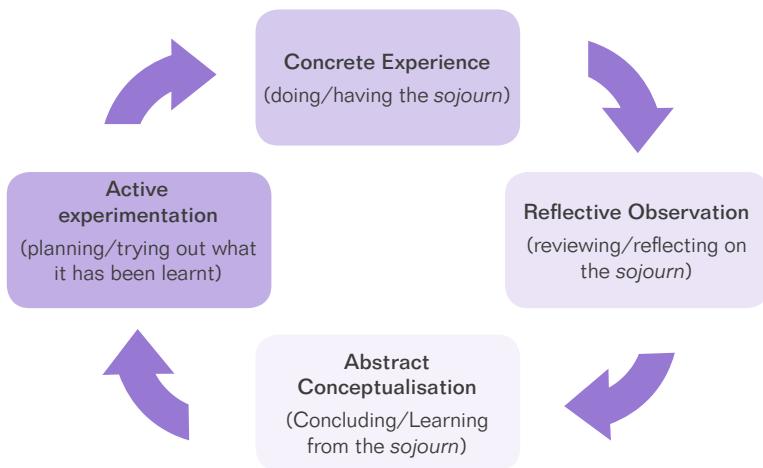


Figure 1: Adapted from Kolb's Experiential Learning Model (1984, p. 38)

Following Kolb's model, the concrete experience or task undertaken by the trainees is to teach lessons to Polish pupils through the medium of English. This involves a dual educational focus: teaching content to pupils who have English as an additional language. This educational approach is linked to what Coyle et al (2010) defined as Content and Language Integrated Learning (CLIL). CLIL is considered as: '...an

educational approach in which various language supportive methodologies are used which leads to a dual-focused form of instruction where attention is given to both to the language and the content' (Coyle et al, 2010, p. 3).

Reflecting on and discussing the strategies used facilitates the conceptualisation of the learning and teaching process in the unknown situation (Polish sojourn). This learning process must involve the development of learners' cognitive skills, as the acquired language learning strategies must be used to manage the new language and content. Equally, trainees have to master the metacognitive skills of planning, delivering, monitoring and evaluating the learning that takes place. Thus, Bruner's theory of instruction and his idea of 'scaffolding' (Bruner, 1983) is relevant in facilitating the learning of EAL and the subject content.

A synergy develops between learning content and language. This is the process where 'learners use the new language to acquire new knowledge and skills and as they do so they make progress in both language and subject area content' (Coyle et al, 2009, p. 4). Coyle et al (2010) state that to carry out a successful CLIL the 4Cs framework needs to be applied: subject matter (Content), language learning and language using (Communication), learning and thinking (Cognition) and intercultural understanding of the world we live in (Culture) (see Figure 2).

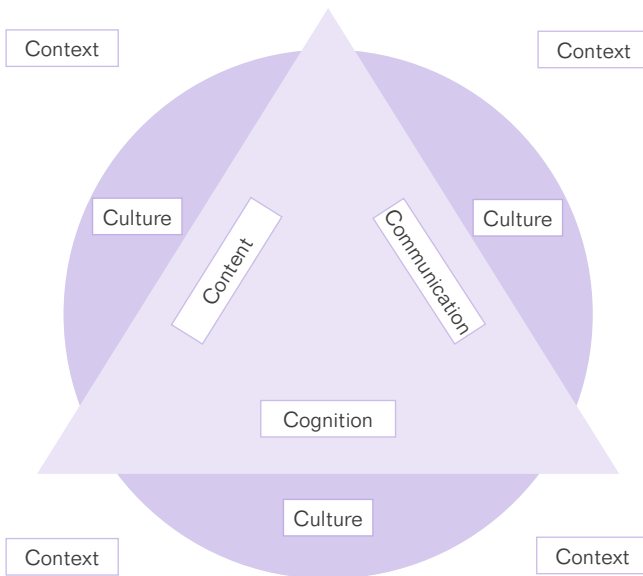


Figure 2: 4C's Framework for Successful CLIL, Coyle et al (2010:41)

The outcome for trainee teachers in understanding and experimenting with this teaching approach is to be able to close the gap that exists when dealing with EAL pupils. The CLIL approach will connect what the learner can currently do and the expectations for his/her ability. Therefore, CLIL offers suitable cognitive challenge to pupils at an accessible linguistic level.

METHODOLOGY

During a whole cohort lecture, all secondary trainee teachers were invited to complete a short questionnaire about their prior knowledge, experience and confidence in teaching EAL pupils. Responses were obtained via a Likert scale. Seventy-three completed questionnaires were returned, including 37 from trainees who were going to take part in the Poland visit and 36 from trainees who were not going to take part in the visit. Quantitative data was obtained from this data-set, then analysed and summarised.

Subsequently, on the last day of the Poland visit, all trainees were invited to complete a second questionnaire. Sixty completed questionnaires were returned. Both quantitative (Likert scale) and qualitative data was obtained. Quantitative data was analysed and summarised as percentage scores. Qualitative questions were coded and analysed.

Ethical clearance had been obtained in advance via the usual university channels. Attention was given to mitigate any possible effects of power relations within tutor-student relationships. Research information and consent forms were provided with the questionnaires. It was made clear to trainees that their participation in the research was entirely voluntary, and they were free to withdraw at any stage.

An important limitation of the data collection was that questions probed trainees' perceptions of their knowledge, experience and learning. We did not attempt to measure or validate this independently in this study.

RESULTS

PRE-TRAINING QUESTIONNAIRE

The following results were obtained from an analysis of the pre-training questionnaire, which asked trainees to rate their confidence in teaching EAL pupils before their Poland experience on a 3-level scale (very confident, confident, not confident at all):

- 56% of the whole group (n=73) and 60% of the prospective Poland group (n=37) indicated that they were not confident at all in the use of key pedagogies in meeting the needs of EAL pupils.
- 53% of the whole group and 59% of the Poland group indicated that they were not confident at all in addressing the needs of EAL pupils generally.
- 60% of the whole group and 65% of the Poland group indicated that they were not confident at all in planning lessons to include EAL pupils.

These responses indicate that at this early stage in the course, the majority of trainees lacked confidence in these areas. It is interesting to note that responses from the group who had chosen to take part in the Poland trip rated their confidence levels lower than the cohort as a whole.

POST-TRAINING QUESTIONNAIRE

The first question invited trainees to rate their confidence in teaching EAL pupils both before and after their Poland experience, on a 5-level scale (very high, high, medium, low, very low). Ninety-three percent of trainees reported an increase in confidence, with 79% increasing by 1 or 2 levels, and a further 15% increasing by 3 or 4 levels. The mean gain in confidence was 1.7 levels.

The second question probed more general areas of teaching skills and invited trainees to rate their skills enhancement across a range of areas on a 4-level scale (greatly enhanced, significantly enhanced, enhanced a little, not enhanced at all). Table 2 shows the percentage of trainees who reported their teaching skills 'greatly' or 'significantly' enhanced in each area.

Teaching skill	%
Ability to adapt lessons	89
Team teaching skills	70
Peer observation skills	82
Non-verbal communication skills	58
Range of EAL strategies	83
Ability to demonstrate enthusiasm for subject	71
Ability to reflect in action /during teaching	78
Ability to reflect on action / after teaching	87

Table 2: Percentage of Trainees Reporting Greatly or Significantly Enhance Confidence (n=60)

These results show clearly the positive impact of the Poland experience across a wide range of

QUALITATIVE DATA

In the qualitative section, open questions probed: 1) the wider skills and understanding gained by trainees as a result of the Poland experience, and 2) how trainees perceived their experience in Poland would impact upon their future practice as teachers. A total of 179 comments were analysed.

