Evaluation of the Whole School SEND Review programme: A cluster randomised controlled trial
Evaluation report

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Executive summary

The project

The Whole School SEND (WSS) Review programme is a one-year programme aimed to support secondary schools reflect on, develop, and improve their special educational needs or disabilities (SEND) provision. It is delivered by the National Association for Special Educational Needs (nasen). SEND coordinators (SENDCOs) are supported through training and coaching to work alongside colleagues and drive whole-school change towards inclusive education. Alongside a self-evaluation of SEND provision in their schools, the programme organises peer school visits and supports the creation of school development plans. The goal is that through the programme, improvements would be made in terms of the well-being, attendance levels and, in the longer term, attainment of pupils with SEND, alongside similar benefits for all pupils in the school.

The project was a two-arm efficacy, cluster randomised controlled trial. A total of 156 schools with 29,699 pupils, including 4,178 pupils with SEND participated. Schools were randomised to receive either the WSS Review programme or business as usual. The implementation and process evaluation (IPE) included case studies, document analysis of SEND Action Plans, interviews, surveys, observations of training, engagement days, and school visits. The primary outcome was the GCSE (General Certificate of Secondary Education) English Language mark obtained results for pupils with SEND who were in Year 9 when the intervention was delivered. This was to give the effects of the programme time to embed in schools before measuring the impact.

The programme was scheduled to deliver from April/May 2020 to June 2021 but with Covid-19 delays, it was reduced in length from 16 months to 11 months and delivered from September 2021 until July 2022. These delays had some considerable implications for the research, most notably, due to respondent fatigue, and schools failing to respond to requests for their data over a greatly extended study period.

Table 1: Key conclusions

Key conclusions
1. Pupils with SEND in WSS Review schools made one additional month's progress in GCSE English Language, on average, compared to pupils with SEND in other schools. This result has a very low security rating.
2. Among pupils eligible for free school meals (FSM), those in WSS Review schools made two additional months' progress in GCSE English Language, on average, compared to those in other schools. This result also has very low security due to high levels of missing data.
3. Pupils with SEND in WSS Review schools had positive outcomes for absence and exclusions and negative well-being outcomes compared to pupils with SEND in other schools. These results also have very low security.
4. The programme was delayed and disrupted due to Covid-19, with key changes including the reduction of the programme (from 16 months to 11 months) and the move to support staff online rather than in-person. This, alongside a change in support for pupils with SEND in control schools to be more aligned with the intervention schools, could have had an impact on programme outcomes.
5. Despite adaptations made to deliver through Covid-19 restrictions, the programme was delivered in a manner consistent with its design and evidence from case studies suggests that the programme was implemented well and led to positive changes in terms of SEND leadership provision across the school, as well as schools' orientation towards pupils with SEND.

EEF security rating

These findings have a very low security rating. This was a two-arm efficacy trial, which tested whether the intervention worked under developer-led conditions in a number of schools. The trial was a well-designed cluster randomised controlled trial. The trial was well-powered. However, the following factors reduced the security of the trial. Around 55% of the pupils with SEND who started the trial were not included in the final primary outcome analysis because of difficulties with school withdrawal and data collection from schools. The study was adversely affected by the onset of and fallout from the Covid-19 pandemic, which led ultimately to challenges maintaining the study sample.

Additional findings

Pupils with SEND in WSS Review schools made one additional month's progress for their combined mark in GCSE English Language, on average, compared to pupils with SEND in other schools. This is our best estimate of impact, which has a very low security rating. As with any study, there is always some uncertainty around the result: the possible impact of this programme also includes negative effects of one month's less progress and positive effects of up to two months' of additional progress.

Pupils with SEND in WSS Review schools made zero month's additional progress in GCSE Mathematics, on average, compared to pupils with SEND in other schools. Exclusion and authorised absence rates were slightly lower for pupils with SEND in WSS Review schools, but well-being outcomes were also slightly lower. It must be noted that these results also have very low security.

