Exam accommodations for secondary students with literacy difficulties

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List of abbreviations

ADHD - Attention Deficit Hyperactivity Disorder

ANOVA - Analysis of Variance

APPG – All Party Parliamentary Group

CTOPP - Comprehensive Test of Phonological Processing

CPD – Continuous Professional Development

DASH - Detailed Assessment of Speed of Handwriting

DfE - Department for Education

EHCP - Education, Health and Care Plan

GCSEs - General Certificate of Secondary Education

HAST - Helen Arkell Spelling Test

JCQ - Joint Council for Qualifications

SEN - Special Educational Needs

SENCO - Special Educational Needs Coordinator

SpLD - Specific Learning Difficulties

TOMAL - Test of Memory, Attention and Learning

TOWRE - Test of Word Reading Efficiency

YARC - York Assessment of Reading for Comprehension

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1. Executive summary

Exam provision for students with literacy difficulties

Students with literacy difficulties, including dyslexia, may present with significant challenges with reading accurately and fluently, spelling and writing (Rose et al., 2009; Snowling et al., 2020). Poor working memory and processing speed are often argued as underpinning these difficulties (Carroll et al., 2025). Given these characteristics, school examinations can be a source of struggle for students with literacy difficulties, evidenced by their often lower performance in end of secondary school exams (APPG, 2019).

Access arrangements are one way in which students can be supported to demonstrate their knowledge in a test environment. Notably, there is a consistent yearly rise in the number of access arrangements being granted for GCSE and A-level examinations in England (Ofqual, 2024), indicating that more students are receiving accommodations for their exams each year. Existing research in the UK has highlighted the challenges that special educational needs (SEN) teams face in meeting the demands for assessing a high number of students for access arrangements (e.g., Woods et al., 2018). A more up-to-date understanding of the challenges facing SEN teams in conducting access arrangements assessments was required and a focus on students with literacy difficulties was warranted given the administrative demand in applying for exam access arrangements for these students. For instance, SEN teams cannot rely on diagnostic reports when applying for access arrangements for students with literacy difficulties but instead must provide a comprehensive account of evidence of need. This requirement has significant implications for SEN teams managing a high demand. Importantly, the present work sought to gather data on the views and experiences of key stakeholders around the identification and provision of access arrangements in secondary schools, crucially allowing students' views to be heard in addition to practitioners.

Further, a pressing concern was the lack of research which examines the efficacy of exam access arrangements. To date, it is unknown if secondary students with literacy difficulties in the UK benefit from the use of an access arrangement. Given the time, effort and resourcing costs that go into identifying suitable exam arrangements for students, it is important to have an evidence base to support the use of such arrangements and to reflect on what works.

Four research objectives were identified:

1. To capture the current context of access arrangement provision offered to secondary students with literacy difficulties;
2. To examine the effectiveness of common exam access arrangements (i.e., 25% extra time, use of a word processor, and a scribe) in supporting students with literacy difficulties;
3. To determine what factors predict exam performance, taking into consideration the criteria used to assess the need for an access arrangement;
4. To produce guidance for schools to review their provision of exam access arrangements, based on the research findings.

Methodology

The project comprised three complementary strands:

Strand 1 aimed to capture the current context of exam access arrangements offered to secondary students with literacy difficulties (research objective one). Here the focus was on secondary schools in England. The objective was achieved in three ways: (i) administering an online survey to practitioners involved in identifying students in need of exam access arrangements; (ii) conducting in-depth semi-structured interviews with SENCOs and Specialist Assessors; as well as (iii) conducting in-depth semi-structured interviews with Year 10 and 11 students (aged 14-16) with literacy difficulties. The focus of the three separate studies was to identify current practice in identifying need, as well as provision that is offered to support students when using an exam access arrangement. In addition, participants were asked to reflect on what worked well and to report on any barriers that they encountered.

Research objectives two and three were captured in Strand 2 of the work, which focused on testing the efficacy of common exam access arrangements (25% extra time, use of a word processor, and a scribe). The decision to examine these arrangements was made on the basis of 25% extra time being the most commonly approved access arrangement. Further, use of a word processor and a scribe could be considered to help students with writing challenges, of which many students with literacy difficulties experience. The focus here was to determine whether test performance improved when students with and without literacy difficulties completed an English Language test paper task with and without an access arrangement in place. Two studies were conducted. The first was a controlled experiment that compared student performance across three conditions: (i) standard test conditions (handwriting); (ii) handwriting with 25% extra time; and (iii) when using a word processor. The second adopted a multiple baseline case study design and focused on how students with literacy difficulties performed when using a scribe. Access arrangement guidelines/regulations in England specify that, for students to meet the criteria for many access arrangements, they must perform below a certain threshold on cognitive and/or literacy measures. For instance, to qualify for 25% extra time, students must have at least two below average (standard score ≤ 84) *or* one below average (standard score ≤ 84) and one low average score (85-89) in different areas of speed of working (e.g., speed of reading, speed of writing, processing speed, working memory). Background measures were thus taken to profile the students taking part in this study.

In addition to the empirical studies that were conducted, Strand 3 focused on a practitioner resource (research objective four), which was developed based on the findings from the project for schools to reflect on their practice. This consisted of an infographic for students (co-produced with practitioners and a student), a route map to identify steps to effective provision, and an audit tool. Two knowledge-exchange workshops were held with practitioners from a range of different secondary schools to evaluate the resources. As part of the knowledge-exchange process, the resources were trialled by the practitioners between the two workshops. This led to further refinement of the resources in response to their feedback.

Key findings

Current practice

When investigating current practice and provision of access arrangements, practitioners and students identified several challenges with providing effective support:

- Practitioners that had **more specialist training** in relation to access arrangements (e.g., a Level 7 assessor qualification) felt more confident in being able to identify and support students with access arrangements. A desire for more staff training to provide effective support was also recognised in the interview data.
- **A lack of clarity around the purpose of access arrangements** was evident from key stakeholders. Parents and students were reported as often believing that access arrangements would offer an advantage over other students, rather than recognising that they should improve access but not confer an advantage. Meanwhile, some students reported a lack of understanding around what access arrangements were or why they qualified for an access arrangement. Senior leaders were also identified as encouraging SENCOs to support students whose parents were particularly vocal by offering an access arrangement. Clearer communication about the purpose of access arrangements, the eligibility criteria and process for applications are needed from schools.
- Students reported a **stigma** surrounding access arrangements, which led to sometimes choosing to not use this support even though it would be beneficial. They also talked about missing other things (e.g., break time) when using specific arrangements (e.g., staying in an exam room for extra time). This highlights how something that is supposed to be supporting (access arrangements) may raise further inequalities. Greater awareness and communication within schools around the purpose of access arrangements may reduce some of the stigma associated with their use. Subsequently, it could be expected to encourage the use of arrangements when approved.
- **Significant demand and pressure of staff workload** was noted. Many SENCOs felt that access arrangements were just one part of their role, but that the administrative burden is getting increasingly unmanageable. The increase in student numbers requiring assessment was acknowledged, as was the time it takes to pull together information for the application (e.g., screening, assessments etc).
- **Variation in practice** was evident across schools and particularly between state and independent settings. While independent schools reported having the resources available to meet the student demand, state schools reported needing to be more strategic with the resources that they had (e.g., staff time and physical space to support arrangements, technology). This meant that, in some state schools, students may 'slip through the net' and not be identified as potentially benefiting from an access arrangement.
- Linked to the above, **availability of resources** (availability of tests, time to screen/assess, staff availability for establishing a detailed picture of needs and implementation of exam arrangements, technology, physical space) were reported to impact on decision-making around identifying needs and supporting access arrangements.

- A significant concern raised by practitioners and students was **a gap in knowing how to support students to use an access arrangement**. A lot of effort was observed in identifying need as per the JCQ regulations, but monitoring the support put in place is also crucial. The majority of SENCOs and Assessors reported no monitoring processes were in place and a lack of training on how to use an access arrangement. Of concern was that students reported needing to seek external support (such as help from private tutors external to the school or from parents who researched different revision and exam strategies) to help them understand how to effectively use the arrangements that were put in place.

The efficacy of common arrangements

- As a group (overall), **both students with and without literacy difficulties were found to improve their test score** on an English Language paper when using 25% extra time or a word processor. They were **also found to produce more text** in both accommodated conditions (extra time and word processing), compared to standard test administration.
- **Students with literacy difficulties still scored below their age-matched peers** when comparing performance across all conditions (i.e., when using and not using an access arrangement).
- While students with literacy difficulties still scored significantly lower (i.e., on their test score) in both accommodated conditions (25% extra time and using a word processor) and wrote fewer words when using 25% extra time, compared to their peers' baseline; **students with literacy difficulties were found to type significantly more (using a word processor) than their peers hand wrote in the standard test time.** This does suggest that use of a word processor may increase access to the test for students with literacy difficulties.
- A l**arger gain** in how much was produced when using a word processor was observed for **students without literacy difficulties.**
- **Considerable variation** was noted for both students with and without literacy difficulties and how they performed in different exam conditions. Considering both the 25% extra time and use of a word processor conditions, **some students benefited from having an access arrangement in place, while some did worse.**
- Test performance when using a word processor was predicted by typing fluency.
- The multiple baseline case study design highlighted the **importance of practice and familiarity** with using an access arrangement (in this case, a scribe).
- Those with the lowest literacy scores showed small, but immediate improvements when the scribe was introduced.
- **Confidence** in using a scribe appeared to **increase over time** for most students.
- **Variation was observed** in benefiting from the use of a scribe, suggesting an i**ndividualised approach is necessary.**

Recommendations for practice

By fostering an environment that allows students to demonstrate their knowledge, access arrangements may contribute to greater fairness and better outcomes. Based on the research findings, key recommendations for practice have been identified through the

school audit tool (see Section 5) that was developed as part of the project. The school audit was designed to support schools in following the JCQ guidance. It focuses on roles, responsibilities and processes. Key recommendations include:

- Schools to have a designated role for access arrangement provision - a role in addition to SENCO day-to-day responsibilities (e.g., an 'Access Arrangements Coordinator' within the school).
- Senior leaders to reflect on workload in line with JCQ regulations, protecting SENCO time (or Access Arrangements Coordinator) accordingly.
- School-wide training on access arrangements reflecting roles and responsibilities. This cannot be solely located within the SEN team; the wider teaching team should be involved to identify need early, support communication with students and their families and to provide opportunities to practice and monitor use of access arrangements. Increasing the involvement of the wider teaching team would meet the JCQ regulations of needing to gather evidence from teachers as part of the application process. It would also be in line with the SEND Code of Practice (DfE/DoH, 2015) which states that 'every teacher is a teacher of SEN'.
- Governors, Senior Leadership Teams and Multi-Academy Trusts to prioritise resources to support use of access arrangements and practice; relevant staff training and staff time are required.
- Clear, early communication is encouraged between parents, teachers and students to prevent any misconceptions. Ongoing effective provision should involve input from the student themselves in terms of their preferred strategies and what is working best for them.
- Schools to remain committed to an inclusive ethos and maintain strong support for the learning needs of students with SEN. This could be achieved by following the recommendations highlighted here (e.g., managing stakeholder expectations, addressing perceptions of access arrangements, and emphasising equity in practice) and schools using the audit tool to reflect on the provision they offer.
- Clear messaging about access arrangements around school to reduce stigma related to support and 'normalise' access arrangements.
- Students to be trained in *how* to use access arrangements, as early as possible and opportunities to do so need to be frequently integrated into lessons and school tests. SEN teams to use the graduated approach (assess-plan-do-review cycle) to monitor use of an access arrangement and to reconsider support when ineffective. This is especially important given our findings that variable performance is observed when using an access arrangement.
- Training on digital skills should be available for students using a word processor. This includes touch typing, as well as broader digital literacy skills if a word processor is to become a students' normal way of working. Similarly, touch-typing training for those acting as scribes for students in exams is needed to be able to transcribe efficiently.

Recommendations for exam regulatory bodies and wider policy makers

The research findings also speak to the need of supporting equitable practice across the nation. Key recommendations for the agenda of exam regulatory bodies and wider policy makers to support equitable provision include:

- Reviewing inconsistencies in approaches that are widening inequalities between the state and independent sector. One prominent finding from the interview data was that independent schools have the capacity and availability of standardised tests to work through a number of assessments to find a score that meets the criteria for an access arrangement. This places students in state schools, that do not have these resources available to them, at a disadvantage. Regulatory bodies could seek to tighten the possible list of tests that can be used, given that the current list is extensive. For instance, when assessing verbal memory, assessors may use any one of 43 different subtests that are available. One school may have access to a number of these tests, whereas another school may only have access to one test. A review of practice could be important, asking for transparency about the number of tests conducted when applying for an access arrangement.
- Greater transparency around the number of students using a word processor for their GCSEs would be beneficial. At present, this arrangement is centre-delegated and is not reported on in Ofqual statistics of approved access arrangements. Knowledge of this is important for determining how common this arrangement is and could then be matched with future endeavours to enable students to use this arrangement effectively where use is known to be high or increasing. It is noted here that both students with and without literacy difficulties did significantly better when using a word processor, therefore for a centre-delegated arrangement care should be taken to ensure that those that use a word processor need it and it does not confer an advantage over other students who do not have access to this technology.
- A commitment to ensuring that all schools have the resources to implement access arrangements fairly (e.g., availability of laptops or other technology).
- Clarity in both regulatory guidance and policy on the importance of clear, identified and equitable processes, including reflection on resourcing and capacity building for training and use of access arrangements once allocated.

2. Background

Exams are a significant part of the education system that measure a student's knowledge, skills and understanding of a particular subject. In England, exams are positioned at various milestones in a student's academic journey and are key to progression. The most prominent assessment in English secondary schools are the General Certificate of Secondary Education (GCSEs). GCSEs take place at the end of secondary education (Year 11; aged 16), and assess knowledge of core subjects (like English, Maths and Science), along with other optional subjects. They generally consist of written exams, and sometimes coursework or non-examined assessments (for subjects like Art or Design). Importantly, GCSE results can have a major impact on an individual's future, determining what academic or vocational path a student can follow post-16.

It has been argued that high-stakes standardised tests ensure that standards are monitored and maintained across schools (Cresswell, 2000; Newton, 2007; Standish & Perks, 2021). With this, comes a recognised pressure for schools in England to succeed in 'league tables' published by the government that compare GCSE performance across state-funded schools (Leckie & Goldstein, 2017). This type of test-based school accountability may be used by school leaders and governors for evaluation and target-setting purposes (Jerrim et al., 2024; Williams et al., 2014). It may inform parental choice about school selection (Leckie & Goldstein, 2009). Further, it may influence government strategy around regional inequalities and identifying schools that are 'underperforming' and require intervention from the national school inspectorate - Ofsted (Leckie & Goldstein, 2019). Thus, reflecting on ways to support students in exams is likely high on the school agenda. In addition to the pressures on the wider school and teachers, there is also a level of accountability placed on the student (Carey et al., 2019; Denscombe, 2000), as performance in end of school exams can determine their next steps.

The pressure of high-stakes exams may, arguably, be most felt with regards to supporting students with special educational needs (SEN)[1]. The number of pupils with SEN and recorded as receiving SEN support or with an Education, Health and Care (EHC) plan in primary and secondary schools in England continues to rise each year (Department for Education [DfE], 2024). Educational outcomes for students with SEN in upper secondary education (Key Stage 4) are often reported to be lower compared to students without SEN. For example, only 36.9% of students receiving SEN support and 13.0% of those with an EHC plan secured a Grade 4[2] or above in English and Maths GCSEs in the 2022/2023 academic year, compared to 65.1% of those with no identified SEN (DfE, 2023). Given the reported

[1] It is acknowledged that Special Educational Needs and Disabilities (SEND) and SEN are often used interchangeably. The term SEN is used throughout this report, as SEND is a broader term encompassing all individuals with disabilities, even if they don't have specific educational needs. The focus of this report is on those students with specific learning difficulties that fall under the SEN umbrella. Moreover, support in schools is formally categorised and recorded as 'SEN support' (rather than SEND support) and refers to the initial level of support provided by schools to children with learning difficulties.

[2] Since 2017, GCSEs are graded from 9 (highest) to 1 (lowest), with 4 being the standard pass mark.

pressures, an investigation into the support offered to students with SEN for exam purposes was warranted.

2.1 Students with literacy difficulties

Students with Specific Learning Difficulties (SpLD) represent one of the largest groups receiving SEN support in secondary schools in England (DfE, 2024). SpLD are characterised by a difficulty in one or more specific aspects of learning and is an umbrella term used to cover a range of conditions such as dyslexia, dyspraxia and dyscalculia (SEN Code of Practice; DfE/DoH, 2015). In 2019, the APPG for dyslexia and other SpLDs reported that a student with dyslexia is twice as likely to fail to achieve a grade 4 or above in GCSE English and Maths. The current project focused on students with specific *literacy* difficulties (including those with a diagnosis of dyslexia and those identified by schools as having literacy difficulties on the SEN register)[3].

The cost of literacy difficulties is significant, affecting both the individual and the wider economy. The National Literacy Trust (2024) reported that 1 in 6 adults struggle to read and write at a basic level, and the cost of illiteracy to the UK economy is estimated at £80 billion each year (World Literacy Foundation, 2018). Poor literacy skills have been shown to impact on employability (Bynner & Parsons, 2006), social mobility (Payne, 2006) and well-being (Deighton et al., 2020). Students with dyslexia are also disproportionately underrepresented in post-secondary education, suggesting lower engagement in Higher Education (Higher Education Statistics Authority, 2024; Richardson & Wydell, 2003), which may be due to choice or inability to access Higher Education given the benchmarks required.

Prevalence estimates of dyslexia in the UK vary between 5-20% (Carroll et al., 2025), depending on the cut-off criteria used to define a reading difficulty and different operational definitions. Higher prevalence rates are believed to be a result of the cut-off used for identification being less stringent (e.g., scoring at the 25% percentile in reading; Wagner et al., 2020). Defining characteristics of dyslexia include problems with accurate and fluent reading (Carroll et al., 2025; Rose, 2009; Snowling et al., 2020). A recent Delphi study reported a consensus definition of dyslexia that identifies dyslexia as a 'set of processing difficulties' (Carroll et al., 2025). Such difficulties may be present in phonological awareness, phonological processing speed, or phonological memory and are argued to contribute to the impact of dyslexia on performance in exams.

A substantial body of research exists documenting the reading challenges of children and young people with dyslexia (see Hall et al., 2022; Melby-Lervag & Lervag, 2012; Snowling et al., 2020). In addition, research has also demonstrated that reading difficulties extend to challenges with writing (see Hebert et al., 2018 and Sumner et al., 2014). Children and adults with dyslexia have been shown to write fewer words per minute than their peers, suggesting a slow transcription speed, and their writing is typically graded as at a lower level

[3] An inclusive approach was taken to include students on the SEN register that do not have a diagnosis, given the inequalities that exist around affording a dyslexia diagnosis (see the 'dyslexia debate': Gibbs & Elliott, 2020). See also the APPG (2019) report which identified that over 80 per cent of people with dyslexia will leave school without a diagnosis.

than their peers (Sumner et al., 2013, 2020). Studies using kinematic measures to record and analyse writing temporally have demonstrated the impact of spelling difficulties on the dynamics of handwriting in children with dyslexia (e.g., Kandel et al., 2017). For instance, children with dyslexia take longer than their peers to start writing words that are less orthographically consistent or frequent (Afonso et al., 2019) and spend more time pausing within-words than their peers (Suarez-Coalla et al., 2020). Other characteristic features include a higher proportion of spelling errors (Tops et al., 2013) and less diverse vocabulary in their writing (Sumner et al., 2016; Wengelin, 2007). Poorer handwriting legibility has also been noted (van Heuverswyn et al., 2024).

Considering the noted SEN attainment gaps and the high prevalence of reading difficulties (DfE, 2024; Carroll et al., 2025), it is important to understand how students are being supported to access school exams to demonstrate their skills. The core issues related to dyslexia are associated with impacting on exam performance. Typically, these are difficulty with reading accurately and fluently, problems with spelling, and slow speed of processing - in addition to challenges with writing. Many GCSEs exams require students to complete written tasks within time constraints. For such exams, writing must be legible and produced at speed. The current project was positioned to investigate how students with literacy difficulties can be best supported to demonstrate their knowledge and remove some of these barriers to performance in high-stakes assessments. This was achieved by a focus on exam access arrangements.

2.2 Exam provision: Access arrangements

High-stakes tests, such as end of school examinations, are standardised to ensure that test-takers experience the same testing condition with the intention of maintaining fairness, standards and comparability (e.g., administered in a consistent way and evaluating students using the same criteria). However, standardisation may introduce construct-irrelevant barriers for some test-takers (Hjarne, 2020). For instance, when the skills required to complete the test are not relevant to the construct being measured. One example of this may be when students are required to complete a written exam, but they have significant problems with producing legible handwriting that would be easily readable by an examiner. Another example relates to time as a potential source of construct-irrelevant variance for students who take longer to read the exam paper and have slower processing abilities. A speeded element may disadvantage students who might require more time to write or plan their responses. If such a variable unrelated to the construct being assessed was associated with greater relative difficulty for a subset of the testing population, the test can be considered biased against those individuals (Avenia-Tapper & Llosa, 2015). A result of this may be that educators make incorrect inferences about the abilities of such students (Hjarne, 2020).

Under the Equality Act 2010, schools in England have a legal responsibility to ensure equitable access to assessment for all students. One way that students may be supported in exam settings is by being granted an access arrangement. Access arrangements aim to ‘level

the playing field' and to remove any construct-irrelevant barriers. Box 1 defines what is meant by an exam access arrangement[4].

It is noteworthy that there has been an increase in demand for exam access arrangements in England, with an upward yearly trend recorded by Ofqual (2024). For instance, in the 2023/24 academic year, there was a sharp 12.3%[5] increase compared to the previous year in the number of access arrangements awarded for GCSEs and A-levels (Ofqual, 2024).

Box 1. What are access arrangements?

In education, access arrangements are adjustments made to support children and young people who have specific needs that could affect their ability to complete an exam. Access arrangements ensure that all individuals have an equal opportunity to demonstrate their knowledge and skills, without being disadvantaged by factors related to their disability or condition (JCQ ref). The most common access arrangement to be granted for GCSEs and A-levels is 25% extra time (Ofqual (2024), affording individuals extended time to complete an exam paper. Other examples of access arrangements include use of a reader or scribe, use of a word processor, rest breaks, modified papers, etc.