A significant number of trainees specifically commented on an increase/enhancement in their knowledge, skills and confidence in meeting the needs of EAL learners. This was in addition to their reporting on it in the quantitative section. However, what was more notable in the qualitative participant responses was the extent of *wider* knowledge and skills development that was reported. It was very clear that the experience of team teaching in this very different context had impacted trainees' knowledge and skills across a broad range of areas. Key themes that emerged from the data were: adaptability, clarity of verbal communication, non-verbal communication strategies, reflection, cross-subject development, and EAL skills. Below are example comments related to each of these themes, which were extracted from the data.

Adaptability: The most commonly cited development was in adaptability. There were 45 comments relating to this.

I have improved my ability to adapt lessons during teaching.

It has given me a great ability to adapt lessons as and when necessary...thinking on the spot of different strategies to get pupils to understand.

When lessons need to be adapted I will be more confident with this.

Being able to adapt and change quickly working with others team teaching.

My skills as a teacher have broadened in having been forced to move away from teaching with powerpoints.

Clarity of Verbal Communication/Instructions /Vocabulary: There were 38 comments relating to improvement in clarity of verbal communications.

I am aware that I need to speak slower.

I have learned about scaffolding for language not just subject content.

The need to reinforce key words and explain tasks clearly.

Simplification of vocabulary.

I have taken away useful hints and tips that I have learnt from peers, e.g. hand gestures and how to chunk information and explain things in easy to understand pieces.

Use of Non-Verbal Communication Strategies: There were 9 responses relating to the use of non-verbal communication.

I now have more ideas of how to explain key terms visually.

Incorporate more body language.

Recognised the importance of non-verbal communication.

Reflection: There were 10 responses relating to development of capacity to reflect upon teaching (own and others').

How to observe lessons and key things to look for.

Ability to adapt and reflect on lessons/activities.

My reflective practice skills have been greatly enhanced, and through observing/being observed by my peers, my ability to adapt and improve lessons has developed.

Cross-Subject, Learned New Strategies: There were 7 responses about learning new teaching strategies from teachers of subjects other than own.

I have learnt a lot from watching other subjects and how they approached teaching in an EAL setting, such as envoy tasks and using visuals on the board

I have developed my teamwork skills and I think team teaching is rewarding and a lot of fun

The ability to observe different lessons from multiple subjects is a really good aspect of the trip

EAL Skills: There were 16 responses that focussed specifically on improved EAL skills.

It has given me a lot more confidence in teaching EAL pupils back at home

If future practice includes working with EAL pupils, I feel much more confident in this aspect and will be able to address the issue better

Use of EAL activities such as non-verbal communication, use of images and getting pupils to repeat words

I had not had any real EAL experience in my first placement. I feel confident working with EAL in my next school

Additionally, there were comments relating to other general areas of development, including planning, differentiation, scaffolding, use of interactive teaching approaches.

DISCUSSION

Much of trainee teachers' development during their professional training course is in the form of experiential learning in the school context (practicum). Trainees have to develop proficiency in the 'plan, teach, reflect, adapt' cycle. Time spent away from the classroom (e.g. in meetings with school colleagues or in university seminars) provides opportunities for structured and meaningful reflection upon classroom experience which is difficult to achieve in the busy teaching 'moment'.

A short, focused international experience such as the Poland sojourn amplifies this effect due to the new, unfamiliar nature of the context. Additionally, the carefully planned model in which structured reflection is built into the pattern of the day ensures that maximum benefits can be attained. There are few opportunities in the PGCE course for the trainees to observe their peers teaching and give feedback, so this is a strength of the project as it encourages them to articulate to each other what good practice looks like.

Our data reveals that via the Poland sojourn, trainees' learning is enhanced and their knowledge developed through the transformation of their practical experience of planning, teaching and reflection in schools (Kolb, 1984, Passarelli and Kolb, 2012). They emerge with improved knowledge and greater confidence in meeting the needs of EAL pupils (Roose, 2001).

At the end of the academic year, the team carried out interviews with trainees from the Poland trip. This was an opportunity for trainees to discuss if/how they had used the skills they developed during the Poland enhancement, in their teaching since that time. Analysis of this case study data will form the next strand of our research. We see this as an ongoing project and hope to continue to develop the research, aiming both to improve our own team practice and to disseminate within the wider ITE community.

BIOGRAPHY

Mary Stevenson began her career as a secondary mathematics teacher, and was head of department in two schools. Since moving to Liverpool Hope, she has taught on a variety of mathematics and mathematics education courses. As Coordinator of Secondary Mathematics Education, she leads and teaches on the PGCE Mathematics course, the Mathematics Enhancement Course, and a CPD programme for serving

mathematics teachers. Mary's research interests are the nature of subject knowledge for teaching, and the impact of overseas experience upon teachers' professional skills. She is involved in the running of a small educational charity, and this work has taken her to various locations in India.

Helen Gadsby is a senior professional tutor working in the faculty of education. Helen is the course leader for PGCE Secondary Geography and also teaches on the BA QTS primary courses and across the masters provision. Helen is currently in the final stages of her PhD at UCL looking at fostering reflective practice in secondary PGCE students. Helen's research interests are reflective practice, teacher pedagogy, mentor development and sustainable development.

Julie Collins has a background in secondary school Science teaching, as a head of Biology and is now a Senior Professional Tutor in Science Education. Since moving to Liverpool Hope University she has taken on leadership of the Secondary Sciences (Physics, Chemistry and Biology) PGCEs and regularly teaches on primary teacher training courses.

Maria Herrera began her career in Spain as a Secondary Modern Languages teacher. She moved to the UK in 1989 and worked in a range of Wirral and Knowsley secondary schools, both in a pastoral role and as Head of Spanish. She also worked with primary schools introducing and developing primary languages. Maria joined Liverpool Hope in 2001. She has been involved in a Comenius 2.1 project, working in partnership with the Universities of Venice, Krakow, Sevilla, and Berlin with a research focus on developing training materials for Content & Language Integrated Learning (CLIL) in primary ITE. She has also been engaged in a Comenius Regio Partnerships with Castilla y León and Sefton Local Authority, to support the learning of English and Spanish as Foreign Languages in the schools of Castilla y León and Sefton.

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Teaching teachers disability: special educational needs and disability studies discourses in teacher training

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ABSTRACT

This study investigated trainee teachers' internalization and experiences of contrasting Special Educational Needs (SEN) and Disability Studies (DS) discourses within textbooks aimed at them. To facilitate this, twenty-nine trainee teachers studying at a university in the North West of England completed a questionnaire, requiring both quantitative and qualitative responses to a number of quotations taken from such textbooks. A literature review demonstrated the way in which the discourses within these books have changed over time, shifting from a reliance on the ideologies of Special Educational Needs towards a greater inclusion and acceptance of those found within Disability Studies. Participants' agreement ratings were significantly higher for quotations pertaining to Disability Studies' ideologies than for those pertaining to Special Educational Needs. However, the qualitative responses suggested that they perceived disability through an amalgamation of the two fields' discourses. Drawing upon both results, the conclusion was that the participants perceived disability through an intermingling of internalized discourses from the two fields, and that their perceptions were potentially shaped by the discourses found within textbooks written for trainee teachers.

INTRODUCTION

The trainee teachers who participated within the research were all studying undergraduate degrees leading to Qualified Teacher Status (QTS) at a single university in the North West of England. The University has a large education department, providing both undergraduate and postgraduate teacher training programmes. It also offers a number of subject specialisms, including both SEN and DS. The trainees who participated therefore came from a wide variety of specialisms.

The study focused upon trainee teachers' experiences of, and the extent of their agreement with, the disability-related discourses within education textbooks. Although there have been a number of studies exploring the perceptions of trainee teachers regarding disability, most have focused upon practical issues or training needs. Even those which have explored teachers' personal beliefs regarding disability have largely utilised single-method methodologies, leaving a significant gap within the currently available literature.

