



McGinley, Colette *What effect does the implementation of reading comprehension strategies have on pupil understanding of unfamiliar topics in S2 Modern Studies?* [MEd].

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**University
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‘What effect does the implementation of reading comprehension strategies have on pupil understanding of unfamiliar topics in S2 Modern Studies?’

**A dissertation submitted in part requirement for the degree MEd
Professional Practice**

Word Count: 16,394

August 2020

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Abstract

It is not yet clear what impact COVID-19 school closures (March-June 2020) have had on the widening attainment gap within the Scottish education system. Through continuous reflection on and improvement of their professional practice, teachers can help ensure ‘excellence’ and ‘equity’ for all and provide valid insights and contributions to wider educational change.

This research looks at the proposed implementation of the reading comprehension strategies ‘guided reading’ and ‘paired reading’ as a means to support literacy attainment and reading instruction in S2 Modern Studies. The data collection methods pre/post-test, observation and questionnaires are analysed and justified within the context of a mixed methods, action research approach to professional enquiry. Findings from the literature expose the need to develop pupil’s metacognition and self-regulation so that all pupils, regardless of social background can be successful in their learning across the curriculum.

Acknowledgements

I would like to thank my supervisor for her continuous feedback and guidance throughout this dissertation process. Thank you to my family and friends for their unwavering support.

Permission to Consult

The author gives permission for this dissertation to be made available to anyone who knows of its existence and who wishes to consult it.

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Abbreviations

GTCS – General Teaching Council for Scotland

USA – United States of America

CfE – Curriculum for Excellence

PISA – Programme for International Student Assessment

EEF – Educational Endowment Foundation

NIF – National Improvement Framework

SIMD – Scottish Index of Multiple Deprivation

SNSA – Scottish National Standardised Assessments

OECD – Organisation for Economic Co-operation and Development

IT – Information Technology

SWEIC – South West Educational Improvement Collaborative

BGE – Broad General Education

SCQF – Scottish Credit and Qualifications Framework

CIPD – Chartered Institute of Personnel and Development

ABI – Acquired Brain Injury

SQA – Scottish Qualifications Authority

ASN – Additional Support Needs

EAL – English as an Additional Language

AR – Action Research

UK – United Kingdom

UNCRC – United Nations Convention on the Rights of the Child

PAR – Participatory Action Research

GDPR – General Data Protection Regulation

BERA – British Educational Research Association

UN – United Nations

PVG – Protected Vulnerable Groups

SCEL – Scottish College for Educational Leadership

NQT – Newly Qualified Teacher

CPD – Continuing Professional Development

Introduction

Promoting 'Literacy', defined as "the set of skills which allows individuals to engage fully in society and in learning, through different forms of language, and....texts" (Education Scotland, 2009) is not only a Scottish Government priority, but it is the responsibility of all educators and curriculum leaders across Scotland (GTCS, 2012). Modern Studies (and Social Subjects) teachers are in prime positions to aid the development of key literacy and numeracy skills as well as foster "decision making, detecting bias, ...[applying] knowledge, interpreting statistics, supporting opinion" (Proctor, 2018, p.467). In essence, this curricular area enables young people to develop the key skills that are needed for the twenty-first century workplace (Scottish Government, 2008). This poses the need for an investigation into how to develop and support literacy in the Modern Studies classroom and in content curricular areas generally.

Interventions to support literacy are of particular importance in the wake of the Coronavirus pandemic which saw classroom teaching move to 'online learning'. Prior to school closures on the 20th March 2020, the intention of this study was to consider the impact of reading comprehension strategies on pupil understanding of key curricular areas in S2 Modern Studies. The purpose of this enquiry now, is to gain a better understanding of the pedagogical, political and psychological factors which can influence pupil engagement with reading, as well as exploring pedagogical improvements which can be made in the researcher's own professional practice. It is hoped that the shared findings from this investigation and research proposal may be applied across different educational settings and advance the wider political, pedagogical discussion surrounding literacy attainment and reading comprehension in the secondary classroom.

POLICY CONTEXT AND RATIONALE

To be successful in Social Subjects, it is essential that pupils develop the key skills needed to understand, analyse and evaluate written sources. Yet, children with low reading skills struggle to interact with traditional classroom reading (Ciborowski, 1995), consequently missing out on key curricular content. This research seeks to identify if reading comprehension strategies can support learners to engage with this vital skill of information handling. To achieve this, this study will analyse the extent to which the implementation of 'guided reading' and 'paired reading' strategies in S2 Modern Studies lessons may increase curricular knowledge and contribute to an increase in literacy attainment. It is hoped that any student engaging with these reading strategies will gain a greater independence and a deeper understanding of curricular content and skills.

Although the author advocates for reading comprehension implementation across curricular areas, Modern Studies will be specifically highlighted for a number of reasons. First, the author's GTCS registered subject and area of expertise is Modern Studies. Second, Modern Studies is a discipline unique to the Scottish Education system and different to Citizenship Education (England) and Social Studies (USA). Thus, the investigation seeks to contribute to this significantly under researched discourse. Third, Modern Studies and discrete subject disciplines are "under threat" for a more Social Studies approach (Priestley, 2009). This may be due to budget cuts or the benefits of an interdisciplinary approach (Priestley, 2009). Through

an investigation into reading comprehension strategies and their application, this study seeks to highlight the important contribution that the discrete subject Modern Studies can make in integrating literacy instruction into the wider school curriculum and the benefits that this has in school and beyond.

National Policy: Scotland

There have been significant, systematic pedagogical and political changes in the Scottish education system in recent years, from the implementation of Curriculum for Excellence (CfE) in 2014, to a recognition of the widening attainment gap between the most disadvantaged and affluent learners. Pupils living in the most deprived areas are more likely to achieve one Higher while their more affluent counterparts leave school with five Highers (The Times, April 2020). This link between poverty and attainment, backed up by concerns over declining literacy skills and reading scores (PISA, 2019), has led to numerous Scottish policy initiatives.

Scotland's First minister announced that education would be her government's 'priority', a pledge backed up by a £750 million 'Attainment Scotland Fund' (Scottish Attainment Challenge, 2019). The main aim is to improve literacy, numeracy, and health and wellbeing in nine "challenge authorities" with the highest concentrations of deprivation (see Scottish Government website). However, the 'excellence and equity' policy document has been critiqued as a blanket intervention which merely focuses on "simplistic numerical equality... which may lack clarity and precision of focus" (Gillies, 2018, pp.112-113). Added to this, the First Minister's Reading Challenge (2016) was set up to "positively impact attainment by building reading cultures in schools, families and communities to support and nurture reading for pleasure" (Research Scotland, 2018). However, there seems to have been a greater up-take of this initiative in primary schools only, perhaps due to flexible time arrangements or the nature of the challenge's game-based activities. This significant political focus has resulted in increasing pressure on schools and educators to improve attainment and achievement outcomes for all pupils, in a context of imposed "Cuts to support and classroom assistants whilst continually asking for more to be done in the classroom...you can't raise attainment without support or resources yet neither are given" (Scottish Government, 2017, Response 792111357). Yet, these attainment interventions need to go much further as increasing funding doesn't directly increase individual attainment; "what matters most is how schools can effectively and efficiently use the resources they have for maximum impact (EEF, 2018, p.3)."

The National Improvement Framework (NIF) highlighted that the only way to improve the gap nationally is;

"more robust and consistent evidence" that can identify "the size of the attainment gap at different ages and stages... Improved data on children's progress at key stages, including differences between those from the least and most deprived areas, [that] will allow for planning further interventions to ensure that all children achieve as well as they can" (NIF, 2016, pp.16-17).

One of the ways that this can be achieved is for schools to use classroom formative assessment and practitioner enquiry data alongside the Scottish Index of Multiple Deprivation (SIMD) and apply the intensely debated Scottish National Standardised Assessments (SNSA) data to "track and monitor the ongoing progress of all pupils" and "to measure the impact of interventions

designed to raise and narrow gaps in attainment” (NIF, 2016, p.1). Consequently, this drive for data has resulted in a move away from valuing and recognising teacher professional judgement (Ellis, 2018, p.330). This has faced further scrutiny in light of the 2020 examination diet cancellations; as children from deprived areas were more likely to have their teacher’s estimate downgraded (The Guardian, August 2020) due to the “optimistic” inflation of pupil pass rates (SQA Chief Examining Officer, August, 2020). These policies outlined above are founded on a so-called “what works” evidenced-based research strategy (Scottish Government, 2017) and yet, who is conducting this research? Who decides ‘what works’? (Scottish Government, 2017, Response 792111357), and are practitioners being consulted at local and national levels?

In a context where national government and local authorities are vying for control over education, an international policy document which has had significant implications for debates over attainment in Scottish schools was the Organisation for Economic Co-operation and Development (OECD)’s report on the quality and equity in Scottish schools (OECD, 2007). It is important because the debate about the OECD’s authority and influence in Scottish schools “reflect a larger issue around the direction and processes attached to educational change” (Lingard & Rawolle, 2009). This is particularly worthy of note in an action research study that seeks a ‘bottom-up’ process of change to improve literacy attainment in a Scottish school.

Teacher research must be valued and resourced by policy makers as “these inequalities in education are a product of wider socio-economic inequality: inequality that is already proving to be exacerbated by the COVID-19 pandemic and resulting economic crisis” (Black, 2020). The researcher has observed the effects of the significant period of ‘online learning’ on pupils from disadvantaged backgrounds without IT or internet access, with varying home situations and circumstances falling behind in comparison to their affluent peers. It may become increasingly important for educators on their return to full time education to ‘plug the gap’, thus pointing to the need for targeted resources and interventions based on teacher research rather, than imposed top-down systems of policy and funding.

Local Government Policy and Procedures

“Local authorities are not immune from Scottish Government pressure to improve educational outcomes” (Bell, 2018, p.958). Each authority has responded to attainment differently, respective to local circumstances and challenges. Thus, there are varying geographical nuances of attainment, which is why it is important to set out the local context in which this investigation into literacy attainment is located. South Ayrshire is part of the South West Educational Improvement Collaborative (SWEIC) which seeks a collaborative approach to improve achievement across East, North and South Ayrshire, and Dumfries and Galloway. In comparison with the other Ayrshire authorities, South Ayrshire has a mix of SIMD deciles (Figure 1) which affects both local educational attainment and national government funding. South Ayrshire’s Scottish Attainment Challenge funding allocation based on deprivation for 2020/21 was £399,523 in comparison to £3,762,790 (East Ayrshire) £5,767,252 (North

Ayrshire). South Ayrshire’s funding for the next academic year (2021/2022) is £2,398,707 (Scottish Government, 2020).

Figure 1: Percentage of pupils by SIMD Decile 2018/19 (taken from SWEIC, 2019)

	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10
D&G	5.5	4.2	8.5	17.7	14.5	24.0	9.6	6.3	4.0	5.6
East	12.9	21.5	10.9	12.6	9.7	5.9	6.0	8.1	8.5	3.8
North	16.9	26.8	11.8	9.9	5.9	6.6	6.9	5.7	7.8	1.8
South	8.6	10.3	9.8	16.6	14.8	9.1	3.0	9.5	9.8	8.6

Source: Scottish Government, Pupil Census Supplementary Tables 2018/19

These deprivation levels therefore have an impact on pupil achievement. 96 percent of all South Ayrshire school leavers in 2018 achieved level 4 literacy and 85 percent achieved level 5 literacy. This compares to 94 percent achieving level four and 79 percent achieving level five in East Ayrshire (SWEIC, 2019). However, this data seems to mask the realities of the attainment gap in South Ayrshire. Despite this comparative success of South Ayrshire school leavers, the literacy attainment gap between those in quintile one and quintile five, is 25 percentage points in primary one which increases to 34 percentage point gap in literacy achievement in S3 (Figure 2). In 2018, the combined ‘literacy and numeracy’ attainment gap at level four increased by five percent back to its 2016 level. A five percent increase in the attainment gap was also seen at level five back to the level in 2015 (South Ayrshire Council, 2019, p.19).

Figure 2: Percentage point difference between Quintile 1 and Quintile 5 achieving expected CfE levels (SWEIC, 2019)

	P1	P4	P7	P1,4,7 Combined	S3(L3+)	S3(L4+)
North						
Reading	16	16	14	15	5*	20
Writing	19	10	21	16	4*	22
Listening and Talking	11	21	13	13	3*	15
Literacy	20	16	21	18	5*	21
Numeracy	13	22	19	14	4*	28
South						
Reading	18*	16	11	15	16*	39
Writing	20	18	18	18	16	37
Listening and Talking	8*	9	10	9	15*	32
Literacy	25	19	19	21	20	34
Numeracy	8*	15	15	11	13	44

Source: Scottish Government published tables – Achievement of Curriculum for Excellence (CfE) Levels 2017/18 (Table 11)

* Shows where data has been published in bands due to small numbers, therefore are approximate value

The reason for this increase is unclear, given the various local measures that have been initiated, such as recent changes in tracking and monitoring system for BGE pupils and investment in the quality of learning and teaching through professional development courses such as Making Thinking Visible and Three Read, Word Aware, and Reading wise (South Ayrshire Educational Services, 2017/18, p.5). Moreover, these reading programmes and interventions

are mostly primary focused. Added to this, South Ayrshire has its own reading challenge which encourages children aged four to 11 years to read six books over the summer, but it favours those with social capital. Children can get free access with a library card but the programme is online, something which will prove challenging given that libraries and other public spaces which provide free wifi are currently closed. This highlights the importance of strategies that can be integrated into secondary curricular tasks and activities to remove barriers to equitable participation.

It is hoped then, that this enquiry can have potential benefits in providing insight into strategies to address the literacy attainment gap and contribute towards the authority's aim to "Increase the percentage of all leavers achieving SCQF levels four and five in literacy and numeracy" and ensure quality learning and teaching (South Ayrshire, 2018, p.5) as outlined in the researcher's departmental improvement plan (2019-20).