To maintain equity, the process of putting exam access arrangements in place for students is regulated by the Joint Council for Qualifications (JCQ) in the UK. The JCQ represents qualification awarding bodies for GCSE, A-levels and vocational courses, including AQA, OCR, CCEA, SQA, NCFE, WJEC, City & Guilds, and Edexcel. Importantly, the JCQ publishes specific criteria that centres (schools/colleges) must refer to when assessing whether a student may require an exam access arrangement. Each year the JCQ publishes a new update, aiming to further refine the process or clarify any confusions. Centres must use the standardised forms produced by the JCQ when applying for an access arrangement on a student's behalf, although the selection of the appropriate form and what supporting evidence is required depends on the profile of the student. Given the focus here on literacy difficulties, Box 2 refers to the typical process for applying for access arrangements for students with literacy difficulties that may require further support in exams.

As shown in Box 2, the process for applying for individual access arrangements is both rigorous and lengthy. The JCQ (2024, p. 103) further stipulates that centres must consider whether the proposed adjustment is effective and suitable for the candidate's learning difficulty. They provide an example that if the student did not use 25% extra time, then it would not be appropriate to process an application for this arrangement. This suggests that centres must monitor the use of access arrangements, in addition to identifying need. An investigation of how schools are managing to effectively identify and monitor needs was central to the work reported here.

[4] Of note, access arrangements are commonly referred to as 'test accommodations' in other countries.
[5] A candidate may be granted more than one type of access arrangement, so they may contribute to the overall figure reported here more than once.

Box 2. The typical process for applying for access arrangements for students with literacy difficulties

Applications for access arrangements in England are managed by the school Special Educational Needs Coordinator (SENCO), usually in conjunction with an Exams Officer. Learning difficulties are, arguably, time intensive for centres to evidence, in comparison to more complex needs (e.g., autism, physical and sensory needs, social, emotional and mental health needs) where the centre is able to use external diagnostic reports and referral letters as evidence of need. However, for a student with a learning difficulty, such as dyslexia, a diagnostic report is not accepted for processing an access arrangement. Rather, if a SENCO believes that a student with a literacy difficulty may benefit from extra time in an exam, use of a computer reader/reader in addition a scribe and/or extra time, or scribe/speech recognition technology, they must complete a Form 8 with an assessment by the centre's appointed assessor from Year 9 onwards using current editions of nationally standardised tests. Assessments must be conducted by a specialist assessor with an Assessment Practising Certificate (APC) or suitably qualified assessor (e.g., HCPC registered psychologist, specialist teachers with a Level 7 assessing qualification).

The Form 8 is made up of three parts. Part 1 is completed by the SENCO or access arrangements coordinator and requires detailed information about the candidate's current difficulties related to school work and examinations (providing evidence of feedback from teachers, the student and/or support staff), their normal way of working and any other relevant information. Part 2 is completed by the assessor and presents the assessment evidence. Here the assessor must refer to the JCQ criteria for different access arrangements. For instance, evidence for extra time requires that a candidate must present with at least two below average (standard score ≤ 84) *or* one below average (standard score ≤ 84) and one low average score (85-89) in different areas of speed of working (e.g., speed of reading, speed of writing, processing speed, working memory). The assessor must provide details about the standardised test used, the candidate's score and where that score falls according to standard norm descriptors (e.g., low average, below average, etc). Finally, based on the assessment evidence, the SENCO, access arrangements coordinator or assessor working in the centre must complete Part 3, which confirms the access arrangements that are being applied.

Once the Form 8 has been completed for each candidate, the SENCO must submit the application to the JCQ by a specific deadline. Arrangements must be processed and approved before an examination or assessment takes place.

It is also worth noting here that some arrangements are delegated to centres, meaning that they do not need to submit a formal application for approval by the JCQ. These include use of coloured overlays, supervised rest breaks and use of a word processor (with the spelling and grammar check disabled). There is, however, still a requirement that these centre-delegated arrangements are trialled and shown to be a candidate's normal way of working. In relation to use of a word processor, centres must have a written policy that details the criteria the centre uses to award and allocate word processors for assessments and examinations. The policy must be available for inspection visits from the JCQ.

2.3 Previous research related to practice

Existing research conducted in schools in England has highlighted the challenges of managing access arrangements. Woods et al. (2018) conducted a survey to determine the perceived manageability of provisions and processes for GCSE exam access arrangements. The majority of the sample, which comprised secondary-based SENCOs, specialist assessors and exams officers, reported that the administration of access arrangements was not manageable. Two issues were raised: (i) the time needed to complete each application; and (ii) the demands of incorporating annual changes to the guidance issued by the JCQ. Further, the findings highlighted inequities created by differences in school resources to devote to identification of need and provision of an access arrangement.

A large survey broadly investigating the SENCO role highlighted that SENCOs specifically raised concerns about the intensity of paperwork required for access arrangements and cited the Form 8 (application for access arrangements) as being lengthy (Curran & Boddison, 2021). This finding has been confirmed more recently; McGhee and Masterson (2022) found that more than half of their sample of 513 UK SENCOs and specialist assessors reported the administrative burden of access arrangements as overwhelming. Nonetheless, the majority of their sample agreed the access arrangements benefitted students with SpLD.

Inclusion of pupil voice, as the key stakeholder in this process, is also important when discussing provision and is emphasised in the SEND Code of Practice (DfE/DoH, 2015). Few studies have considered the effect of access arrangements on students but, those that have, highlighted how dialogue with students is equally important. Woods et al. (2010) captured the views of 86 secondary students with SEN, including dyslexia, ADHD, and language impairment. Most students (88%) reported that they were never consulted about their need for access arrangements. Further examination of their experiences revealed that preference for arrangements was very individual, rather than driven by what might be expected given their disability/diagnosis. Building on this, Hipkiss et al. (2021) analysed use of 25% extra time in one secondary school in England and reasons for non-usage. Of those students who were allowed 25% extra time in exams, usage in mocks and final GCSE exams (across a range of subjects/test papers) was reported at 41%, meaning that for more than half of the test papers, extra time was not utilised. The reported reasons for usage depended on the nature of the exam paper, whether the student felt they had the knowledge or needed to rush, and how they felt on the day.

Given the increase in the volume of access arrangements being granted, it is conceivable that even greater pressure may be observed on SEN teams compared to previous accounts, or that additional challenges are present. Further, considering the time it takes to assess, implement and provide access arrangements, student consultation around effectiveness is key. Non-uptake of a granted access arrangement, as reported by Hipkiss et al. (2021), may indicate another (different) unmet need, or could suggest that the assigned arrangement was unreliably identified, which arguably is a waste of human resources and evidence-gathering. The International Examination Officers' Association (IEOA) survey further suggested that perceived stigma contributed to students choosing not to use extra time (Harland, 2016). It is also recognised that a detailed assessment process is required to

evidence that students with literacy difficulties are in need of an access arrangement. For such students, a diagnosis of a literacy difficulties isn't needed, nor enough to pass as evidence of need. Instead, SEN teams must provide a clear audit trail of evidencing need for these students, formally assess processing and speed of working, and document students' normal way of working. This detailed process, rather than simply granting an access arrangement if a diagnosis of a learning difficulty is present, may further compound the challenges reported by previous SEN teams (Woods et al., 2018). It means that a high proportion of students must be assessed for exam access arrangements, which causes pressure on school budgets and increases the workload of the SENCO. Further research capturing the practitioner and pupil perspective is warranted.

2.4 Previous research related to the efficacy of access arrangements for students with literacy difficulties

Research suggests that access arrangements may improve test confidence and self-efficacy for students with SEN (Feldman et al., 2011; Lovett & Leja, 2013). Post-secondary students in the USA have reported feeling more relaxed when taking a test with extended time (Slaughter et al., 2022), while others report reduced anxiety (Lovett & Harrison, 2021). A pertinent question around the efficacy of exam access arrangements still remains - essentially, do such arrangements increase students' access to the test? For instance, extra time is considered to help test-takers to complete more items in the test paper. Therefore, there is an assumption that extra time overcomes the construct-irrelevant barrier when speed is not included in the construct. This has been described as a way to 'equalise the assessment conditions' (Ontong & Rossouw, 2024) but should not be used to provide individuals with an advantage. Empirical evidence is needed to confirm whether this is indeed true.

Related to fairness, existing research conceptualises how accommodations affect the performance of students during assessments in three ways:

1. The 'interaction hypothesis', which has also been referred to as the 'maximum potential thesis (MPT)'. This suggests that the effectiveness of the accommodation depends on the interaction between the student's specific needs and the type of accommodation provided. For example, students with SpLD who process information more slowly may be assisted by additional time. Here the accommodation is considered effective when it improves the test score of students with difficulties, but has no effect on those without disabilities, as their typically developing peers are already achieving their maximum potential (reaching their ceiling) under standard time conditions (Runyan, 1991; Zuriff, 2000).
2. The 'differential boost' hypothesis refers to the idea that test accommodations may differentially improve the performance of students with disabilities (i.e., provide a greater "boost") compared to their peers without disabilities (Weis & Beauchemin, 2019). Here the accommodation is effective when it improves the performance of students with difficulties significantly more than the performance of those without difficulties.
3. Over-inflation of scores for all students has also been discussed by Duncan and Purcell (2020). Here a concern is that an accommodation, such as extra time,

benefits all candidates by over-inflating marks and undermining the validity of the exam results. Lewandowski et al. (2013) argue that if the granting of an access arrangement is justified, typically developing participants should achieve higher marks than participants with SpLD under standard test conditions, but there should be no group differences in performance when both groups are provided with the accommodation.

2.4.1 Extra time

Gregg and Nelson (2012) reviewed the effectiveness of extra time for adolescents (post-secondary) and adults with learning disabilities (specifically, literacy difficulties). Only nine studies were identified as addressing the effect of extra time, all of which were conducted in the USA, and the authors noted a lack of detailed descriptive information about the participants. That said, a consistent finding across studies was that typically achieving students outperformed students with learning difficulties when the latter group had extra test-time. In each of the reviewed studies it is not possible to answer whether the gap between the two groups of students was smaller when students with learning difficulties were given extra time versus not having extra time. A direct comparison of how students with and without learning difficulties performed in the standard test time versus the difference in performance of the two groups with extra time would have proven interesting. Only two studies in the review examined what happened when typically achieving students *also* used extra time on reading comprehension and maths tests; revealing that both students with and without learning difficulties made significant gains under accommodation conditions. The magnitude of improvement was large for students with learning difficulties, but medium for typically-achieving students. However, Gregg and Nelson (2012) identified that more research is needed in which both students with and without literacy difficulties are administered both the standardised and accommodated versions of tests.

In a similar way, but specific to SpLD, Duncan and Purcell (2020) reviewed research on extra time. Again, the consistent finding was that typically developing students performed better on timed tasks than students with SpLD. Further, the granting of extra time was generally found to demonstrate a positive effect on test scores for students with SpLD and typically achieving peers. However, contradictory findings were presented indicating there was no consensus on whether extra time conferred an advantage - some reporting a differential boost and others referring to over-inflation of scores for all students.

Only two studies have been identified that focus on a UK sample. Duncan and Purcell (2017) compared the exam scripts of three groups of UK Higher Education students: those with SpLD that used a word processor plus 25% extra time, students with SpLD that handwrote with 25% extra time, and students without SpLD who took the same exam under standard conditions. The authors found that even with accommodations in place, students with SpLD did not exceed performance of the comparison group: no significant group differences were observed for the number of words written by students in the three conditions and students with SpLD that hand wrote with extra time had significantly lower marks in their exams than the comparison group. An additional measure of the number of words written per minute was taken and significant differences between the SpLD and non-SpLD samples confirmed slower processing and provide an argument for granting extra

time. However, this study lacked a comparison of how students with SpLD performed without the accommodation, to really identify whether an accommodation benefit was shown. The other study by Hipkiss et al. (2021) focused on secondary students in one school in England and compared GCSE grades across students that used extra time versus those that did not have an access arrangement in place. They reported lower grades for students that used extra time, suggesting that access arrangements did not give students an unfair advantage. It is not, however, possible to confirm that students benefited from their access arrangement, as a comparison to performance without the arrangement was not made.

One debate that exists in the literature surrounds the arbitrary identification of '25%' extra time (Golan et al., 2020). McLoughlin (2015) argues that there is no empirical grounding in choosing 25% over 20% or 30%. Similar issues have been raised in the USA (Lovett, 2011). While examining the different cut-offs for extra time is beyond the scope of the present work, it is recognised that the identification of one set cut-off for all students (i.e., 25%) presupposes a degree of homogeneity across students. There is a question around whether 'one size fit all', particularly for students with literacy difficulties where variation in performance is often the norm (Carroll et al., 2025). An important factor that should be considered, and is missing from current research examining extra time, is the role of individual differences. For instance, Lovett et al. (2018) examined the effect of taking a test in a separate room for students with ADHD and found, overall, no benefit of students sitting an exam in a private room, compared to a classroom with other students. However, inspection of individual level performance and the relationship between ADHD symptoms revealed that separate room accommodations were beneficial for a subgroup of students with ADHD, namely those with elevated hyperactivity, but not those that rated highly as inattentive. Capturing nuances within group data is important to better understand how support could be effectively tailored to suit a students' needs.

2.4.2 Other accommodations

The majority of research in this area has focused on the effect of extra time. However, college students with learning difficulties in the US rated using a word processor and scribe more positively than having no accommodations in place for exams (Lewandowski et al., 2014). Studies comparing handwriting and typing performance in 'weaker writers' have shown moderate to large effects for an increase in length of text and improved quality of writing when using a word processor (see Morphy & Graham, 2012 for a meta-analysis of 27 studies). Moreover, Graham et al. (2011) found that when students with dyslexia were experienced in the use of a word processor, a statistically significant effect for quality was found (d = 0.54) supporting word processing over handwriting. Comparing performance to students without literacy difficulties, Berger and Lewandowski (2013) asked US college students with learning difficulties to complete an expressive writing task taken from the Wechsler Individual Achievement Test, first using handwriting and then typing. The findings did not support the interaction hypothesis or differential boost for students with literacy difficulties, as both students with and without literacy difficulties performed significantly better in terms of productivity (i.e., how much was written) and writing quality when word processing. It is, yet, unclear whether this finding would extend to an exam paper and setting, however based on the findings reported here it could be hypothesised that students with literacy difficulties would benefit from the use of a word processor.

There is also a paucity of research on the use of a scribe for students with SpLDs. Macarthur and Cavalier (2004) studied 31 secondary school students in the US, comparing the performance of those with general learning difficulties (*n* = 21) and those without (*n* = 10) in a persuasive composition using three different conditions: handwriting, speech recognition software, and dictation to a scribe. They found that those with learning difficulties produced the best essays when dictating to a scribe, whereas this condition made no difference to those without learning difficulties. They inferred that removing the transcription demand (i.e., the act of spelling and handwriting) resulted in better writing outcomes for students with learning difficulties. Further research is required to capture how different accommodations may support students with literacy difficulties.

In sum, research considering exam accommodations has focussed on the effect of extra time, given that it is the most common arrangement for students with SEN. A focus on performance on maths or reading comprehension tests was evident (see Gregg & Nelson, 2012 and Duncan & Purcell, 2020). However, there is a paucity of research examining the effectiveness of extra time on samples in the UK and with secondary students; and it is not known how students with literacy difficulties perform on exam papers that require extended writing that challenge the difficulties present for these students (i.e., an English Language paper). Given the challenges with transcription, working memory and processing (Carroll et al., 2025), it is conceivable that other arrangements, such as use of a word processor or scribe may also be an avenue of support for students with literacy difficulties. What is currently missing is a controlled study, directly comparing students with and without difficulties, in both standard and accommodated conditions. Without considering how both groups of students perform with and without an access arrangement, it is not possible to determine whether students 'benefit' from the arrangement in place and whether this benefit offers a differential advantage. Finally, consideration of individual differences and within-student factors that can impact on performance are rarely studied but could identify whether a more individualised approach is necessary.

2.5 Research objectives

From reviewing the existing literature, two key questions remain. First, how are schools managing the increased need of identifying access arrangements and ensuring effective provision? Second, are accommodations to an exam beneficial to the performance of students with literacy difficulties? These questions are important to address, as implementing access arrangements can present significant logistical and resourcing difficulties for schools to manage, such as finding rooms and increasing staff training. Further, empirical justification for the decision-making process is warranted. By capturing what works and any challenges in practice, it was also hoped that opportunities to further develop practice could be shared. Thus, the project objectives were:

1. To capture the current context of access arrangement provision offered to secondary students with SpLD;
2. To examine the effectiveness of common exam access arrangements (i.e., 25% extra time, use of a word processor, and use of a scribe) in supporting students with literacy difficulties;

3. To determine what factors predict exam performance, taking into consideration the criteria used to assess need of an access arrangement;
4. To produce guidance for schools to review their provision of exam access arrangements, based on the research findings.

The focus was on secondary schools as preparation for GCSEs is a particular pressure point for students with literacy difficulties and thus an important time to address educational inequalities. Research objective one was covered in Strand 1 of the project discussed below (Section 3). Here the views and experiences of both students and SEN practitioners were considered. Research objectives two and three are covered in Strand 2 of the project (Section 4). Two separate, but complementary, controlled efficacy studies were conducted. The first compared students with and without literacy difficulties on an English Language exam paper under standard test conditions, with 25% extra time, and when using a word processor. The second study used a multiple baseline case study approach to examine the effect of students with literacy difficulties using a scribe on test performance. Finally, research objective four (reported in Section 5) was achieved by developing an audit tool based on the research findings and took a participatory knowledge-exchange approach to further refine the guidance materials.

3. Strand 1: Current practices and provision of access arrangements

To capture what was happening in English secondary schools, the views and experiences of both practitioners and students with literacy difficulties were considered. The focus was on secondary-based SENCOs and Specialist Assessors, given their role in identifying students in need of an access arrangement. Ethical approval was obtained from UCL's IOE Education and Society. The research conforms to the British Psychological Society Code of Ethics and Conduct. Informed consent was obtained prior to data collection.

The following sections (3.1 - 3.3) summarise three key studies that were conducted to shed light on current practice.

3.1 Survey of practitioner experience

A survey was conducted with practitioners and had four key aims:

(i) Although we know the overall number of approved access arrangements granted each year and the most popular arrangement (Ofqual, 2024), information was not available about which arrangement was used by specific groups of students/areas of need. We sought to identify the most common arrangements for students with literacy difficulties, as such data may help to prioritise where to target future research around support.

(ii) While JCQ have guidance for evidencing need, it is the centre's responsibility (and specifically the SEN team) to identify which students should be assessed for exam support, to keep up-to-date with current regulations, to assess and interpret data, as well as apply for access arrangements and monitor this support. We wanted to understand how confident SEN teams were in their ability to identify and action support. The findings could be expected to inform more appropriate professional development in this area.

(iii) Little attempt has been made to understand how confident SEN practitioners feel in identifying and supporting access arrangements, and identifying factors that may influence levels of confidence. A focus here was whether experience (in years) and their role (SENCO vs Assessor) predicted level of confidence in this respect.

(iv) Given the role of the SENCO is to not only identify need but to review support, the present study aimed to identify how SEN practitioners monitored the use of access arrangements.

3.1.1 Methods

An online questionnaire was devised for the purpose of this study and hosted on Qualtrics between January-March 2023. The study was shared with existing contacts of the project team, as well as contacting SENCO and Assessor qualification training providers to share the information with alumni, and advertising the link on social media (e.g., Twitter/X). A total of 228 practitioners accessed the survey, but only complete responses are reported (e.g., consent items fully completed, and background/demographic data provided). The final sample comprised 134 secondary-based SEN practitioners (50 SENCOs, 42 SENCOs with the Specialist Assessor qualification, and 42 Specialist Assessors; n = 122 female). A range of experience was reported. A significant number of respondents were new to the role (15.67% had less than one year's experience), but overall, the sample could be considered experienced with close to two-thirds having worked for five or more years in the area of supporting students with access arrangements. The majority of respondents were working in schools in the Southeast (n = 43, 32.09%), followed by Outer London (*n* = 24, 17.91%) and Inner London (*n*= 16, 11.94%); although responses were gathered from each region in England (apart from a lack of data from the Southwest). Two-thirds of respondents worked in mainstream schools (state and academies), with the remaining working across grammar schools (n = 4, 2.98%), independent schools (n = 21, 15.68%) and specialist settings (n = 4, 2.98%). Full details about the sample details and school characteristics can be found in Sumner et al. (preprint).

Participants completed an online questionnaire that had three sections:

(1) 'About you': asking demographic questions;

(2) 'About your school': asking for contextual information about the school they were based in;

(3) 'About your practice': here closed and open-ended (free-text) questions were used to ask for procedural details about identifying needs, their views on access arrangement provision, their confidence in providing access arrangements, and how they manage such provision. They were able to elaborate on any challenges that they encountered.

3.1.2 Key findings

The steps to data analysis and detailed findings can be viewed in full in Sumner et al. (preprint). Here, a snapshot of the key findings is reported:

- **Implementation:** Close to half of respondents (*n* = 57, 42.5%) reported starting the process of identifying (screening) students that may need an access arrangement on secondary school entry (Year 7, ages 11-12). Mid-way through secondary school (Year 9, ages 13-14) was another popular response (*n* = 58, 43.2%). The remaining responses included Year 8 (*n* = 2, 1.4%), Year 10 (*n* = 14, 10.4%) and Year 11 (*n* = 3, 2.2%).
- **Most common arrangement:** Respondents were asked to rank 12 types of exam access arrangements from most common to least common for students with literacy difficulties. The most common arrangement was 25 % extra time, rated as number one by 70.2% of the sample. This was followed by use of a word processor, a reader, and rest breaks.
- **Practitioner confidence:** Respondents were asked to rate a series of statements using a 5-point Likert scale (ranging from '1 = not at all' to '5 = extremely confident'). Overall, the sample appeared very confident in their ability to remain up-to-date with the regulations, completing the applications, and choosing the appropriate arrangement for a given student. Lower scores were evident for understanding the regulations and supporting arrangements when they were in place (e.g., providing training or strategies to help students to use the arrangement effectively). Factors related to confidence judgements were explored:
    - **Years of experience**: Small to medium, positive and significant correlations ($p < .001$) were observed for the relationship between years of experience working on access arrangements and all of the confidence statements: staying up-to-date ($r = .30$), understanding regulations ($r = .38$), completing the application ($r = .34$), choosing the arrangement ($r = .34$), and supporting the arrangement ($r = .36$).
    - **Role:** Three groups (roles) were evident in the sample: (i) SENCOs, (ii) SENCOs that had obtained the specialist qualification to be able to assess for access arrangements (i.e., administer psychometric assessments), and (iii) Specialist Assessors. Separate one-way analysis of variance (ANOVAs) showed significant group differences for each of the confidence ratings. Staying up-to-date: $F(2, 95) = 10.92$, $p < .001$, $n^2_p = .19$; understanding regulations: $F(2, 95) = 12.06$, $p < .001$, $n^2_p = .20$; completing the application: $F(2, 95) = 13.94$, $p < .001$, $n^2_p = .23$; choosing the arrangement: $F(2, 95) = 13.39$, $p < .001$, $n^2_p = .22$; supporting the arrangement: $F(2, 95) = 12.42$, $p < .001$, $n^2_p = .21$. Bonferroni-corrected post hoc comparisons showed that SENCOs identified themselves as less confident than SENCOs that had the Specialist Assessor qualification, and those that were only Specialist Assessors, in all of the five areas (ps < .01). Comparisons between SENCOs + Assessor role and Assessors only revealed they were comparable in all five areas of confidence ratings (ps > .26).