The study focused upon the presentation of disability found within textbooks, and by highlighting the impact that the discourses present within such texts have upon the conceptualisations of future teachers, it may encourage Initial Teacher Training providers, including the University where the study was conducted, to reconsider course materials which DS scholars would problematize. In particular, many of the older works found within this, and doubtless other, University's libraries were problematic in their conceptualisations of disability. However, the study concluded that the conceptualisations of disability found within the fields of DS and SEN may not be as sharply distinct as is often argued by scholars. This may help to open up dialogue between the two fields, facilitating greater cooperation and a sharing of ideas between them.

LITERATURE REVIEW

Before planning the methodology for the current study, it was important to consider the available literature to provide a theoretical foundation. The first section outlines the numerous critiques presented by DS scholars regarding the field of SEN. The second section explores disability-related discourses present within the two fields and examines the prevalence of these discourses within textbooks written for trainee teachers. The final section sets up the current study, based upon the preceding sections.

DS SCHOLARS' CRITIQUES OF SEN

The field of SEN has been recurrently problematized by DS scholars. One of DS' most frequent criticisms of SEN is that it over-medicalizes disability. This is exemplified by the introduction to Barden's (2014) article, which argues that dyslexia-related discourses are dominated by psycho-medical ideas and terms including '... "deficits" and "difficulties" ...' (p.1). Likewise, Clough and Garner (in Bartlett and Burton, 2006) propose that the 'psycho-medical model' of disability present within educational settings results in the educational labels, tests and notions of deficit found within SEN. Reid and Knight (2006) state that the medical model is the '...predominant approach to special education...' (p.18), and argue that, since this model is grounded within an ableist perspective, it leads to disability being perceived within a deficit-orientated framework, based upon special educational legislation, practice and positivist science.

Additionally, DS scholars have drawn upon philosophy in their discussion of SEN. For example, although Danforth and Rhodes' (1997) article was first published seventeen years ago, it is regarded as a seminal work within DS. Danforth and Rhodes draw upon the work of Derrida, a French philosopher, to deconstruct the diagnostic process, the 'ability/disability' binary and the categorisation of certain characteristics as 'disabilities' within educational settings. In order to problematize and deconstruct this binary, their article focuses on the diagnostic processes which lead to individuals being considered either 'abled' or 'disabled'. Such categorisation can be seen as both underpinning and necessitating the whole field of SEN. Drawing upon Taylor's (1990) 'Learning Denied' as an example, Danforth and Rhodes argue that the term 'reading disability' is logically problematic, as it depends upon the specific reading paradigm and definition of reading valued by an individual. In this way, they argue, the diagnostic process can become a 'dead end' (p.362) within academic contexts such as SEN, as it relies heavily upon contestable definitions of academic areas, skills and abilities. Thus, this article highlights the often critical approach taken by many scholars working within DS towards the field of SEN.

At first, the numerous criticisms discussed above appear to indicate a fundamental, irresolvable distinction between the two fields. However, it is possible to argue that this distinction is not as great as many would suggest. As evidenced within the following section, many of these divisions can be blurred.

DISCOURSES PRESENT WITHIN SEN AND DS

It is necessary to set up the contrasting discourses found within the two fields of SEN and DS before discussing any specific textbooks. During the 1960s, disability activists within the UK began to reject both residential care and the perceived control of their lives by medical professionals. The Union of the Physically Impaired Against Segregation (UPIAS), formed in 1974, was crucial in the development of social model modes of disability, which DS within the UK is largely built upon (Barnes in Watson et al, 2012). UPIAS members drew upon both sociology and their own embodied experience, arguing that disability comprises a form of 'social oppression' (Watson, Roulstone and Thomas, 2012, p.13) and proposing the fundamental distinction between the terms 'impairment' and 'disability' which lies at the heart of the social models. According to UPIAS, impairment refers to '...lacking part or all of a limb, or having a defective limb or mechanism of the body...' (UPIAS, 1977, p.20), while disability refers to:

...something imposed on top of our impairments by the way we are unnecessarily isolated and excluded from full participation in society (UPIAS, 1976, in Oliver, 1996, p.33).

This terminological distinction demonstrates the way in which the social model acts to externalize disability from individuals, placing it within the societal context, and redefines disability as a socially, rather than biologically, constructed phenomenon.

In direct contrast to DS' consistent attempts to externalise disability, numerous SEN journals act to create a 'within-child' perception. Lindsay (2003), for example, not only criticises the social model of disability as '...illogical and unhelpful' (p.5), but also directly argues for the importance of "...within-child" factors' (p.5), re-internalizing disability into specific children. Lindsay et al, (2007) also refer to 'within-child' factors involved in children's 'difficulties [sic]' (p.824).

Many DS scholars are also concerned with the importance of terminology. Bolt (2011), for example, highlights the numerous meanings of the word 'blind' and its derivatives, including '...lack of understanding or discernment' (p.16). Bolt argues that the use of such terminology in reference to individuals considered to have impairments reinforces the negative connotations of such words and applies these to disabled people. Many of the textbooks outlined later, located within the field of SEN, do not share this concern, again separating the two fields. However, this division is not absolute. Many recently published SEN textbooks, exemplified by Glazzard et al, (2010), demonstrate the terminological concern more often associated with DS. Therefore, although it can be argued that language distinguishes the two fields, it is necessary not to over-emphasise this division.

Another fundamental distinction between the two fields is the relative role of embodied, personal experience. Moore and Slee (in Watson, Roulstone, and Thomas, 2012) argue that DS '...establishes a platform for the voices of disabled researchers and activists...' (p.233). This quotation highlights the value placed upon first hand experiences of

disabled people within DS. A similar position was proposed by Barton's (2005) seminal work on emancipatory research and disabled people, which argues that disability research should empower disabled people, allowing them to find a voice. In contrast, SEN appears to focus firmly upon the importance of professionals and experts.

Considerations of labels and labelling are also frequently found within DS scholarship. Eisenberg and Schneider (2007), for example, indicate that labelling a child with ADHD can result in negative perceptions and expectations being held by teachers, parents and children. Clough and Garner (in Bartlett and Burton, 2006) suggest that the 'psycho-medical model' of disability, present within the educational setting, has resulted in the dominance of labelling within the field of SEN. As such, it can be seen that approaches to, and acceptance of, labelling again separates DS from SEN, further emphasising the ideological differences between the two fields.

This section has outlined the numerous ways in which the disability-related discourses found within DS and SEN differ. Many of the distinctions discussed so far have been accompanied by examples of instances where the discourses associated with one field are present within the other. Therefore, these distinctions should be taken as indicative of ideological distinctions prevalent within the fields, rather than universally accepted contrasts.

AN EXPLORATION OF TEXTBOOKS WRITTEN FOR TRAINEE TEACHERS

The next segment of this review, grounded in the previous discussion of discourses, focuses upon the way in which textbooks written for trainee teachers represent disability.

From an analysis of textbooks published over a range of forty-three years (e.g. Webb, 1967; Leach and Raybould, 1977; Norwich, 1990; Sandow, 1994; Farrell, 2004; Glazzard et al, 2010; Hall, 2009; Sage, 2007), the evolution of SEN's ideologies and conceptualisations of disability becomes apparent. The earliest work, that of Webb (1967), is almost incomparable with more recent textbooks such as those by Farrell (2004) and Glazzard et al, (2010). Yet many of the works with relatively early publication dates are not as incompatible with DS ideologies as is often claimed by DS scholars. This is clearly exemplified by Leach and Raybould's (1977) text as, although it contains many examples of deficit-orientated terminology, this work also displays numerous concepts found within the modern DS academy. Of particular note is the discussion of 'The effects of labelling' (p.22), found within the work's second chapter. This section argues that labelling can result in children being perceived entirely within the context of any labels assigned to them, causing teachers to overlook their other qualities. Furthermore, the way in which this work problematizes 'within-child' (p.27) perceptions of disability is similar to the way in which the social model perceives disability, in that both act to externalize it from the individual. Therefore, despite its publication date, this textbook can be seen to incorporate numerous ideologies traditionally ascribed to DS.