AIMS

In order to examine and challenge these deep-rooted and systematic inequalities that exist within the classroom, the following questions will guide this research; *what factors influence pupil 'literacy' (reading) attainment? What can a classroom teacher do to improve 'literacy' attainment outcomes in a Modern Studies classroom context (pedagogical implications)?*

Therefore, to assess the impact, the aims of the proposed study are as follows;

- to assess literacy attainment in Modern Studies (and consequently curricular knowledge), through the implementation of reading comprehension strategies
- to find out if using the 'guided reading' and 'paired reading' strategies, enables pupils to work independently
- to actively engage with the participant's pupil voice and gather their opinion on the effectiveness of the tasks.

This will enable the researcher to draw conclusions and make recommendations for future practice with regards to using reading comprehension support strategies. to help improve learning and teaching for the benefit of all pupils in the classroom.

Detailed academic understandings of the process and benefits of reading comprehension, as well as the factors which can influence 'successful' reading and their pedagogical implications will be discussed in Chapter Two. Based on this, findings and recommendations for educators and policy makers will be posed. Chapter Three considers the implications for this reading comprehension proposal in practice and outlines the methodological, ethical and limitation considerations of the proposed classroom intervention.

Review of the Literature

With the ever-increasing literacy attainment gap between our most disadvantaged and affluent learners, Scottish educators must prioritise every day classroom interventions and solutions. The purpose of this chapter is to explore the technical processes involved in reading comprehension, as well as identify the barriers which might affect its effective implementation in the classroom. These understandings will enable consideration of the practical implications for teachers seeking to integrate explicit literacy (reading) instruction in specific secondary curricular areas to increase attainment for all pupils.

SEARCH STRATEGY

The aim of this review is to retrieve the available literature to answer a specific research question (Boudah, 2011; Higgins, 2011) and identify 'what works' (Boudah, 2011). An initial preliminary survey of the literature was done to refine the proposed intervention, consider search terms (Oliver, 2002) and create a sound ethical application. The following search strategy is based on the Monash University Model where key concepts and terms were identified, relevant resources were selected, searches were combined with Boolean operators and the results viewed (Punch & Oancea, 2014). Four different search concepts were identified; 'reading comprehension', 'metacognition', 'strategies', 'social studies' and synonyms for these key words included. The researcher used phrase searching to ensure that both words appeared in the literature titles. When searching for strategies, an asterisk was included to enable searchers for the root of the word and substitute the word strategy(ies) for method(s) and framework(s) for wider scope.

The number of results on 'reading comprehension', excluding newspapers and book reviews, in the Glasgow University Library database was 224,602. I then used subject headings in the database to get hits across the different disciplines of education (n=79,818) and psychology (n=40,135) which gave a total of 106,347 results. 1,228 records excluded as they were hard book copies which could not be accessed because of the library closure. 1,477 records were excluded based on non-English written language (n=103,642). The results were then filtered for journal articles (5,975) and ebooks (89).

To refine the results further, the search strategy was amended. With the aforementioned filters applied, Boolean operators (Punch & Oancea, 2014) were used to combine search terms 'reading comprehension' and 'metacognition' (n=1,613). Finally, this was refined using the subject term, 'educational research' (n= 2673) and the literature was then screened for relevant articles. To ensure the inclusion of key policy and major academic models and frameworks, these documents were identified and consulted through citation searching and the researcher's prior conceptual understanding of the research area.

This process was repeated for the search concepts 'strategies' and 'social studies'. As mentioned in the previous chapter, because Modern Studies is a subject discipline unique to the Scottish Education system, literature searches included reading international comprehension interventions from 'Social Studies' in the United States to 'Citizenship Education' in England. To filter research results further, Boolean operators were used to

combine different search concepts together, for example using ‘and’ to search for the terms ‘reading comprehension’ and ‘social studies’ (n=68,135) as well as ‘reading comprehension’ and ‘Citizenship Education’ (n= 2,831).

Due to reporting restrictions, only the contributions deemed most relevant were included. The number of records excluded based on title and abstract were (n=9). Full-text articles accessed for eligibility were (n=125) and the number included in the review below (n=113) (appendix 1.1).

LITERATURE REVIEW

What is reading comprehension?

Reading comprehension is an area thoroughly researched within the disciplines of education and psychology. The concept itself is multi-faceted and complex. The act of reading comprehension can be defined as “reading for meaning” (Clarke et al., 2014); an interaction in which the reader ‘extracts’ and ‘constructs’ meaning from written text (Kong, 2019, p.9; Clarke et al., 2014).

Reading comprehension is therefore a process which brings together “language, literacy and knowledge” (Bernhardt, 1991). Early interpretations across scientific and linguistic disciplines saw this process as a linear or a hierarchical chain in which one event must occur for the proceeding steps to occur. From a traditional psycholinguistic perspective, reading comprehension is viewed as a “psycholinguistic guessing game”, in which the reader makes hypotheses (Goodman, 1967) and through this process, questions are answered (Smith, 1978). In this understanding, comprehension of the text is achieved through the ‘top-down processing’ of information. The reader starts by briefly reading and seeking to understand the written text as a whole. From this, paragraphs, sentences then words are deconstructed and their meanings analysed (Goodman, 1967; Smith, 1978). This enables the reader to pick apart the nuances of the word choice from contextual clues in the overall narrative. However, this sequential method seems to suggest that every pupil thinks and processes information in the same way when reading. It fails to account for individual experiences and difficulties. Furthermore, this model implies that if the reader doesn’t understand the text as a whole, (i.e. stumbles at the first hurdle) then the reader cannot gain any meaning or knowledge from different components of the text.

From a cognitive-psychological standpoint, reading and reading comprehension is a learned behaviour acquired in stages (Gough, 1972; Laberge & Samuels, 1974). In its simplest form, reading comprehension can be expressed using the following formula; “reading = decoding x comprehension” (Gough et al., 1996). A pupil can only be described as ‘reading’ if they demonstrate both a “decoding ability and comprehension of the text” (Tennent, 2016, p.5; Snow et al., 1998). This is achieved through ‘bottom-up processing’, in which information from individual words (phonetical knowledge) enter the retina, the individual word is processed and made sense of in the brain, then sentences and paragraphs come together to unlock the meaning of the text as a whole (Gough, 1967; LaBerge and Samuels, 1974). Therefore, the literature advocates that early years educators must initially focus on the teaching of phonics. However, phonics instruction alone does not explicitly explain nor effectively manage the difference between slow and skilful readers in secondary school. Why do some learners struggle to unlock the meaning from text when they know individual words and sounds?

Moreover, skilful readers spend less time reading individual words/sounds and more time linking it to their own background knowledge and understanding (Alderson, 2000, p.18). This suggests that a contextual understanding (top-down) and word recognition (bottom-up) happen/are needed in tandem and are both required to fully comprehend a text.

Therefore, this idea of linear processing is inherently problematic. Levy (2011) notes that although there was this great debate about reading comprehension in the academic sphere, very few educators accepted these polarised stand points outlined above. Hall (2003) further stressed that reading is not an innate concept or process; that reading comprehension is “bound up with ethnicity, gender, social class, disability, and so on” (Hall, 2003, p.189). If we recognise that reading exists in a social and cultural context, then we can appreciate that these factors, inherent in the personal characteristics of the individual reader, can influence reading comprehension. Thus, the literature in this area has moved toward an understanding that reading comprehension happens through ‘interactive processing’ which occurs at multiple levels, simultaneously and incorporates the readers own personal understandings and previous background knowledge (Kintsch & Rawson, 2005). Therefore, if the reader comes across an unfamiliar word, their contextual, background knowledge of a topic can often provide clues and help them to guess the meaning and vice versa (Stanovich, 1980). This socio-political understanding of reading mirrors that of the social-constructivist movement, the realisation that knowledge is not an innate concept but that it holds power and meaning which has been constructed by society. Therefore, it is appropriate to recognise and deconstruct the prescribed labels and meanings of texts, as this in turn affects how the reader processes textual information. This holistic understanding of reading comprehension is only achievable through an appreciation of contextual factors.

Factors which influence reading comprehension

As outlined above, “reading comprehension is dependent on several cognitive and linguistic processes” (Muijselaar, et al., 2017). It is this interplay between the reader and the textual language influences successful achievement of a specific reading goal (Enright et al., 2000). Thus, if socio-cultural differences among individual readers are accounted for, then it can be concluded that there are numerous variables, which may affect successful engagement in reading comprehension.

Individual characteristics such as age, gender and nationality, among others, can influence the reading comprehension process (Bachman & Palmer, 1996, p.64). This is because these factors influence the reader’s perceptions, ideas and understandings of the world. All of these characteristics inform the reader’s background knowledge which contributes to their personal representation of meaning (Kintsch & Rawson 2005), which they extract and internalise from a written text. The background knowledge that the reader holds and activates during reading is labelled ‘schemata’. In other words, previously learned knowledge comprises of “networks of information stored in the brain which act as filters for incoming information” (Alderson, 2000, p.17). These personal, organisational filters will vary among readers based on their knowledge collected from their varied lived experiences. This schemata, stored in the long term memory, impacts reading comprehension because it shapes how the reader ‘looks’ and searches for information and how they subsequently process, organise and store the information (Symons

& Pressley, 1993). Therefore, as the schemata of each reader is different, this allows for differences in reading ability.

Some readers experience significant barriers to their learning. Young primary students who experience reading difficulties, often face difficulties with phonological awareness (Chall, 1983). This is because, there are two skills needed for reading comprehension, ‘decoding’ and ‘listening’ (Arron et al., 1999). Therefore, there is a link between reading comprehension and listening comprehension (Catts et al., 2005) and without mastery of these skills, pupils are unable to understand the text (Gough & Turner, 1986). Also, ‘poorer readers’ tend to be “anxious and uncertain about their reading ability, and their uncertainty or anxiety generalises to other learning tasks” (Ciborowski, 1995). By the time these pupils progress to secondary school, not only is their reading comprehension affected, but their spelling, writing, vocabulary (Snider & Tarner, 1987) and even their ability to draw conclusions (Nation, 2008) can be impacted. “This reading gap between primary and secondary school can see many pupils unprepared for the changing demands in academic reading in secondary school and with too little time to catch up” (Quigley, 2020, p.3). Therefore, early intervention is key. Before a child starts school at five years, the vocabulary gap between the most deprived and least deprived children is approximately 18 months (Bradshaw, 2011). Research suggests that this is due to differences in the number of words that children are exposed to and the quality of that interaction (Parsons & Branagan, 2016; Sosu, 2018). Previous background knowledge and exposure to different words increases vocabulary and thus aids reading. All of these issues highlight that delays in word processing can interfere with reading comprehension.

Cognitive rehabilitation and ‘special education’ literature have highlighted that factors such as; attention and memory can impact reading comprehension (Caretti et al., 2005). Textual content and design have also been identified as having the potential to hinder reading comprehension (Alderson, 2000, p.61). Therefore, “reading difficulties are defined as the inability to decode accurately and fluently as well as comprehend written material” (Horowitz – Kraus & Finucane, 2016, p.1). 80 percent of those with learning difficulties are dyslexic (Lerner, 1989). Recent studies into children with dyslexia have highlighted that difficulties with comprehending reading material are not just down to poor vocabulary exposure or being a poor reader, but that there is a ‘dysfunction’ in the left hemisphere of the brain (Shaywitz & Shaywitz, 2008). However, if we are to truly make education inclusive then we need to recognise the value that dyslexic thinking can bring (Value of Dyslexia Report, 2018) and resist negative labelling, as self-worth is a vital prerequisite to successful learning. In this sense we can understand dyslexia as under the umbrella of neurodiversity (cognitive diversity), where dyslexic people process information differently and exhibit different neurocognitive functioning (Neurodiversity at Work, CIPD 2018). Therefore, as educators we need to think of strategies and supports to unlock their thinking.

Given the international focus on attainment in recent years, the contemporary educational discourse seeks to understand ‘emotive barriers’ and the link between achievement and engagement (OECD, 2010; Jung-Sook Lee, 2014; Abubakar, Abubakar & Itse, 2017). A survey of 800 primary and secondary pupils in England uncovered gendered differences in attitudes towards reading; boys were more likely to find reading boring and difficult (National Literacy Trust, 2005). The results highlighted that reading efficacy declines between primary and secondary, as primary pupils rated themselves as better readers than secondary pupils (National Literacy Trust, 2005). Therefore, preconceptions of reading can influence individual

attainment. Coady (1979) recognised that the reader's conceptual ability forms part of the reading comprehension process. If a reader believes that they are unable to read or that they hate reading, this creates a barrier to learning. Bachman and Palmer (1996, p.65) note that 'affective schemata', known as the emotional parts of a reader's background knowledge, has the potential to either help or hinder a pupil's ability to read or utilise metacognitive strategies to help them comprehend written text (see Greven et al., 2012). This emotional connection might be either positive or negative due to a previous personal reading experience (Kong, 2019). This analysis seems to imply that students with social-emotional difficulties will also face challenges when reading or when engaging with texts (Arnold et al., 2005). This has significant implications for the attainment gap, as working on mindset through successful reading comprehension can help achievement. Growth mindset research shows that mindset can help reduce the attainment gap as "students in the lowest 10th percentile of family income who exhibited a growth mindset showed academic performance as high as that of fixed mindset students from the 80th income percentile" (Claro, Paunesku & Dweck, 2016). Consequently, there is a drive to build resilience and a 'growth mindset' among pupils (Andersen & Nielsen, 2016; Claro, Paunesku & Dweck, 2016), but there seems to be little consensus on successful subject specific interventions, to increase attainment through mindset.

Thus, given this link between pupil self-efficacy and barriers to reading comprehension, educators may wish to consider focusing less on differentiated or watered down textbooks but rather, help their students "gain or regain the confidence in their abilities and the control of their learning lost through years of an accumulation of academic frustrations and failures" (Ciborowski, 1995). If a pupil has an intrinsic interest in reading and enjoys the learning process (Dweck, 1999; Zimmerman, 2002) and believes that this will lead them to attain the learning goal (Bandura, 1977), then reading has the potential to enable a child to be successful.