- **Management of access arrangements:** Only 16 (23.1%) of SENCOs responded that they have sufficient time to manage access arrangements in their setting. In addition, 35 SENCOs (52.1% of the SENCO group) responded that they do not feel they have enough resources within their school to match the demand of access arrangements for students. All participants were asked how they monitor use of an access arrangement, and their free-text comments were analysed using content analysis. Monitoring student progress through test data was the highest reported approach (*n* = 36, 41.3%), followed by requesting feedback from teachers/staff (*n* = 33, 39.0%), and discussions with the students about use (*n* = 32, 36.7%)[6]. Also, of note, was that 23 (26.4%) responses alluded to no process being in place to monitor students' use of access arrangements.
- **Challenges identified:** Respondents were asked to reflect on any challenges that they encountered with providing access arrangements. Thematic analysis (Braun & Clarke, 2022) of the data identified three themes:

  (1) Lack of time to fulfil duties: a large number of responses emphasised how coordinating access arrangements was just one part of their specialist role, and they did not feel they have sufficient time to gather history of need, complete the required forms, ensure assessment days run smoothly, and communicate agreed arrangements with all stakeholders. In addition, lack of time was not limited to those being interviewed, but respondents also recognised how the wider teaching team are often too busy to provide appropriate written documentation to support the evidence of need and have no time to teach students how to use their arrangements effectively.

  (2) Poor understanding of access arrangements raises further challenges: responses pointed towards a lack of understanding from teachers (e.g., knowing the referral process, timelines for identifying and applying for arrangements), as well as parents and senior leaders within the school putting pressure on practitioners to put an access arrangement in place for some students.

  (3) Meeting the increase in demands puts a strain on resources: many respondents identified that they do not have the staff or physical spaces available to support all the required arrangements, particularly with the increase in need for a separate space to take exams for some students. Lack of technology and finances were also referred to as impacting on their ability to meet the increase in needs.

3.2 Practitioner interviews

The survey findings outlined above identified some key challenges that were reported to be experienced by SEN practitioners when navigating exam access arrangements. Given that the responses were limited somewhat to how much a respondent was willing to write (in the free-text boxes), the next step was to conduct a more in-depth exploration of current

[6] Note that some participants provided answers that fell across more than one of the coded categories, therefore percentages do not add up to 100%.

practices and the experiences of those identifying access arrangements for students with literacy difficulties. The aim was to delve further into why some of these challenges exist. This was achieved by a semi-structured interview with SENCOs and Assessors, aiming to capture both the challenges and opportunities/implications for school leaders to consider.

3.2.1 Methods

Interviews were conducted with 35 SEN practitioners (21 SENCOs and 14 Specialist Assessors; 3 male). All participants were working in secondary schools in England and had experience of identifying and/or assessing students for exam access arrangements. Practitioners working in both state-funded and independent schools were recruited, as both settings must adhere to JCQ regulations for applying for access arrangements. Table 1 provides an overview of the sample. Representation was shown across England, although most were based in London (*n* = 23, 65.71%). The sample could be considered experienced, with close to a third coordinating access arrangements for 6-10 years (*n* = 11, 31.42%) and another third of the sample being in this role for 10+ years (*n* = 12, 24.38%).

Individual semi-structured interviews were conducted online (over Zoom). Interviews lasted between 25-60 minutes *(M* = 51.84, *SD* = 3.59*),* were audio-recorded and transcribed verbatim. Participants were asked to reflect on their typical practice of: 1) identifying students with literacy difficulties as needing access arrangements; 2) the nature of support offered; 3) how arrangements were monitored; 4) what works well; and 5) if there are any barriers to providing support. The schedule was flexible and comprised follow-up questions and probes to generate further explanation from participants if required. The interview schedule was piloted with 3 practitioners prior to conducting the interviews.

Interview transcripts were analysed inductively, using Braun and Clarke's (2022) reflexive thematic approach where data were open-coded and respondent/data-based meanings were emphasised. A degree of deductive analysis was also employed to ensure that the open-coding contributed to producing themes that were meaningful to the research aim of capturing current practice, barriers and best practice, and to ensure that the respondent/data-based meanings that were emphasised were relevant. Initial line-by-line coding across the whole data set was first completed and then initial codes were collated into potential themes and then shaped into final themes. The research team, who have professional backgrounds in psychology and SEN, met regularly to discuss data analysis. Initial themes were revised following team discussions about possible overlap.

Table 1. An overview of the demographics of SENCO/SAs who participated in interviews

Characteristics	**Number of participants** (N = 35)
Role	
SENCO[a]	21
Specialist Assessor	14
Type of school[b]	
Independent	11
Local authority-maintained schools	10
Grammar	1
Academy	2
Specialist	2
Working across range of schools	9
Region of England	
London	23
Southeast	6
East	2
West Midlands	1
Northwest	1
Southwest	2
Length of time coordinating access arrangements	
< 1 year	5
1 – 5 years	7
6 – 10 years	11
>10 years	12

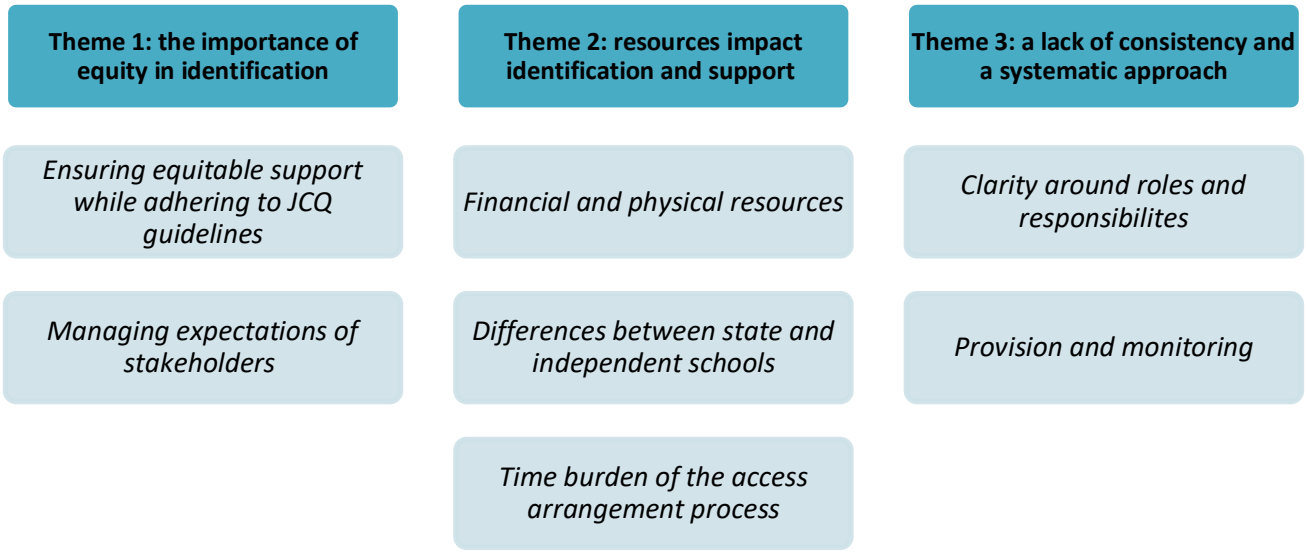
Note. [a] One SENCO was also an Assistant Headteacher, another SENCO was a designated Inclusion Lead, and one SENCO was a SEN consultant across schools; [b] Types of school: Local authority-maintained schools are state-schools that follow the national curriculum; Academy schools are state-schools independent from the local authority (run by not-for-profit trusts) that can follow a different curriculum; those responding as working across schools were Specialist Assessors that worked externally (private practice).

3.2.2 Key practitioner themes

Three overarching themes, each comprised of sub-themes, were identified - shown in Figure 1. The first theme '*the importance of equity in identification'* captures the underlying principles guiding AAs and practitioners' objective to maintain equity. The second theme *'resources impact identification and support'* describes how resources impact practice and decision-making. Finally, the third theme *'lack of consistency and a systematic approach'* refers to the variation in practice which may be driven by the complexity of the system, gaps

in knowledge, access to resources and lack of clarity around roles. The main findings are discussed below. A more detailed discussion, including illustrative quotes to support the identified themes, can be found at Antalek et al. (preprint).

Figure 1. SENCOs' and Assessors' experiences of the Access Arrangements process: Themes and subthemes



3.2.2.1 Theme one: The importance of equity in identification

This theme spoke to the participants' strong emphasis on wanting to create a 'level playing field' so that all students would have an equal opportunity to demonstrate their knowledge in exams. While most participants expressed their confidence in being able to ensure equity in identification, some noted challenges in this respect. Two sub-themes were identified: (i) Ensuring equitable support while adhering to the JCQ guidelines; and (ii) Managing expectations of stakeholders. The key findings within this theme are reported below (bullet points 1 and 2 relate to the first sub-theme, while bullet points 3-6 relate to the second sub-theme):

- **Commitment to minimising inequalities:** Many participants recognised the importance of providing access arrangements for students with literacy difficulties and, doing so, fairly. The JCQ regulations/guidelines were frequently referred to in the interviews and praised for making the process fairer over the years. Examples included the requirement to evidence need and that an arrangement is a student's 'normal way of working'. Further, the specification that dyslexia diagnostic reports do not grant access arrangements was suggested to support equity by no longer disadvantaging students with literacy difficulties who cannot easily pay for a private diagnostic assessment.
- **Ambiguity around assessment options:** Some participants identified that national consistency across schools is not possible when there is not one set list of assessments to be administered. There are several assessments that can be utilised. Concerns were raised that some schools assess exhaustively with a range of different assessments until they find two scores that meet the JCQ criteria for extra time,

while other settings do not have the capacity to take this approach and conduct one or two assessments from their available battery of tests. This may unfairly penalise students who have access to fewer types of tests, thus reducing their chance of eligibility for access arrangements.

- **A greater understanding is needed from all stakeholders about what counts as evidence:** Concerns were raised about external professionals not understanding the JCQ regulations (e.g., by stating access arrangements should be granted in external report) and how this can lead to frustrations from parents who have had their expectations raised.
- **A challenge in managing the expectations of teachers, school leaders, parents and students:** Interviews highlighted disparities in understanding access arrangements across key stakeholders, leading to unrealistic expectations.
    - Some parents were reported to view access arrangements as a competitive advantage and thus push for this, which creates significant pressure on the SEN team. This was seen more so in independent schools than state settings. Pressure was also reportedly added from senior leaders about responding to parents that were particularly vocal.
    - Exam anxiety and pressure to do well was recognised in students and some participants suggested that, as a result, students try to game the system (e.g., purposefully perform poorly on assessments to try and get an access arrangement).
    - Pressures from the wider school were also acknowledged, in terms of considering exam results.
- **The impact of parental advocacy:** Concerns were raised for those students without strong parental advocacy and how they often slip through the net. Notably, those that had experience of working in both independent and state schools recognised the advantage that independent school students had in this respect.
- **The importance of clear regulations:** Although challenges were identified, participants recognised the importance of having the JCQ guidelines to be able to justify the decisions that they were making.

3.2.2.2 Theme two: Resources impact identification and support

Although participants recognised the goal of providing access arrangements was to limit inequalities, variation in practice across participants and settings was evident. This second theme presents one of the biggest factors explaining variation in identification of need and support with using an access arrangement: resources. Within this theme, three sub-themes were identified: (i) Financial and physical resources; (ii) Differences between state and independent schools; and (iii) Time burden of the exam access arrangements process. The key findings from the sub-themes are included below in corresponding order:

- **Support is determined by school financial and physical resources:** Participants described how they must consider the availability of staff and their time, access to physical spaces, and whether technology support is available when they are considering possible access arrangements for students. This was particularly true for arrangements that required individual support (e.g., use of a scribe, technology, separate invigilation, rest breaks). In many cases, certain arrangements were

avoided if considered too resource-heavy, meaning some students may not receive the arrangement they need.

- **More resources available in independent settings:** A significant disparity between state and independent schools was evident in terms of the availability of the above resources, which in turn impacts on identification and provision of access arrangements. Participants working in independent schools reported having sufficient resources to identify every student that needed an access arrangement, while others working in state schools discussed needing to take a strategic approach to allocating limited resources.
- **Not enough time to fulfil the role:** All participants remarked that the process of identifying need and providing and monitoring access arrangements is extremely time-consuming. Participants highlighted that, in practice, sufficient time is not allocated within the broader job role, meaning that the time of the SENCO/Assessor feeds into decision-making about who is assessed (prioritising need) and whether any training to use the arrangement can be offered.

3.2.2.3 Theme three: A lack of consistency and a systematic approach

The final theme from the dataset identified the piecemeal approach to identification and provision of access arrangements that most schools face. This theme had two subthemes (i) clarity around roles and responsibilities; and (ii) provision and monitoring. The key findings for the two sub-themes are discussed below in turn:

- **A lack of joined up thinking about how best to support access arrangements:** Participants described a lack of understanding over the breadth of the role in the provision of access arrangements, as well as whose responsibility it might be to ensure that students are best supported. This lack of clarity appeared to come from senior leaders, as well as teachers, not being clear on what effective provision should look like and whether it was the responsibility of the SEN team or teacher. In particular, participants discussed that training students' how to use an access arrangement rarely happened, due to resource limitations and lack of guidance/knowledge of how to do this.
- **Staff training and a wish for further guidance around implementation:** There was recognition that more training for SENCOs would be helpful, as well as the broader team. This was often linked with expressing a desire for more guidance around implementation (training) and monitoring.

3.3 Student interviews

The final step in considering the provision provided in secondary schools in England was to capture the experiences of students themselves. Semi-structured interviews were conducted to identify what works well and where (if any) challenges exist.

3.3.1 Methods

Interviews were conducted with 13 secondary students (4 male) in Years 10 and 11 (aged 14-16). For the students to take part in the interviews, their parents/carers had to confirm

that their child was: 1) in either Year 10 or 11 and attending a secondary school in England; 2) receiving SEN support for literacy difficulties; and 3) had experience of using exam access arrangements. Parents/carers and the students provided written consent to take part in the interviews. All participants were from different secondary schools. Table 2 provides further details about the participants.

Table 2. Student participant demographics.

Characteristics	**Number of participants** (N = 13)
Type of school [a]	
Independent	5
Local authority-maintained schools	8
Region of England	
London	6
East	1
Southeast	2
Southwest	2
Northwest	1
Channel Island	1
Official Dyslexia Diagnosis	
Yes	9
No	3
Unsure [b]	1
Accommodation used [c]	
25% Extra Time	1
Word Processor	1
Both Extra Time and Word Processor	7
Rest Breaks [c]	3
Scribe	1
50% Extra Time	1
Coloured Overlay	1
Separate room	2
Modified Papers	1
Reading Pen	2

Note. [a] Types of school: Local authority-maintained schools are state schools that follow the national curriculum. [b] Of note, one student was unsure whether he had an official diagnosis and therefore is not reported here. [c]Most students used more than one accommodation. All students who receive rest breaks also had another accommodation.

Individual semi-structured interviews were conducted online (over Zoom). The schedule was flexible and comprised follow-up questions and probes to generate further

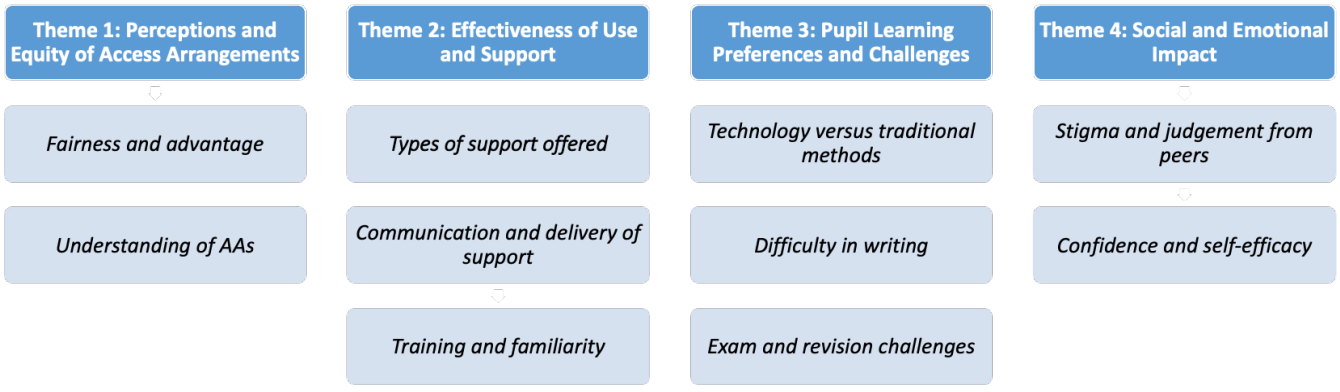
explanation from participants if required. Feedback on the schedule was provided by two professionals to ensure clarity of the interview questions, as well as piloting the questions with a student before commencing the interviews. Interviews lasted between 10-33 minutes *(M* = 18.71, *SD* = 6.43) and were audio-recorded. The conversation was later transcribed verbatim, although removing identifiable information. Students were first asked to confirm any diagnoses that they had received and what support was in place (i.e., their normal way of working in the classroom). Students were asked to reflect on: 1) their views on school assessment processes; 2) the type of support they need in the classroom and for exams; 3) their experience of using access arrangements; and 4) their experience of using technology for school purposes.

The team followed Braun and Clarke's (2022) reflexive thematic approach to analyse the data. The analytical approach was the same as detailed above in Section 3.2.1.

3.3.2 Key student themes

Four overarching themes, each comprised of sub-themes, were identified (see Figure 2). The first theme 'perceptions and equity of access arrangements' encompasses the varied perceptions of access arrangements, in relation to fairness, use and implementation. The second theme 'effectiveness of use and support' describes the variation in support provided to students in terms of using their access arrangements and establishing a normal way of working. The third theme 'pupil learning preferences and challenges' refers to the various preferences and challenges pupils face in using access arrangements. Finally, the fourth theme 'social and emotional impact' describes the social and emotional impact of support for pupils. The key findings related to each theme are discussed in brief below.

Figure 2. An overview of the student interview themes and subthemes



3.3.2.1 Theme one: Perceptions and equity of access arrangements

Overall, the majority of participants felt that their access arrangements were helpful to them, however, there were still mixed feelings about the equity of these access arrangements. Some participants questioned the fairness of using these arrangements in exams, including whether it was fair for them personally to receive such support. These perceptions were impacted by their level of understanding of the purpose of access arrangements and whether there was positive reception from their peers, as well as

understanding from their teachers and the broader school community. Within this theme, two subthemes were identified: (i) fairness and advantage; and (ii) understanding of access arrangements. A summary is provided below:

- **Fairness and advantage**: Concerns were raised around who qualifies for exam access arrangements, with some believing that some students receive support without needing it, making the process appear too easy or inconsistent. Some participants viewed their access arrangements as fair and as a necessary accommodation to allow them to complete their exams on a level playing field compared to other students. On the other hand, some pupils questioned whether access arrangements confer an advantage or are unfairly allocated to themselves.
- **Mixed understanding:** Participants who viewed their accommodations favourably and as fair adjustments appeared to understand *why* they needed an access arrangement and *how* it was beneficial for them. However, there were also pupils who lacked awareness of the access arrangement system and lacked clarity on why they received these arrangements and how they were intended to support their performance in exams. It was evident that this stemmed from a lack of information from the school.

3.3.2.2 Theme two: Effectiveness of use and support

This theme highlighted the noticeable inconsistency in support that students received for access arrangements. It reveals the absence of a standardised approach in assisting students with these arrangements, both in regular lessons and in exam-specific training. While some students reported positive experiences with supportive teachers, others felt that assistance was inconsistent or generic. It was clear that there was a lack of clear communication between teachers, students, SENCOs and exam coordinators which led to confusion and inequitable access to support. Some students recalled the challenges in receiving timely or proactive support, often having to chase teachers for assistance. Parental involvement and external tutoring emerged as additional support mechanisms, highlighting that some students seek help outside school when in-school support was insufficient. Within this theme, three sub-themes were identified: (i) types of support offered; (ii) communication and delivery of support; and (iii) training and familiarity with support tools. Here the key findings were:

- **Types of support offered:** Schools were reported as providing various types of support, including extra time, laptops, scribe support, reading pens, and separate space to take exams. Some students found this support beneficial, while others struggled with its effectiveness and felt that their needs were not met. As a result, some students sought external tutoring or parental help to supplement exam support.
- **Communication and delivery of support:** Participants had mixed experiences with teachers, with some finding them helpful, and others reported feeling unsupported. There were noted gaps in communication between teachers, students, and learning support teams, which led to confusion and, in some cases, arrangements not being put in place. For those where support was mixed, there was a desire for more structured processes.

- **Training and familiarity with support tools:** Participants reported limited training opportunities on how to use access arrangements effectively. For some types of access arrangements, such as scribes, there was also the challenge of the supposed accommodation being an unfamiliar tool. Some expressed difficulty adapting to certain access arrangements, such as reading pens or scribes, raising a key need for training to be in place to ensure appropriate provision. This would also align to the need for evidencing that arrangements are a students' normal way of working.