This examination, therefore, appears to suggest that many of the common DS critiques of SEN are outdated, at least when applied to SEN textbooks, and are only relevant to the very earliest of works. Glazzard et al.'s (2010) direct references to the social model, for example, would not be out of place within a textbook aimed at students studying DS:

The assumption within the social model is that disability is a social construct. It makes a subtle but important distinction between disability and impairment... (p.9).

Based upon the evolution of these works, it can be tentatively argued that the field of SEN is beginning to incorporate numerous DS ideologies, at least within the academic materials it produces. However, this integration does not necessarily mean that teachers are internalizing or accepting such concepts. Although the academic understanding of disability within SEN may be evolving, it is important that such changes filter down into the thinking of teachers working 'on the ground' in both 'mainstream' and SEN settings. Of course, the internalization and acceptance of such ideologies would not necessarily translate into practical application. It would, however, lay the foundation for pedagogical improvement.

BACKGROUND TO THE CURRENT STUDY

Much of the available literature regarding teachers' and trainee teachers' perceptions of disability focuses upon their perceptions of inclusion, training needs and other practical issues surrounding SEN (see Reinke et al, 2011; Shippen et al, 2005; Buell et al, 1999; Daam, Beirne-Smith, and Latham, 2000). There are, however, far fewer studies which examine teachers' general perceptions towards disability itself. Many such studies appear to be similar, utilising purely quantitative methods, often Likert-scales, to statistically investigate teachers' knowledge and beliefs regarding impairment (e.g. Brook et al, 2000; Trolley, Magerkorth, and Fromme, 1999). Therefore, those discussed below have been selected as they exemplify much of the other research available.

One exemplar of the numerous quantitative studies is that of Woodcock and Vialle (2011) which outlines the impact of teachers' expectations and prejudices on students, arguing that such expectations are linked into academic performance. This paper indicates that the label 'learning disability' often results in trainee teachers attributing different causes to a child's test 'failures'. Additionally, their results suggest that trainee teachers perceive 'learning disability' as '...an uncontrollable, stable cause of failure' (p.22). Furthermore, the trainees argued that ability and effort are less important in the attainment of students with the label than students without it, as they believed the labelled students' 'failure' is out of the students' control.

Brownlee and Carrington (2000) investigated student teachers' attitudes towards disability and disabled people, as well as attempting to alter the participants' opinions through interaction with a physically impaired teaching assistant. Results indicated that the trainee teachers largely found such interactions positive, and felt that they gained a greater understanding of both disability and disabled people. This journal, however, gives relatively little detail of the trainees' opinions and thoughts regarding disability, the aim of the current study. Instead, it largely focused on methods through which assumed negative perceptions can be altered.

A recent study by Samsel and Perepa (2013) investigated the relationship between media portrayals of disability and teachers' perceptions of their students. Utilising semi-structured interviews and questionnaires, their study suggested that the teachers had perceptions of disability based upon medical, deficit models, yet also perceived students as individuals, rather than grouping them based upon diagnostic labels, amalgamating both SEN and DS discourses. However, their study involved very few participants. As such, its results cannot be generalised into the wider educational context.

SUMMARY

The numerous differences between the two fields of SEN and DS lay the theoretical foundation for this study. While it can be seen from educational textbooks that the field of SEN is beginning to incorporate some concepts and ideologies from DS, this does not mean that teachers or trainee teachers are internalizing such discourses. Reviewing previously conducted studies both highlights gaps within the available literature and informs the next section of this literature review – the methodology. The next section, therefore, builds upon the studies and discourses outlined so far, in order to explore this study's research questions and problem.

METHODOLOGY

In this section, the mixed-methodology employed in answering the research questions will be introduced and justified.

The study involved three research questions:

1. To what extent do education textbooks aimed at trainee teachers incorporate ideas from SEN and DS?
2. How do trainee teachers experience and respond to contrasting SEN and DS discourses present within teacher training textbooks?
3. What particular concerns, areas and issues do trainee teachers raise in relation to the contrasting ideologies presented within these textbooks?

The usefulness of a mixed-methodology is not universally accepted. Quantitative and qualitative research approaches are built upon the fundamentally contrasting paradigms of positivism and interpretivism respectively (Sale, Lohfeld, and Brazli, 2002). Therefore, Sale, Lohfeld, and Brazli (2002) argue that combining the two within a single piece of research is often difficult as they cannot be said to elucidate exactly the same phenomenon. For example, while qualitative methods are often employed when investigating individuals' 'lived experiences', quantitative methods are all but useless in such situations. However, Sale, Lohfeld, and Brazli (2002) also argue that mixed methods methodologies can be effectively utilised within single pieces of research.

SAMPLE

Although, as discussed by Cohen et al. (2011), opportunity, or 'non-probability', samples are problematic due to the weak basis they provide for generalising findings, such a sampling method was deemed essential within the current study, in order to increase participation and to aid data collection. In particular, the time constraints involved in the study, which relied heavily upon data being collected from undergraduate participants before they left for the summer vacation, necessitated the use of such a sample in order to allow data to be collected within a relatively short period of time. As such, the participant group consisted of undergraduate QTS students living within the University's halls of residence.

According to Cohen et al. (2011), a minimum of thirty participants is required when performing statistical analysis within research. They argue that this number should be seen as a bare minimum. However, due to the time constraints involved in the study, only twenty-nine questionnaires were ultimately completed.

QUESTIONNAIRE DESIGN

Due to the time frame involved in the current study, and the trainees' workload during the research period, it was decided that the study would utilise a questionnaire-based format, as it is less time consuming for participants. The questionnaire required both quantitative and qualitative responses to a number of quotations taken from contrasting Special Educational Needs and disability studies discourses within textbooks aimed at trainee teachers.

Within the current study it can be said that the questionnaire's quantitative and qualitative sections examine subtly different phenomena. The quantitative semantic differential scale explores the participants' acceptance of contrasting discourses via the production of 'measurable', statistical data. The qualitative, open-ended questions are designed to allow participants greater freedom to introduce new ideas and concepts into the discussion and to gain a deeper insight. As such, both sections can be seen to be worthwhile in investigating the research's aim and to complement one another through their differences. Indeed, the main benefit of using both qualitative and quantitative methods in conjunction was that two distinct, yet complementary, data sets were obtained and then considered alongside one another. This allowed for 'between methods methodological triangulation' which involves utilising at least two different data collection methods (Cohen et al, 2011) to circumvent and minimise the many limitations inherent to both quantitative and qualitative research.

RESULTS & DISCUSSION

The following data analyses were conducted based upon the methods outlined within the previous section. In order to facilitate a clearer presentation, they have been divided into three sub-sections, followed by a short conclusion. The quantitative segment of the questionnaire is analysed first, followed by the second, qualitative, section. The third part of this analysis draws together the two, providing triangulation.

ANALYSIS OF THE FIRST SECTION OF THE QUESTIONNAIRE

The analysis of the participants' agreement ratings from the questionnaire's first section consisted of a number of t-tests comparing participants' mean agreement ratings for quotations containing either SEN or DS related discourses. This test revealed a significant difference between the mean rating scores for the two conditions. The negative t value obtained indicated that the trainees' ratings were, in fact, significantly lower for statements pertaining to SEN ideologies than for those relating to DS ones. Therefore, it was possible to conclude post-hoc that the trainees' mean agreement rating was higher for DS related statements than for statements pertaining to SEN ideologies.