There were tentatively positive impacts in attainment for all pupils in WSS Review schools, not only pupils with SEND. Progress equivalent to one month's additional impact was found for pupils in combined GCSE English Language and GCSE Mathematics scores compared to pupils in other schools. However, well-being outcomes were also slightly lower. These results also have very low security.

The trial was heavily impacted by the Covid-19 pandemic and its aftermath. Delivery was delayed, had to be shortened, and adapted to go online. It could also have contributed to reducing the effects of the programme as control group schools significantly increased their support for pupils with SEND.

Despite these challenges, the programme was implemented well, with all intervention schools engaging with the core components of the programme to at least an adequate level. The programme was appreciated by SENDCOs who felt that it supported them to reflect on their practice, improve their strategic leadership of SEND, and raise the profile of SEND at the school level. This extended to perceptions of an improved culture of collaboration seen through increased distributed leadership of SEND through the school as well as positive changes to teaching practices. These are in line with the objectives of the programme and current evidence of best practice in supporting pupils with SEND.

This trial was affected by high levels of missing data. This was largely because data were collected directly from schools and there were significant challenges in maintaining engagement and cooperation. There were repeated delays due to Covid-19, and this meant that in some cases schools had to be engaged in the trial for around five years. A follow-up report is therefore, planned with data for the second cohort to be collected through the National Pupil Database. This will hopefully lead to a more secure understanding of the impact of the programme.

Cost

The average cost of the WSS Review programme was around £1,457, or £27 per pupils with SEND per year when averaged over three years. The main costs were the training and cover costs. SENDCOs dedicated an average of 24 hours to aspects of this programme in addition to seven hours of a senior leader's time.

Impact

Table 2: Summary of impact on GCSE English Language standardised mark

Outcome / group	Effect size (95% confidence interval)	Estimated months' progress	EEF security rating	No. of pupils	P-value	EEF cost rating
GCSE English Language / SEND only	0.05 (-0.08 to 0.17)	1 month	🔒🔒🔒🔒🔒	1,839	0.46	£ £ £ £ £
GCSE English Language / all FSM eligible	0.13 (0.01 to 0.24)	2 months	N/A	3,758	0.03	£ £ £ £ £

N/A=not applicable.

Introduction

Background

Pupils with special educational needs or disabilities (SEND) represent a significant and often vulnerable part of the secondary school population, while growing in number since 2016 (Department for Education, 2024a) and becoming an increasing policy priority in recent years. The Children and Families Act 2014, Section 6(3) states: 'a child or young person has special educational needs if he or she has a learning difficulty or disability which calls for special educational provision to be made for him or her'. Furthermore, it defines a child of school age as having a learning difficulty or disability if he or she:

> '(a) has a significantly greater difficulty in learning than the majority of others of the same age, or
>
> (b) has a disability which prevents or hinders him or her from making use of facilities of a kind generally provided for others of the same age in mainstream schools or mainstream post-16 institutions.'

The SEND identification process is typically overseen by the SEND coordinator (SENDCO) (a qualified teacher holding or working towards a qualification in SEND coordination) who gathers evidence from teachers, parents, and pupils themselves, and specialists if this is considered necessary (Department for Education, 2015). Pupils may be identified as needing special educational needs (SEN) support and schools must put in place additional support, resources, and interventions to support that child. As explained in the statutory guidance of the SEND Code of Practice, schools are expected to provide support around four areas of need: communication and interaction; cognition and learning; social, emotional, and mental health (SEMH) difficulties; and sensory and/or physical needs (Department for Education, 2015, pp. 97–8). Pupils whose needs are not met through this approach are typically put forward for an Education and Health Care assessment, which is the responsibility of the school's local authority, and this may result in an Education and Health Care Plan (EHCP) (Department for Education, 2015). School leaders report substantial challenges in making additional provision for pupils with SEND, with increasing demand for specialist professional assessments and rising levels of need, exacerbated by the Covid-19 lockdowns. In state-funded secondary schools in England, there were 60,229 pupils with EHCPs in 2019/2020 (1.8%) rising to 99,825 in 2023/2024 (2.7%). Over the same period the number of pupils identified with SEN support (but without an EHCP) increased from 379,193 in 2019/2020 (11.1%) to 471,677 in 2023/2024 (12.9%) (Department for Education, 2024a).