Impact on pupil understanding

To investigate the impact of reading comprehension or the extent to which pupils are able to 'comprehend' a text, it is useful to briefly consider what it means to 'know' or to 'understand'? It is not within the scope of this study to go into depth about the varying historical origins and philosophical nuances of epistemology (see Sandoval, Greene & Bråten, 2016) but it is recognised that 'knowledge' is socially constructed and that what is considered 'knowledge' in one discipline, might vary to another. Similarly, "literacy is both cognitively and socio-culturally linked to the contexts in which it occurs" (O'Brien et al., 1995). Therefore, we must recognise the nuanced differences in individual subject disciplines (aka disciplinary literacy) (EEF, 2018). In Modern Studies, for example, knowledge about contemporary events and issues are 'acquired'. Knowledge and understanding in this context include; "the retention of information, the analysis... and the evaluation of different types of evidence and viewpoints" (SQA Course Specification, p.31). This section will discuss reading comprehension and metacognitive thinking and the impact on curricular knowledge.

Vygotsky (1978) understood different types of knowledge as engaging with higher cognitive processes and functions. It is in this way, that 'knowledge' and 'understanding' are linked to metacognition. Metacognition, is an individual's awareness (knowledge) about the 'how to think' in order to effectively learn and understand (Flavell, 1976). Metacognition is recognised as "having knowledge (cognition) and having understanding, control over, and appropriate use

of that knowledge” (Tei & Stewart, 1985, p. 47). Interestingly, Kolić-Vehovec et al. (2014) found that just as gender can influence reading, gender can impact metacognition; as girls, particularly as they got older, “consistently demonstrated better metacognitive knowledge, as well as more positive attitudes toward both recreational and academic reading when compared to boys” (Kolić-Vehovec et al., 2014,p.82). This points to a need for explicitly teaching metacognitive thinking to enable all pupils to succeed in and enjoy reading.

Analysing the impact that reading comprehension has on pupil understanding and metacognition requires an appreciation of how pupils learn. The ‘social learning theory’ posits a difference between “enactive learning”, where an action or behaviour is taken and its consequences observed and “vicarious learning”, where knowledge and understanding are gained through observation or listening to others modelling behaviour (Bandura, 1977b). However, this implies that the learner is passive and based on the ‘interactive’ processing model of reading comprehension explained earlier in the chapter , we know that the learner plays an active role in the process. Zimmerman (1990) further developed this understanding to stress that the learner is “not just performing actions but is also taking an active role in their learning” and in doing so, “the learner is aware about what they have and have not learned” (Zimmerman, 1990). Therefore, it is through this active role and “effortful control” (Rothbart & Bates, 2006) over their learning that learners demonstrate metacognitive thinking and thus know how to be successful in reading.

Flavell understood metacognition as being achieved through “consciousness, task and strategy” (Flavell, 1987). “Metacognitive knowledge of strategies contributes to an awareness of the ways to attain a learning goal” (Kolić-Vehovec et al., 2014). An ability to self-regulate, to monitor learning goals, relies on having an awareness of higher thinking (executive functions) (Lin et al., 2016). This is achieved when pupils analyse the task and decide which strategies will achieve their goal (Lin et al.,2016). Many studies have linked the concept of ‘self-regulation’ to a child’s ability to gain new academic skills (Blair & Razza, 2007; Duckworth et al., 2010; Shoda, Mischel & Peake, 1990). These learners are able to work independently, set and monitor their learning goals. This suggests that not only does metacognition enable students to work and think independently, internalise, conceptualise and add meaning to information but that it enables them to be successful in their learning. Therefore, it is important that pupils are aware of the metacognitive strategies they use when reading (Palincsar & Brown, 1984) and that educators help pupils re-gain control over their learning, by developing the skills they need to be successful.

If the metacognitive processes outlined above are automatic (sub-conscious) then these are defined as metacognitive *skills* (Williams & Moran, 1989, p.223). Metacognitive skills underly successful reading (Clarke et al.,2014) as successful reading is developed through a high “standard of coherence” (Perfetti et al., 2005). On the other hand, metacognitive *strategies* are conscious acts which are used to encourage deeper thought and makes the reader aware of their metacognition and comprehension (Williams & Moran, 1989, p.223). It is the practice of these metacognitive strategies that help develop the skills needed to help improve reading comprehension (see Gajria et al., 2007). Anderson (2002) stressed the importance of pupils moving from cognition (thinking) to metacognition (thinking about thinking) by considering “what am I try to accomplish? And What strategies am I using?”. Pupils who know and understand how to learn or study (those who have metacognitive knowledge) learn better (Winne & Hadwin, 1998). Furthermore, people who use metacognitive strategies and exhibit

metacognitive skills, display the agreed qualities of skilled readers (Griffith & Ruan, 2005; Randi, Grigorenko & Sternberg, 2005); as good readers use their background knowledge and understanding “to comprehend text literally as well as to draw valid inferences from texts, in their comprehension of words, and in their use of comprehension monitoring and repair strategies” (Snow, Burns & Griffin, 1998, p.62). Therefore, developing metacognitive thinking can impact reading comprehension and vice versa, leading to critical understanding and the development of key literacy skills.

Studies show that “able readers read more independently” (Quigley, 2020, p.4). The aim of reading comprehension is therefore not only to help students engage with a literacy-based curriculum but, to create independent readers (Tennent et al., 2016, p.22) and independent thinkers who can “challenge and enhance existing knowledge” (Clarke et al., 2014, p.9). Thus, reading comprehension and sound metacognitive thinking lay the foundation for accessing knowledge across subjects in a continuous life-long learning beyond school (Alverman & Earle, 2003). Therefore, it is of paramount importance that all Scottish educators focus on developing reading comprehension and metacognitive thinking as a means to increase attainment in Scottish schools to provide young people with the essential skills they need in adulthood.

Strategies to support reading comprehension

Despite the importance of reading comprehension and metacognition, there has not been wide spread curriculum application (Pressley, 2002). This may be due to excessive workload demands and time constraints (Quigley, 2020) as mentioned in chapter one, or the perception of practitioners that they do not have the expertise for literacy instruction (Hall, 2005; Ness, 2007; O’Brien, Moje, & Stewart, 2001; O’Brien, Stewart, & Moje, 1995). Again, reading comprehension is not easily integrated into secondary curricular areas as there are numerous general strategies with vague descriptions (Palinscar & Brown, 1984), unclear guidance (Quigley, 2020, p.10) with most studies focused on primary or elementary school. This section aims to give a succinct account of different metacognitive reading comprehension strategies, the instructional approaches ‘guided reading’ (teacher modelling) and ‘paired reading’ (guided practice) and provide some examples of how they may be applied to Modern Studies.

Reading comprehension strategies, defined as “highly specific processes that might be embedded into essentially any discussion of text and combined with other strategies” (Duke & Pearson, 2002, p.224), can act as a formative assessment tool as pupils can display their thinking and metacognition (Tennent, 2015). When planning a reading comprehension activity, it is important to consider the over-arching purpose and intended outcome. Pressley & Afflerbach (1995) note three types of strategies; ‘planning and identifying’, ‘monitoring’ (self-regulating) and ‘evaluating’. These strategies support the different purposes of classroom reading; a) reading to find information, b) reading for basic comprehension, c) reading to learn, d) critical reading across contexts (Khalifa & Weir, 2009). The complete list of strategies is extensive but what is important is that for meaningful learning to occur, the implementation process must be pupil led (see Griffiths et al., 2015 for more on reading to learn). Palinscar and Brown (1984, p.120) selected what they termed “four concrete activities” that could be used to achieve the various reading purposes outlined above; “summarizing (self-review), questioning, clarifying, and predicting”. This section will focus on the strategies that appear most often in

the literature ‘summarizing’ and ‘questioning’, and will include a brief discussion of their practical application.

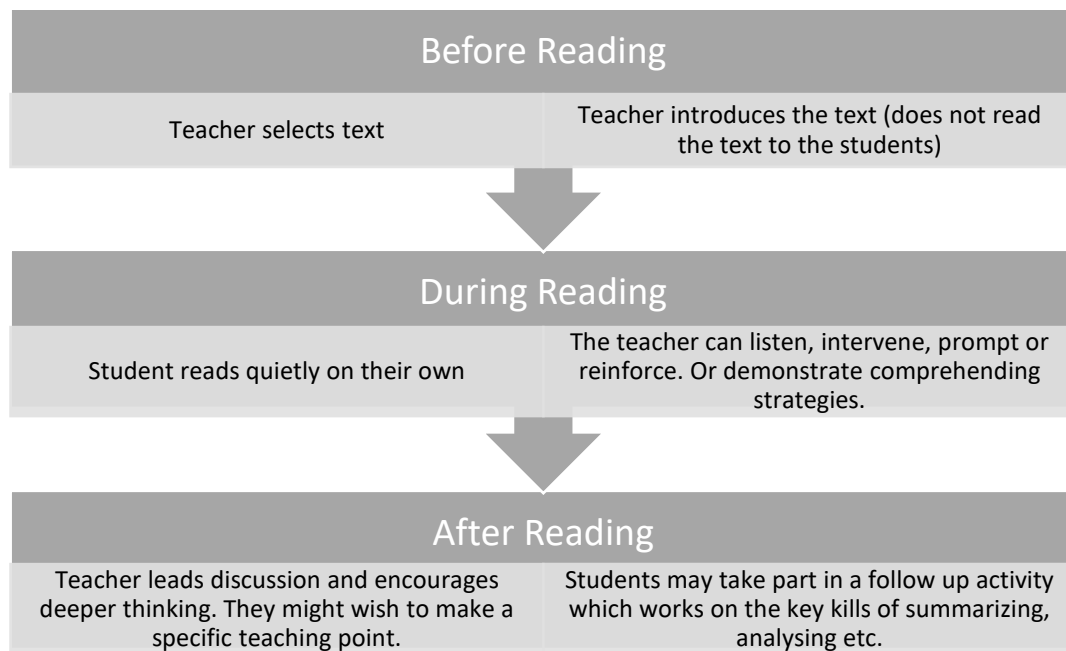
To teach the reading comprehension strategy of ‘Summarising’, pupils and teachers can follow the ‘rules’ by McNeil and Donant (1982); delete unnecessary or redundant material, compose a word to replace a list of items or individual parts of an action, select a topic sentence or invent a topic sentence if one is not available. This is an important skill to develop because writing summaries can elicit higher order thinking (Cox, 1988). A key part of establishing reading comprehension, is the teacher regularly checking for pupil understanding (Frey & Fisher, 2010). To effectively implement the ‘Questioning’ strategy, consideration of the nature and types of questions that are selected is crucial. The verbal or written questions can be both implicit and explicit (Steensel, Oostdam & Gelderen, 2013). There are three types of questions which are particularly suited to reading comprehension activities and “encourage readers to reach different layers of meaning in texts” (Tennent et al., 2016, p.38); ‘right there’, ‘think and search’, ‘own my own’ questions (Raphael & McKinney 1983), or in other words, ‘looking’, ‘clue’ and ‘thinking’ questions (Tennent et al., 2016, p.38). However, significant improvements in comprehension occur when the pupil is actively involved and creates their own questions (Yopp, 1988). Perhaps a fourth type of ‘wonder’ questions could be developed to allow pupils to develop their own comprehension questions. In Palanscar and Brown’s study, the separate reading comprehension strategies listed above were combined through a reciprocal instructional approach to enable pupils to control their learning. Here, the two approaches ‘guided reading’ and ‘paired reading’ outlined below are combined because it is recognised that effective reading comprehension is achieved through both teacher modelling (adopted from guided reading) and guided practice (taken from paired reading) (Swanson, 1999). Combining guided reading instruction and paired reading activities may enable easy integration of literacy and reading comprehension instruction into Modern Studies lessons.

Guided Reading

These reading comprehension strategies outlined above are only effective and meaningful, especially for poorer readers, when there is explicit teacher instruction (Brown et al., 1983). ‘Guided reading’ is a comprehensive framework to reading comprehension which is used to describe the guided instruction of reading in small groups (Simpson, 1966; Fountas & Pinnell, 1998). However, small group reading is problematic in Modern Studies as the texts are usually snippets of non-fiction sources and, the varying needs, limited time and frequent absenteeism make static groupings difficult. The general approach is still useful however, as the teacher follows an “intentional and intensive teaching of systems of strategic activity” to increase reading comprehension (Fountas & Pinnell, 1998).

“The teacher’s introduction supports critical thinking and deep comprehension. Discussion of the meaning is grounded in the text and expands thinking... The teacher has the opportunity to provide explicit instruction in a range of reading strategies [and] incorporates explicit vocabulary instruction... (Fountas & Pinnell, 2010, p.3).

Diagram 1 based on Fountas & Pinnell (2010)



Guided Reading is pupil lead, it is “not about the teacher telling the readers what they should understand from the text...what is important is the readers understanding” (Tennent et al., 2016, p.35). So how might this guided reading approach look in practice? The following example combines the summarisation and questioning strategies (for more information see Duke & Pearson, 2002). Following a teacher facilitated discussion about the text using ‘looking’, ‘clue’ and ‘thinking’ questions (Tennent et al., 2016), pupils first highlight the key points of a newspaper article or text and any vocabulary that they are unsure of. Next, for each paragraph, pupils add a title and summarise the key points into two or three bullet points. Finally, they create two or three questions for each paragraph/ section (appendix 2). This enables pupils to regulate their metacognition of the summarising process in simple steps through the reduction of key information from the text (Fuchs, Fuchs & Kazdan, 1999).

Paired reading

Research has demonstrated that targeted small group intervention sees a quick and significant impact on attainment (EEF, 2018, p.16). Another approach to implementing the strategies ‘summarising’ and ‘questioning’ is through ‘paired reading’. Paired reading is based on the premise of peer assisted learning, where students “alternate between the roles of tutor or tutee as they jointly work on a set of pre-structured tasks”, correct their partners work and provide feedback (Sporer & Brunstein, 2009, pp.289-290). Paired or partner reading, allows students to increase and practice basic reading fluency in “shared reading” activities (Fuchs & Fuchs, 2005). Varying needs, social relationships mean it may not be possible to frequently swap or maintain the same pairs, so the model needs to be flexible and adaptable for the secondary classroom. Nevertheless, its implementation is important as “peer assisted learning should stimulate students to engage in a host of cognitive and metacognitive processes that help them

coordinate their learning efforts in a socially supportive environment” (Sporer & Brunstein, 2009).