3.2.2.3 Theme three: Pupil learning preferences and challenges

This theme explores the diverse learning needs, preferences, and challenges of students in terms of their exam support and access arrangements. There was a mixed picture in relation to technology use and how confident participants feel in using technology for schoolwork and exams. Participants also discussed their challenges around writing and the fairness of writing-based assessments. There were concerns that writing may not accurately reflect intelligence or subject knowledge, particularly for students with spelling, grammar or processing difficulties. Within this theme, three sub-themes were identified: (i) technology versus traditional methods; (ii) difficulties in writing; and (iii) exam and revision challenges. Key findings within this theme were:

- **Technology vs. traditional methods**: Some students reported preferring technology-assisted learning, while others favoured traditional methods. While some students reported the benefit of using technology in exams and as their normal way of working (e.g., typing, speech-to-text, or assistive software), others reported feeling less confident with technology and preferred traditional methods, such as handwriting or non-digital note-taking.
- **Difficulties with writing:** Writing was identified as a significant challenge for many participants with the majority of participants expressing a dislike of writing and some questioning whether writing was a fair way of assessing knowledge. Participants repeatedly referenced challenges with structuring their ideas in writing as well as the difficulties with punctuation.
- **Exam and revision challenges:** Students struggled with exam preparation and revision strategies. Managing extra time in exams was also a concern. Many participants had not had any training in how to use their extra time and were unsure how to best apply this arrangement in exams. Participants also referenced the challenges with longer exams where their extra time meant they would need to sit the exams for several hours. This was also an issue during mocks and practice exams where they were expected to use their extra time while others had been dismissed to lunch or a free period.

3.3.2.4 Theme four: Social and Emotional Impact

Beyond academic concerns, the emotional and social impact of receiving support affected how students perceived and engaged with their support systems. Stigma and peer judgement affected students' willingness to use accommodations, with some feeling self-conscious, embarrassed, or unfairly perceived as less capable. Confidence and self-advocacy varied widely, with some participants feeling empowered by their access arrangements

while others reported low confidence and discomfort with seeking help. Within this theme, two sub-themes were identified: (i) stigma and peer judgement; and (ii) confidence and self-efficacy. The key findings within this theme are presented below:

- **Stigma and peer judgement**: How students may be perceived by others had a notable impact on their approach to accepting support. Social perceptions and misunderstandings of access arrangements were suggested to impact student confidence and willingness to use them.
- **Confidence and self-efficacy:** Participants' confidence and self-efficacy varied within these interviews. While some participants felt that access arrangements reduced the stress they felt around exams, other participants felt less secure in this regard. Attention from peers impacted confidence, with some students feeling judged or self-conscious about using access arrangements. In certain cases, educators' perceptions also contributed to feelings of scrutiny, further influencing students' willingness to use these support systems.

3.4 Summary related to the practice and provision of access arrangements

The three studies reported under this strand of work provide a comprehensive understanding of current approaches to the provision of exam access arrangements in secondary schools in England. A number of challenges were identified, but with this comes opportunities for key stakeholders to reflect upon. Triangulating the data from the three studies, six key areas were identified as raising practical implications for schools and key stakeholders to consider. These are discussed in brief below and are expanded on in the overall discussion (Section 6).

1. Practitioners that have more specialist training on access arrangements (e.g., the assessor qualification) feel more confident in being able to identify and support students with access arrangements. A desire for more staff training to be able to provide effective support was also recognised in the interview data.
2. A lack of clarity around the purpose of access arrangements was evident from key stakeholders. This was reported by SENCOs/Assessors as unrealistic expectations shown by parents and teachers/senior leaders; as well as reported by students themselves. Better communication about what access arrangements are and their purpose is needed. This may also have positive repercussions in reducing stigma, as reported by students, and subsequently encouraging the use of arrangements when approved.
3. Linked to the above, students reported how access arrangements can affect their confidence. Some chose to not use their arrangement due to feeling embarrassed, but also, in some cases, because of the length of time that they may be expected to sit in an exam hall and how that takes their time away from other activities. Here the aim of being supportive is found to result in further inequities.
4. With the increase in demand comes added pressure on staff workload. Senior leaders need to reflect on allocated time for this role if they want to ensure that all needs are met and equitably so.

5. Variation in practice was evident and could be argued to often be governed by the availability of resources (availability of tests, time to screen/assess, staff availability for implementation of exam arrangements, technology, physical space). Resources undoubtedly impact decision-making around identifying needs and supporting access arrangements.
6. While comprehensive guidelines exist for informing the identification of need of an access arrangement, gaps are evident in knowing how best to implement and support students to use their access arrangement effectively. This was identified by both practitioners and students, with the latter highlighting the impact this can have and needing to seek external support (outside of what is offered at school). Students need to be trained in how to use their access arrangement and their progress should be monitored so that the efforts to secure an access arrangement are not in vain.

4. Strand 2: Efficacy of common access arrangements

The focus of this second strand was to determine whether students perform better when they have an access arrangement in place. Two studies were conducted: (1) an efficacy study that compared performance when handwriting within the allocated test time, vs. when using 25% extra time, and when using a word processor; and (2) a multiple baseline case study which examined performance when using a scribe. As identified for Strand 1, ethical approval was received from UCL's IOE Education and Society.

4.1 Extra time and word processing

The aim of this study was to examine (a) whether 25% extra time and use of a word processor for an English Language (writing) test paper would benefit students with literacy difficulties; and (b) whether students without literacy difficulties would benefit from the same access arrangements. The comparison group provides a benchmark for performance. An English Language test paper was used as it required extended writing, a challenge for students with literacy difficulties. The access arrangements considered (extra time and word processing) should support writing difficulties, allowing more time to read the question, process and transcribe an answer. A measure of productivity (how much was written), as well as the quality (test score) was taken. Both measures were considered important, as productivity may be considered reflecting whether access to a test is improved (e.g., able to respond to more/more words written), whereas the test score should reflect success. To analyse performance, comparisons of productivity and test scores in the three different test conditions (handwriting baseline/set time, handwriting with extra time, and using a word processor) was examined on a group and individual level.

In addition, we were interested in whether a benefit in performance when using an accommodation was related to the criteria used to identify need. As discussed in Box 2, the JCQ specifies that for students to be awarded extra time they must demonstrate: at least two below average (standard score ≤ 84) *or* one below average (standard score ≤ 84) and one low average score (85-89) in different areas of speed of working (e.g., speed of reading, speed of writing, processing speed, working memory). These criteria suggest that speed of

working on literacy tasks/cognitive processing would impact on a student's ability to perform under timed conditions. The present study examined whether speed of working predicted test performance for students with literacy difficulties. This analysis was exploratory for performance when using a word processor, as there is no formal assessment of ability required for students to be able to type their answers, only that schools must be able to evidence that it is the student's normal way of working. That said, it was of interest to determine whether speed of working also may predict performance when using a word processor.

The following research questions were examined:

1. Do secondary students with and without literacy difficulties benefit from using extra time and/or use of a word processor in an English Language test?
2. What factors predict performance?

4.1.1. Method

4.1.1.1 Participants

Nine schools initially agreed to take part in the research study. Three schools had to withdraw from the study due to changes in staffing in their SEN teams. Five of the remaining schools were in London and one additional school was based just outside of London (South England). All were selected to take part as they were state schools, which was deemed important for this study given the variation in support offered between independent and state settings.

School SENCOs were asked to identify students in Years 9 and 10 that could form either of two groups: (1) Students that were identified on the SEN register as having a literacy difficulty and needing an exam access arrangement; or (2) Students that did not have any recognised SEN/literacy difficulties and would not be considered for exam access arrangements. The second group would form the comparison group. For ease, the two groups are referred to as 'SpLD' (students with literacy difficulties) and 'non-SpLD' (comparison group) from hereon.

A total of 157 participants were recruited from the final six schools. One participant did not attend any of the testing sessions, therefore they were not included in the analysis that follows. The final sample reported on below includes 156 participants: 75 students with SpLD (M_{age} in years = 14.41, SD = 0.80; 30 male) and 81 with no identified SpLD (M_{age} in years = 14.36, SD = 0.69; 42 male). An independent samples t-test revealed no significant difference between the two groups in age, $t(150) = -.69$, $p = .25$, d = .74. A chi-square test of independence showed there was no significant association between gender and SEN status, $X2(1, 156) = 2.32$, $p = .12$.

No participants reported vision or hearing difficulties. The majority of participants were White British (SpLD, *n* = 44, 58.66%; non-SpLD, *n* = 38, 46.91%), Black (SpLD, *n* = 10, 13.33%; non-SpLD, *n* = 12, 14.81%), Asian (SpLD, *n* = 3, 4.0%; non-SpLD, *n* = 11, 13.58%) and mixed ethnicities were also recorded (remaining sample, apart from 2 SpLD students and 1 in the non-SpLD group that selected 'prefer not to say'). Eight students in the SpLD group

(10.67%) had English as an Additional Language (EAL), compared to 14 (17.28%) in the non-SpLD group.

The majority of students in both groups reported that handwriting was their normal way of working (SpLD group, n = 54, 72.00%; non-SpLD group, n = 72, 88.89%). Others reported typing as their normal way of working (SpLD, n = 7, 9.33%), while some used both handwriting and typing (SpLD, n = 6, 8.00%; non-SpLD, n = 5, 6.17%).

4.1.1.2 Measures

Demographics and ways of working

Participants completed a short questionnaire that asked questions about their gender, ethnicity, language status, vision and hearing, and normal ways of working. The questions were hosted on Qualtrics and the findings have been presented in the participants section above.

Background literacy and processing measures

The JCQ guidelines (2024) for access arrangements specify that, for students to meet the criteria for access arrangements (such as extra time), they should perform below a certain threshold on cognitive and/or literacy measures. Background measures were thus taken to profile the students taking part in this study so that performance in these measures could be considered in relation to predicting outcomes. Below lists the measures taken:

Background measures:

- *Spelling ability* was measured using the Helen Arkell Spelling Test, 2nd edition (HAST-2; Caplan et al., 2012). This was a dictated single-word spelling test. Students were verbally provided with the target word and an example of the word in a sentence and then had to attempt the spelling on lined paper. The manual reports test-retest reliability as .98. Raw scores were calculated by summing the number of correctly spelled words and converted to standard scores (*M* 100, *SD* 15).
- *Vocabulary.* Vocabulary was assessed using the picture vocabulary subtest from the Woodcock-Johnson IV (Schrank & Wendling, 2018). Participants were presented with pictures of objects and were asked to name them. The test contains 23 items with a start point for each age group and a discontinue rule of 3 consecutive incorrect responses. The test median reliability is .89. Raw scores were calculated by summing the number of correct answers.

Speed of working measures:

- *Single word reading fluency* was measured using the Test of Word Reading Efficiency, 2nd edition (TOWRE-2; Torgesen et al., 2012). Two subtests were used: a sight word efficiency (SWE) where a list of words was read as fast as possible, and a phonemic decoding efficiency (PDE) which assessed rapid reading of non-words. The raw score is the number of words read correctly within 45 seconds. Two sub-tests scores are available from this measure (SWE and PDE). Raw scores were converted to standard

scores (*M* 100, *SD* 15). The test manual reports test-retest reliability ranging from .89 to .93.

- *Passage reading fluency* was assessed by administering both fluency passages from the York Assessment of Reading for Comprehension, secondary edition (YARC; Hulme et al., 2010). Each participant read a passage appropriate for their age. The time taken to read each text was used to calculate a reading rate score (reliability = 0.90–0.95, depending on age). Raw scores were calculated and converted to standard scores (*M* 100, *SD* 15).
- *Working Memory.* Working memory was assessed using the Digits Backwards subtest of the Test of Memory and Learning, second edition, which is a traditional digits recall (TOMAL-2; Reynolds & Voress, 2007). This assessment can be used as a measure of speed of working in access arrangement testing. A series of 2 to 10 digits was presented to the participants acoustically at a rate of 1 digit per second, starting with 2 and continuing up to a maximum of 10 digits. Participants were instructed to repeat the digits back in reverse order. The number of digits responded in the correct order are calculated. Raw scores were calculated and converted to standard scores (*M* 100, *SD* 15).
- *Rapid naming.* Two assessments of rapid naming were taken from the Comprehensive Test of Phonological Processing, second edition (CTOPP-2; Wagner et al., 2013): Rapid Letter Naming and Rapid Digit Naming. Here participants had to verbally identify the letters/numbers on the stimuli card, as quickly as possible. Raw scores were calculated by the time (in seconds) it took for participants to read all stimuli. Raw scores were then converted to standard scores (*M* 100, *SD* 15). The test manual reports internal consistency coefficients (reliability) for the two subtests as .85.
- *Handwriting and Typing Speed.* Handwriting speed was measured using the Detailed Assessment of Speed of Handwriting (DASH; Barnett et al., 2007). Participants were asked to copy the sentence *'the quick brown fox jumps over the lazy dog'* as quickly as possible for two minutes, with the number of words per minute calculated to give a speed of writing. Due to time constraints this sentence copying task was used as an assessment of handwriting speed, rather than the full free writing task from the DASH as is typical in an assessment for access arrangements. Sentence-copying has been shown to be a good predictor of writing performance (Sumner et al., 2013). Moreover, although this task is specific to handwriting, the same prompt and instructions were given to participants for typing, as a measure of typing speed. Raw scores from the handwriting task were converted to standard scores (*M* 100, *SD* 15). As standard scores are not available for typing, raw scores will be reported for this assessment.

Exam performance

The focus of this study was on performance on an English Language paper. Past Standard Assessment Tests (SATs) English papers were used, as they were considered to parallel the GCSE English Language extended writing tasks that focus on writing persuasive text but were suitable for the age group in the study. Typically, the GCSE English Language test paper has two parts, a persuasive writing task and then a creative writing task. Here we focused just on persuasive writing as practitioners informed the research team that this style of

writing is focused on in secondary education. Three papers were chosen after discussing the suitability of topics (writing prompts within the papers) with practitioners working with this age group and also piloting the task with three students within the same age range. The topics of the three papers were: (1) 'Save our Sports Centre', (2) 'Party Time'; and (3) 'Space for Everyone'. In all cases, a short scenario was provided on the topic and participants had to write a letter to someone persuading them to (1) save the sports centre, (2) let their year group have a party, or (3) make changes to their local park.

Participants were asked to read the exam paper and to respond either on the lined paper provided (handwriting) or using a laptop. When using a laptop, participants typed their answer to the exam paper using a program called InputLog. The interface was similar in style to Microsoft Word. Spell check and grammar checks were disabled, though participants had most options available to them as would be in MS Word including ability to edit the font size, paragraph format, etc. Using InputLog meant that the whole writing process was recorded and thus the total number of words written could be calculated (as the program records all productivity - including text that has been deleted). This was deemed important to monitor activity during the exam task. Regardless of whether they were handwriting or typing, all participants had the printed paper in front of them. The standard time for this task was 30 minutes. When students were completing the task with 25% extra time, they had 37 minutes to complete the task. The start time and finish time was written on a piece of paper next to the participant.

Two measures will be reported here:

i. Total number of words written. This included all the words written (including deletions/crossings out) in both the handwriting and typed tasks.

ii. Test score. The corresponding SATs marking criteria were used to score the writing samples across three areas: sentence structure, punctuation and text organisation (6 marks max); composition and effect (10 marks max); spelling (4 marks max). The marks across the three areas were summed, resulting in a total test score which will be used in the subsequent analysis. Performance was scored across three raters with 10% of the sample being double coded. Any disagreements were discussed with the team, leading to an agreed final score.

4.1.1.3 Design and procedure

Given the focus of the study, there were three conditions: handwriting (baseline: standard test time), handwriting with 25% extra time, and use of a word processor. The order of the conditions was counterbalanced, as was the order of the three exam questions.

Participants were seen across three testing sessions that took place in a classroom within their school. In an attempt to mimic an exam scenario but also acknowledging what was possible to set up in schools, sessions comprised 3-4 students at a time. Students were allocated desks that were spaced apart in a quiet classroom and no interruptions occurred. All sessions were conducted within a three week period, with a testing session scheduled

each week. Once the exam paper was completed, participants worked through the literacy and processing measures with a researcher.

4.1.1.4 Analytical approach

Descriptives are provided on all measures (means and standard deviations). The first step was to compare the two groups on the background measures. To answer research question one, two steps were taken:

1. Mixed-model 3 x 2 (test condition: standard vs. 25% extra time vs. word processor x group: SpLD vs. non-SpLD) ANOVAs were conducted for each of the two measures: total words written and test score.
2. 'Accommodation benefit' was calculated to determine the difference between baseline and accommodation scores, as per Lovett et al. (2018). Benefit was calculated by subtracting the participants' baseline score (standard test time) from their accommodated score. This was done for both the number of words written and final test score.

To answer research question two that asked about factors relating to test performance, we focused on students with SpLD only. First principal component analysis (PCA) was conducted to determine whether the numerous reading and processing measures could be reduced to a smaller set of variables. The results of the PCA was then used alongside the measure of spelling ability in a correlational analysis to determine their relationship with the outcome measures (test performance). Regression models were then conducted to determine which background measures predicted test performance.

4.1.2 Key findings

Table 3 reports the performance on the background measures, split by group. A series of independent samples t-tests were conducted, revealing significant group differences on all measures, whereby students with SpLD were found to perform below their peers. Bonferroni corrections were applied with the adjusted significance threshold set at $\alpha = .0045$.

Results indicated significant group differences for all of the measures shown in Table 3. Students in the non-SpLD group were found to perform significantly better than the SpLD group on the assessment of spelling ability (HAST-2), $t(156) = -9.11$, $p < .001$, $d = -1.72$, and vocabulary (Woodcock-Johnson), $t(156) = -3.56$, $p < .001$, $d = -.60$. All of the reading assessments demonstrated the same pattern: single word reading fluency (TOWRE Sight Word Efficiency), $t(156) = -8.11$, $p < .001$, $d = -1.42$, non-word reading fluency (Phonemic Decoding), $t(156) = -9.01$, $p < .001$, $d = -1.57$; as well as passage reading fluency (YARC Level 1), $t(156) = -9.21$, $p < .001$, $d = -1.61$, and Level 2, $t(156) = -10.11$, $p < .001$, $d = -1.77$.

Significant differences were found for working memory (TOMAL-2 digits backwards), $t(156) = -2.70$, $p = .008$, $d = -.47$, rapid letter naming (C-TOPP-2), $t(156) = -6.26$, $p < .001$, $d = -1.09$], and rapid digit naming, $t(156) = -7.89$, $p < .001$, $d = -1.37$.

Finally, students with no SpLD had a faster handwriting speed (DASH), $t(156) = -7.07$, $p < .001$, $d = -1.17$, and typing speed, $t(156) = -7.51$, $p < .001$, $d = -.48$.

Table 3. Background measures for the SpLD and non-SpLD groups.

Measure	SpLD (N =75) Mean (SD)	Non-SpLD (N =81) Mean (SD)
Spelling (HAST-2)	90.92 (10.95)*	110.61 (11.59)
Vocabulary (Woodcock-Johnson) [a]	15.63 (1.33)*	16.47 (1.45)
Single word reading fluency (TOWRE-2, SWE)	86.68 (13.34)*	106.39 (14.34)
Single non-word reading fluency (TOWRE-2, PDE)	87.83 (12.80)*	108.12 (12.99)
Passage reading fluency (YARC Level 1)	90.10 (12.21)*	110.05 (12.50)
Passage reading fluency (YARC Level 2)	90.39 (12.07)*	111.39 (11.62)
Working memory (TOMAL-2 digits backwards)	90.58 (10.95)*	97.77 (17.22)
Rapid naming (CTOPP-2 letters)	79.49 (15.61)*	95.53 (13.99)
Rapid naming (CTOPP-2 digits)	79.08 (15.60)*	98.38 (12.72)
Handwriting speed (DASH copy task)[b]	24.63 (4.89)*	30.71 (5.43)
Typing speed (copy task) [b]	28.31 (9.48)*	41.63 (11.10)

Note. *$p < .001$. Standard scores (*M* 100, *SD* 15) are reported unless otherwise listed as follows: [a]Raw scores used; [b]Words written per minute.

4.1.2.1 How do students perform with an access arrangement in place?

First considering how much students wrote across the different exam conditions, Table 4 presents the means, standard deviations and range of scores for the two groups across the three conditions. A 3 x 2 (condition: standard test administration vs. handwriting with 25% extra time vs. word processing x student group: SpLD vs. non-SpLD) ANOVA was conducted on the total word count. The order in which participants completed each condition was entered as a covariate to control for order effects. Figure 3 provides a visual of the scores.

There was a significant main effect of writing condition, $F(2, 212) = 7.80$, $p < .001$, $\eta^2_p = .07$, indicating that the number of words written differed across the three writing conditions. Bonferroni-adjusted pairwise comparisons indicated that participants wrote more words when using a word processor compared to the standard (handwritten) test condition and extra time (both $p < .001$). However, there was no significant difference between the standard test condition and extra time ($p = .595$).

Table 4. Number of words written per exam condition

	SpLD (N = 75)		Non-SpLD (N = 81)	
Condition	Mean (SD)	Range	Mean (SD)	Range
Standard testing (handwriting)	148.63 (63.98)	39-293	175.08 (69.21)	55-379
Handwriting 25% extra time	157.63 (70.57)	39-384	191.46 (70.99)	80-434
Word Processor	194.68 (88.45)	40-413	266.46 (102.32)	64-558

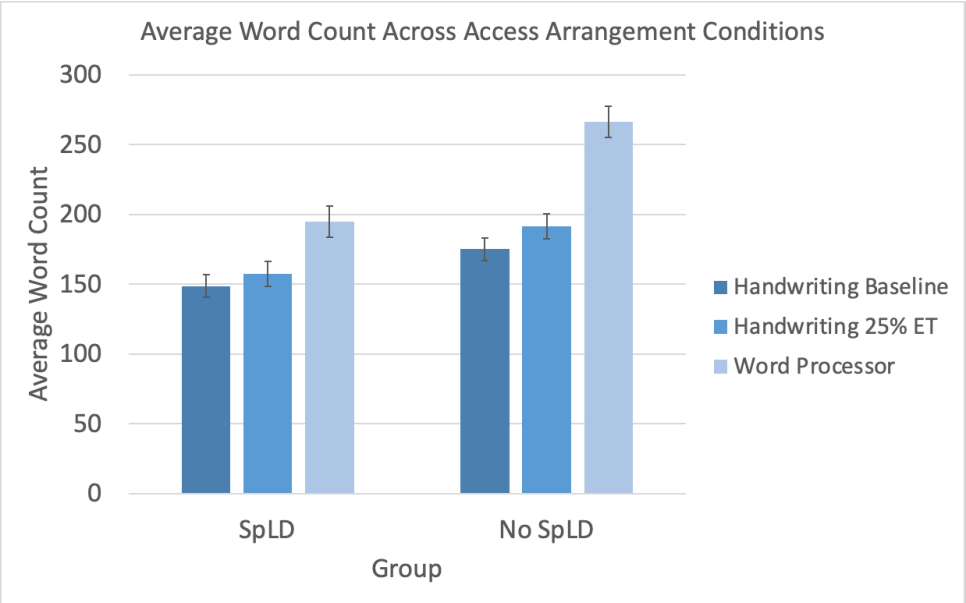


Figure 3. Average number of words written across exam conditions. *Note:* error bars represent standard error.