This finding appears to contradict a great deal of the material presented within the literature review. If SEN and DS were truly as dichotomously distinct as is suggested in the numerous DS based critiques of SEN (such as Reid and Knight, 2006; Brownlee and Carrington, 2000; Danforth and Rhodes, 1997), it would be logical to expect that trainee teachers educated within an educational rather than DS context, would agree more strongly with the ideologies associated with the field of SEN.

This finding is, however, in line with the earlier discussion of SEN textbooks, which suggested that DS ideologies are beginning to influence academics working within

the field of SEN and that many of the common DS critiques applied to SEN may be outdated. Many of the most recently published SEN works explored, such as Glazzard et al, (2010), Hall (2009) and Sage (2007), incorporate DS discourses into the modes of thought they present – modes of thought which appear to have been incorporated into the participants' thinking when they rated their agreement to the nine quotations presented within the questionnaire.

However, it is necessary to note that all of the trainee teachers who participated were educated at the same university. As evidenced by their publications, many of the SEN faculty's lecturers are active within the field of DS. Thus the ideas presented to the trainees within their SEN lectures may incorporate DS modes of thought. Students undertaking their teacher training at other universities would be presented with different texts, arguments and ideologies, reducing the generalisability of the current study's results.

Additionally, despite the aforementioned statistically significant result relating to mean agreement ratings, many of the trainees' comments within the first section appear to reflect a greater division between the participants. One participant, for example, indicated very strongly that they identified with DS ideologies through the assertion that labelling can be used as a 'Reason of blame for lack of progress for child ... [and a] Get out clause'. Yet, another participant indicated they believed that 'Being investigated, although unpleasant, allows us further understanding of the child and their difficulty which means we can teach the child so they progress'. The qualitative data arising from the first section of the questionnaire, therefore, appears to increase the complexity of the apparently clear-cut findings of the quantitative analysis.

ANALYSIS OF THE SECOND SECTION OF THE QUESTIONNAIRE

A number of themes emerged during the analysis of Statement A of the questionnaire.

Statement A: Traditionally, we have looked for causes of learning difficulty in the child. Children have been subjected to tests and investigations by doctors, psychologists and teachers, with the aim of pinpointing the nature of the problem... [however] what and how we teach and the way in which we organise and manage our schools...[can] themselves be a major cause of children's difficulties (Norwich, 1990, p.ix).

Two of these themes were particularly relevant to the current discussion. The first of these, and the one most frequently present within the participants' responses, was an agreement, or partial agreement, with the phrase 'what and how we teach and the way in which we organise and manage our schools ... [can] themselves be a major cause of children's difficulties.' This is exemplified by the following quotations, taken from the responses of three different trainees:

The way we teach can be a major cause of children's difficulties because we as teachers need to be able to adapt to the needs of every child.

It seems a positive turning point as it acknowledges that the children should not be focused on but instead we should look at the environment and attitudes in society.

The fault lies in the school, it is up to us to support and engage children and if we can't the blame lies with us, not the child.

These statements, and numerous others, strongly indicate an understanding of the way in which societal and environmental factors play a role in disabling children labelled as having SEN. This indicates that the trainees had not internalized the purely individualistic, medicalized conception of disability which DS scholars often argue permeates the field of SEN (see Barden, 2014; Reid and Knight, 2006; Brownlee and Carrington, 2000).

Interestingly, four of the twenty-five trainees who responded to the first statement within the questionnaire also directly commented upon the way in which children do not need 'fixing' and many other participants indicated either discomfort or strong disagreement surrounding the use of the word 'problem' within the statement.

The strength of language and expression within many of the responses indicate a strong opposition to the medicalized, deficit-orientated perception of disability which scholars such as Barden (2014), Clough and Garner 2006 (in Bartlett and Burton, 2006) and Reid and Knight (2006) have frequently argued dominates the field of SEN.

Coding and categorisation of Statement B within the second section of the questionnaire (taken from Sage, 2007, p.67), through the process outlined within Denscombe (2008), led to the emergence of three important themes within the trainees' responses.

Statement B: Disability...[and] other terms with similar meanings includ[ing] 'defect', 'deficit', 'disorder', 'handicap', 'abnormality' and 'impairment'...all refer to the same condition: an inability to function in what is considered a normal way because of biological disturbances (Sage, 2007, p.67).

The most frequent theme was the questioning or rejection of 'normality' and an indication that the participants believed 'normality' to be socially constructed. This is highlighted by one participant's response, which rhetorically asked: *What actually is classified as 'normal', and is there a 'normal' way of doing things besides what society and the media have created[?]*. Another participant rejected the concept, stating that they believed: *...the word 'normal' is used too frequently today when really there is no 'normal'*. Such responses link into both the aforementioned social model of disability, which argues for the socially constructed nature of disability, and into other works within the field of DS such as Davis' (2010) chapter entitled 'Constructing Normalcy'. Here, Davis seeks to outline the social construction and etymology of 'normalcy' through an explanation of the historical foundations of the concept.

Given the apparent centrality of 'normalcy' to the modes of thought found within DS, and particularly to the social model of disability, it can be seen to be one of the disciplines most central ideologies. The trainees' apparent acceptance of this concept, as indicated by their responses to this statement, is important, as it strongly suggests their internalization of DS modes of thought.

A further recurrent theme emerged from the participants' responses to this statement. Many of the participants commented upon the manner in which the Quotations' use of 'negative' terminology and language led to a 'degrading', 'depressing' portrayal of disability. For example, one participant stated: *I'm not a fan of the negative words surrounding disabilities, such as 'defect and disturbances'. I think this is degrading*. As outlined within the earlier literature review, with reference to Bolt (2011), such issues regarding terminology and language are frequently of concern to DS scholars. Yet

the fact that such terms can be found within the majority of the textbooks discussed, strongly suggests that such a concern is not of primary importance within SEN. Thus, the way in which many of the trainees highlighted this issue within their responses again suggests a degree of acceptance of DS ideologies.

Of the twenty-four trainees who responded to Statement B, only three directly commented upon the quotation's assertion that disability is similar in meaning to terms such as 'defect', 'deficit', 'impairment' and 'abnormality'. One participant stated: *Comparing disability and abnormality is offensive*. Another argued that: *...disability can be perceived as the outcome of societal restriction, not just biology*. This suggests that the majority of the trainee teachers were not, at least consciously, aware of the distinction between impairment and disability, biology and society, which is so prominent within the social model and DS.

The final recurrent theme to emerge from the trainees' responses to this quotation is at least a partial acceptance of the statement's assertion that terms such as 'disability', 'impairment', 'defect', 'deficit', 'disorder', 'handicap' and 'abnormality' all refer to the same condition. One participant stated: *I agree with what this person is trying to say, however, dislike the way they have said it*, while another reported: *I think most of [the terms] do [refer to the same condition,] but I do not like the word 'defect'*. A minority of the trainees provided similar responses, in which they indicated a degree of agreement with the statement's underlying argument, yet questioned some of the specific terms within it. This reaffirms the idea that the participants may be unaware of many of the terminological distinctions and debates found within DS, including most notably the disability/impairment distinction presented within the social model of disability.

A number of themes also emerged from the analysis and interpretation of the third statement presented within this section of the questionnaire.