Practical applications of ‘paired reading’ might include the ‘jigsaw method’ where pupils read a particular part of the newspaper/text or search for a particular point or theme (e.g. different causes of crime). One acts as the tutor and one the tutee, after five to ten minutes roles are swapped and the text re-read. They then summarise their findings and generate a question. The pair group with another pair to share and discuss findings and swap questions. “This allows you [the teacher] to allocate sections of various length and complexity according to student’s reading abilities” (Thomas, 2017, p.106) and mixed ability pairs enable ‘poorer’ students to be supported. Other cooperative learning methods also lend themselves to paired reading (Duke & Pearson, 2002) as students take collective responsibility for the completion of the task (Greenwood, Carta & Hall, 1988). These approaches to reading comprehension have the potential to develop literacy skills and engage pupils in key content knowledge.

Role of the Teacher

Finally, what do teachers need to do to successfully implement these strategies? Teachers can support the development of metacognition by ‘pointing out’ ‘naming’ and ‘asking for’ the reading strategy used, “thereby signalling the cognitive and linguistic activities involved in reading” (Varga, 2017).

As discussed previously (p.9), given the link between reading comprehension and listening comprehension (Gough et al., 1996; Catts et al., 2005), there are important implications for classroom literacy instruction facilitated through discussion (Seidenberg, 2017). In a traditional classroom model, the teacher does most of the talking and only ask questions they know the answer to (Skidmore et al., 2003, p.47). If we define discussion or dialogue as “conversation with cognitive challenge” (Alexander, 2008, p.28), then we can see the potential power it has for developing higher order (critical) and metacognitive thinking. Discussions surrounding texts can also increase pupil vocabulary (Goldenberg, 1992, p.317) and thus address the increasing vocabulary gap (see Chapter one).

To assess pupil thinking and metacognition the teacher can ‘wait, support, used paired talk and encourage’ (Tennent et al., 2016, p.46; Rowe, 1986) The outcome is that “pupils can make tentative statements to see what they think about something; change their minds; listen to others views and responses; formulate considered responses through verbalising, refining and asking their questions” (Tennent et al., 2016, p. 46), all of which leads to the development of sound comprehension and critical thinking.

In essence, as the more knowledgeable other (Wood et al., 1976; Vygotsky, 1978), the teacher, has an important role of ‘scaffolding’ the task. The aim is to put support and structures in place to encourage the pupil to work independently. This scaffolding and support can be achieved through “elements in the task” (Wood et al., 1976, p.90) or in the ‘handover’ (Bruner, 1983), where the teacher gradually reduces support from having "all the responsibility for performing a task...to a situation in which the students assume all the responsibility" (Duke & Pearson, 2002, pp. 210-211). This role is supported by the idea that the teacher’s purpose is guiding the students before and during the reading interaction (Tennent et al, 2016; Tennent, 2015) through metacognitive strategies.

FINDINGS AND RECOMMENDATIONS

The purpose of this review was to examine the nature and nuances of reading comprehension as well as the extent to which the suggested strategies and instructional approaches impact pupil understanding of metacognition and content knowledge. As a result, four major findings emerge. First, all studies examined noted an increase pupil comprehension. Second, reading comprehension has the potential to increase literacy attainment, particularly for poorer learners. Third, the explicit teaching of metacognition gives pupils (readers) more control over their learning and enables them to work independently and thus be successful. A fourth, under researched finding emerges that subject teachers and secondary pupils may not have high 'literacy' efficacy.

Reading comprehension is a complex process which requires the reader to use phonological understandings and context (from text and prior knowledge) to decode and construct meaning. Individual characteristics such as age, gender, social background and even concern over reading efficacy may affect reading comprehension and consequently impact spelling, writing, vocabulary and attainment in secondary school. Analysis of the literature found implementation of reading comprehension strategies lead to success in both "performance related (reading comprehension) tasks and strategy related (declarative and procedural strategy knowledge)" ie. metacognitive knowledge (Sporer & Brunstein, 2009). Therefore, reading comprehension must be implemented with the aim to help students regain confidence and efficacy in reading to overcome barriers. As articulated by Ness (2007), further teacher professional enquiry surrounding curricular applications of supporting literacy attainment should be developed. Strategies in a Social Subjects context, found that "instructional practices focused on teaching essential words, text as a source for reading and discussion, and team-based learning approaches" can improve reading comprehension and increase pupil's social studies content knowledge (Vaughan et al., 2013). There is need for the application of explicit literacy (reading comprehension) instruction and metacognitive strategies in Modern Studies classrooms. To ensure success, this should also be supported by literacy specialists (Ness, 2007) to share good practice across Scottish schools.

Small group or one-to-one targeted interventions "have the potential for the largest immediate impact on attainment" (EEF, 2018, p.16). This positive influence is evident as "reading interventions delivered using social studies content have a substantial positive effect on outcomes among students with learning disabilities" (Swanson et al., 2014) as 'poorer students' are supported in paired reading tasks. "Higher performing students took as much benefit from this peer-assisted learning method as lower performing students" (Sporer & Brunstein, 2009). This is aided by discussion which increases pupil vocabulary and addresses part of the attainment gap. A focus on developing reading comprehension and metacognition can create more inclusive classroom environments, increase attainment and provide all children with the skills they need in the world of work. Using 'guided reading' and 'paired reading approaches to teach the strategies of 'summarising' and 'questioning' demonstrate that reading comprehension can be effectively integrated to address literacy attainment in Social Subjects. These findings advocate a pupil centred classroom model where there is less didactic teaching and more teacher guided and facilitated group/pair learning and discussion as a means to engage pupils with key curricular content and improve literacy attainment.

Metacognition and self-regulation help children to achieve new skills, learn new information, work independently and achieve their goals. The explicit teaching of metacognition can help students to develop their understanding of and have agency (self-regulation) over their learning goals and increases their self-efficacy. Furthermore, there is an added social outcome as, students know to work cooperatively and poorer students are supported effectively by their peers. It is therefore crucial that pupils have agency, and an active role in the learning process, the teacher is the facilitator of creating learning opportunities to discuss text and make pupils aware of their metacognition. There is a need to explicitly 'teach' metacognitive thinking and reading comprehension strategies as teacher introduction and guidance through scaffolding and discussion supports independent work and critical thinking (Fountas & Pinnell, 1998). Moving forward, it is important that there are professional development opportunities that not only show the value of literacy integration (Ness, 2007) but support and give staff the tools to integrate reading comprehension and metacognitive thinking in the classroom. Further, policy makers must realise that changing students' attitudes and mindsets through metacognition and self-regulation is an effective, low-cost solution to increase academic achievement (Rattan et al., 2015). Given the significant sums of money being plowed into Education, the impact of reading comprehension strategies points to a need for further data and evidence about "the impact and cost effectiveness of specific interventions" (Bell, 2018, p.966).

It is difficult to ascertain the extent to which pupils find the reading and metacognitive strategies useful and enjoyable. Some studies suggest that as metacognitive knowledge of reading strategies increased in adolescents, attitudes towards reading decreased (Kolić-Vehovec, Zubković & Pahljina-Reinić, 2014). However, whether this is a direct link is unclear, as secondary pupil attitudes to metacognition and the use of reading strategies is significantly under researched. With the discourse increasingly valuing pupil opinion and contribution to research, greater investigation into their attitudes towards reading and metacognitive strategies is needed. What is clear, is that there appears to be a general reluctance of teachers to implement these strategies for a variety of reasons, including the top-down approaches which are "constructed outside of the school contexts in which it is applied" (O'Brien, et al., 1995). If teachers are confident with the purpose and applications of the reading comprehension strategies outlined above, then teachers can effectively help every pupil be can be successful in reading (Haverback & Parault, 2008).

Reading comprehension is a complex process that teachers often take for granted because they are successful learners. The explicit teaching of metacognitive reading strategies not only aid comprehension but enable students to work independently, think critically and question the information they read. Therefore, everyday classroom interventions such as those listed in this chapter, have the potential to enact real, positive change. However, "how a project is implemented is vital and arguably as important as its content" (EEF, 2018, p.16). Therefore, for a reading comprehension intervention to be successful, significant thought must be given to its practical implementation. The final chapter will look at how a reading comprehension intervention may be structured, implemented and its impact analysed.

Methodology

RESEARCH DESIGN

As previously discussed, “facilitating student gains in literacy is a multifaceted challenge that requires educators to question how best to engage students in academic achievement” (Wenzel & Peterson, 2017). Based on the academic discourse, the researcher sought to identify if explicitly teaching pupils the strategies ‘guided reading’ and ‘paired reading’ in the form of short textual activities, has an impact on pupil understanding and attainment. How would a reading comprehension intervention such as this, be implemented in a secondary classroom? To shape and guide the research aims, this chapter sets out the broad framework of this proposed intervention as well as the methods used to answer the research questions. First, the research design will be outlined, followed by a methodological discussion of action research, methods of data collection, data analysis techniques and their ethical implications. Finally, the chapter will conclude with the reporting considerations and limitations of this study.

Participants and Context

The proposed research would have been conducted in the researcher’s school which provides the researcher with sound understanding of the participants, their additional support needs (ASN) and the school’s contextual environment. The denominational school in South Ayrshire has a wide catchment area consisting of five coastal towns in the local authority and one town from a neighbouring authority (East Ayrshire). Thus, the school encompasses pupils from a variety of SIMD deciles (SIMD, 2016). This can impact classroom learning and the nature of this study as pupils have a range of social, emotional and learning needs (Education Scotland, 2018), which must be addressed to enable all pupils to participate in the intervention.

However, the range of ‘needs’ are compensated for in class size, as the proposed research study would have included 23 pupils in their second year of secondary school (between the ages of 13 and 14). Smaller class sizes enable a personalised and targeted approach, something which may be difficult in densely populated schools. There are two EAL (English as an Additional Language) pupils in the S2 Modern Studies class selected for the intervention. However, unlike in some inner-city areas, these pupils have spent their whole schooling years in Scotland and do not require language support in the classroom.

Due to the school’s class rotation system in Social Subjects, S2 (13-14-year-olds) were selected as they were the only BGE class timetabled for Modern Studies at the time of the planned intervention. The teacher/researcher would have taught this class for three periods a week for six weeks (18 lessons in total) had the schools not closed. Moreover, it was anticipated that the skills learned during this enquiry would have aided S2 pupils as they move into S3 and that the skills learned could have been transferred across a variety of literacy-based subjects, better preparing them for National exams in S4. These contextual factors (pupil needs, class size and timetabling) are important as these impact the nature and

results of the study for any future researchers looking into reading comprehension in social subjects.

Procedure

The proposed guided reading and paired intervention takes place over six weeks (16 lessons). A pre/post intervention reading comprehension test is used to produce base line data at the beginning of the study (lesson 1), and then to identify the pupil progress in applying the reading skills at the end of the intervention (lesson 16). Each 'test' consists of a paragraph of text, containing content in which pupils have no background knowledge. After reading the text, pupils answer a few short questions to assess their understanding of the content. The pupils are allocated 20 minutes to complete the activity. The task is balanced to include both closed, factual questions and open-ended questions, with space for pupil interpretation. Added to this the vocabulary and difficulty of the text is differentiated to the appropriate level for the pupil.

During the intervention (lessons 2-15), participant observation is used to measure pupil autonomy in completing the reading comprehension tasks. This participant observation is partially-structured, to look for specific pupil behaviours and emerging themes (Menter, 2011). The proposed observations are recorded on a proforma and filled out per lesson (appendix 3). A note of naturally arising classroom data, specifically pupil work samples, may also be recorded during the observation. Moreover, at the end of each lesson, pupils hand in their worked tasks which focus on a particular strategy. Pupils are given 20-25 minutes to complete each task to gain an accurate representation of their reading ability.

Throughout the intervention, a questionnaire is distributed to pupils after an introduction to each reading comprehension strategy and practice with various texts (lesson 8 and 15). As there are two strategies, 'guided reading' (lessons 2-8) and 'paired reading' (lessons 9-15), pupils complete the questionnaire twice. Pupils are given approximately 10 minutes to complete the questionnaire. The responses are completed on a Likert scale to elicit quantitative data (appendix 4). There is also a space for pupils to add in any additional qualitative comments or feedback in order to provide qualitative insight.

To measure the impact of reading comprehension strategies on curriculum knowledge, the textual excerpts link to the curriculum content, in this case, the S2 Modern Studies course which looks at world conflict. Prior to attending secondary school, pupils have rarely covered this content in great depth, therefore an increase in content knowledge may be attributed to the intervention.

METHODOLOGY

Given the contemporary political agenda of striving for 'excellence' in Scottish schools, educators are encouraged to share and implement good practice through a cycle of continuous improvement (Education Scotland, 2015). Consequently, there is a push for practitioners, as part of their professional standards, to engage with formal and informal methods of critical enquiry into their selves and their classroom practice "to improve teaching and learning" (GTCS, 2012, p.12). Moreover, this "good practice" should be shared in an open

“professional dialogue” (GTCS, 2012, p.19). “Currently, methods such as action research attract greatest appeal within the Scottish education system, and... [this approach has] been integrated as part of the continuum of professional learning endorsed by the General Teaching Council for Scotland” (Colucci-Gray & Darling-McQuistan, 2019, p.891), as it enables teacher-researchers to transform their practice. As a result, action research projects are undertaken globally across a range of education settings (Beck, 2017).

Search Strategy

In a preliminary search of core texts and the University of Glasgow’s online database, practitioner enquiry and teacher research were considered broadly. From this, the key concept ‘action research’ was included in a systematic, phrase search of ebooks, journal titles and article abstracts concerned with the methodologies of educational research (Torgerson et al., 2017). To narrow the search findings further, Boolean operators were used in a search of ‘action research’ *and* ‘education’, as there was a lot of discourse surrounding medicine and nursing education (Punch & Oancea, 2014). Following this, the discourse on data collection methods best suited to action research were located in a generic search of ‘action research’ *and* ‘data collection’ *or* ‘methods’. The strengths and weaknesses of ‘pre/post-test’, ‘observation’ and ‘questionnaire’ were researched and aligned to a mixed methods approach to professional enquiry. By making action research the search focus, the researcher was able to locate important ethical issues surrounding collected data, and dissemination as well as addressing the limitations of this methodology.

What is action research?