There was also a main effect of group, $F(1, 106) = 10.10$, $p = .002$, $\eta^2_p = .09$, indicating that word count was significantly lower for students with SpLD compared to non-SpLD students. There was no significant interaction between test condition and order of condition, $F(2, 212) = 0.12$, $p = .887$, $\eta^2_p = .001$, suggesting that order effects did not differentially impact number of words written across test conditions. However, there was a significant condition × group interaction $F(2, 212) = 3.88$, $p = .022$, $\eta^2_p = .037$. While access arrangements benefitted both groups, the relative advantage of using a word processor was greater for students without SpLD in terms of their total word count.

The next step was to analyse test performance (i.e., the score assigned when using the marking criteria). As above, a 3 x 2 ANOVA was conducted but this time to compare the test score. The order in which participants completed each condition was also entered as a covariate to control for order effects. Table 5 presents the means, standard deviations and range of scores. Figure 4 provides a visual of the scores.

There was a significant main effect of writing condition, $F(2, 212) = 4.12$, $p = .018$, $\eta^2_p = .04$, indicating that test performance differed across the three writing conditions. Bonferroni-adjusted pairwise comparisons indicated that compared to standard testing, participants performed better with extra time ($p = .021$), and when using a word processor ($p < .001$). Finally, participants performed better when using a word processor compared to handwriting with extra time ($p = .007$).

Table 5. Test performance scores per exam condition

	SpLD		Non-SpLD	
Condition	Mean (SD)	Range	Mean (SD)	Range
Standard testing (handwriting)	3.79 (2.21)	1-9	7.7 (2.93)	1-15
Handwriting 25% extra time	4.1 (2.44	1-12	8.17 (3.15)	1-16
Word Processor	4.29 (2.52)	1-11	9 (3.36)	2-17

There was also a main effect of group, $F(1, 106) = 67.17$, $p < .001$, $\eta^2_p = .39$, indicating that test performance was significantly poorer for students with SpLD compared to non-SpLD students. There was no significant interaction between test condition and order of condition, $F(2, 212) = 0.53$, $p = .588$, $\eta^2_p = .005$, suggesting that order effects did not differentially impact performance across test conditions. A non-significant condition × group interaction, $F(2, 212) = 1.72$, $p = .182$, $\eta^2_p = .016$, was observed, indicating that both groups demonstrated a similar pattern of improving their test score when an accommodation was in place and to a similar degree.

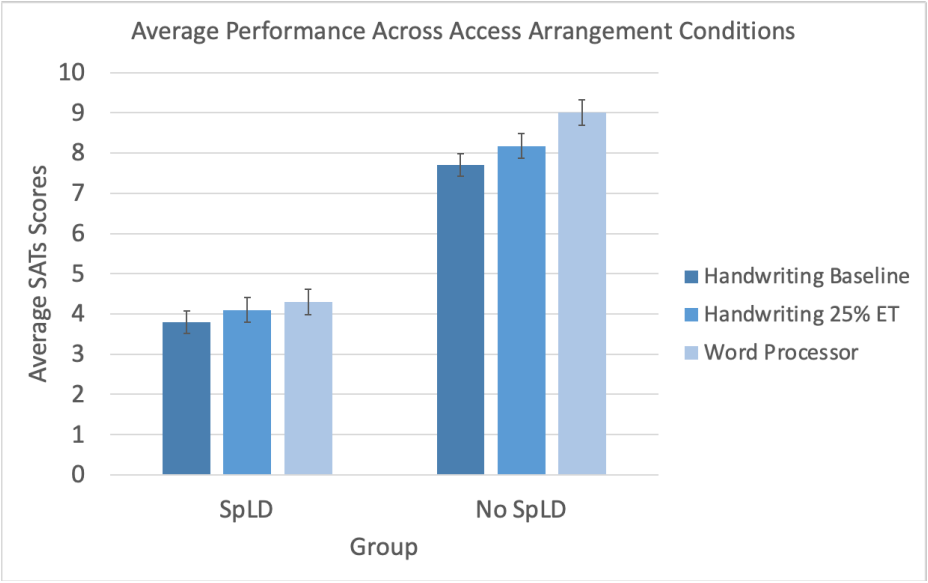


Figure 4. Average performance scores across exam conditions. *Note:* error bars represent standard error.

Further analyses were conducted directly comparing the performance of students with SpLD when using an access arrangement (extra time or word processor) to students with no SpLD in the standard test time (e.g., the baseline of the control group). Means and SDs are already reported in Tables 4 and 5. Students with SpLD were found to write significantly fewer words when using 25% extra time compared to the number of words written by students without SpLD in the baseline condition, $t(118) = -3.21$, $p = .002$, $d = -.58$. However, an advantage was observed in the word processing condition, as students with SpLD wrote significantly more words when allowed to type, compared to students without SpLD in the baseline condition, $t(120) = 5.57$, $p = .02$, $d = .42$. Considering the test score, when using 25% extra time, students with SpLD were still found to score significantly below their peers baseline performance, $t(133) = -7.64$, $p < .001$, $d = -1.32$. This was also true when evaluating the test score of students with SpLD using a word processor compared to their peers baseline performance, $t(133) = -7.21$, $p < .001$, $d = -1.24$.

4.1.2.2 Accommodation benefit

To pick up on variation within the groups, accommodation benefit was calculated to determine the difference between baseline and accommodation scores from the quality score and productivity (total word count). *Extra time benefit* was calculated by subtracting participants' handwriting baseline score (i.e., completing the task in the standard condition) from their score when completing the test with 25% extra time. *Word processor benefit* was calculated by subtracting participants' handwriting baseline score from their score when completing the test on a word processor. In these two cases, a positive value represented a benefit with the accommodation in place, while a negative value represented poorer performance with the accommodation. A final comparison was made between extra time and word processing. Here we label this variable *Extra time X Word processor benefit* (subtracting the word processing score from their extra time score) and a positive value represents better performance when using extra time, but a negative value represents better performance when using a word processor. Table 6 reports the means, SDs and ranges for accommodation benefit.

Table 6 presents some interesting results that demonstrate considerable variation in both groups. On average, for both groups, a benefit was found in the test score and measure of productivity when using an accommodation (extra time or word processing) compared to handwriting within the standard test time. Comparing extra time versus word processing revealed a greater benefit when word processing. However, of note, negative values can be seen in all measures, suggesting that some students did benefit, while for others performance was lower. Wide variation, in particular, was found for the productivity measure (number of words written).

Figure 5 further illustrates the proportion of students with SpLD that showed an improvement in their test score when using an access arrangement, as well as those that did not demonstrate an improved score. Close to a third showed no improvement with either 25% extra time or using a word processor.

Table 6. Accommodation benefit scores (productivity and quality/test score)

	SpLD		Non-SpLD	
	Mean (SD)	Range	Mean (SD)	Range
Productivity				
Extra time benefit	25.86 (91.33)	-174 - 383	20.23 (79.66)	-161 - 248
Word processor benefit	74.09 (83.81)	-74 - 308	93.25 (105.85)	-203 - 340
Extra time X word processor benefit [a]	-47.24 (91.51)	-271 - 131	-54.92 (96.24)	-258 - 162
Test score				
Extra time benefit	.66 (1.51)	-2 - 6	.21 (2.53)	-10 - 7
Word processor benefit	1.46 (2.29)	-4 - 7	2.07 (2.97)	-5 - 10
Extra time X word processor benefit [a]	-.42 (2.58)	-8 - 6	-1.28 (3.49)	-11 - 14

Note. [a] A positive value here represents higher scores when using extra time, but a negative value represents higher scores when using a word processor.

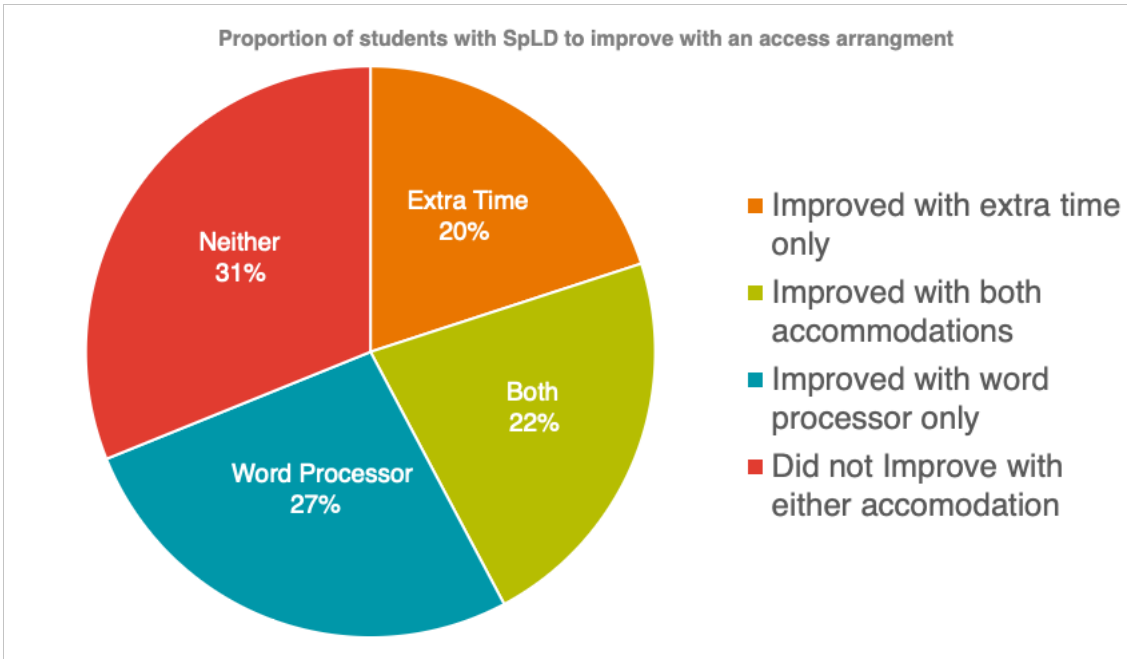


Figure 5. A visual breakdown of improvements in test score for students with SpLD using an access arrangement.

4.1.2.3 What factors impact performance?

The next step focused on students with literacy difficulties only and aimed to determine what variables are associated with test performance.

Factor analysis

Given that a number of reading and processing measures were administered, first we sought to identify if these could be reduced. A principal component analysis (PCA) was conducted to reduce dimensionality and identify latent structures among the cognitive and literacy variables. Sampling adequacy was confirmed (KMO = .52), and Bartlett's test of sphericity was significant ($\chi^2(28) = 160.93$, $p < .001$), indicating factorability. An oblique rotation (Oblimin with Kaiser Normalisation) was applied, allowing for correlations between factors. Two components were identified based on eigenvalues greater than 1, which accounted for a substantial proportion of variance.

In the first model, we included the raw scores of the cognitive and literacy measures that could be used to justify an access arrangement in a JCQ application (e.g., the TOWRE-2 single word and non-word reading fluency measure, YARC passage reading fluency, TOMAL-2 digits backwards, CTOPP-2 rapid letter naming and rapid digit naming, and handwriting and typing speed). Following this analysis, variables with loadings < 0.4 were removed as they were not strongly associated with either factor. This resulted in the removal of the TOMAL-2 digits backwards variable.

The second model resulted in a two-factor solution with loadings all > 0.4. Sampling adequacy was again confirmed (KMO = .63), and Bartlett's test of sphericity was significant ($\chi^2(21) = 153.48$, $p < .001$), indicating factorability. The rotated pattern matrix revealed that Factor 1 had high loadings for both the Phonemic Decoding Efficiency (.659) and the Sight Word Efficiency (.785) subtest of the TOWRE-2, the scores from the C-TOPP-2 digits (.853) and letters (.912), and the YARC L2 Reading Fluency (.714), suggesting a 'speed of processing' factor. Factor 2 had strong loadings for the DASH Writing Speed (.627) and typing speed (.845), indicating a 'writing fluency' factor. Given these findings, factor scores were generated using SPSS's regression method and saved as new variables to represent these latent constructs for further analysis.

Regression analysis

Pearson correlations, controlling for age, were conducted with the new factors determined by the PCA, as well as spelling ability (HAST-2) and working memory (TOMAL-2 digits backwards) to determine which components show meaningful associations with test scores and the number of words written from the different test conditions. It was deemed important to include spelling ability and working memory in the correlational analysis, given existing research that has shown that both these skills predict writing outcomes (Berninger & Winn, 2006). The correlational analysis was intended to inform which factors could be included as predictors in the subsequent regression model.

As seen in Table 7, positive significant correlations were found between spelling and working memory (r = .48, p = .03) and spelling and writing fluency (r = .55, p = .01) abilities. A positive relationship was also observed between writing fluency and the test score (r = .60, p = .005) and overall productivity (r = .48, p = .03) when using a word processor. No further correlations were found between the background measures and test performance.

A strong, positive correlation was observed between performance on the baseline standard testing condition and performance when using extra time (r = .94, p < .001) and when using a word processor (r = .66, p = .002). It is also worth noting that positive and significant correlations were found for the word count and resulting test performance in the standard condition (r = .62, p = .004), when using extra time (r = .44, p = .05, and using a word processor (r = .57, p = .008); indicating a close relationship between how much a student wrote and their final mark on the exam paper. No further significant correlations were observed.

Given the non-significant correlations with extra time, this was not explored with a regression model. Instead, a linear regression was conducted to explore the significant correlations with test performance when using a word processor. The first model examined whether the writing fluency factor predicted performance on the word processing condition. The regression model was statistically significant, $F(1, 36) = 11.51$, p = .002, and explained 25% of the variance in handwriting performance with extra time (R^2 = .25, Adjusted R^2 = .23). The writing fluency factor was a significant positive predictor of writing performance using a word processor, β = .50, $t(36) = 3.39$, p < .001, indicating that higher scores on this factor were associated with better test performance when using a word processor.

Next a linear regression model examined whether writing fluency also significantly predicted the number of words written in the word processing condition. The regression model was statistically significant, $F(1, 36) = 9.46$, p = .004, and explained 21% of the variance in handwriting performance with extra time (R^2 = .21, Adjusted R^2 = .19). The writing fluency factor was a significant positive predictor of word count using a word processor, β = .46, $t(36) = 3.07$, p = .004, indicating that higher scores on this factor were associated with a greater number of words.

Table 7. Correlation matrix for cognitive/literacy scores and test performance

	Spelling	Working memory	Speed of processing	Writing fluency	Standard test score	Extra time test score	Word processor test score	Standard word count	Extra time word count	Word processor word count
Spelling	-	.48*	.25	.55**	.25	.09	.22	.26	.07	.26
Working memory		-	.24	-.11	-.11	-.06	-.19	-.16	-.13	-.18
Speed of processing			-	.29	-.09	-.03	.15	.11	.16	.27
Writing fluency				-	.24	.09	.60**	.33	.13	.48*
Standard test score					-	.94***	.66**	.62**	.46*	.40
Extra time test score						-	.58*	.49*	.44*	.25
Word processor test score							-	.34	.52*	.57*
Standard word count								-	.37	.48*
Extra time word count									-	.55*

Note. Values are significant at $p < .05$*, $p < .01$**, and $p < .001$**.

4.1.3 Summary

The findings demonstrate that, overall, both students with and without literacy difficulties improve their test score on an English Language paper when using 25% extra time or a word processor. Both groups also produce more text when one of these accommodations is in place, suggesting increased access and benefit. Of note, even with the arrangements in place, students with literacy difficulties still performed at a lower level to their peers when also working in accommodated conditions. Comparisons were also made between the performance of students with literacy difficulties in the accommodated conditions and students with no SpLD in the standard test time (the baseline). Interestingly, students with SpLD still scored lower (i.e., test score) in both accommodated conditions (25% extra time and using a word processor) when comparing to their peers' baseline. Students with SpLD also wrote significantly less when using 25% extra time and comparing to their peers baseline. However, students with SpLD were found to type significantly more (using a word processor) than their peers hand wrote in the standard test time. This does suggest that use of a word processor may increase access to the test.

A larger gain in the amount of text produced was observed for students without literacy difficulties when using a word processor, suggesting that this accommodation may over-inflate scores for students that do not present with literacy challenges. Also of note was the considerable variation within both groups of students. From looking at the accommodation benefit variable, it was evident that some students do better with 25% extra time or a word processor, while others do worse. Furthermore, comparing individual differences in scores highlighted that close to a third of students with literacy difficulties demonstrate no difference in test score when using extra time or a word processor.

Finally, the cognitive and literacy measures that are typically used to assess need of an access arrangement did not correlate with performance when using 25% extra time for students with literacy difficulties. The only significant correlation and predictor of using a word processor was typing speed. That said, positive correlations could be seen between the amount a student writes and their test score.

4.2 Use of a scribe

The final study examined how students with literacy difficulties perform when using a scribe as an access arrangement. Research has found that students with dyslexia present with significant challenges with spelling, which has a knock-on effect on handwriting execution (Sumner et al., 2014). Poor legibility has also been reported (Kuster et al., 2024; Van Heuverswyn et al., 2024). Scribes are not widely used in schools in the UK - e.g., in the 2023/24 academic year Ofqual reported a scribe or speech recognition technology made up 7.9% of all approved arrangements. One possible explanation for this could be that human scribes are resource intensive, and schools may have limited availability of staff to support such an accommodation (see survey and interview findings in Section 3). Yet, it is conceivable that removing the transcription (spelling and handwriting) demand of writing

may alleviate a student's working memory resources to aid composition (Berninger & Winn, 2006).

Evidence of need for a scribe varies depending on the disability. To qualify to use a scribe for exam purposes, a student with a learning difficulty must meet set criteria outlined by the JCQ (2024). They must be shown to demonstrate a below average score (standard score ≤ 84) on an assessment of speed of writing and/or spelling accuracy (with unrecognisable attempts). A scribe must only be used if a candidate is 'not sufficiently competent or confident in using a word processor with the spelling and grammar check, or predictive text facility disabled' (JCQ, 2024, p.50). A scribe should also be established as the candidate's normal way of working. A human scribe must undergo training and follow set rules, such as they will write or type exactly what the student says in the exam and they are able to change what they have written/typed, but only if the student directs them to. They also can read back what has been written, but only if asked to by the student.

When considering different access arrangements, a scribe could be argued as one approach to level the playing field for students with literacy difficulties - e.g., by removing the challenge of spelling. However, it is unknown whether this may challenge students in other ways (e.g., as orally reporting an answer to someone could further disadvantage some students). As such, it is really important to investigate further how a scribe is used by students with literacy difficulties. The aim of this study was to examine whether students with literacy difficulties benefit from using a scribe for an English Language (writing) test paper.

Given that students with literacy difficulties are a heterogeneous group - confirmed by the variability observed in the efficacy study reported above - the decision was made to adopt a case study design where each participant is viewed as a discrete and unique case (Yin, 2018). Nickels et al. (2022) argue that case study methodology is a valuable tool when there is a high level of individual differences, which is lost if data is averaged. In a similar way, Elliott et al. (2001) have used this design empirically when examining test accommodations in the US and argue that this design reduces errors in interpreting results due to the heterogeneity of the students being lost during the process of data aggregation. A multiple-baseline design was utilised as it involved participants receiving a time-lagged intervention (e.g., introduction of a scribe), with the amount of time spent at a preceding baseline condition varying with each participant (Ledford & Zimmerman, 2023). This gives a picture of stability of performance (without the scribe) and then how test performance changes with the introduction of a scribe. A concurrent design was used with a staggered move from the baseline phase to the experimental phase to strengthen internal validity (Christ, 2007).

Two research questions were posed:

1. Do secondary students with literacy difficulties benefit from using a human scribe in an English Language test?
2. Does practice with a human scribe improve performance?

4.2.1. Method

4.2.1.1 Participants

Six participants were recruited from one state secondary school based in London. The school (covering ages 11-16) had approximately 1150 pupils on roll, with 2% having an Education, Health and Care Plan, and 9% requiring some form of special educational needs support. Within the school, 64% of the pupils were recorded as having English as an Additional Language (EAL), and 42% of pupils had been entitled to free school meals at any point in the last 6 years.

The SENCO at the school identified students from Year 9 (aged 13-14) who met the following criteria:

a. Having a specific difficulty with literacy. A formal diagnosis of dyslexia was not required, but they must be on the school SEN register for literacy support.

b. Identified as needing to be assessed for an exam access arrangement and use of a scribe was being considered by the SEN team.

Year 9 was selected as participants were close to the time for formal assessment for access arrangements for their GCSE examinations at the end of Year 11. Characteristics of each student (case) are provided below. The descriptors used to illustrate performance (e.g., standard score of 70-84 is described as 'below average' and 85-89 is 'low average' etc) align with Patoss recommendations (Jones & Kindersley, 2013) and can be found in Appendix 1.

Pupil 1. Pupil 1 was 13 years and 11 months at the time of the first testing session. He had no reported vision or hearing difficulties. He identified as White and that Romanian was his native language but reported living in England for his whole life. He reported speaking both Romanian and English at home but reading only in English and speaking in English with his friends and at school. Handwriting was his normal way of working and he had previously trialled rest breaks as an access arrangement for exams.

Pupil 1 scored in the below average range on all reading assessments: single word reading fluency (TOWRE-2, SS 78) and non-word reading fluency (TOWRE-2, SS 74), and passage reading fluency (YARC, SS 80). Spelling ability also fell in the below average range (HAST-2, SS 70), with writing speed falling in the well below average (DASH, SS 65). He scored in the below average range for rapid naming (CTOPP-2, letters SS 75; digits SS 70). The only score within the average range was verbal working memory (TOMAL-2, SS 100).