Statement C: ...the normal is defined by the abnormal. The very existence of... [normal] behaviour or performance creates the need for some individuals to be outside those norms; but...[what is considered normal is] variable, and depends on the 'needs' of society at any time. It can be argued that...the new 'special-needs industry' [has] had the effect of marginalizing more and more children with a greater variety of identified handicaps, while providing employment for an increasing number of professionals [such as special educators, educational psychologists and speech therapists] (Sandow, 1994, p.9).

The most prominent of these, a questioning or outright rejection of the concepts of 'normality' and the 'norm', directly links into the analysis of the previous statement. For example, one trainee rejected the idea of a normal/abnormal binary within education by stating: *I don't like the use of normal and abnormal in terms of children. I don't think any child can be called 'normal', everyone is individual and different*. Another questioned the concept through the use of rhetorical questions including: *What is normal? How can we define normal?* The recurrence of such notions within responses to multiple statements acts to strengthen the interpretation of the second statement.

THEMES PERMEATING MULTIPLE STATEMENTS

Drawing together and analysing the participants' responses to the three statements in combination elucidated two over-arching themes. As previously mentioned, a significant number of the participants questioned, or even rejected, the concept of

'normality' when responding to both the second and third statements. Such responses conflict with many of SEN's ideologies discussed thus far. For example, the work of Reid and Knight (2006), Brownlee and Carrington (2000) and Clough and Garner (in Bartlett and Burton, 2006) argues that the field of SEN contains a strongly medicalized conceptualisation of disability, involving diagnostic labels and a construction of disability built largely upon biological differences. If the trainees who participated in the current study had internalized and accepted such conceptualisations, it seems logical that they would not have widely questioned the concept of normality. Yet many participants did so within both the first and second sections of the questionnaire, as exemplified by the quotations presented earlier within this analysis.

As well as rejecting a number of SEN's fundamental ideologies, the participants' responses indicate a significant acceptance of DS ideologies. This can be seen within a number of the themes which emerged in response to specific statements, including a dislike of several terms problematized within DS, an acceptance of the role of society in causing children's 'difficulties' and the aforementioned questioning of both normality and the associated medicalized conceptualisation of disability. Despite this, the trainees' responses also favoured a number of SEN ideologies. This is demonstrated by their positive reaction to the 'special-needs industry' and the extensive inclusion of statements such as those which follow:

Schools cannot adapt to everyone's needs, it will always in some way cause difficulty for any individual child.

I think it is impossible to create a fully inclusive society that can adapt for every person's needs.

Additionally, the fact that the vast majority of the trainees failed to refer to DS's fundamental disability/impairment distinction in response to the second statement suggests that they may not be, at least consciously, aware of DS's ideologies to any significant extent.

The current study's participants perceived disability through an intermingling of SEN and DS discourses. Therefore, it appears that, in the same way as the textbooks explored earlier, the disability-related perceptions and conceptualisations of trainee teachers are undergoing a major shift, moving away from an exclusive reliance on SEN discourses towards an understanding based on the ideologies associated with DS. It is possible that the interweaving of SEN and DS discourses in textbooks has begun to influence trainee teachers, at least at the University in question, causing them to reassess many of their underlying beliefs and perceptions regarding disability.

CONCLUSION

Following data collection and research analysis, it was possible to attempt to answer the three research questions.

The literature review concluded that textbooks are beginning to incorporate, and even advocate, numerous DS discourses (Question 1). Although some older works were problematic from a DS perspective, more recent works presented an intermingling of the ideologies found within the two fields of DS and SEN. Indeed, the most recent works appeared to favour DS ideologies over those commonly associated with SEN.

Due to their inter-linked nature, this conclusion addresses the second and third research questions in conjunction. The main issue raised by the participants surrounded the concept of 'normality'. Many questioned or rejected this concept when responding to quotations from textbooks, strongly aligning them with the perceptions of disability found within DS. However, their responses also reflected an intermingling of both DS and SEN discourses, with many individual participants giving responses which reflected discourses from both.

The discussion of these research questions lays a foundation upon which to discuss the current study's research problem: 'An investigation into trainee teachers' experiences and internalization of contrasting SEN and DS discourses within textbooks aimed at trainee teachers.'

On first inspection, the quantitative data obtained appears to suggest a rather simplistic answer – that the participants had more strongly internalized those discourses associated with DS, leading them to question or reject those belonging to SEN.

Indeed, much of the current study has acted to blur the apparently clear-cut distinction between the two sets of ideologies. In addition, the qualitative analysis suggested that the trainees' internalized beliefs were not, in fact, as one-sided as it initially appeared. It can be concluded from the current study, therefore, that the trainee teachers experienced and perceived disability through an amalgamation of SEN and DS discourses. While it is not possible to firmly conclude that the participants' internalized beliefs originated from education textbooks, both contain an intermingled presentation of ideologies. It is therefore possible that the participants' beliefs were influenced and shaped by the presentations in these works, although further research would be necessary to confirm or contradict this.

THEORETICAL IMPLICATIONS

The current study builds upon the available literature exploring the perceptions of teachers and trainee teachers regarding disability. The findings contrast with those of many earlier articles. As previously mentioned, comparing the current study's results with those of older studies suggests a recent, ongoing shift in perceptions towards an increasing acceptance of DS' ideologies and discourses. This has significant theoretical importance for a variety of reasons. It provides a greater insight into the way in which teachers and trainee teachers conceptualise disability, and indicates that such perceptions may be linked to the portrayal of disability within textbooks. In addition, scholars working within DS often criticise those conceptualisations which they consider to belong to the field of SEN. By providing a further insight into such conceptualisations, the current study is beneficial to disability scholars and activists, as it highlights those SEN discourses which remain prevalent within an educational setting. This will allow them to focus their attention on confronting the problematic conceptions which remain, rather than challenging beliefs which appear to be largely historical.

Furthermore, the study blurs the supposedly firm boundaries between the two fields, suggesting the possibility of discussion and co-operation between them – a collaborative process which could alter the way in which teachers perceive disability in order to inform and improve academia, pedagogy and educational policy.

BIOGRAPHY

Stephen Newport undertook this research as his dissertation (worth 33% of his MA) while completing an MA in Disability Studies. This is of course a very cut-down version of the Dissertation, whose original version is 25,000 words long. He would be happy to discuss it (initially by email, please) with anyone interested.

He is currently working in a Special Needs school in Lancashire.

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Research Summaries

Research in Action

Issue 3 2018

Research Summaries

'Research in Action' aims to encourage the sharing of ideas and innovations in teacher education by making connections between research and practice. The journal aims to showcase research undertaken at Liverpool Hope University and within our partnership schools. This section provides brief summaries of recent/ongoing research projects undertaken by Liverpool Hope staff, colleagues from our partnership schools and PhD/EdD students to encourage professional learning and dialogue.

Research into the role of local authorities in supporting local school improvement systems

Ben Bryant, Simon Day, Simon Rea, Kate Wilson, ISOS Partnership

Across England, LAs are responding differently to the challenges facing the education system and are at different points on their journeys in developing effective school improvement systems with their schools and academies. In their efforts to drive up school standards, councils have taken a variety of different approaches to developing effective school improvement systems, responding differently to the challenges facing the education system.

The Local Government Association (LGA) commissioned an independent research organisation, ISOS Partnership (www.isospartnership.com), to investigate the ongoing role of local authorities (LAs) in school improvement.

KEY FINDINGS

Our research, informed by fieldwork discussions with a sample of eight local areas (Cumbria, Dorset, Hampshire, Liverpool, Somerset, Tower Hamlets, West Sussex and Wigan) and supported by discussions with other areas across the country, shows that there are eight key issues:

1. local systems are at different stages and taking different approaches in the transition to becoming more autonomous;
2. in the majority of local areas, strategic partnerships have been formed to facilitate and foster a shared, system-level vision for school improvement;
3. most local areas we visited were continuing – and planned to continue – to offer local authority school improvement services;
4. there was less evidence of local systems establishing approaches to the development of system leadership capacity;
5. most local systems had models of and approaches to school improvement that would be familiar to schools and local authority advisers;
6. local systems had been planning for reductions in funding and there was uncertainty about the future;
7. traded services were both complementing and conflicting with other school improvement offers;
8. local authorities have an important role to play in the local school improvement system.