Action research is a “complex [and] dynamic” activity (Greenwood & Levin, 1998, p.50). It is a transformative process which occurs in “practitioner’s practices, their understandings of their practices and the conditions in which they practice” (Kemmis, 2009, p.463). In other words, the explicit purpose of action research (AR) is to improve practice (Griffiths, 1998, p.21), in the practitioner’s work context (Punch, 2014). Therefore, the role of the researcher, is an ‘active’ involvement “in the cause for which the research is conducted” (Bogdan & Biklen, 1982, p.215). Koshy (2005) proposes that this transformation is achieved; first, through an action such as observation, listening, analysing or questioning; second through investigative reading and professional development; and finally, in reflection. All of this, in turn, enables what is generally considered to be ‘good’ practice (Koshy, 2005).

Although action research is a popular methodology in educational research and teacher training programmes, the definition is fluid and unclear, with many scholars changing the parameters to suit their individual study context (Beck, 2017, p.37). However, it is generally agreed, that AR is both an ‘interventionist work’ (Denzin & Lincoln 1998, p.169) and a cyclical process conducted by practitioners (Wells, 1994, p.26).

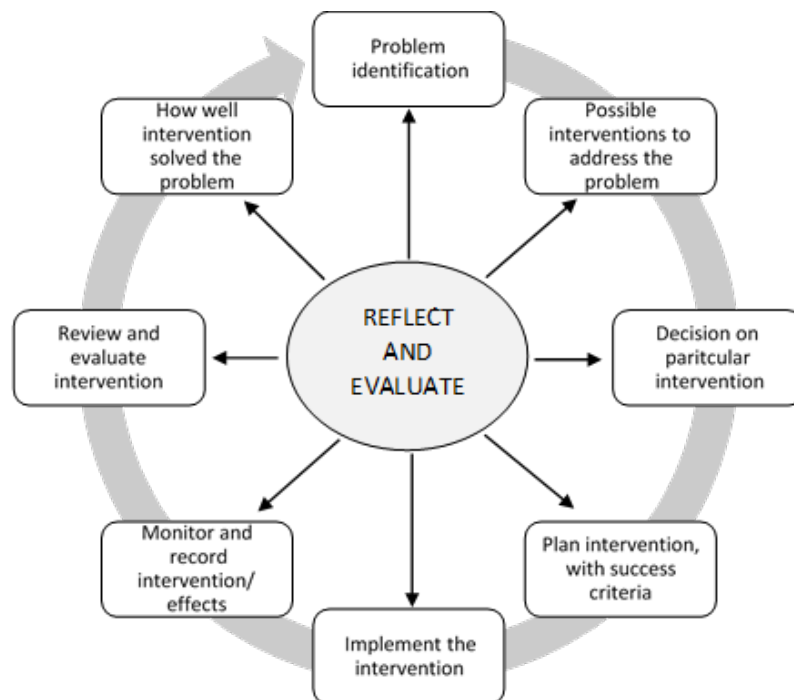
“An important characteristic of action research, which sets it apart from other research designs, is that it is usually cyclical in nature... For many people, the spiral of cycles of self-reflection, involving planning, acting and observing, reflecting re-planning and

so on, has become the dominant feature of action research as an approach” (Punch, 2014, p.137).

Klein (2012) stresses that there is no right way to conduct action research. However, an enquiry following the ‘action research’ design, generally goes through the process of “Evaluation, Action and Change” (Robson, 2002, p.218) as outlined below (Diagram 1) where evaluation and reflection happen at every stage (Cohen et al., 2017, p.451). Other authors place emphasis on an action research methodology that is; thoroughly planned and deploys ‘systematic data gathering’ (Anderson & Freebody, 2014; McNiff, Lornax & Whitehead, 2006), is collaborative (Cochran-Smith & Lytle, 2009), and has publicly disseminated findings (Elliot, 1997).

Nevertheless, a key part of this process (Hannay, Mahony & MacFarlane, 2004) is an intentional, self-reflection (Dana & Yendol-Hoppey, 2014). It is in this way that “insider knowledge” about both the researcher and participants is gained (Greenwood & Levin, 1998, p.50). These insights can result in the sharing of ‘good practice’ in a bottom-up structure which both values and recognises teacher knowledge (Cochran-Smith & Lytle, 2009; Zeichner, 1995; Zeichner & Liston, 2014; Bryk, Gomez, Grunow & LeMahieu, 2015). Thus, action research enables teachers the opportunity to be “key actors in shaping and leading educational change” (Donaldson, 2011, p.4). This stance has recently been recognised in a global shift toward greater teacher agency in education (Priestly et al., 2015).

Diagram 1: Process of Action Research (Cohen et al., 2017, p.451)



Conversely, scholars have criticised action research as being poor in quality because of its ‘inward looking’ characteristics and technical procedures (Adelman, 1989, p.179). This implies that practitioners cannot enact meaningful institutional and pedagogical change or that their participation as both teacher and researcher makes their findings invalid. However,

the adoption of this process does not mean that the outward educational context is ignored, but rather, AR holds a spotlight on ‘what works’ in practice.

Just as action research has been integrated as an important part of teacher professional development (McAteer, 2013), it is also inherently political (Salman, 2015). “Action research implies change, and any change carries the potential for the jostling of beliefs and practices, along with personal, pedagogical, and institutional changes” (Klein, 2012, p.6). This means that it is not a static concept but a flexible methodology which can be applied in a variety of institutional contexts based on the current social change narrative. This is perhaps why there are varying nuances of action research evolving within the literature. Arhar, Holly and Kasten (2001) (summarised by Owen, 2006) note that “AR is the process of developing theories by practitioners who test those theories against their own values... the research and what is being studied are connected in an interactive way – the values of the researcher influence what is learned”. Therefore, there is a central criticality to the investigation (Carr & Kemmis, 1986; Kemmis, McTaggart, Nixon, 2014; Punch, 2014). As society’s views, values and norms evolve, then so does the research framework which investigates one’s own practices. The ‘plan-do-review’ cyclical model is by its nature critical otherwise improvements wouldn’t be made and practices not modified to reflect the political agenda.

In a socio-political context, young people are becoming increasingly involved and exercising their political rights to protest in matters such as climate change (UK Student Climate Network, 2019), racial justice (Black Lives Matter, 2020) and education equity (SQA exam results, 2020). Therefore, it is important that educators, especially teachers of Modern Studies, provide opportunities to engage young people in processes of change.

An increasing political emphasis on the rights of the child (UNCRC, 1989) has resulted in a shift to recognising “children’s participation in studies about social issues” (Greene & Hogan, 2005). Participatory action research (PAR), “is a systematic approach to collective investigation of an issue by the people whom the issue directly affects” (Baum et al., 2006). “PAR is a mechanism through which agency is distributed to the participants” (Sharnrova & Cummings, 2017, p.401). Children are involved from the research design to the dissemination of the findings (Jones, 2004). However, in an educational schooling context, there are many barriers to this sort of participation including, but not limited to, parental approval, management priorities, timescale and teacher workload (Flicker, 2008) as well as data protection (GDPR). These issues make the implementation of PAR difficult, but the key principles of pupil voice and agency should still be adopted in ‘traditional’ action research.

Yet despite the positives of PAR, it appears that teacher-researchers tend to view action research, or enquiry as a personal reflective activity. In a three-year review of academic action research proposals submitted to the Institutional Review Board (IRB) at the Brock University, Owen (2006) found that the most common definition that is adopted by graduate students is McNiff (2002)’s understanding of AR as different to empirical research; It (AR) “is an enquiry conducted by the self, into the self... so you can continue developing yourself and your work” (McNiff, 2002).

It is this self-reflection attached to the action research methodology that separates AR and ‘traditional’ or ‘orthodox’ research (Greenwood & Levin, 1998). Therefore, we must consider, what methods are best suited for an action research study which seeks to reflect on

pedagogical practices and highlight the voice of the participants? Moreover, what is the role of the teacher in this process?

Mixed methods

The overarching research paradigm of this proposed action research study is a ‘pragmatic approach’, which was selected because these philosophical and methodological approaches work “best for a particular research problem” (Robson, 2002, p.43). As outlined in chapter two, understanding a pupil’s ability or ‘inability’ in literacy and reading is a complex phenomenon which is influenced by socio-cultural and psychological factors. This pragmatic approach using “mixed methods research combines elements from both qualitative and quantitative paradigms...” to consider a broad range of views and “produce converging findings in the context of complex research questions” (Lingard, Albert & Levinson, 2008) and circumstances (Greene et al. 1989, Johnson & Onwuegbuzie 2004, Schulenberg 2007). A mixed methods design allows practitioners to engage with a range of “student-centred,” and “instructional development” enquiries (Tomal, 2003:12) and is recognised as a research paradigm in its own right (Klein, 2012, p.9).

Mixed methods research doesn’t “fall comfortably” into the polarised epistemological camps primarily associated with quantitative and qualitative collection methods and analysis (Feilzer, 2010, p.7). Pragmatism, a framework commonly associated with mixed methods, is concerned with the research problem and its impact, and is thus free from imposed methodological constraints and world viewpoints (Cresswell & Plano Clark, 2007). Rather than seek to accurately represent ‘reality’, pragmatists aim to take the contextually relative findings (Felizer, 2010, p.14) and to make a useful contribution (Rorty, 1999).

The literature substantiates and validates the mixing of quantitative and qualitative approaches in one single study. These arguments include, adding to the rigour of triangulation (Flick, 2018; Wilson, 2014), as well as illustrating more comprehensively an analytical density that creates a richness in data (Fielding, 2012). This gives the researcher a complete picture and understanding about practice (Klein, 2012). It strengthens the combination of methods tailored to a particular situation and research question (Gelo et al 2008); using the strengths within both traditions, for example, accessing numbers and unlocking voices.

As well as its flexibility,

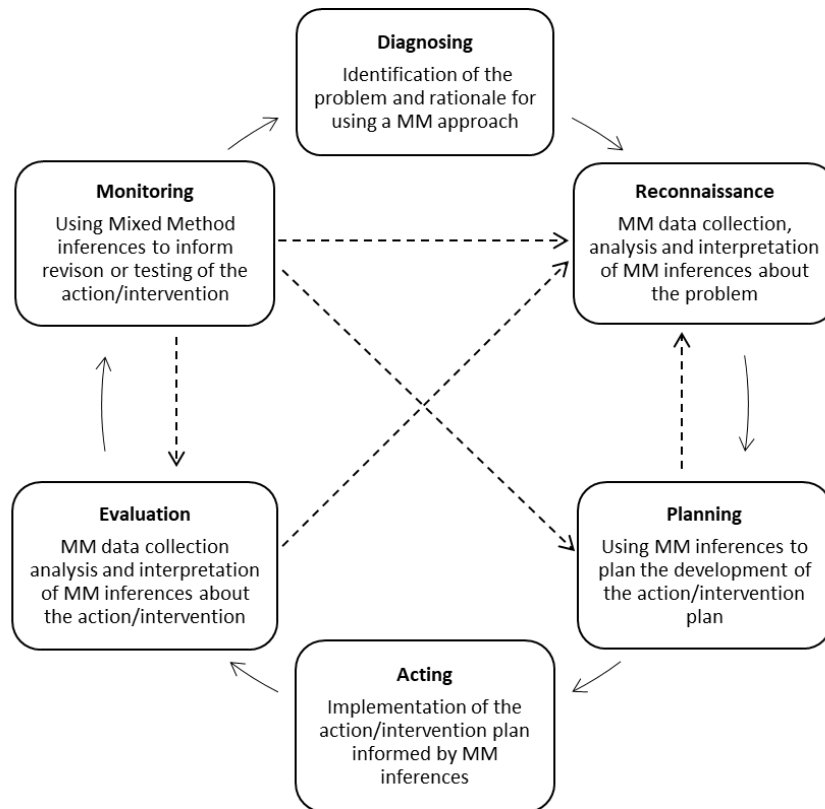
“Employing both quantitative and qualitative research may provide a means of bridging the macro-micro gulf. Quantitative research can tap large-scale structural features of social life [e.g. trends within the education system], while qualitative research tends to address small-scale behavioural aspects [e.g. personal pupil classroom experiences]” (Punch, 1988, p.247).

This approach is justified and valid for an action research study as “Combining the two approaches can produce more scientifically sound and transferable results by synergistically integrating qualitative stakeholder engagement with quantitative outcomes to inform action/intervention planning, implementation, evaluation, and monitoring” (Ivankova & Wingo, 2018). In this way, the numeric data collected through action research, can aid the

qualitative narrative of teacher observation and thematic analysis of pupil voice (Mills, 2011). This ensures that the results are validated through triangulation (Greene, Caracelli, & Graham, 1989).

It is advantageous to combine mixed methods and action research, as it enables the researcher to address “a practical issue in a systematic and dialectic way through... an evidence-based approach to action/intervention monitoring” and “credible and valid conclusions about action/intervention outcomes” (Ivankova & Wingo, 2018, p.986). Moreover, using mixed methods and action research enhances the “translation of research into practice by... optimising action/intervention outcomes” and “enhancing transferability of action/intervention results to other contexts and community settings” (Ivankova & Wingo, 2018, p.986), thus addressing some of the critiques of action research. The combining of these approaches may be implemented in the following way (Diagram 2).

Diagram 2: Mixed Methods Action Research Framework (Ivankova, 2015)
 Note:MM = Mixed Methods



DATA COLLECTION AND ANALYSIS

It is important to consider, not only the data collection methods which are best suited to the methodology and the research questions but, the extent to which the data methods fit the research design and the participants involved. Due to the limited timescale, data collection methods such as focus groups and interviews were not chosen because they could not be conducted during class time and would require extra commitment from the participants, thus reducing the number of pupils willing to participate. Added to this, successful data collection from focus groups are dependent on the group dynamic (Cohen et al., 2017) and the

researcher assessed that due to classroom relationships, this would not be effective. Other data collection methods such as personal online data made public through social media, and document analysis of pupil work, were not used because of ethical issues associated with 'internet research' and data protection (UK Government, 2018). Below the strengths and weaknesses of the chosen data collection methods for this proposed study are explored.