Pupil 2. Pupil 2 was 14 and 3 months at the time of the first testing session. He had no reported vision or hearing difficulties. He identified as Asian and spoke no other languages. Handwriting was his normal way of working and he had previously trialled rest breaks as an access arrangement for exams.

Pupil 2's spelling ability was recorded as being in the well below average range (HAST-2, SS 67) and writing speed in the below average range (DASH, SS 80). Passage

reading fluency was also in the below average range (YARC, SS 82), but he performed in the average range on all remaining measures of reading (TOWRE-2 words, SS 91, and non-words, SS 91) and cognitive processing (CTOPP-2 letter naming, SS 105, digit naming, SS 110; and TOMAL-2 verbal working memory, SS 95).

Pupil 3. Pupil 3 was 14 and 4 months at the time of the first testing session. He had no reported vision or hearing difficulties. He identified as White and spoke no other languages. Handwriting was his normal way of working and he had not previously trialled the use of any exam access arrangements.

Pupil 3's spelling ability was recorded as being in the well below average range (HAST-2, SS 68) and writing speed in the below average range (DASH, SS 70). He scored in the below average range on all reading assessments: single word reading fluency (TOWRE-2, SS 79) and non-word reading fluency (TOWRE-2, SS 73), and passage reading fluency (YARC, SS 73). His rapid naming scores were well below average (CTOPP-2 letter naming, SS 60, digit naming, SS 55). The only score within the mid-average range was verbal working memory (TOMAL-2, SS 95).

Pupil 4. Pupil 4 was 14 and 3 months at the time of the first testing session. She reported no vision or hearing difficulties. She chose to not disclose her ethnicity but did report that Polish was her native language. Handwriting was her normal way of working and she had not previously trialled the use of any exam access arrangements.

Pupil 4's spelling ability was recorded as being in the well below average range (HAST-2, SS 68), as was her rapid letter naming performance (CTOPP-2, SS 65). She scored in the below average range on all reading assessments: single word reading fluency (TOWRE-2, SS 76) and non-word reading fluency (TOWRE-2, SS 72), and passage reading fluency (YARC, SS 70), as well as for verbal working memory (TOMAL-2, SS 70). Both rapid digit naming (CTOPP-2, SS 85) and writing speed (DASH, SS 85) were in the low average range.

Pupil 5. Pupil 5 was 14 and 8 months at the time of the first testing session. She reported no vision difficulties but some damage to her left ear. She identified as White and reported English as her only language. Typing was her normal way of working and she had not previously trialled the use of any exam access arrangements.

Pupil 5 scored in the well below average range for rapid digit naming only (CTOPP-2, SS 60) and the low average range for writing speed (DASH, SS 85) and single word reading fluency (TOWRE-2, SS 85). All remaining scores were in the mid-average range: non-word reading (TOWRE-2, SS 104), passage reading fluency (YARC, SS 104), spelling (HAST-2, SS 93), rapid letter naming (CTOPP-2 SS 90) and verbal working memory (TOMAL-2, SS 100).

Pupil 6. Pupil 6 was 14 and 3 months at the time of the first testing session. He had no reported vision or hearing difficulties. He identified as Asian and that Gujrati was his native language, but reported living in England for his whole life. He reported speaking both Gujrati and English at home but reading only in English and speaking in English with his friends and at school. Handwriting was his normal way of working and he had not previously trialled the use of any exam access arrangements.

Pupil 6's writing speed (DASH, SS 70), single word reading fluency (TOWRE-2, SS 84) and passage reading fluency (YARC, SS 81) fell in the below average range. Spelling ability was found to be in the low average range (HAST-2, SS 86), as well as non-word reading fluency (TOWRE-2, SS 88) and rapid digit naming (CTOPP-2, SS 85). Rapid letter naming (CTOPP-2, SS 90) and verbal working memory (TOMAL-2, SS 100) fell in the mid-average range.

4.2.1.2 Measures

Participants completed the same demographics questionnaire and background literacy and processing measures as used in the previously reported efficacy study. The literacy and processing measures included: nonverbal ability (WISC-IV), spelling (HAST-2), vocabulary (Woodcock-Johnson), single word reading fluency (TOWRE-2), passage reading fluency (YARC), rapid naming (CTOPP-2), digits backwards assessment of working memory (TOMAL-2) and handwriting speed (DASH). Full details of each measure can be found above in Section 4.1.1.2. To qualify for a scribe, the school (centre) must demonstrate that the pupil cannot produce written work through any other means due to: spelling in the below average range (a spelling accuracy standardised score of 84 or less) with unrecognisable spellings; or below average writing speed (a standardised score of 84 or less).

Exam performance

Similar to the above efficacy study, the focus was on performance on an English Language paper. Again, past SATs English papers were used, which required students to complete an extended persuasive writing task. Six papers were needed for this study so that performance could be assessed at multiple points. The three papers that were used above were also included in this scribe study. Those topics were: (1) 'Save our Sports Centre', (2) 'Party Time'; and (3) 'Space for Everyone'. A further three papers were developed by the research team which followed the same structure (e.g., providing a short scenario on a given topic and asking the students to write a letter persuading someone about the topic). The additional three topics were: (1) 'School will finish at 5pm!'; (2) 'Free travel for everyone under 18'; and (3) 'A new centre for young people'. The suitability and comparability of topics (writing prompts) was discussed between the research team and practitioners working with this age group.

Participants were asked to read the exam paper and to respond either on the lined paper provided (handwriting) or by verbalising their answer to a human scribe sat next to them. All participants had the test paper printed in front of them. The time for this task was 20 minutes if handwriting; or 25 minutes (added 25% extra time) if using a scribe, as per JCQ regulations. This additional time is provided because dictating to a scribe is inherently slower than writing independently, and the extra time compensates for the time taken to verbalise responses.

Multiple baseline designs have a planned continuous measurement. The following four measures were taken from participants' performance on the English test papers:

i. Total number of words written. This included all the words written (including deletions/crossings out).

ii. Time taken. The time that each participant took to complete the task was measured from when students started writing (or verbalising) to when they said that they had finished.

iii. Test score. The SATs marking criteria were used to score the writing samples across three areas: sentence structure, punctuation and text organisation (6 marks max); composition and effect (10 marks max); spelling (4 marks max) for the handwriting baseline scripts. So participants could score a maximum of 20 points on the handwriting conditions. The scripts where a scribe was used did not include the spelling marks as spelling was not dictated by the participants. Thus, the maximum score they could receive was 16 points. The marks across the three areas were summed, resulting in a total test score. To compare performance across the conditions, these total scores were expressed as percentage points.

iv. Confidence. Participants completed a 7-point Likert scale (1 = not at all confident to 7 = extremely confident) after each session to indicate their level of confidence in completing the task.

4.2.1.3 Design and procedure

Participants were assessed on all the reported background, literacy and processing measures to build a profile of each case. Each participant took part in six testing sessions that examined performance on an English Language paper. The order of the exam papers (topics) was counterbalanced. The number of sessions was decided upon following discussions with the school about what would be feasible and not impose too much of an interruption to the students' lessons. Sessions took place within a quiet classroom within their school. The handwriting baseline tasks were completed in small groups and the scribe conditions were conducted 1:1. All sessions were conducted within a 6-week period.

A concurrent AB multiple-baseline across-participants design was used to determine the effect of using a scribe on test performance and productivity. Concurrent designs, whereby baseline measurements start at roughly the same time are considered advantageous at controlling for threats to internal validity (Christ, 2007). The key feature was that the length of the baseline phase and introduction of the intervention (experimental phase) were staggered at different points in time across participants. Participants were randomly allocated to one of three conditions to vary the number of sessions at baseline:

- Condition 1 had two baseline sessions where students completed the exam question by hand (i.e., typical method of completing an exam paper), followed by four experimental sessions where they used a scribe;
- Condition 2 had three baseline sessions (handwriting) and three experimental sessions (use of a scribe);
- Condition 3 had four baseline sessions (handwriting) and two experimental sessions (scribe).

In the intervention (experimental) sessions, a researcher acted as a scribe for the participant. Those in the scribe role had received training from Communicate-Ed to do so. The role of the scribe was explained to participants prior to each session using a script with points compiled from the JCQ guidelines (JCQ, 2022). The script identified what a scribe is permitted to do and not do (e.g., scribes are not allowed to give help with answering the question). The scribe typed the student's response. It is noteworthy that participants did not have to dictate spellings but were required to indicate when they wanted to add a punctuation mark. Participants were also offered a chance to review their final work, this is where many of them dictated punctuation. During the scribing sessions, the computer screen was positioned between the researcher and the participant giving the participant a clear view. Grammar and spelling checks were disabled when the scribe typed the students' work.

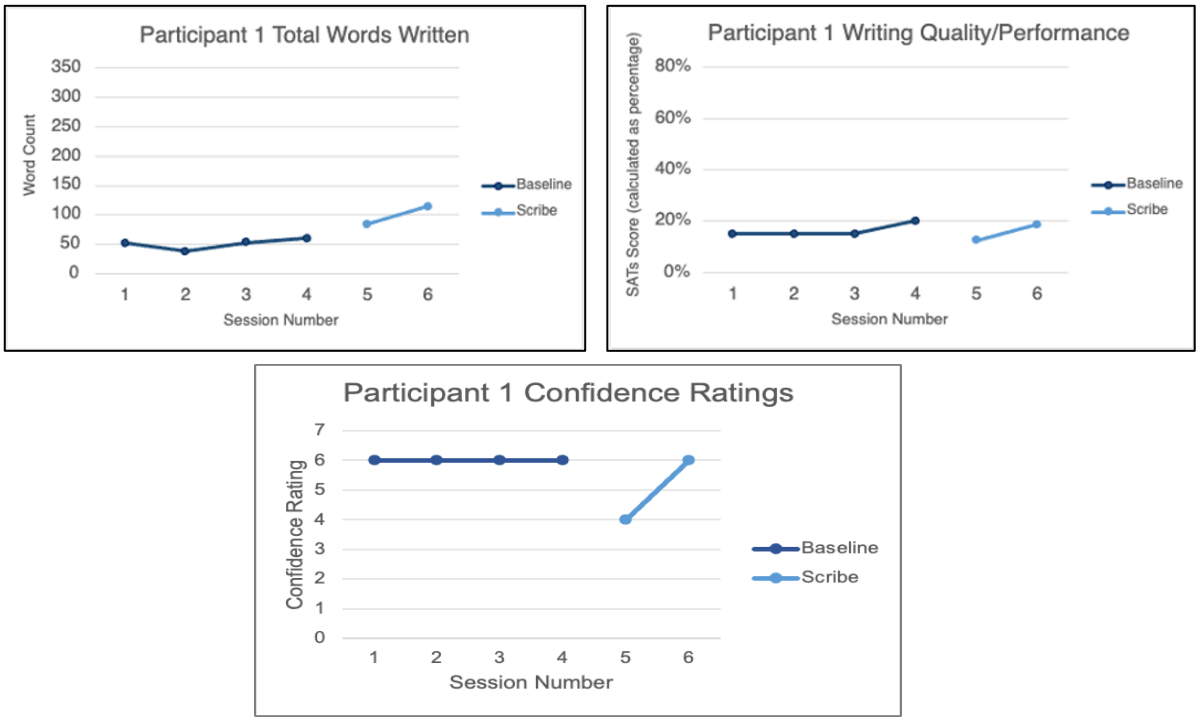
4.2.1.1 Analytical approach

The profile of each student is reported descriptively in Section 4.2.1.1. Performance across the six sessions is then graphed for each student, reporting test performance score and total number of words written. Visual analysis of the data will be commented on, paying attention to any changes in performance when the scribe was used.

4.2.2 Key findings

In all cases, the total time on task was lower when using a scribe versus handwriting. This was true for all pupils and across each testing session. The average time scribing was 6.65 minutes, compared to the average time handwriting which was 12.46 minutes. The three remaining measures are reported for each student: test score, number of words and confidence ratings.

Figure 6. Pupil 1 performance: total words written, test score and confidence ratings



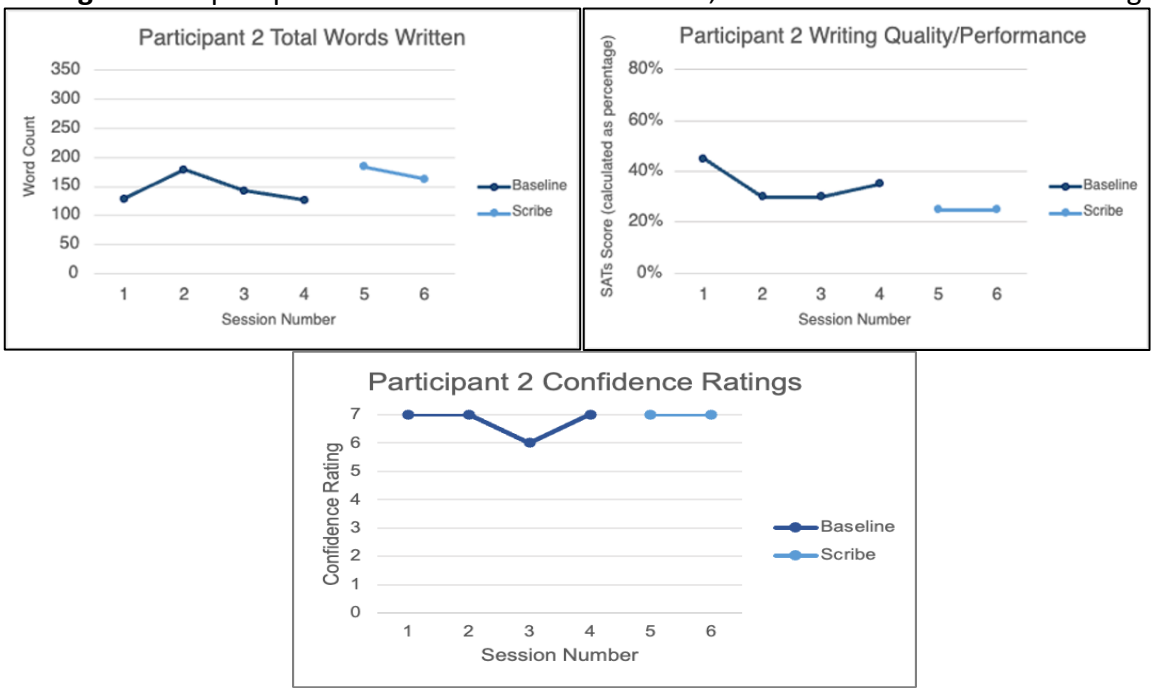
Pupil 1.

Figure 6 displays the total words written, test scores (expressed as percentages) and confidence ratings across the six sessions for Pupil 1. Visual analysis indicates that Pupil 1 produced more text when using a scribe, with a higher word count evident in the final session. Test performance was not shown to have an immediate effect when introducing the experimental phase and remained similar across handwritten and scribe conditions. Confidence in the handwriting conditions was stable and relatively high. A stark decrease in confidence was reported with the introduction of the scribe, although this returned to the previous confidence levels on the second attempt with the scribe.

Pupil 2.

Figure 7 reports the findings for Pupil 2. Visual inspection of the data points indicates that Pupil 2 produced more text in the scribe conditions. Test scores show a steep initial decrease when the experimental phase was introduced, which remained stable and suggests better performance when handwriting. Confidence ratings were relatively stable across the testing sessions.

Figure 7. Pupil 2 performance: total words written, test score and confidence ratings



Pupil 3.

Figure 8 reports the findings from the four measures for Pupil 3. Visual analysis reveals an increase in the number of words written when the scribe was introduced although performance then appeared relatively stable. The test score did show a slight increase when a scribe was used. Confidence ratings were variable across sessions although high ratings

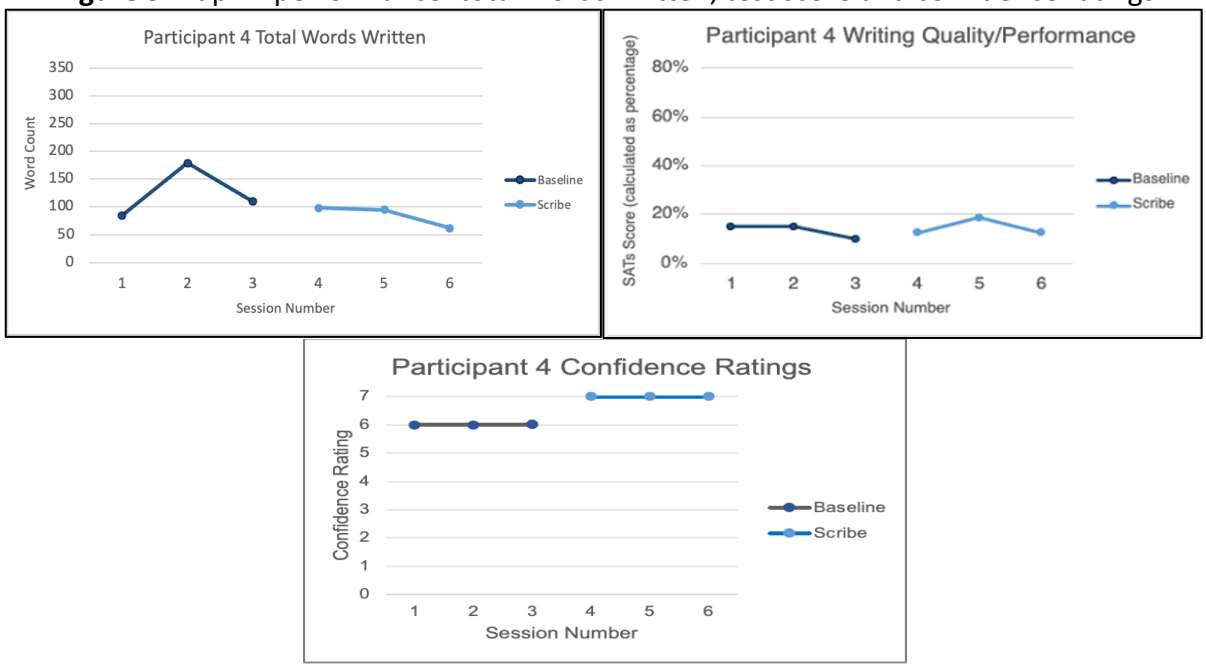
were observed in the final two scribe sessions, an increase from when the scribe was first introduced.

Figure 8. Pupil 3 performance: total words written, test score and confidence ratings

Pupil 4

Figure 9 reports the findings for Pupil 4. Visual inspection of the data points indicates that Pupil 4 produced less text in the scribe conditions. Test scores were similar across baseline and experimental sessions. Confidence ratings were stable across baseline and experimental sessions and noticeably higher when using a scribe.

Figure 9. Pupil 4 performance: total words written, test score and confidence ratings



Pupil 5

Figure 10 reports the findings for Pupil 5. Visual inspection of the data points indicates an increase in the number of words written by Pupil 5 when the experimental phase was introduced. Test scores showed a sharp increase when the experimental phase was introduced and this better performance was relatively stable. Confidence ratings were overall higher when using a scribe.

Figure 10. Pupil 5 performance: total words written, test score and confidence ratings

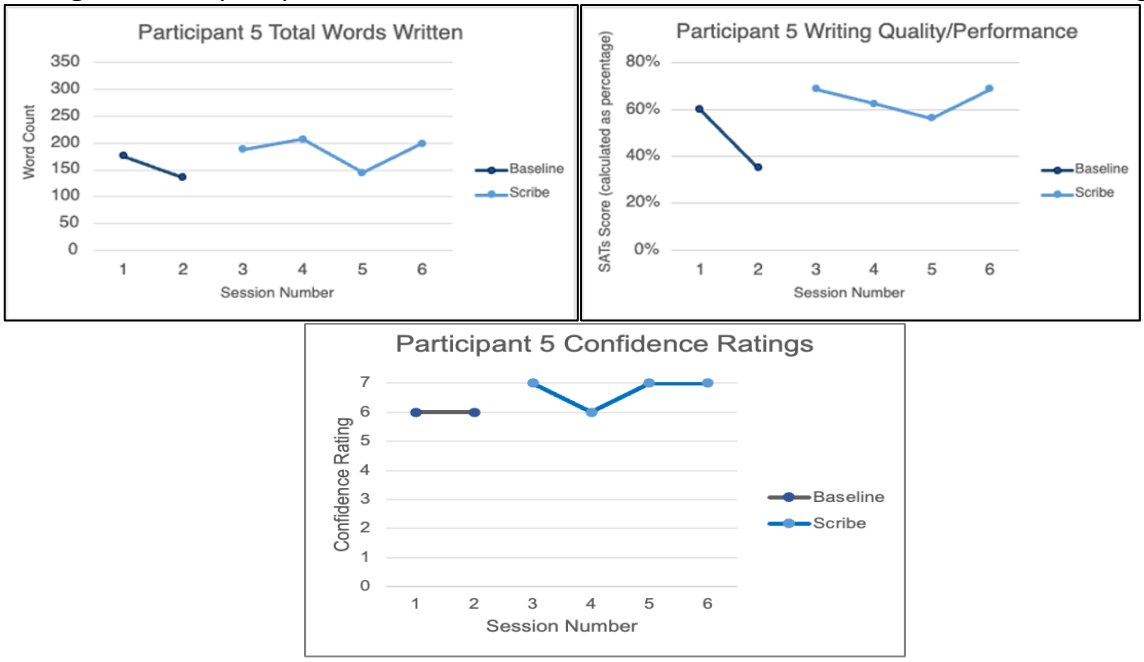
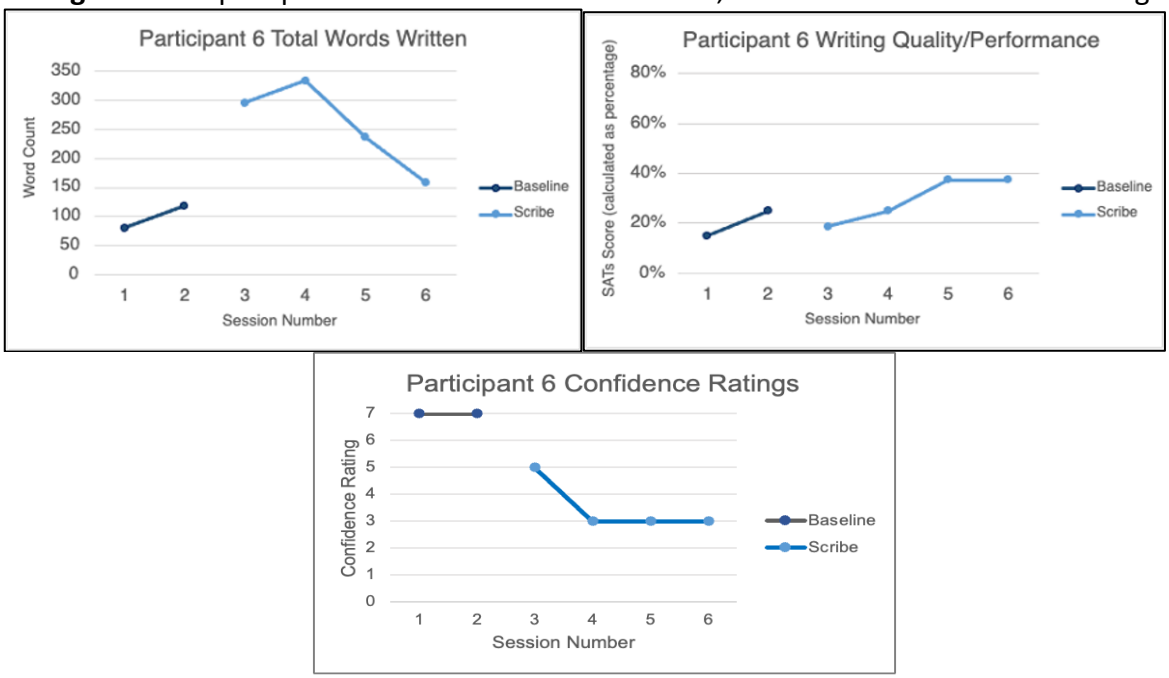


Figure 11. Pupil 6 performance: total words written, test score and confidence ratings



Pupil 6

Figure 11 reports the findings for Pupil 6. Visual inspection of the data points indicates that Pupil 6 produced considerably more text in the scribe conditions. Test scores in the experimental sessions showed a steady increase with more practice. Interestingly confidence ratings were found to decrease with more experience of using the scribe.