Although councils are at different points on their journeys there are a number of key themes that can be found across all effective school improvement systems.

What conditions are needed to establish effective local school improvement systems?

An effective local school improvement system will have a range of features including:

- strong relationships between schools, academies, the LA, and other local and regional partners
- being focussed on context and place, and taking account of these contextual factors in developing an effective local vision
- clear local priorities and clarity about roles and responsibilities
- high-quality school improvement capacity, utilising school and other capacity, and
- effectively marshalling limited resources
- evidence of impact in improving outcomes developing school leadership and capacity, and strengthening partnership working
- supporting all children in the local area, including the more vulnerable.

We believe there are nine key conditions that are important in helping to establish such systems (see Figure 1). There will of course be differences in emphasis and priority between the conditions, according to the context of the local system, the existing relationships between schools, academies and the council, and the stage of transition. But we believe all of the following conditions will have relevance for most systems.

1. Clear and Compelling Vision	LA needs to co-ordinate and provide strategic push. Role for the LA as objective facilitator. Opportunity to focus on place and local context. LA can help to get roles clear.
2. Trust and High Social Capital	LA needs to model effective relationships and partnership working. Local democratic mandate can help sustain relationships founded on shared desire to find solutions.
3. Engagement from Majority of Schools and Academies	LA needs to be the honest broker. Compelling vision can get schools on board. LA role to reach out to schools, academies and MATs with offer for all local children.
4. Leadership from Key System Leaders	LA has opportunity to engage key leaders and facilitate discussions. Development of system leadership capacity can be a key purpose of local school improvement system.
5. Crucial Convening and Facilitative Role for The Local Authority	LA able to bring the intelligence from across the local school improvement system, utilise existing expertise and capacity, and support evaluation processes.
6. Sufficient Capacity for School-to-School Support	LA needs to support the local partnership to identify local capacity and broker from outside where needed. LA can help map future capacity, encourage school leaders, and commission system leader development programmes.
7. Effective Links with Regional Partners	LA needs to engage effectively with regional and sub-regional partners on behalf of and alongside the local school improvement system
8. Sufficient Financial Contributions	LA needs to support the development of the partnership with funding and/or capacity
9. Structures to Enable Partnership Activity	LA needs to work with schools to develop a multi-tiered structure that will work in their local context. LA can ensure that local school improvement system is high quality and credible.

Figure 1: Key Conditions to Establish Effective Local School Improvement Systems

How should local systems ensure their partnerships are sustainable for the future?

One risk for the sustainability of current partnership arrangements is that they are founded on effective working between individuals. When those individuals move on, the basis of the partnership changes and possibly weakens.

That is one of the reasons why some school/council partnerships have established themselves as separate, school-owned companies. There are positive reasons for this approach, but it is not necessarily the right approach for all partnerships.

How should local systems look beyond the local area?

To be sustainable in the long term local systems must look for opportunities beyond their own local area. This might mean identifying neighbouring local systems with similar challenges, finding opportunities to share practice, or establishing where particular local systems have areas of expertise to share. This might mean looking to teaching school alliances that work beyond the boundaries of one local system. It should mean looking for sources of support and funding to help develop the local partnership further, or perhaps to work and trade across boundaries.

For the full report, including the eight fieldwork case studies, visit: www.local.gov.uk/enabling-school-improvement

Exploring the relationship between academic optimism and school effectiveness

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Over the past four decades, three organizational properties of schools have emerged that have consistently been found to exert a powerful influence on school performance, even when controlling for SES. These properties include the **academic emphasis** of the school, the **collective efficacy** of the faculty, and the **faculty's trust** in parents and students. All of these properties are linked together as a single powerful latent construct called **academic optimism** that shapes school norms and behavioural expectations (Hoy, Tarter and Woolfolk-Hoy, 2006) (see Figure 1).

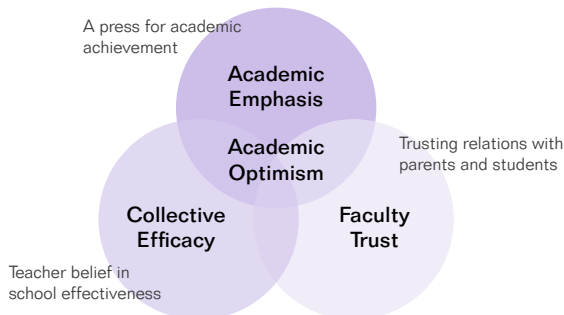


Figure 1: Academic Optimism in Schools

RESEARCH FOCUS

A large body of work now exists supporting academic optimism as a school-level property that predicts student achievement. However, further research across a variety of school settings and different cultural contexts is needed to contribute to the development of a theory of academic optimism (Hoy, Tarter and Woolfolk-Hoy, 2006).

To address this gap, qualitative data was collected from eight schools in a suburban district in the North West region of the United Kingdom. Data was obtained from school Ofsted reports and online government data-bases. Data collection centred on four key organisational and social properties of school effectiveness:

1. The effectiveness of leadership and management;
2. The quality of teaching, learning and assessment;
3. Student development, behaviour and welfare;
4. Outcomes for pupils.

A comparative analysis of the qualitative data was undertaken, contrasting schools identified as having high and low academic optimism. Optimism scores were based on the ratings of 235 teachers, using the School Academic Optimism Survey (SAOS). Reliability scores were calculated to measure the consistency of the three sub-scales in a different cultural context.

Participating schools differed on variables relating to school sector and key indicators of effectiveness (Table 1).

School	Phase	Pupils on Roll	Ofsted Overall Rating	Quality of Leadership	Quality of Teaching	Student Outcomes	Student Development and Welfare
S 1	Secondary	893	Good	Good	Good	Good	Good
S 2	Primary	243	Outstanding	Outstanding	Outstanding	Outstanding	Outstanding
S 3	Primary	353	Good	Good	Good	Good	Good
S 4	Primary	415	Outstanding	Outstanding	Outstanding	Outstanding	Outstanding
S 5	Secondary	917	Good	Good	Good	Good	Outstanding
S 6	Prim/Sec	1234	Good	Good	Good	Good	Outstanding
S 7	Special	100	Outstanding	Outstanding	Outstanding	Outstanding	Outstanding
S 8	Primary	473	Good	Good	Good	Good	Good

Table 1: School Demographic and Effectiveness Data

RESULTS

Standardized scores for the three properties of Academic Optimism were calculated and compared to normative sample scores (Hoy, n.d.). The standardized scores for all schools were in the moderate-high range across the three properties of Academic Optimism, and for Academic Emphasis were more than two standard deviations above the average of 500 and higher than 97% of sample schools (see Table 2).

School	Collective Efficacy	Faculty Trust	Academic Emphasis	Academic Optimism	Collective Efficacy	Faculty Trust	Academic Emphasis
	Mean Scores				Standardised Scores		
S 1	4.54	4.30	4.89	4.57	675	667	900+
S 2	494	5.08	5.68	5.22	796	866	900+
S 3	4.20	4.36	5.20	4.54	572	682	900+
S 4	4.05	4.40	4.38	4.28	527	692	900+
S 5	4.26	3.95	4.69	4.29	590	576	900+
S 6	5.23	5.05	5.14	5.14	884	858	900+
S 7	4.88	4.20	4.68	4.68	778	641	900+
S 8	5.09	4.60	4.93	4.85	842	743	900+

Table 2: Levels of Academic Optimism in Participating Schools

Qualitative data highlighted a number of organizational and relational properties of schools that may have contributed to these high levels of optimism. School effectiveness was likely a key contributing factor, with all eight schools receiving overall Ofsted ratings ranging from good to outstanding. Within these schools, a number of features likely contributed to the collective belief that staff could enhance student learning:

- Excellent leadership and management;
- Consistently good teaching, learning, and assessment;
- Ongoing attention to student development and well-being.