A key aspect of the context for secondary schools is a system that is widely regarded as failing to deliver the support needed by vulnerable children with SEND:

> '…the system is not working well for anybody: for parents, for kids, and for teachers and for special educational needs schools, and for councils' (Gillian Keegan, Secretary of State for Education, 16/01/24, TES).
>
> 'The current SEN[D] system is broken. CYP [children and young people] with SEN[D] face significant delays in having their needs identified and often do not receive the support they desperately need. There is also a postcode lottery, with identification and provision varying significantly depending on where in England a child or young person lives' (Child of the North and the Centre for Young Lives, 2024).

In addition, there are substantial variations in the rate of identification of SEND between primary schools, so much so that a recent analysis shows that: 'which primary school a child attends makes more difference to their chances of being identified with SEND than anything about them as an individual, their experiences or what local authority they live in' (Hutchinson, 2021: p. 7).

The gap in attainment between pupils with SEND and their peers is substantial. The Education Policy Institute (EPI) expresses the gap in attainment at different key stages between pupils with SEND and their non-SEND counterparts in months of educational progress. In 2023, EPI showed that by the end of primary school, SEND pupils are on average

17 months behind their non-SEND peers in terms of attainment and 22 months behind by the end of Key Stage 4.[1] Pupils with SEND are more likely to be excluded from school, to be eligible for free school meals (FSM), and to be 'looked after' or identified as a child in need (Department for Education, 2019a). In 2019, at the start of this evaluation, 28% of pupils with SEN in all schools in England were eligible for FSM compared to 13% of pupils without SEN (Department for Education, 2019b). Five years later, in 2024, 42.2% of pupils with an EHCP and 38.3% of pupils with SEN support were eligible for FSM compared to 21.4% of all pupils in schools without SEN (Department for Education, 2024a). The impact of the close association between socio-economic disadvantage and SEND can also be illustrated in school exclusion rates: the permanent exclusion rate for pupils eligible for FSM is five times higher than for those who are not eligible; for pupils with SEN but without an EHCP, it is six times higher (Department for Education, 2024b).

Research over the last two decades has highlighted the importance of a broader approach to inclusive pedagogy for all learners (Florian, Rouse, and Black-Hawkins, 2016; Florian and Spratt, 2013; Lewis and Norwich, 2004), pointing to the need to develop schools as inclusive learning environments, rather than focusing primarily on specialist approaches for individuals identified with SEND. Equally, there is a strand of research in the field of inclusive education over the last 30 years addressing the development of more inclusive practices for diverse learners, including those with SEND, seeing this as a whole-school issue (Hick and Thomas, 2008). A key example is the Index for Inclusion (Booth and Ainscow, 2002), which provides a process and resources to support inclusive school development. The Index for Inclusion has been translated into a number of languages and prompted the development of a range of tools and initiatives to support the development of more inclusive practices in schools. These include various award schemes, for example, within local authorities, to recognise good practice.

The Whole School SEND (WSS) Review is best understood against the backdrop of this broader endeavour aimed at supporting the development of more inclusive school cultures. The WSS Review process includes:

- SENDCO training on self-evaluation and peer mentoring provided by an experienced WSS reviewer.

- The use of an evidence-based framework, which draws on a school's current information, robust data, and contextual factors to structure the review.

- Peer-to-peer support and a reflection network to facilitate a collaborative, localised, and grassroots approach to developing SEND provision.