4.3 Summary

This multiple baseline design explored six cases (participants) and their response to using a scribe. The findings are descriptive in nature. The findings revealed that all participants spend less time on the task when using a scribe compared to handwriting. However, performance in terms of how much they write, and the overall quality of their answers, was considerably variable across participants. For half of the participants there was no immediate improvement in test performance when the scribe was implemented, but for the remaining half an increase was observed from first introduction. An upward trend for test performance was observed with more practice of the scribe. The final case (pupil 6) was a good example of improvement with more practice. Confidence ratings generally appeared higher when using a scribe or over time.

While the study design picks up on individual variability that can be masked in larger experimental designs, limitations can be acknowledged. A limitation specific to the methodology was that the number of sessions was limited to six due to testing constraints within the school. More sessions may have picked up on more fluctuations or upward trends in the experimental phases. In addition, the scribe in the study would class themselves as a fluent typist but a measure of fluency may have been useful, given the role in needing to keep up with the student. This is an important consideration for schools when recruiting people in this role.

5. Strand 3: School audit

5.1 Purpose

The overarching aim of this final strand was to triangulate the findings from Strand 1, reflecting on effective management of GCSE exam access arrangements, and to produce a tangible school-based resource. The school audit was developed based on principles of university-school facilitated knowledge-exchange programmes, that is, using themes generated from a discrete piece of research or scoping literature review to present findings in a domain-based table, underpinned with illustrative criteria. The table, or audit, contextualises findings for an educational context, enabling practitioners to reflect on and improve upon school practice (Brackenbury et al., 2022).

The following five principles were identified by Brackenbury et al. (2022, p.6) as the ways in which university-school knowledge-exchange partnerships underpin the successful use of research in educational settings:

1. Consensus - the need for consensus between the multiple stakeholders including teachers, school leaders, children, families and researchers to address persistent problems of practice;
2. Iterative design - a commitment to iterative, collaborative design;
3. Theory and implementation knowledge - a concern with developing theoretical and implementation knowledge through systematic inquiry;
4. Capacity building - a concern with developing capacity for sustaining change in systems and;
5. Longevity - that more intense and long-term relationships between users and researchers are more likely to lead to research being used.

The model described in the research briefing provides a structure to enable the above elements in a time-bounded and cost-effective manner. Research findings are made accessible through the use of an 'audit' which schools use to translate recommendations into actionable practice. For example, the Pupil Theme 1 refers to pupil concerns about equity and fairness. Using the audit, a school can consider the ways in which perceptions of fairness could be improved across Year Groups and curriculum areas.

Two workshops were used, the first to introduce the audit, explain how it related to the findings in Strand 1 and how it should be used. Participants trialled the audit in school. At the second workshop they verbally explained how the audit had been used and completed a detailed questionnaire and feedback form.

Practitioners were encouraged to use the audit to stimulate reflection and discussion and use a planning template to implement agreed changes. Ethical approval was obtained from UCL IOE Education and Society in order to collect feedback from the practitioners that attended the workshops on the appropriateness of the resources and where improvements could be made. Feedback from practitioners was important to further shape the resources and to ensure that they were applicable to school practice.

5.2 Method

The first step was to look across the themes from the practitioner and student data and to consider what might be actionable for schools. The themes from Strand 1 were used to map a matrix of core domains implicit in the effective management of exam access arrangements, with each domain underpinned by one or more emergent themes from the SENCO/Assessors and young people interviewed for the project. Two key overarching domains were identified: 'Whole school context' and 'Individual pupil'. Each of these domains then had a series of contexts within which themes could be explored. Table 8 shows the identified domains and subcategories. The domains then formed the basis of an audit framework (see Appendix 2).

In the framework, each domain is expanded with examples to enable schools to identify if practice needs to be improved in this area. Table 9 provides an example of a domain with some illustrative criteria of what this may look like in practice, encouraging practitioners to reflect on their provision and next steps.

Table 8. Matrix showing Strand 1 themes against Audit Domains

	Themes
Domains: Whole school context	
Inclusive ethos	SENCO/Assessor Theme 1: The importance of equity in practice SENCO/Assessor Theme 2: Managing expectations of stakeholders Pupil Theme 1: Perceptions and equity of exam access arrangements
Resourcing and capacity building	SENCO/Assessor Theme 1: The importance of equity in practice SENCO/Assessor Theme 3: Role of resourcing SENCO/Assessor Theme 4: Lack of consistency and need for a systematic approach Pupil Theme 2: Effectiveness of use and support
Communication	SENCO/Assessor Theme 4: Lack of consistency and need for a systematic approach Pupil Theme 1: Perceptions and equity of exam access arrangements Pupil Theme 3: Pupil learning, preferences and challenges
Assessment and monitoring	SENCO/Assessor Theme 1: The importance of equity in practice
Domains: Individual pupil	
Access to resources	SENCO/Assessor Theme 3: Role of resourcing Pupil Theme 4: Social and Emotional Impact
Accurate pupil profile	Pupil Theme 2: Effectiveness of use and support
Lesson planning	Pupil Theme 2: Effectiveness of use and support
Individual Support	SENCO/Assessor Theme 4: Lack of consistency and need for a systematic approach Pupil Theme 1: Perceptions and equity of exam access arrangements Pupil Theme 3: Pupil learning, preferences and challenges Pupil Theme 4: Social and Emotional Impact

Table 9. An example of a domain

Domains: Whole school context	Illustrative criteria	Reflections/Explorations/ Next Steps
Resourcing and capacity building	· SENCO and other staff involved in exam access arrangements are given support, training and allocated time. · Staff receive regular training and research updates to support good provision for pupils with literacy difficulties. · Appropriate budget is allocated to provision of materials/people enabling exam access (e.g., laptops, scribes). · Appropriate budget is allocated to support for pupils with literacy difficulties	*[to be completed by practitioner]*

Once the resources had been developed, the next step was to present them to practitioners working in secondary schools and supporting access arrangements. Two workshops were planned. Twenty-nine practitioners from twenty-one different secondary school settings in London and the South of England attended the first workshop. Practitioners were a mix of SENCOs and Specialist Assessors, as well as a SEN Consultant based in a Multi-Academy Trust. In workshop one, the research findings from Strand 1 of the project were presented and practitioners were introduced to the audit framework. Discussion activities were facilitated which asked attendees to reflect on the ways in which the framework made the research findings easier to implement in respect of creating change in schools.

Practitioners were asked to share the audit with their colleagues prior to the second workshop, which was scheduled two months later. They were asked to discuss each domain and consider ways in which their school could improve practice and processes to enable more effective use of exam access arrangements. The schools were also provided with an Action Planning Template to assist with future planning based on these discussions (see Appendix 3).

In workshop two, practitioners were asked to discuss their use of the audit framework within their school. They then completed a detailed questionnaire (Appendix 4). Some schools also submitted a copy of their notes written onto the audit framework.

5.4 Key findings

Practitioners were largely in agreement that the audit tool was helpful in applying research findings to practice. For example, of 11 completed questionnaires, all 'agreed' or 'strongly agreed' that *'I have made concrete plans to use some of the evidence base as part of my day to day practice'.*

Practitioners mostly found the audit tool helpful, writing: *'I think the illustrations acted as useful prompts to open discussions and consider implementation or change for individual settings' and 'Clear layout, asks the right questions'.*

Practitioners summarised their conclusions for 'next steps' in each of the domains. Most found that the domains were helpful in determining specific goals or identifying areas where improvement was needed. Below is an example of practitioners' notes on 'next steps' or initial thoughts for their schools from one of the domains, 'Communication' (see Table 10). Responses were received from 8 out of 11 respondents:

Table 10. Practitioner notes to develop communication within their school

1	Huge improvement needed.
2	Parent and pupil communication needed.
3	Embed access arrangements into Key Stage 3 assessments.
4	Better communication with students, teachers and stakeholders.
5	Inform all stakeholders annually. Parents event booklet. CPD, effective QFT.
6	Engaging early with parents/carers. Avoiding immediate confrontations.
7	This has been an area we as a school have really had to rethink and implement across all stakeholders.
8	Exam access arrangements are not embedded in school culture or parent communication.

These responses show that the domain prompts reflection on potential areas for improvement in schools. The audit framework shows promise in assisting practitioners to embed recommendations deriving from Strand 1. The themes from SENCOs/Assessors and students have been contextualised into domains, with criteria or indicators to illustrate good practice which translates the findings from Strand 1 into actionable plans. An example of the detailed discussions from one school, based on the audit is attached in Appendix 5. Further research is required to evaluate the extent to which the audit tool facilitates school improvement in managing the complexities of the access arrangements process.

6. Overall discussion

High-stakes examinations are designed to assess academic capabilities and, at the end of secondary education, they play an important role in determining a student's next steps. Exams are typically time-bound, meaning that students' have a fixed period to complete an exam paper. Therefore, students must be able to recall relevant information to answer the exam question within the set time, as well as be able to transcribe their ideas/answer quickly and legibly. However, students with literacy difficulties often present with characteristics that mean it can be difficult to access a test that has a speeded, written component. Access arrangements are one way in which students with literacy difficulties may be supported to better demonstrate their knowledge in secondary education.

The present body of work aimed to investigate both the practice and provision of exam access arrangements in secondary education, as well as the efficacy of common arrangements that are used by students with literacy difficulties. While some research exists on the practice of access arrangements and alludes to the unmanageability of the paperwork required from the perspective of SEN teams (e.g., Woods et al., 2018), little is known about the perceptions of supporting students with literacy difficulties with these arrangements (from both the practitioner and student viewpoint). In particular, the application process for a student with a learning difficulty requires a detailed case to be put forward to the JCQ. Moreover, a yearly increase in the number of exam access arrangements being granted in the UK for GCSE and A-Levels, means that a review of practice is warranted (Ofqual, 2024). In addition to this, there is a paucity of UK-based research that has considered the effectiveness of using access arrangements. It was crucial to understand whether students with literacy difficulties benefit from the support often put in place to be able to demonstrate their knowledge in an exam.

Below the findings from the five research studies (3 in Strand 1, and 2 in Strand 2) are discussed in relation to the literature, as well as acknowledging strengths and limitations of the work and possible future research directions. The report ends by identifying key practical implications that have been embedded into a tangible audit tool (e.g., Strand 3) for practitioners to use.

6.1 Summary of results

6.1.1 Practice and provision of access arrangements

Surveying and interviewing SENCOs and Specialist Assessors, as well as hearing from Year 10 and 11 students with literacy difficulties about their experiences of access arrangements raised both positive examples of practice, as well as areas for further consideration. From the practitioner perspective, a clear emphasis on supporting students with literacy difficulties and recognition of wanting to ensure equitable support was evident. Many practitioners also praised the usefulness of the JCQ guidelines, both in terms of clearly specifying the process for applying for access arrangements and for using the guidelines as justification for the decisions made when explaining the outcome with parents.

That said, a prominent finding across the survey and interview data was the significant demand and pressure that SEN practitioners are experiencing in secondary

schools. The time spent on identifying need, gathering evidence and applying for exam access arrangements was consistently reported as demanding, which matches earlier findings (e.g., Woods et al., 2018). Many SENCOs felt that access arrangements are just one part of their role, as the SENCO role is multifaceted. In English schools, SENCOs are responsible for the day-to-day operation of the school's SEN policy and often have additional teaching responsibilities (Curran & Boddison, 2021), particularly those in the maintained sector. The SENCO workload in itself has been acknowledged as demanding. A survey conducted by Curran et al. (2018) found that 74% of 1900 SENCOs in England reported they did not have enough time to ensure all students with SEND were supported with the provision they need. Dobson (2023) has argued that more data is required to better understand the SENCO workforce in terms of whether they need more influence and time to provide strategic support. The present findings suggest that a review of the SENCO workload, particularly in relation to an increase in the demand of access arrangements, is warranted.

Related to specific roles, SENCOs can only carry out the formal assessments needed to meet the JCQ criteria if they have obtained a Level 7 qualification (or equivalent). Alternatively, and likely dependent on financial constraints, schools may employ a qualified access arrangements assessor to assess students' needs – i.e., someone who holds one of the accepted Level 7 qualifications (e.g., a Specialist Assessor with an Assessment Practicing Certificate, or Educational Psychologist). The survey findings highlighted that more experienced SENCOs and Specialist Assessors felt more confident in their ability to identify students in need of an access arrangement. Furthermore, SENCOs that had obtained one of the Level 7 Assessor qualification also rated themselves as more confident than SENCOs that did not complete further training to assess for access arrangements. In fact, SENCOs with the Assessor qualification were comparable in this respect to Specialist Assessors. This finding is interesting coupled with the qualitative finding that SEN practitioners had a desire for more specialist training; particularly showing concern around not having the time or training on how to effectively support students to *use* an access arrangement. This lack of training was a strong finding with important implications for schools to consider. Given the time that goes into identifying need and securing access arrangements, more wrap-around support is needed to ensure that arrangements are being used with effect. In line with this, the interviews with students revealed that some resorted to seeking external support (outside of what was offered at school) to help them understand how to effectively use the arrangements that were put in place.

The roles and responsibilities of the school SENCO are set out in the Special Educational Needs and Disability (SEND) Code of Practice (DfE/DoH, 2015). The Code of Practice specifies that schools should endeavour to identify needs early and to implement appropriate support in line with the graduated approach, or assess-plan-do-review cycle (DfE/DoH, 2015). The requirement to establish and review a student's normal way of working, in addition to individual testing of literacy ability and cognitive processing as part of the application for an access arrangement means that SENCOs need to collaborate with the wider teaching team to gather appropriate evidence, as well as regular check-ins with the student. From the survey data, over a quarter of the sample reported having no process in place to monitor use of an access arrangement. This is despite the JCQ guidelines (2024, p.103) clearly specifying that centres must consider whether the proposed adjustment is

effective and suitable for the candidate's learning difficulty. The finding of limited strategies in place to monitor and support the use of an access arrangement may relate back to time pressures, however schools need to consider how to provide full support.

Another challenge observed from the data was misunderstanding from key stakeholders and the impact this can have on SEN teams and the students themselves. Practitioners' reported pressure from parents and students and a misconception that an access arrangement may offer an advantage to the student. While others identified pressures from the school leadership team, particularly around supporting students whose parents were particularly vocal. In a similar vein, misconceptions were reported from the student perspective, with some referencing existing stigmas within schools and that leading to students sometimes electing to not use this support even though it would be beneficial. Further, some students highlighted choosing not to use an access arrangement because of the implications on their time and having to stay in an exam hall for longer. This is particularly worrying when a process that is supposed to be increasing access is potentially leading to further inequities. Clearer communication about the purpose of access arrangements targeted at the wider school, parents and students would be beneficial.

A final salient finding from the three studies was how the availability of resources impacted on both the identification and provision of an access arrangement, and this was a large driver in the variation in practice. In this sense, practitioners referred to challenges with resources such as the availability of tests to screen and/or assess need, staff availability for implementation of exam arrangements, technology, and physical space. It was acknowledged that to meet individual requirements, there could be a cost in terms of technology (word processor, speech recognition, reader pens), staffing, or physical space. There were vast differences between the state and independent sectors in terms of these resources. The former often referred to needing to be strategic with matching the resources they have available to student demand, while independent schools were able to meet the demand. Social advantage of accessing accommodations has been reported in the USA (Lovett, 2021) and Calarco (2018) found that wealthier parents were more likely to be involved in their child's education and request accommodations. The possibility of more advantaged children having a greater chance of receiving an access arrangement raises challenges for equality.

6.1.2 Efficacy

The efficacy study appears to be the first experimental examination of common access arrangements in secondary students with literacy difficulties in English schools. Two studies were conducted, the first comparing performance across standard test administration (handwriting), to completing an English Language paper with 25% extra time, and using a word processor. The second experiment was a multiple baseline case study design that examined the effectiveness of using a scribe for an English Language paper.

Overall, both students with and without literacy difficulties were found to improve their test score on an English Language paper when using 25% extra time or a word processor. They were also found to produce more text when one of these arrangements

was in place. This finding would suggest that providing this arrangement means that students with literacy difficulties were better able to access the test (by producing more) than in the standard test administration. However, it is worth noting that students with literacy difficulties were still shown to underperform, compared to their peers and a larger gain in how much was produced when using a word processor was observed for students without literacy difficulties. Comparisons were also made between students with literacy difficulties performing with accommodations in place versus students without literacy difficulties performing in the standard test time (baseline condition). This type of comparison is typically what happens in exams. Interestingly, students with literacy difficulties still scored significantly lower on their test score in both accommodated conditions (25% extra time and using a word processor) and wrote fewer words when using 25% extra time, compared to their peers' baseline. However, students with literacy difficulties were found to type significantly more (using a word processor) than their peers hand wrote in the standard test time. This does suggest that use of a word processor, rather than 25% extra time, may increase access to the test for students with literacy difficulties. In addition, when looking at the range of scores, considerable variation was noted for both students with and without literacy difficulties and how they perform in different exam conditions. In fact, some students benefited from having an access arrangement in place, while some did worse. This was evident from the positive and negative values shown in the accommodation benefit variable. The finding of mixed performance corresponds with existing data from the USA with post-secondary students completing maths and reading comprehension tests with extended time (Gregg & Nelson, 2012).

A subsequent analysis of within-student factors (i.e., cognitive processing and literacy abilities) found that test performance when using a word processor was predicted by the speed at which students can transcribe their ideas (writing fluency). This result was perhaps not surprising given the literature that has consistently shown how writing fluency predicts both productivity and test quality (Morphy & Graham, 2012). Indeed, it does suggest that supporting students to type fluently would be beneficial in supporting them to further access the test. Other correlational analyses did not yield significant results when examining the cognitive and literacy measures against test outcomes when using extra time. However, it is worth noting that strong correlations were found between how much a student writes and their test score in all three conditions (baseline, 25% extra time, and using a word processor). This may suggest that by increasing access to a timed test, if students write more, they may also perform better overall. Though, it still remains that individual variation can be seen and a personalised approach to understanding the best type of support for a particular student may be warranted.

In relation to using a scribe, the multiple baseline case study design highlighted the importance of practice and familiarity with using the exam arrangement. All students included in this study were on the SEN register and use of a scribe for exams was being considered by the school SENCO. It was noteworthy that those with the lowest literacy scores showed small, but immediate improvements when the scribe was introduced. Further, confidence in using a scribe appeared to increase over time. Again, though, variation across students was observed, with some showing an immediate benefit (writing more and scoring higher) and others not performing as well as when handwriting in standard test conditions. It is also recognised here that orally telling an answer to a scribe

may present further challenges for some students. Composing an answer verbally is different to writing, whereby the latter may be more formal. Again, training is important here to ensure that the student knows the requirement of the task and how to work successfully with a scribe, maintaining the formality that is typical of written work.

6.2 Strengths and limitations

A number of strengths and limitations can be acknowledged. One particular strength to the reported studies is the decision to include students with literacy difficulties, and not just those with a diagnosis of dyslexia. In real-world settings, access arrangements are provided without need for a diagnosis (Vickers, 2010). Requiring a diagnosis would exclude relevant students. Recent research also argues for a move away from highly selective samples that lack generalisability to what is observed in practice (Astle & Fletcher-Watson, 2020). This was an important factor in both the interview and efficacy studies. It was also a strength to report on the pupil voice alongside the practitioner perspective. Also related to the sample, a relatively good sample size is reported for all five studies, given what would be expected for the different methodological designs. Particularly considering existing research that has compared effectiveness of access arrangements, the efficacy study recruited a larger number than is shown in the cited studies.

However, limitations can be raised. It is recognised that the survey and interview studies relied on self-selecting respondents and it may well be that a wider range of responses would be evident in the accounts from those that did not have a keen interest in taking part in research. It is possible that some of the findings around confidence may be less so in a wider SEN practitioner population. The project also focused on schools in England and it is unknown whether similarities exist across the other nations in the UK or whether lessons could be learned from comparing practices.

While the sample size for the efficacy study is seen as a strength compared to existing research, a larger sample would have enabled more sophisticated analysis to determine causal pathways that highlight direct and indirect effects of cognitive processing and literacy abilities to test performance (e.g., path analysis). Here the challenge of recruiting secondary school students is recognised. A number of schools were successfully recruited but three were forced to pull out due to changes in the SEN team.

Finally, it has to be acknowledged that students in the efficacy study were part of a research study, and the findings should be viewed in this respect. To try and enhance ecological validity, participants completed the exam papers in small groups (rather than individually as can be typical in research studies) and were encouraged to view the testing conditions as mock exam practice. However, it is possible that they may perform differently in a real school exam.