The study was in part a test of the reliability of a ‘foreign’ measure of optimism in UK schools. The measure proved reliable in the subsets of 235 respondents. Aggregating to the school level, the data showed correlations, which were not significant, but were large and in the anticipated direction (see Table 3).

Reliabilities (N=105)	Optimism r w/effective	w/effective & structure
Academic Optimism .87		
Perceived Effective .86	.56** (N=105)	.60 ns (N=8)
Enabling Structure .86		.19 ns (N=8)
** = p<.01		

Table 3: Reliability Scores

Data support continuing the inquiry on a larger scale. Further qualitative research would provide a richer understanding of life in high vs. low optimism schools. This work would contribute to the development of a theory of Academic Optimism.

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Enactments of character education in UK schools

Konstanze Spohrer, Education Studies, Liverpool Hope University

In recent years, character education has attracted renewed attention among education professionals, policy makers and researchers. In England, character education has been championed as a response to persisting educational inequalities by former Education Secretary Nicky Morgan who launched a character education grant scheme in 2015. In 2017, the scheme was replaced by the Essential Life Skills programme across 12 Opportunity Areas. Despite the high profile of character education, there is a limited research base on the ways in which character education is understood and put into practice locally.

The ongoing research project aims to examine school leaders' and teachers' understandings of the value of character education and the ways in which character is developed in their schools. Nine semi-structured individual interviews were conducted with school managers and teachers in three secondary schools in the North West of England. First findings indicate that character education is understood by schools as an umbrella for a range of activities relating to values education as well as the development of skills and behavioural characteristics in pupils. School leaders and teachers see the value of character development primarily as a foundation for educational and later life success and a way to develop good and well-rounded citizens; some respondents emphasised character education as a response to challenges such as mental health and a changing labour market. The participants agreed that character education is best developed through a concerted approach where character development is part of the school culture and embedded in all aspects of school life. There were tensions between and within schools as to what extent character development can and should be monitored and assessed. Future work within the project will explore the resources used by schools to teach character and how children and young people respond to character education activities.

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Book Review

Research in Action

Issue 3 2018

Book Review

Kinchin, I.M. & Winstone, N.E. (Eds) (2017) *Pedagogic Frailty and Resilience in the University*, Sense Publishers, Rotterdam 230pp

Whilst focusing on academic life in the University, this fascinating text does I feel offer interesting ideas to all education sectors. It gripped me because of two concepts that sit centrally within the book. They relate to a research project into academic life within the university sector.

1. The approach taken to the research was to use concept maps to explore the stresses and drivers within academic settings
2. The model for pedagogic frailty that emerges has validity and applicability for academics, lecturers, teachers, and indeed for any educators working in and critiquing their practice within organisational contexts

The editors have gathered together a number of perspectives to inform understanding of the concept of pedagogic frailty within the chapters of the book. Chapter explore the concept in the context of particular factors from the model and discuss implications for the individual and practice. The chapters also explain how the research was actually carried out using the tool of concept mapping to unpack experience and relationship between the individual and institutional priorities.

Ian Kinchin opens the book with an overview of the model and how it captures the tensions and interplay of factors in educational environments. The model itself is introduced on page 6, Figure 2. It presents the concept of pedagogic frailty as being constructed and influenced by, on the one hand, the regulative discourses or values that underpin a teaching community and the relationship/tensions between pedagogy and the discipline. On the other hand these concepts have a discursive relationship with the research–teaching nexus, and together these feed into the locus of control for individuals. Pedagogic frailty is influenced by this interplay between the regulative discourse, pedagogy and discipline and the research teaching nexus, and also by the locus of control. It can decrease or increase in relation to how the four factors are constructed and exert power within individuals' experiences.

Contributors provide scholarly and informative, accessible insights into the concept. In the subsequent chapters, they explore the way pedagogic frailty for individuals is constructed and fluctuates in the face of e.g. how teaching excellence is being framed, educational values; and they examine what pedagogic frailty implies for academic development, leadership and academic trajectories; as well as academic work in respect of quality enhancement, the discipline and relations with students.

The book closes with what is unfortunately a rather open-ended discussion of the opportunities and challenges posed by the idea of 'pedagogic frailty', suggesting more questions than answers. Nevertheless, in both its discussion and its unpacking of the concept, the book offers invaluable ideas that might inform leaders of change, academic developers and educators themselves because it provides insight into the interaction

between crucial cultural and organisational influences upon practice and the individual. For me it opened a door to a new way of considering issues of power, agency, and scope for action for both individuals and for those considering the structuring and influencing of educational and organisational systems and processes, whether in HE or more broadly across educational settings.

Dr Ruth Pilkington, Professorial Fellow of Liverpool Hope University



Call for Papers

Research in Action

Issue 3 2018

Call for Papers

Hope **Research in Action** is designed to encourage the sharing of ideas and innovations in teaching and learning by making connections between research and practice.

Each edition will bring together a selection of high quality research recently undertaken by Hope postgraduate students and teaching staff. We also showcase collaborations between the School of Teacher Education and our partnership schools, undertaken to advance the understanding and improvement of practice. These contributors will offer research-informed and scholarly ideas and inspiration to encourage professional learning and dialogue. The journal will include updates of new publications, details of upcoming events, and school-university partnership opportunities.

The journal aims to support a stimulating forum for professional dialogue amongst educators within and across institutions, building networks amongst our lively professional community of new and existing teachers, teacher educators, and colleagues from partnership organisations

PEER REVIEW

All papers for the Journal will undergo a peer review process, which is designed to be critical supportive and constructive, encouraging early and developing writers to engage with confidence in the Hope Community of Practice.

We welcome papers, work-in-progress, research reports and mini articles, book reviews of relevance to the community, and abstracts of action research, projects and early initiatives.

Submissions are given an initial screening by the editor prior to scrutiny by a team of reviewers from the Journal Editorial Board. (This body currently consists of Associate Professor Philip Bamber and Professorial Fellows Tina Cook and Ruth Pilkington.) Decisions, recommendations and comments to support submission are conveyed to authors together with feedback about the paper.

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Keywords: Please provide five or six keywords to help readers find your article.

Headings: Please indicate the level of the section headings in your article:

First-level headings (e.g. Introduction, Study, Conclusion and /or Implications) should be in bold CAPITALS (14pt). Second-level headings should be in bold, with an initial capital letter for any proper nouns. Third-level headings should be in italics, with an initial capital letter for any proper nouns.

Author biography – maximum of 150 words.

References use Harvard in text.

The following submissions are sought:

- Research reports and mini articles – of up to 3500 words
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- Short abstracts outlining project activity, action research, initiatives for sharing, etc -300-500 words
- Event announcements and reflections – 100 words

Date for Submission: Early December 2018 – date TBC; drafts reviewed January

All papers and prospective submissions for consideration to Ursula Leahy
leahyu@hope.ac.uk by Friday December 14th 2018 at 4pm

Review Feedback: Start of February

Planned Publication Date: Summer2019

Call for Reviewers and Members of the Editorial Board – The Journal Editors would like to invite interested persons to become reviewers and editorial board members. Please email Ursula Leahy – email as above – to express your interest. Also email Ursula with any general queries, and if email addresses fail to reach the intended recipient.



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