Pre-/ Post- Test

If the goal of teacher professional enquiry is to make a significant contribution to educational change, then adding quantitative data to the study can help bridge the issue of generalisability (Punch, 1998) associated with action research. To generate quantitative data on reading scores, a pre-intervention and a post-intervention test was selected. This pre-test/post-test data collection method is typically best suited to experimental studies due the quantitative data produced. However, experimental studies do not lend themselves to a classroom setting due to a variety of ethical questions surrounding control groups, denying one group the expected benefits of an intervention. Moreover, random sampling is considered essential to make the intervention a 'true' experiment (Morrison, 2009, pp.143-4). Again, this is limited in an action research project investigating the reading attainment of only 23 pupils. Therefore, a "Pre-experimental design: the one group pre-test post-test design" (Cohen et al., 2017, p.?) is more suited to educational enquiries as it only partly experimental and doesn't include sampling or a control group (Flynn Fee, 2012). This simplistic method (Cohen et al., 2017) allows the link between variables to be identified and measured (Boudah, 2011), which in this case is the extent to which the intervention improved literacy attainment and increased content knowledge (Aim 1). This is important because, if the test is administered correctly the researcher may conclude that the intervention was responsible for the outcome and thus help contribute positively to practical classroom solutions.

However, this narrow 'scientific' understanding alone fails to account for the external social factors which impact pupil performance. With the pre-test post-test methods there are threats to the internal validity of the study (Boudah, 2011) because other factors such as the pupil's emotions, home life, the school, the classroom organisation and materials are 'extraneous variables' which could impact the results of the intervention (Cohen et al., 2017). To mitigate this limitation and ensure reliability, the researcher would have looked at the participant's holistic attainment and look at other interventions and learning initiatives going on across the school (Cohen et al., 2017), which could account for a change in behaviour or performance. These issues would have been addressed by understanding additional support needs and working in partnership with the guidance and pupil support department.

Other possible threats to validity include, the time of day that the tests are taken which can impact pupil performance (Stiggins, 2001), the amount of preparation permitted (Cohen et al., 2017). For example, in this proposed intervention, the 'tests' would have been short extracts to meet the needs of the participants and the school timetable. Other potential issues include what is being tested. Cohen notes that "testing reading may require several component..." questions and thus the test itself may be 'multidimensional' (Cohen & Wollack 2010) and complex. The researcher would have introduced pupils to the different types of questions and how they might be asked so to avoid confusion and encourage independent working. This raises important questions and implications for the analysis of pre-test post-test methods;

what constituent parts of reading must be demonstrated for the skill to 'achieved' (Cohen & Wollack, 2010). In the researcher's experience, achievement of a skill is often subjective and thus relies on teacher judgment of pupil progress. These issues of reliability and accuracy in pupil performance, can be minimised through thorough planning in relation to location, time, test design and the subsequent triangulation of data (Greene et al., 1989; Conrad & Serlin, 2011).

Observation

Observation is used frequently in teacher-education to gain invaluable insight into classroom practices. Observation for the purposes of academic research provides a good insight into pupil social relations (Mujis, 2011). "Various behaviours are recorded in categories as they occur, ordinarily to build a picture of sequences of types of teacher and pupil behaviour" (Kemmis et al., 2014, p185). "Rather than relying on participants to report their behaviour, you often get more accurate information by setting aside time to observe quietly what is happening" (Flynn Fee, 2012, p.164). This information allows the researcher to assess the extent to which pupils can work independently (Aim 3). It is in this way, that observation can corroborate other data (Menter et al., 2011).

This process of collecting qualitative data does pose issues of subjectivity and bias (Robson, 2002). Observation in an educational enquiry is often viewed in the literature as not reliable or rigorous and thus raises issues of external validity because the 'observer' is a participant in the study (Cohen et al., 2017). Due to teacher-researcher participation, pupils may change their behaviour because they are being watched (reactivity) (Shaugnessy et al., 2003, p.113). However, these issues can be minimised through triangulation with other data (Denzin, 1989) and trustful relationship participants have with the teacher-researcher.

The nature of observation can be flexible in design (Drew, Hardman & Hosp, 2008), which allows for easy classroom application. This study proposes semi-structured observation, as aforementioned, to allow for a systematic approach open to scrutiny (Menter et al., 2011, pp.163-4). This approach is beneficial as it suits "most circumstances" (Sharp, 2009), but there is a danger that the observation becomes opinionated and judgemental rather than factual (Capel, Leask & Turner, 2013). Flynn Fee (2012) argues that to ensure reliability, the observation proforma must be 'pre-tested', but this is difficult in a short timescale and could not be done due to school closures. Instead, in depth research and training can help to ensure that this research method is used ethically and effectively (Cohen et al., 2017).

It is recognised, that "People's underlying meanings and intentions can be quite different to that which might be inferred from their behaviour" (Menter et al., 2011), particularly when pupils are with their peers. Thus, the final data collection methods seeks to gather pupil voice and opinion.

Questionnaires

Questionnaires are a "versatile and adaptable research tool" (Sharp, 2009). The flexible design enables the collection of qualitative data to provide insight into personal values and beliefs (Menter et al., 2011) and can elicit large sets of quantitative data, (like Likert scales)

in a short time scale. Again, authors stress the importance of random sampling to provide rigor and validity to questionnaires (Flynn Fee, 2012). However, this is not possible with a small class sample size.

Completion of a questionnaire depends on the willingness of the participant (Menter et al., 2011). Small sample sizes pose a risk of small response rates which don't always provide a true insight into the views of the average person (Flynn Fee, 2012). This affects the validity of the study as the responses might only include those who are enthusiastic to take part and thus not truly representative of the whole class. Consequently, this can then affect the findings and impact of the intervention. This is particularly difficult with online surveys, where participants can complete the questionnaire multiple times, deliberately skewing the data or giving false answers (Flynn Fee, 2012). Thus, questionnaires in this study would have been distributed during class time to those pupils who have elected to participate in the intervention. In addition, the physical design of the questionnaire can affect response rates. "Restricting the number of questions asked and the range of topics covered" can impact both the number and quality of responses (Kemmis et al., 2014), something which the researcher considered in the context of a secondary class with a range of pupil reading abilities.

Furthermore, there is a general issue with honest and accurate responses. Questionnaires have the potential to present some problems for people with limited literacy (Cohen et al., 2017). Participants may miss understand the question or give an answer that they think is the desirable or correct response (Fowler, 2009). This is more of an issue in teacher-researcher studies where the pupils may try to please the teacher or hide their 'struggles'. Therefore, the questions would have been posed at the correct, individual reading level and open-ended questions should be used encourage greater detail, reduce the influence of others (Blaxter et al., 2001) and thus measure personal opinion.

Open ended questions are difficult to analyse (Menter et al., 2011) as questionnaires are "better suited to quantitative data" (Blaxter et al., 2001). Conversely, Likert scales also pose potential problems in creating varied responses due to individual interpretation (Cohen, et al., 2017). However, this is not a limitation but a 'inevitable' and 'natural' consequence of measuring personal views and opinions. These general issues can be remedied when questionnaires are issued face to face, as the participant can seek clarification (Menter et al., 2011).

Despite this critique, questionnaires can be very useful in an educational setting in demonstrating a "change in attitudes or opinions or levels of satisfaction over time, after we have made changes in our practice" (Kemmis et al., 2014,p.185) and are thus a valid data collection tool for action research. Applying the pragmatic framework to these methods, particularly the questionnaire, enables the researcher to receive valuable insights (Feilzer, 2010).

Data analysis

The analysis and interpretation of mixed methods requires care (Greene et al., 2001, p.41). From the quantitative data set gathered from pre-intervention and post-intervention testing, data analysis would have consisted of using 'summary or descriptive statistics' to make meaning from the raw data. The first branch of summary statistics is called 'central tendency'

which gives the researcher an overview of the data (Robson, 2002), to find “where the majority of scores are located” (Cohen et al., 2017, p.762), for example, the mean test score. This data would have been displayed in a bar chart to show the pre- test mean and post-test mean score, thus highlighting any change in test scores after the intervention. To supplement the mean, the modal test score would have been identified. To find the mode, a frequency table would have been drawn to identify which test score occurred most often. Once located, a histogram would have visually displayed the results. The second branch of statistics is known as ‘variability’ statistics which demonstrate the consistency of the test scores (Robson, 2002). The range would have been found to highlight the difference between the highest and lowest test score, then the standard deviation calculated to identify how consistent the test scores were, i.e. “how much they deviate from the mean” score (Cohen et al., 2017, p.762). This would have enabled the researcher to identify and make holistic conclusions about the impact of reading interventions on the reading test scores.

To make meaning from the qualitative data collected, this study proposes Braun and Clarke’s (2006) method of thematic analysis. This would have enabled the researcher to “identify, [and] analyse patterns” and emerging themes (Braun & Clarke, 2006), across pupil responses from the questionnaire and insights from teacher observation. This would have been achieved by highlighting and annotating key, re-occurring topics from the data, that the researcher deemed interesting, thus minimising the researcher’s preconceptions and understanding about the area of study. This proposed method is an interpretive, ‘open coding’ process (Robson, 2002), where provisional codes are created (Braun & Clarke, 2006), applied and then grouped into approximately three broad themes (Cohen et al., 2017). “It is about teasing out the theoretical possibilities in the data” (Robson, 2002). This would have enabled the researcher to infer and interpret hidden implications and meaning as the data is re-read and analysed numerous times. An advantage of using this method is that it can be applied to a different frameworks and paradigms (Braun & Clarke, 2006) and is therefore suited to a mixed methods enquiry. However, it is a very time-consuming process, and if not done rigorously, then the credibility of the results may be questioned (Nowell, et al., 2017).

ETHICAL CONSIDERATIONS

Based on the methodological discussion above, it is important to consider the potential ethical implications for this study. The research questions and the methods of data collection have the potential to raise issues considered “questionable practice” (Robson, 2002, p.65). Therefore, there are numerous safeguards imposed by the teaching profession, universities, and researchers. To ensure ethical practice, teachers are subjected to a code of conduct and standards of professional practice set by the General Teaching Council for Scotland (GTCS). Ethical approval for this action research project was granted by the University of Glasgow, the researcher’s Head Teacher and a representative of the local authority prior to school closures (20th March, 2020). This study was deemed to be low risk because the study would have been part of normal teaching practice where data would be collected during class time. However, the literature highlights the concern of action research or ‘minimal risk’ studies not being implemented properly (Owen, 2006) or the methodology being applied liberally (Clark, et al., 2014). Owen argues that “the primary harms to individuals in AR fall into the categories of loss of privacy, embarrassment, emotional distress or psychological trauma, and

loss of privilege” (Owen, 2006, p.67). Therefore, the following ethical problems must be considered from the beginning of the study through to dissemination (Blaxter, Hughes & Tight, 2001).

Obligations and responsibilities

As this is an action research study located in an educational setting, the primary concern must be the interests (Locke et al., 2013) and privacy (Cohen & Manion, 1998) of the participants. Thus, the researcher must ensure “professional sensitivity” (Manson, 2002) when researching young people (pupils). Therefore, there are inherent issues with power (Pascal & Bertram, 2009). In action research there is a “close and collaborative relationship between the researcher and the researched” (Robson, 2002). “Most commonly, ethical issues are thought to arise...” because of the nature of this relationship (Blaxter, Hughes and Tight, 2001, p.158). Therefore, the researcher has particular obligations that need to be addressed.

Due to the dependent relationship between students and teacher, the researcher must not withhold any information from the participants (Kimmel, 1988), they must fully explain the purpose and not engage in ‘deception’ about the nature of the study (Creswell, 1998, p.132). Pupils may also feel the need to comply with the request for their data to be included in a research report, viewing it as “another piece of school work” (Denscombe & Aubrook, 1992). It is therefore important that the researcher clearly communicates to all young people verbally and in writing, that they may opt out of having any data gathered at any time during the research project (BERA, 2018, p.9; UN Convention, 1989), “without fear of negative consequences” (Arhar, Holly & Kasten, 2001). Prior to school closures, this information was detailed to pupils in a plain language statement and consent form to be read and signed before the research is undertaken. However, it is recognised that in educational research, informed consent is not a ‘one off’, but something that is continuously negotiated throughout the study (Wax, 1982, p.42). Thus, participants were made aware of their right to withdraw at any time during the study. As the pupils in this proposed study are under the age of eighteen, consent was also obtained from their parents or guardians. In the Plain Language Statement both parents and pupils were assured that their participation in the study was completely voluntary and would not have impacted their progress or overall grade for the course. Therefore, there is a low risk of any pupil being in distress or in a vulnerable position.

Teacher-researchers have a duty of care to ensure that potential harm to their pupils and participants is avoided. All teachers in Scotland must have a background check and a ‘Protection of Vulnerable Groups’ (PVG) certificate to work with children. For an “ethics of care”, the researcher’s obligations are grounded in relationships, thus these relationships should be maintained and protected throughout the study (Furrow, 2005). However, if any child protection issues are raised as a result of the study then “the requirement to report overrides any confidentiality agreements ... made” (Robson, 2002, p.71) with participants and thus, confidentiality may have been waved as a result.

Data Collection

All of the ethical responsibilities above are important to consider in relation to data collection methods. This is especially important during participant observation, when the observation may invade the personal space of the participant (Simpson & Tuson, 2003, p.61) or cast a light on the personal, academic abilities of a young person. The raw test data should only be used for the purposes of that particular study (Cohen, 2017) and should not be shared out with key stakeholders stated in the ethical approval.

Moreover, the researcher is aware of the importance of careful construction of a questionnaire, as the “degree of threat or sensitivity” of the questions can lead to over reporting or under reporting (Sudman & Bradburn, 1982) by participants. Some participants may feel that questions about their social background are intrusive and could lead to labelling (Denscombe & Aubrook, 1992). Thus the researcher must not force or set up the participants to divulge information. These issues must be considered to “ensure that enough data is gathered to address the focus of the research, but [not collect]... more than is necessary” (Head, 2020, p.78).

Finally, little attention is given to the storage obligation of qualitative data in the literature (Creswell, 1998, p.133). It is good practice to make copies and back up the data collected (Davidson, 1996). However, the researcher must be careful where these copies are stored, for example any paper copies of data or identifiers from this study were intended to be stored in the school in a locked drawer. Any electronic copies would have been stored on an encrypted USB drive and password locked computer and access to the data would have been limited. In an action research study conducted in a school, this would be limited to the researcher and approved named persons.