For this trial, a further layer of support was added through consultancy for SENDCOs and Continuing Professional Development (CPD) at regional networking events, provided by nationally recognised consultants. Thus, it is more akin to the programme of support that might be offered by WSS to local authorities or Multi-Academy Trusts (MATs).

In relation to processes of change, Ainscow, Booth, and Dyson (2006) point to the benefits of engaging stakeholders with evidence that can provoke 'principled interruptions' in professional discourses, providing opportunities for reflection on previously established practices. In this sense, WSS Review can be viewed as seeking to promote the development of more inclusive practices by engaging school leaders and acting as a catalyst for school-led change, focusing on local priorities. Thus, the WSS Review process reflects the premise that excellent teaching for pupils with SEND is excellent teaching for all. There is evidence to suggest that professional development can be effective in improving teacher knowledge of inclusive education, and to a lesser extent teachers' use of more inclusive teaching methods (Donath *et al.,* 2023); however, the process of developing and sustaining more inclusive practices at school level seems to be more complex.

The role of the school SENDCO has developed significantly in recent years, with a mandatory qualification and more detailed guidance in the revised Code of Practice for SEND (Department for Education, 2015). While this role is firmly embedded in the infrastructure of the SEN funding system and is increasingly seen as a route toward school leadership, there is less evidence of the impact of SENDCOs on developing inclusive practices at a whole-school level. Likewise, there is a dearth of rigorous evaluation evidence relating to specific whole-school level interventions that are relevant to secondary schools and can be adopted at scale.

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[1] See https://epi.org.uk/annual-report-2024-send-2/.

The WSS Review process was developed in response to the Department for Education (DfE) identifying a need for schools to access support for implementing 2014 SEND reforms (Bunter, 2018). The DfE guidance encourages schools to commission a review using the WSS Review materials, to reflect on SEND provision and explore different approaches to raising attainment. At local authority level, a substantial proportion of Local Area SEND Inspections identified weaknesses in provision (Ofsted and Care Quality Commission, 2017), often resulting in a requirement for local authorities to issue a Written Statement of Action and provide support. For schools, the disproportionately high levels of exclusion of pupils with SEND remains critical (Department for Education, 2019a). This is likely to impact negatively on pupils' attainment and to reflect weaknesses in school-level support.

The WSS Review process aims to prioritise SEND provision in secondary schools by giving school leadership teams ownership of the process to support school development of SEND—ultimately with the aim of improving pupil outcomes.

Specific issues to address include:

- SEND provision tends not to be prioritised by strategic leadership teams in secondary schools and is not very well regulated (Curran *et al.,* 2018; Wall *et al.,* 2019).

- SENDCOs are most likely to be middle leaders and so in a difficult position to drive whole-school change (Pearson, Mitchell, and Rapti, 2015).

- Ownership of the SEND agenda within secondary schools is often fragmented, in contrast to primary schools. This involves risk in terms of identification and support of pupils.

- SEND provision in secondary schools tends to have less focus on teaching and learning and is more about resources and pastoral concerns (Curran *et al.,* 2020).

- Classroom teachers lack confidence in SEND provision (Ginnis *et al.,* 2018).

- There is a lack of wider understanding in schools of what the SENDCO's role and responsibilities are (Curran *et al.,* 2018).

- SENDCOs may be in post prior to receiving training through the National Award for SEN Coordination (NASENCO) (Wall *et al.,* 2019) and so may lack the required knowledge.

An evaluation of the initial DfE contract for WSS Review delivery noted that peer mentoring, a requirement of the original DfE contract, was valuable and created 'significant learning opportunities' (Bunter, 2018). The evaluation suggests that:

'WSS is well-placed to scale-up contract delivery to reach more schools in more regions but needs to continue understanding the nuances of stakeholders within the community of practice to ensure continued delivery of appropriate interventions' (Bunter, 2018, p. 6).