6.3 Future research

The present findings were specific to students with literacy difficulties, however future research may seek to understand how other learner groups may benefit from exam access arrangements. Further research is also needed to replicate the efficacy results and an

extension to study other access arrangements, such as rest breaks or the use of assistive technology, would be fruitful. The possible usability of assistive technology to help learners to transcribe their text is increasing, and there are possible benefits it could afford in not requiring staff personnel. Yet, little is known about how students interact with assistive technology and whether any barriers may exist. Assistive technology may draw upon other skills that are not part of the assessment, but challenge students in other ways. Assessing the quality of exam responses would also be needed.

A critical examination of 'time' as a possible construct-irrelevant barrier would also be an interesting next step. Additional time in exams is typically awarded for 25% extra time, although in some cases it could be 50% extra time. There is little rationale for these caps (25% or 50%). It would be interesting to investigate how much time is truly needed for students to be able to demonstrate their knowledge – i.e., should exams be time-bound? What happens if there are no time constraints?

It is also recognised that post the Covid-19 pandemic, digital testing has received increased attention (Coleman, 2021). Exam boards are currently looking to develop onscreen digital GCSE and A-level exams. Research to understand how to support students in accessing digital assessments is warranted, particularly with the knowledge from the present findings that touch-typing needs to be supported.

Finally, there are currently no means of comparing the grades of students who were allowed extra time, or another access arrangement, in high-stakes exams in England with the grades of those who were not eligible for access arrangements. Statistics are available for overall grades and split by gender, SEN vs no SEN, EAL, pupil premium, etc, but not for the particular access arrangements used. While it is reasonable to assume that students that have an access arrangement underperform compared to those that do not, this data is not currently available. It would be of interest to fully account for the role of access arrangements.

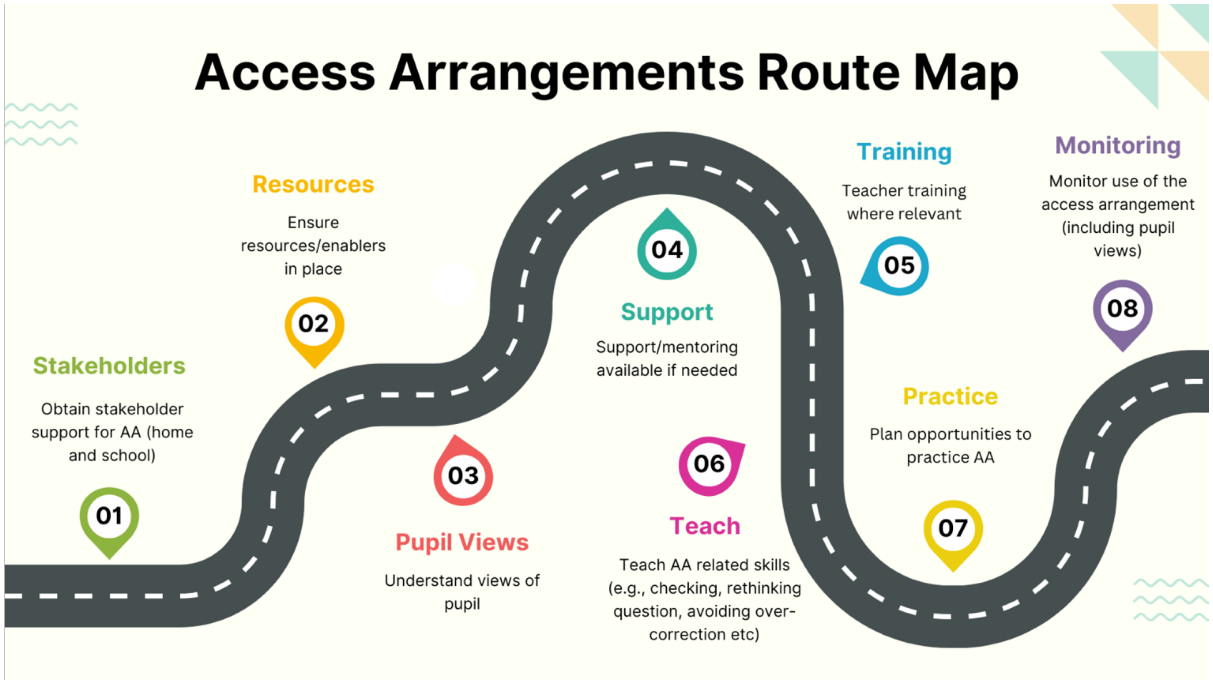
6.4 Practical implications

From the key findings presented above, a number of practical implications can be proposed. These are evident in three outputs developed by the project team:

1. It was recognised from the pupil interviews that a resource was needed to effectively communicate the purpose of access arrangements to other students. In doing so, it was hoped that students would feel empowered to advocate for themselves if they felt that they need exam support and, equally, that other students would recognise what that entailed in the hope of reducing any stigma. The project team co-developed an infographic with practitioners and a student with literacy difficulties, which is freely available here.
2. A 'route map' which identifies the key steps that are important in supporting students with access arrangements (see Figure 12). Based on the findings that highlighted a focus on identifying need, but less so on supporting and training students, it was important to highlight all necessary steps for practitioners to consider.

3. The findings that reviewed school practice and provision of exam access arrangements were also built into an audit tool - a tangible resource for schools to use (see Appendix 2).

Figure 12. Route map illustrating the steps to supporting students with access arrangements.



A summary of the key practical implications that can be raised from the collective findings include:

- For school leaders:
    - Schools to have a designated and protected Access Arrangements Coordinator role (in terms of time) to support access arrangement provision. This should be aside from SENCO day-to-day responsibilities.
    - Senior leaders to reflect on workload in line with JCQ regulations, protecting SENCO time accordingly.
    - School-wide training on access arrangements. This cannot be solely located within the SEN team; the wider teaching team should be involved to identify need early, support communication with students and their families and provide opportunities to practice and monitor use of access arrangements. Increasing the involvement of the wider teaching team would meet the JCQ regulations of needing to gather evidence from teachers as part of the application process.

    - Governors, Senior Leadership Teams and Multi-Academy Trusts to prioritise resources to support use of access arrangements and practice. In line with this, relevant staff training and staff time is required.
- Whole school approaches:
    - Clear, early communication is encouraged between parents, teachers and students to prevent any misconceptions around access arrangements. Better training would support this among the teaching team, but the message must also reach other key stakeholders (parents and students).
    - Schools to remain committed to an inclusive ethos and maintain strong support for the learning needs of pupils with SEN.
    - Clear messaging about access arrangements around school in an attempt to reduce stigma related to support and 'normalise' access arrangements.
- For the SEN team:
    - Students must be trained in *how* to use access arrangements, as early as possible and opportunities to do so should be frequently integrated into lessons. SEN teams should use the graduated approach (assess-plan-do-review cycle) to monitor use of an access arrangement and to reconsider support when ineffective.
    - Work could be done with the wider teaching teams (subject leads) to ensure that practice is relevant to particular subjects and different exam papers (e.g., multiple choice vs extended writing - Maths vs English and History papers).
    - The findings from the efficacy studies highlight that an individualised approach is important - what suits one student may not benefit another. SEN teams should work with the student to determine need and what is most effective.
    - Training on digital skills should be available for those using a word processor. This includes touch typing, as well as broader digital literacy skills. Touch typing will enable students to use their accommodation more effectively, while digital literacy skills ensure that the student can become proficient in using a word processor and takes a future-oriented approach to learning.
    - Scribes to also be considered for their touch-typing abilities. Similarly, a careful review of how a student responds to a scribe and whether training might be required to ensure formal language is being used and that oral language abilities are not further disadvantaging students being asked to use this method of transcription.

- For regulatory bodies and wider policy makers:
    - It is important to review where inconsistencies in approaches may be widening inequalities between the state and independent sector. One prominent finding from the interview data was that independent schools have the capacity and availability of standardised tests to work through a number of assessments to find a score that meets the criteria for an access arrangement. This same approach is not feasible in most state schools, due to resources and staff time. As a result, students in state schools may be at a disadvantage and some students are likely slipping through the net. Aside from reviewing practice to ensure that all schools have access to the

resources required to assess need, regulatory bodies could seek to tighten the possible list of tests that can be used, given that the current list is extensive. For instance, when assessing verbal memory, assessors may use any one of 43 different subtests that are available. One school may have access to a number of these tests, whereas another school may only have access to one test. A review of practice could be important, asking for transparency about the number of tests conducted when applying for an access arrangement.

- Greater transparency around the number of students using a word processor for their GCSEs would be beneficial. At present, this arrangement is centre-delegated and is not reported on in Ofqual statistics of approved access arrangements. Knowledge of this is important for determining how common this arrangement is and could then be matched with future endeavours to enable students to use this arrangement effectively where use is known to be high or increasing. It is noted here that both students with and without literacy difficulties did significantly better when using a word processor, therefore for a centre-delegated arrangement care should be taken to ensure that those that use a word processor need it and it does not confer an advantage over other students who do not have access to this technology.
- A commitment to ensuring that all schools have the resources to implement access arrangements fairly (e.g., availability of laptops or other relevant technology).
- Clarity in both regulatory guidance and policy on the importance of clear, identified and equitable processes, including reflection on resourcing and capacity building for training and use of access arrangements once allocated.

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Appendix 1: Descriptors

Standard score	**Descriptive label**
131 or more	Well above average
116-130	Above average
111-115	High average
90-110	Mid-average
85-89	Low average
70-84	Below average
69 or less	Well below average

Appendix 2: PAASS school self-assessment audit

The audit is based on themes emerging from the Nuffield funded PAASS project. The audit is designed to help schools review their policies, practice and provision to best support students with SpLD to make best use of their exam access arrangements. Schools are invited to use each domain to reflect on their own school context. The illustrative criteria provide examples of focus areas, but are not intended to be prescriptive or exhaustive.

Once schools have used this audit to identify focus areas for improvement, the Action Planning Template can be used to fine tune 'next steps'.

School based audit underpinning optimal use of exam access arrangements:

Domains: Whole school context	Illustrative criteria	Reflections/Explorations/Next Steps
Inclusive ethos	• School regularly accommodates individual pupils' personalised access and learning needs • The school community values diversity • Staff are supported to respond warmly to pupils • Opportunities for staff training, collaborative problem-solving and reflective practice are provided	
Resourcing and capacity building	• SENCO and other staff involved in exam access arrangements are given support, training and allocated time. • Staff receive regular training and research updates to support good provision for pupils with literacy difficulties. • Appropriate budget is allocated to provision of materials/people enabling exam access (eg laptops, scribes). • Appropriate budget is allocated to support for pupils with literacy difficulties	
Communication	• The need for differentiated approaches to learning and assessment is embedded within school culture as normal practice. • Exam access arrangements are talked about in general terms and 'normalised'. • Roles and responsibilities are clearly articulated.	

	• Timely and accessible bi-directional communication with relevant professionals, pupils and parents/carers about exam access arrangements is undertaken early in the process. • Maintain links to SALTS/EPs • Clear communication with exam boards	
Assessment and monitoring	• The Assessment and Monitoring policy includes policy on the school processes for pupils who may need access arrangements. • School has good tracking processes in place • Relevant policies are understood and implemented by all staff • Pupil voice/input from family is regularly sought and acted upon • Formative assessment on pupil response to typical access arrangement activities such as typing and use of extra time is used to build a profile of pupil support needs. • The identification of specific characteristics that underpin a pupil's SpLD profile (e.g., spelling difficulties; writing fluency; breadth of vocabulary; processing speed and working memory) are known and taken into account in lesson planning/individual goal setting.	
Domains: Individual pupil		
Access to resources	• Exam Access arrangements are properly funded, including equipment and relevant staff training • Appropriate literacy interventions are in place when needed. These are implemented with fidelity, including training in delivery and programme monitoring. • Opportunities to learn skills associated with Access Arrangements and practice these are timetabled.	
Accurate pupil profile	• Pupils with literary difficulties have a clearly identified profile, including spelling, reading fluency, reading accuracy, working memory, vocabulary, processing speed, non-verbal reasoning, writing speed and typing speed. • This profile is used to inform planning for Access Arrangements, including how accommodations are introduced and taught. • The profile informs lesson and curriculum planning.	

Lesson planning	• The school ethos embraces a 'literacy rich' environment, using word to explore life and develop pupil voice. • Lessons encourage active learning and peer collaboration. • Lesson activities are inclusive and build skills relevant to pupil's literacy targets. • Skills underpinning successful use of exam access accommodations are woven into lesson activities (eg proofreading, re-reading questions, planning a writing task, decision-making on when to move on to next question, laptop skills, dictation skills etc).	
Individual Support	• Allocated person discusses Access Arrangements and associated issues with pupil • Consideration of emotional wellbeing, such as anxiety, lack of confidence at using accommodation or poor peer support/stigmatization. • Allocated person ensures equipment/resources are available for practice sessions as well as exam. • Timetabled opportunities (including staff) are provided to learn use of technology. • Timetabled opportunities to practice skills are provided.	
Access Arrangements route-map	• Obtain stakeholder support for AA (home and school) • Ensure resources/enablers in place • Understand views of pupil • Support/mentoring available if needed • Teaching training where relevant • Plan opportunities to practice AA • Teach AA related skills (eg checking, rethinking question, avoiding over-correction etc).	
School specific focus area		

Appendix 3: Action Plan Template

Name of Setting:

Audit Domain	What is the change we want to see?	SMART Goal	Actions to complete the goal	Who's involved	Timeline	How will this be measured?	Was the goal achieved?	
							Yes	Much better
								A little better
								As expected
							No	Partially achieved
								Same as baseline
								Not as expected
							Yes	Much better
								A little better
								As expected
							No	Partially achieved
								Same as baseline
								Not as expected
							Yes	Much better
								A little better
								As expected
							No	Partially achieved
								Same as baseline
								Not as expected

Appendix 4: Questionnaire to review the audit

PAASS Evaluation: Using the Evidence

Purpose of the evaluation

The PAASS project is being evaluated in different ways. Today we would like to evaluate the use of research in your settings (as part of the PAASS project).

This form is anonymous.

Date	

Demographics and background questions

1. What is your role?
2. What type of school do you work in?
3. What is your role in applying for access arrangements?
4. At what point do you start the process for identifying access arrangements for GCSE exams?

Please circle the statement that best matches your experience:

1	I haven't attempted to use any of the findings from the evidence base provided on Day 1 within my day to day practice.				
	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
2	I have begun to consider how to use some of the evidence base as part of my day to day practice.				
	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
3	I have made concrete plans to use some of the evidence base as part of my practice day to day practice.				
	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
4	I have now begun to implement specific strategies suggested by the evidence base in my day to day practice.				
	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
5	I have begun to tailor my use of the evidence base so that I can incorporate other aspects of effective practice that I now know about.				
	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
6	I regularly adapt the approaches suggested by the evidence base in order to make them even more effective and/or so that they can apply to a number of situations in my setting.				
	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
7	I have used the evidence base presented on Day 1 so often now that I barely need to think about it, the evidence base is just part of my day to day practice.				
	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree

8	Are there any other comments you wish to make about your use of evidence across the time of the programme.

Thank you for taking the time to complete the questionnaire.
(Questionnaire based on Brown and Rogers 2015)
Questions relating to the audit tool:

1. How user-friendly is the audit tool?

2. Does the audit tool help your school to assess effectiveness of provisions in support of access arrangements?

3. To what extent does the tool help you to plan improvements for children with SPLD in your setting?

4. Would the audit tool help plan provision for all children in your setting?

5. To what extent does the audit tool make research findings accessible to your school?

6. Does the audit tool help to capture metrics and data required for access arrangements auditing?

7. How does the audit tool support collaboration and communication among team members involved in the auditing process?

8. What are your thoughts on the usefulness of the action plan template?

9. What are the overall impressions and user experiences with the audit tool, and what recommendations do users have for its improvement or refinement?

Using the following domains from the Audi Tool, what have you noticed that needs changing in your setting?

Domains: Whole school context	Reflections/Explorations/Next Steps
Inclusive ethos	
Resourcing and capacity building	
Communication	
Assessment and monitoring	
Domains: Individual pupil	
Access to resources	
Accurate pupil profile	
Lesson planning	
Individual Support	
Access Arrangements route-map • Obtain stakeholder support for AA (home and school) • Ensure resources/enablers in place • Understand views of pupil • Support/mentoring available if needed • Teaching training where relevant • Plan opportunities to practice AA • Teach AA related skills (eg checking, rethinking question, avoiding over-correction etc).	

Please use overleaf for any other further reflections or comments.

Appendix 5: Example completed audit by participant at the knowledge-exchange workshop

PAASS School Self-Assessment Audit

The audit is based on themes emerging from the Nuffield funded PAASS project. The audit is designed to help schools review their policies, practice and provision to best support students with SpLD to make best use of their exam access arrangements. Schools are invited to use each domain to reflect on their own school context. The illustrative criteria provide examples of focus areas but are not intended to be prescriptive or exhaustive.

Once schools have used this audit to identify focus areas for improvement, the Action Planning Template can be used to fine tune 'next steps'.

School based audit underpinning optimal use of exam access arrangements:

Domains: Whole school context	Illustrative criteria	Reflections/Explorations/Next Steps
Inclusive ethos	1. School regularly accommodates individual pupil's access and learning needs.	1. Access arrangements are consider for students upon entry to the school and placement is subject to doing about to provide anticipated arrangements. History of need is started at point of entry.
	2. The school community values diversity.	2. The school has an inclusion ethos whereby normal way of working varies between students and is common practice e.g. laptop use in lessons.
	3. Staff are supported to respond warmly to pupils.	3. Known and anticipated access arrangements are shared with staff upon entry. Additional time is not

		provided until Year 9 when this can be confirmed. Staff are able to book support for internal assessments via the SENCo / SEN Department.
	4. Opportunities for staff training and reflective practice are provided	4. Heads of Department are provided with direct training by the SENCo regarding access arrangements, this is then shared with the rest of departments. Feedback from teachers is collected at the end of Year 9 and first term of Year 10. Feedback is gathered from internal assessments e.g. was additional time used.
Resourcing and capacity building	1. SENCO and other staff involved in exam access arrangements are given support, training and allocated time.	1. Staff providing feedback for access arrangements are given one term to feedback on students. SENCo allocates time in Nov-Jan to complete access arrangement assessments. Exams Officer/SENCo/IT Lead/KS4 Head meet following each exam series to troubleshoot and plan for future assessments.
	2. Staff receive regular training and research updates to support good provision for pupils with literacy difficulties.	2. Staff have access to training via virtual CPD (SENDCast & National Online Safety), although allocation of time/monitoring of training is allocated to individual departments

		and SLT. SENCo gives regular student specific updates on strategies to support through weekly staff briefings. Action: Summary of completed CPD would be useful to identified gaps. Follow up with greater coverage of learning walks with SEN focus.
	3. Appropriate budget is allocated to provision of materials/people enabling exam access (e.g., laptops, scribes).	3. IT Lead involved in discussions about Access Arrangement planning and resource allocation. Exams Officer building a bank of invigilators that can be available to support examinations. Action: To ensure access arrangements are included within IT strategy/budgeting e.g. TextHelp software. Use of INSET time to bring in/train invigilation staff so all training is signed off by end of September.
	4. Appropriate budget is allocated to support for pupils with literacy difficulties	4. Students that require additional support on a 1:1 basis/through EHCP provision comes at additional cost which generates funds for the department. Access arrangement testing charged to raise money for the department. This enables high staff to student ratios and guarantee of resources for those students that

		need them. Action: Annual SEN budget review beginning of June to help for forecasts for following academic year.
Communication	1. The need for differentiated approaches to learning and assessment is embedded within school culture as normal practice. 2. Exam access arrangements are talked about in general terms and 'normalised'. 3. Roles and responsibilities are clearly articulated.	1. Students with specific learning needs have support details shared with teaching staff via a student passport, plus an overall summary on Student Support Register. Action: More of SEND focus within learning walks throughout the academic year. 2. Access arrangements are discussed with parents upon entry. Those students with arrangements are made aware and information shared on virtual learning environment as soon as arrangements confirmed (Form 8+supporting evidence). Normal way of working well established within lessons. 3. Access arrangements and exams policies in place. Action: SLT to clarify specific roles around access arrangement planning once applications have been approved.

	4. Timely and accessible bi-directional communication with relevant professionals, pupils and parents/carers about exam access arrangements is undertaken early in the process. 5. Maintain links to SALTS/Eps 6. Clear communication with exam boards	4. All access arrangements are available for the student/parent(s)/carer(s) as soon as arrangements have been approved via virtual learning environment and also through SharePoint (password encrypted files for sharing with professional/post-16 placements/exam centre inspectors). 5. List of relevant assessors has been established and links with local professionals. School completes it's own assessments in-house. Assessments for medical conditions (ADHD/ASC) linked to local companies to avoid NHS waiting lists. 6. All information needed for exam centre inspections available via SharePoint. Examinations officer regularly liaises with exam boards for specific queries. SENCo keeps knowledge and understanding up-to-date through annual training provided by JCQ in September.
Assessment and monitoring	1. The Assessment and Monitoring policy includes policy on the school processes for pupils who may need access arrangements.	1. Policies all current and up-to-date. Robust process in place for students that may need access arrangements.

	2. School has good tracking processes in place.	2. The tracking/monitoring of students is embedded. Relevant progress data is collected annually, and key students tracked, or new students flagged.
	3. Relevant policies are understood and implemented by all staff.	3. Relevant policies available to staff. Heads of Department receive training from SENCo to complete and share knowledge with departments.
	4. Pupil voice/input from family is regularly sought and acted upon.	4. Students are surveyed on a termly basis to gather their views. Those with Access Arrangements also set their own targets. During the process of evidence gathering students identify their preferences for 'normal way of working' when writing.
	5. Formative assessment on pupil response to typical access arrangement activities such as typing and use of extra time is used to build a profile of pupil support needs.	5. Students complete a questionnaire on their access arrangements to help determine which arrangements they prefer for each examination. This informs seating plans by Examinations Officer.
	6. The identification of specific characteristics that underpin a pupil's SpLD profile (e.g., spelling difficulties; writing fluency; breadth of vocabulary; processing speed and working memory) are known and	6. Identification is completed by SENCo as part of building picture of need and through school-based access arrangement assessments if necessary. Profile of needs is shared