Reporting

It is important to consider, “What responsibility do investigators have for the knowledge that they have acquired?” (Robson, 2002, p.67). Stenhouse (1975) argued that researchers have the responsibility to publicly share the products of research. However, there a number of ethical issues to consider once the research is complete. Participants may be concerned with the publishing of the study (Robson, 2002). Therefore, it is important to maintain privacy and remove any traces of participants’ personal data. To this end, the researcher would have used pseudonyms in any publication arising from the study to “protect anonymity of participants [by] masking their names in the data” (Davidson, 1996). The Plain Language Statement articulated to all pupils and parents that no individual would be identifiable. To ensure validity and reliability, other reporting considerations taken by the researcher include, avoiding “taken-for-granted assumptions” about participant behaviours (Abbott & Sapsford, 2006), providing an honest account of the study and findings (Robson, 2002), as well as avoiding implicit sexist language (British Sociological Association, 2004).

DISSEMINATION

As mentioned earlier in this chapter, the purpose of action research is to implement change and for that to happen the findings of the research must be shared, discussed and critiqued nationally.

As this is an action research study which seeks to change the researcher's practice and contribute to the improvement of literacy instruction and attainment in the Scottish curricular area of Modern studies, the key audience of this research goes beyond tutors at the University of Glasgow but to teachers and senior school leaders in a bid to share effective teaching strategies. The research is also aimed at the wider academic research community to contribute to a discourse which highlights the value of action research studies in providing bottom-up drivers of educational policy and practice. Moreover, the research is aimed at those stakeholders who are currently seeking to address the literacy (reading) attainment gap prevalent within the Scottish Education system. Whether these be academic researchers, staff in schools or national/local policy makers and educational officers, it is recognized that we all have a role to play in enabling fundamental and systematic change. To all, including an international audience, the value of Modern Studies as a concrete subject discipline is also highlighted through distribution of this research.

As this enquiry was changed to an extended research proposal due to COVID-19, the researcher sought to determine what was already known about reading comprehension and consider how this might be implemented in a secondary Modern Studies classroom. To ensure that the findings from the research inform educational practice and therefore maximise the learning benefit to all pupils and young people across Scotland, the research outcomes will be communicated to key stakeholders across a range of platforms including written summaries, verbal presentations to school management and teaching staff in the researchers school and across the local authority.

This research was conducted as part of a Masters of Education and thus will be formally submitted as a dissertation to the University of Glasgow. The researcher will also be willing to discuss the research findings to anyone who shows an interest (both formally and informally), and will consider submitting a paper for a relevant conference presentation or paper, or for publication in an appropriate journal to expand the reach to potential regional, national and international adopters. Additionally, a funding application request was submitted to the Scottish College for Education Leadership (SCEL) bursary fund, in association with the GTCS and Education Scotland. If the application is successful, a final written A4 report of the results of the enquiry will be given to the funding body Scottish College for Education Leadership (SCEL). This report may also be published in their magazine.

To increase awareness and further understanding of the research project, the findings will be disseminated to the participants on request via a formal written summary of results and presentation to stakeholders (e.g. Chief Executive, Head Teacher), and informal verbal presentation and debriefing session if requested.

It is recognised that for dissemination to be effective, the findings should be shared throughout the whole duration of the research project, however this was limited due to COVID-19 school closures. During the study, the researcher engaged in regular conversations with the principal teacher and other members of the department as well as occasional email and verbal

correspondence with local authority representatives. The final research project will also be disseminated to peers and colleagues.

To aid the up-take of further research into the implementation of reading comprehension strategies in other secondary subjects, an informal verbal presentation will be also delivered to colleagues at a departmental meeting, whole staff meeting and training event where good practice will be shared. A presentation of the strategies used may be presented upon request from the South Ayrshire Modern Studies network, delivered at a regular network meeting as part of the authority literacy improvement collaborative. Prior to school closures, the researcher had planned to give a presentation to the newly qualified teachers (NQTs) and South Ayrshire council representatives at a practitioner enquiry event and perhaps contribute to or influence local policy initiatives. However, as this event was cancelled, the researcher will now send a summary of the findings to local authority representatives to contribute to the ongoing research into attainment across the South-West Improvement Collaborative. Infographics summarising the main findings may also be used in presentations, published or shared online to increase readership and uptake of the intervention (Huang et al., 2018).

One of the issues with the dissemination, particularly for colleagues, is that due to school closures the intervention was not conducted and therefore it is difficult to provide helpful, practical hints and tips that arise when implementing a new intervention or teaching strategy. Colleagues may also view the research as trying to impose more workload expectations on them, rather than an attempt to pose a discussion point (Wikeley, 1998). Nevertheless, dissemination across localised and national contexts can help other educators apply it to their own subject disciplines, thus bridging the gap between theory and practice (Ball & Cohen, 1999). It is therefore hoped that the disseminated results help to highlight and test the benefit of using and explicitly instructing reading comprehension strategies not just in English but in other secondary curricular areas such as Social Subjects, and contribute to an ongoing conversation about potential measures to address the poverty related attainment gap in Scotland. Discussion of the key findings should aid integrated literacy instruction by not only highlighting the strategies and benefits, but addressing the need for further CPD opportunities and supports for classroom teachers, to ensure that every child has the right tools and skills for the world of work.

LIMITATIONS

A major limitation of this study is the lack of first hand data. As a result of school closures, the reading intervention in Modern Studies could not take place and thus this study was changed to desk-based research. Therefore, this research proposal cannot fully answer what impact reading comprehension would have had on an S2 Modern Studies class. This then limits the dissemination of the findings and the implementation across Scottish schools.

Another limitation of this study is the lack of available literature in the Modern Studies context. As a result, literature from Social Studies interventions in the USA were used. However, Modern Studies focuses more on current affairs so pupils would be working more with statistical and non-fiction sources. Therefore, there are a lack of comparable examples and therefore the impact that the proposed intervention would have had on Modern Studies content knowledge has to be inferred. This is an area which requires further investigation.

This study may also be limited as the search strategy focused on the University of Glasgow's database. As the library was closed during this study, only books and articles that were available online through the university were included. This might result in some relevant works being excluded which may lead to 'non-reporting bias' (Page, Higgins & Stern, 2019). To minimise this impact, a significant body of relevant academic literature and educational policy documents were consulted.

A potential limitation of this study design is the proposed timescale. Given that this is a proposed action research study in a BGE secondary class, the participants and timescale for the intervention and data collection is often subjected to the pre-existing timetabling and in this case the period of class rotations. Therefore, as with any small-scale study, it is difficult to ascertain the long-term impact of the proposed interventions. If undertaken, the reading comprehension intervention results may have also been impacted by the 'interruption' of a two-week Easter holiday. If the proposed intervention is undertaken, these are considerations that future researchers may want to address and amend to suit their environment.

No methodology is perfect in design, and there is significant debate surrounding the limitations of action research. One of the re-occurring limitations is the lack of objectivity because the researcher is a participant. Therefore, some label the process as 'inward looking' (Adelman, 1989). Another issue concerns the generalisability of the findings (Punch, 1998). Added to this, a 'mixed methods' definition not clear (Feilzer, 2010), some say it is the process of using both quantitative and qualitative methods others say that it is a research paradigm in its own right (Klein, 2012). This may make the implementation of this proposed intervention difficult for some practitioners.

In particular, experimental designs are difficult to implement in the classroom. A particular limitation of this proposed intervention is that there is a lack of random sampling, due a small sample size, which is considered essential in experimental designs (Morrison, 2009). This limits the researcher's ability to attribute any change in test scores to the intervention, thus reducing generalisability. Moreover, there is no control group which affects the internal validity of the results (Boudah, 2011) as other variables may impact the intervention (Cohen et al., 2017).

Limitations may result from the chosen data collection methods. As the teacher-researcher, some difficulties may arise recording a qualitative observation whilst teaching which may lead to issues with rigor (Cohen, et al., 2017), as well as objectivity and bias (Robson, 2002) and reactivity of the pupils in response to being observed (Shaugnessy et al., 2003). Some questionnaire responses may not be detailed or accurate because it depends on the willingness of the participant (Menter et al., 2011) and their relationship with the teacher. There are also limitations with Likert scales which can give varied responses to pupil interpretation (Cohen et al., 2017) which may also skew the results.

Other limitations may include, the lack of IT equipment in the researcher's classroom and department, the reading comprehension strategies would not have incorporated any digital or technological design element. Moreover, the researcher does not have extensive experience using these methods in classroom enquiry so is relying on the discourse to say 'what works' in practice.

Despite these limitations, the study does highlight the need for further investigation the impact of reading comprehension on attainment in a Scottish secondary context.

MOVING FORWARD

This study was concerned with seeking to identify educational strategies that would improve literacy levels, through guided and paired reading, for pupils who are struggling with literacies. It was discovered, through textual analysis that teachers have a key role in improving practice and ensuring that their professional understanding as educational change agents is developed, disseminated, and recognised. Also, that “Critical participatory action researchers, as participants in their own practices, have a privileged vantage point from which to understand it” (Kemmis, McTaggart & Nixon, 2014, p.188). The literature has highlighted that teacher enquiry is a valuable practice but not without its limitations if the methodological and ethical frameworks are not adhered to. Thus teacher-researchers must ensure criticality (of their practice as well as their research methods) to improve their teacher practice so to better understand the learning experiences and outcomes for all their learners. Equally, to enact meaningful change, pupils must be given a proper voice and place in the research process.

A fundamental finding in this research for all Scottish educators, is that addressing the attainment (reading) gap has never been more pertinent in light of the recent COVID-19 school closures. Reading comprehension strategies that have been identified and examined in this report can empower poorer students to work independently, regulate their own metacognition and learning, and improve their literacy levels in subject based areas. Thus, reading comprehension should be utilised across all curricular areas to address the literacy attainment gap and ensure an excellent and equitable schooling experience for all.

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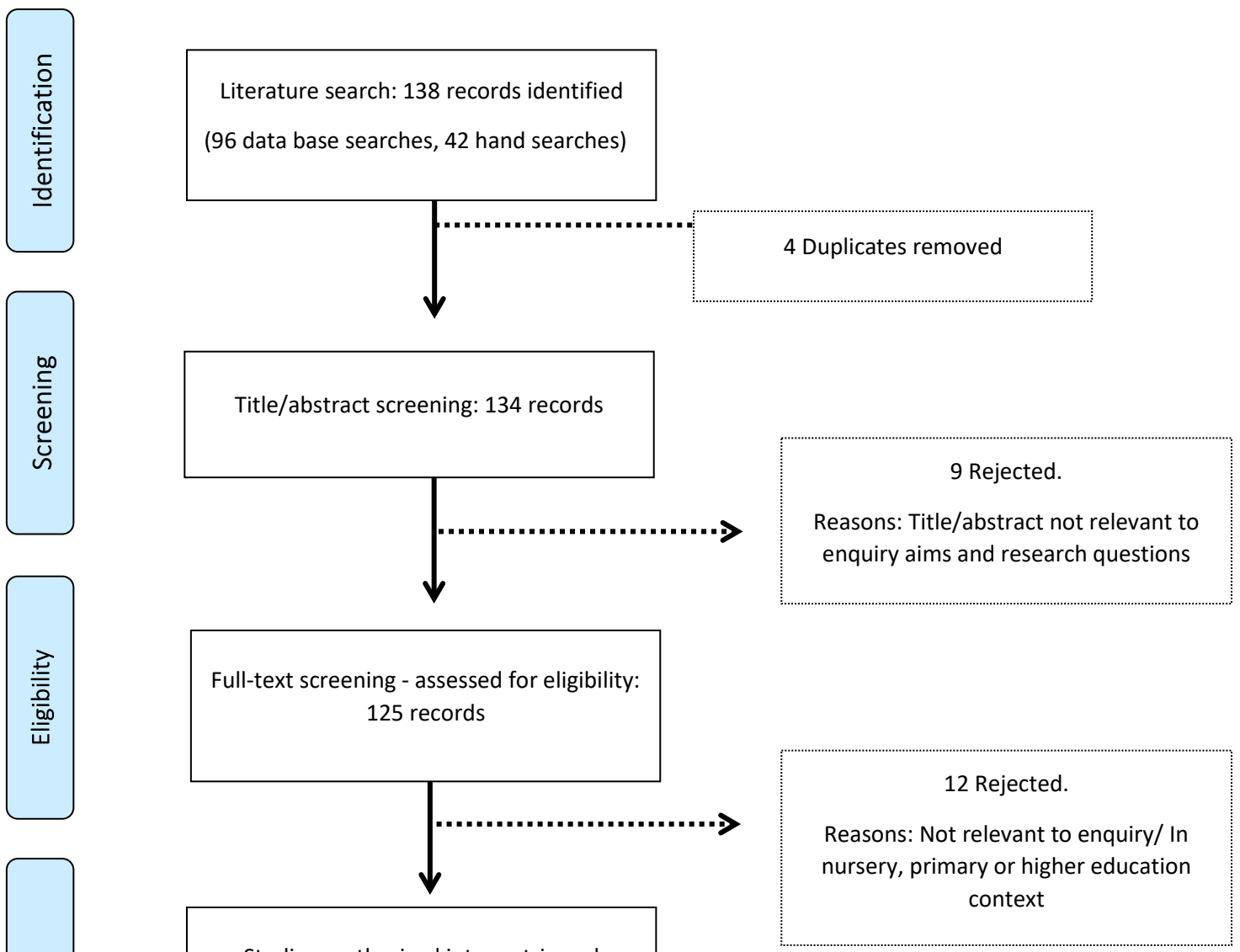
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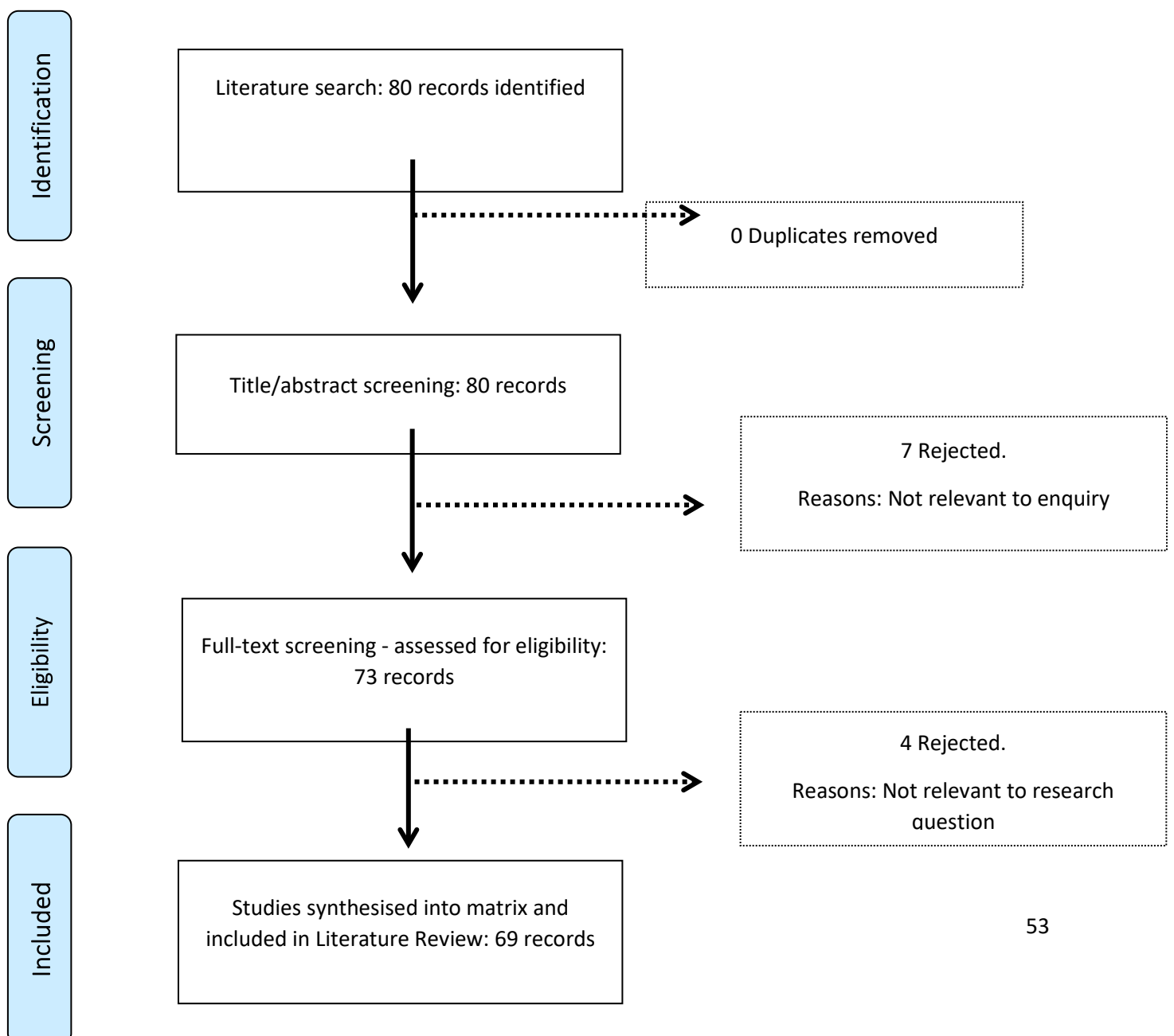
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Appendices

Appendix 1.1: PRISMA diagram outlining the process and stages of reading comprehension literature review search.



Appendix 1.2: PRISMA diagram outlining the process and stages of methodology literature review search.



Appendix 2: Guided Reading template

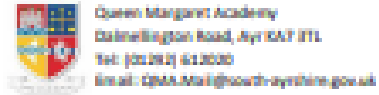
2) Create a title for and summarise each paragraph in 2 or 3 bullet points

1) Highlight key words/phrases in the passage

[Reading comprehension text inserted here for pupils to analyse]

3) Create 2 or 3 questions for each paragraph

Appendix 3: Observation Proforma



Activity:	
Date: Lesson: Teacher:	Time: Group size: Other adults:
Pupil Behaviour Descriptive Notes	Reflective Notes
Pupil Work Descriptive Notes	Sketch of Classroom
	<div style="display: flex; justify-content: space-around;"> Whiteboard Screen Desk </div> <p style="text-align: center;">Seats for participants</p> <p>Door</p>

Observation Proforma 1 based on Creswell (1998)

Appendix 4: Questionnaire – Indicative Questions



Queen Margaret Academy
 Dalmeilington Road, Ayr KA7 8H
 Tel: (01292) 447000
 Email: QMA.Ard@south-ayrshire.gov.uk

Questionnaire indicative questions

Guided Reading

	Question	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
1.	I found this reading strategy useful.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	I would use this strategy again.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	I would feel confident using this strategy independently.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	I think I could use this strategy when reading texts in other subjects.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	I think I would use this strategy in another subject.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	This strategy helped me understand the text better.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Table 1: Likert scale based on 'Fundamentals of Educational Research' (1998)

<p>1. <i>What did you find helpful?</i></p>
<p>2. <i>Was there anything you found challenging or difficult?</i></p>
<p>3. <i>Any other feedback or comments?</i></p>

Questionnaire Indicative questions

Paired Reading

	Question	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
1.	I found this reading strategy useful.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	I would use this strategy again.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	I would feel confident using this strategy independently.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	I think I could use this strategy when reading texts in other subjects.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	I think I would use this strategy in another subject.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	This strategy helped me understand the text better.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Table 2 Likert scale based on 'Fundamentals of Educational Research' (1998)

<p>1. <i>What did you find helpful?</i></p> <p>2. <i>Was there anything you found challenging or difficult?</i></p> <p>3. <i>Any other feedback or comments?</i></p>
--

Appendix 5: Pupil PLS Form



Pupil Plain Language Statement

Investigating the impact of reading comprehension strategies on pupil understanding of unfamiliar topics in S2 Modern Studies.

Researcher: Miss C McGinley
Supervisor: Mary-Clare Kelly
Programme: Master of Education

You are being invited to take part in a research study for a Masters of Education dissertation. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please ask if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

What is the purpose of the study?

The purpose of this study is to identify ways to support you develop key literacy skills that can help you to be successful in Modern Studies. The aim is to find out if using reading comprehension strategies aid your overall understanding and analysis of written sources such as newspapers.

Why have I been chosen?

You have been chosen to participate in this study, along with the other 22 pupils in the S2 Modern Studies class taught by myself, Miss C McGinley. It is hoped that through reading comprehension you will develop skills that will help you not only this year, but may provide you with tools that can be used as you progress to national exams in Social Subjects.

Do I have to take part?

Taking part is completely voluntary and you will not be disadvantaged in any way if you decide not to be involved. If you do decide to participate, you may withhold or withdraw any of your information at any time during the study without giving a reason and you won't be negatively impacted in any way by doing so.

What will happen to me if I take part?

If you decide to take part in the study, you will be asked to complete a series of questions in class based on written sources of evidence. You will also be observed in class during this process to assess your progress and your ability to work independently. This work will then be collected in and analysed. This study will take place over six weeks.

Will my taking part in this study be kept confidential?

Yes, any work you complete during this study will be kept private and will not be shown to anyone, except myself, Miss McGinley, Mr Campbell (Principal Teacher) and Mrs Browne (Head Teacher).

However, we cannot guarantee anonymity. In any case of wrongdoing, the University may be obliged to contact the school for more information.

What will happen to the results of the research study?

The results of the research will be written up as part of a Masters of Education Dissertation. All pupil names will be removed from any evidence or work that is used in the dissertation. The results will be shared with the staff at Queen Margaret Academy and South Ayrshire Council. The results may also be published online for staff and students at the School of Education at the University of Glasgow and potential journal articles and conference papers that arise from the research.

Who has reviewed the study?

This study has been reviewed and approved by the Head Teacher of Queen Margaret Academy, Mrs Browne, South Ayrshire Council and the University of Glasgow.

Contact for Further Information

If you have any questions about this study, you can ask me, Miss McGinley (2136441M@student.gla.c.uk) or my supervisor, Mary-Clare Kelly (MaryClare.Kelly@glasgow.ac.uk).

If you have any concerns regarding the conduct of this research project, you can contact the School of Education Ethics Officer, Dr Barbara Read (email Barbara.Read@glasgow.ac.uk)

Appendix 6: Parent PLS Form



Queen Margaret Academy
Dalmellington Road, Ayr KA7 3TL
Tel: (01292) 612020
Email: QMA.Mall@south-ayrshire.gov.uk

Parent Plain Language Statement

Investigating the impact of reading comprehension strategies on pupil understanding of unfamiliar topics in S2 Modern Studies.

Researcher: Miss C McGinley

Supervisor: Mary-Clare Kelly

Programme: Master of Education

Your child is being invited to take part in a research study for a Masters of Education dissertation. Before you give your consent, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please ask if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish your child to take part. Thank you for taking the time to read this.

What is the purpose of the study?

The purpose of this study is to identify ways to support your child develop key literacy skills that can help them to be successful in Modern Studies. The aim is to find out if using reading comprehension strategies aid pupil understanding and analysis of written sources such as newspapers.

Why has my child been chosen?

Your child has been chosen to participate in this study, along with the other 22 pupils in the S2 Modern Studies class taught by myself, Miss C McGinley. It is hoped that through reading comprehension the pupils will develop skills that will help them not only this year, but may provide them with tools that can be used as they progress to national exams in Social Subjects.

Does my child have to take part?

Taking part is completely voluntary and your child will not be disadvantaged in any way if they decide not to be involved. If they do decide to participate, you or your child may withhold or withdraw any information at any time during the study without giving a reason and will not be negatively impacted in any way by doing so.

What will happen to my child if they take part?

If your child decides to take part in the study, they will be asked to complete a series of questions in class based on a relevant textual source. Pupils will also be observed in class during this process to assess their progress and their ability to work independently. This work will then be collected in and analysed. This study will take place over six weeks and will follow the content of the S2 Modern Studies curriculum.

Will my child's taking part in this study be kept confidential?

Any work that your child completes as part of this study will be remain confidential and will not be seen by anyone, except myself, Miss McGinley, Mr Campbell (Principal Teacher) and Mrs Browne (Head Teacher). Please note that assurances on confidentiality will be strictly adhered to unless evidence of wrongdoing or potential harm is uncovered. However, we cannot guarantee complete anonymity. In such cases the university may be obliged to contact relevant statutory bodies/agencies.

What will happen to the results of the research study?

The results of the research will be written up as part of a Masters of Education Dissertation. All pupil names will be removed from any evidence or work that is used in the dissertation. The results will be shared with the staff at Queen Margaret Academy and South Ayrshire Council. The results may also be published online for staff and students at the School of Education at the University of Glasgow and any potential future journal articles and conference papers.

Who has reviewed the study?

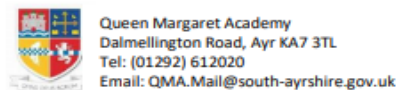
This study has been reviewed and approved by the Head Teacher of Queen Margaret Academy, Mrs Browne, South Ayrshire Council and the Ethics Committee at the University of Glasgow.

Contact for Further Information

If you have any questions about this study, you can ask me, Miss McGinley (2136441M@student.gla.c.uk) or my supervisor, Mary-Clare Kelly (MaryClare.Kelly@glasgow.ac.uk).

If you have any concerns regarding the conduct of this research project, you can contact the School of Education Ethics Officer, Dr Barbara Read (email Barbara.Read@glasgow.ac.uk)

Appendix 7: Pupil Consent Form



Pupil Consent Form

Title of Project: *Investigating the impact of reading comprehension strategies on pupil understanding of unfamiliar topics in S2 Modern Studies.*

Name of Researcher: Miss C McGinley

Name of Supervisor: Mrs M Kelly

I confirm that I have read and understood the Plain Language Statement for the above study and have had the opportunity to ask questions.

I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.

I acknowledge that participants will be referred to by pseudonym in any possible future publication.

I acknowledge that participants in this study will be de-identified.

I acknowledge that there will be no effect on my grades arising from my participation or non-participation in this research.

- The material will be treated as confidential and kept in secure storage at all times.
- The material may be used in future publications, both print and online.
- I agree to waive my copyright to any data collected as part of this project.
- I understand that other authenticated researchers will have access to this data only if they agree to preserve the confidentiality of the information as requested in this form.
- I understand that other authenticated researchers may use my words in publications, reports, web pages, and other research outputs, only if they agree to preserve the confidentiality of the information as requested in this form

I agree to take part in this research study

I do not agree to take part in this research study

Name of Participant

Signature Date

Name of Researcher

Signature Date

..... **End of consent form**

Appendix 8: Parent Consent Form



 Queen Margaret Academy
Dalmellington Road, Ayr KA7 3TL
Tel: (01292) 612020
Email: QMA.Mail@south-ayrshire.gov.uk

Parent/Guardian Consent Form

Title of Project: *Investigating the impact of reading comprehension strategies on pupil understanding of unfamiliar topics in S2 Modern Studies.*

Name of Researcher: Miss C McGinley

Name of Supervisor: Mrs M Kelly

I confirm that I have read and understood the Plain Language Statement for the above study and have had the opportunity to ask questions.

I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.

I acknowledge that participants will be referred to by pseudonym in any possible future publication.

I acknowledge that participants in this study will be de-identified.

I acknowledge that there will be no effect on my child's grades arising from my participation or non-participation in this research.

- All names and other material likely to identify individuals will be deidentified.
- The material will be treated as confidential and kept in secure storage at all times.
- The material may be used in future publications, both print and online.
- I agree to waive my copyright to any data collected as part of this project.
- I understand that other authenticated researchers will have access to this data only if they agree to preserve the confidentiality of the information as requested in this form.
- I understand that other authenticated researchers may use my words in publications, reports, web pages, and other research outputs, only if they agree to preserve the confidentiality of the information as requested in this form.

I give permission for my child to take part in this research study

I do not give permission for my child to take part in this research study

Name of Parent/Carer

Signature Date

Name of Researcher

Signature Date

..... **End of consent form**