'WSS has made a positive contribution to the SEND sector by empowering the sector to believe system change is achievable by providing solutions that already exist in the system' (Bunter, 2018, p. 157).

The initial evaluation (Bunter, 2018) showed evidence of promise in terms of the impact at school level, for example:

- the process enabled schools to build on what they were already doing well for pupils;

- more non-specialist SEND teachers were willing to look reflectively at their classroom practice;

- subject leaders became more aware of SEND practice and curriculum differentiation;

- a wider awareness developed of the value of pupil progress data and its use in future curriculum planning;

- SEND operational practices were changed in some schools;

- peer-to-peer mentoring was adopted by some teachers/groups outside of SEND; and

- the use of peer-to-peer mentoring was valued by all participants.

In addition, particular challenges with the review process in secondary school settings were noted due to the size of such institutions resulting in greater chance of inconsistencies in SEND provision, as well as the behaviour and SEND teams working independently of each other (Bunter, 2018). A further additional challenge related to the tension between secondary schools working together and the competition between them in relation to pupil recruitment.

There is evidence to suggest that careful matching of schools and brokering of relationships may be important to the success of peer support between school leaders (Ainscow, 2015). The WSS Review process builds on substantive research focusing on school improvement and equitable education and engages peer support between school SENDCOs as a key lever for change. Ainscow (2015) suggests that school partnership can be a powerful means of fostering improvements; however, 'such partnerships have to be carefully orchestrated, using evidence as a catalyst to focus attention on overlooked possibilities for moving practice forward' (Ainscow, 2015, p. 143). Thus, the ways in which schools are partnered for school-to-school support may be important. School matching for peer support within the WSS Review process is based on pragmatic considerations such as local access and is aimed at the SENDCO level.

A key indicator is likely to be the degree of engagement of senior leaders and the extent to which the focus for the WSS Review process is seen within a school as largely restricted to pupils with identified SEND. Accordingly, the evaluation considers whether the WSS Review process and additional support delivered in this project had an impact on pupils with SEND and on all pupils, both in terms of their attainment and their well-being.

Intervention

Why: Rationale, theory, or goal of the elements essential to the programme

As noted in the introduction, the WSS Review process was developed to improve SEND provision in mainstream schools through the development of inclusive teaching, rather than specialised approaches; strengthening senior leader engagement and raising the profile of SEND in schools; and shifting from fragmented to distributed responsibility for SEND (all levels, including pupils and their parents/carers). The WSS Review is a structured, peer-to-peer evaluation of SEND provision across the school and leads to the creation of a bespoke SEND Action Plan to target areas of priority and drive improvement. The WSS Review process has been manualised in a WSS Review Guide. The process includes reviewer and mentoring training for SENDCOs, an evidenced-based framework to support the process, and the development of peer-to-peer support networks.

The WSS Review process aspires to be an approach that is constructive, collaborative, and owned by the school (rather than an audit or inspection process). Its aims are for school improvement in SEND provision without 'punitive' interventions. It seeks to draw on and support existing expertise and good practice within and across schools.

Currently (as of August 2024), SENDCOs can access the WSS Review Guide (and other supporting documentation) free of charge. They can participate in online training on the WSS Review process (for free) or participate in face-to-face training for a fee. A school can commission nasen to undertake a WSS Review (two options currently available, one more in-depth than the other) for a fee. Additional consultancy and follow-on training are also offered. A MAT or a local authority can commission nasen to undertake a WSS Review programme for a fee, which includes peer review and action planning. It is this latter option that has formed the basis of the intervention being evaluated in this trial. We will distinguish between the WSS Review process and the WSS Review programme throughout this report.

The intervention, the WSS Review programme, was delivered to SENDCOs who were expected to oversee the WSS Review process within their own school and to subsequently develop and implement a SEND Action Plan, targeting areas for improvement. The intervention provided training and support, facilitated networking, and provided two opportunities for each participating SENDCO to receive one-on-one coaching.

Thus, the core element for the programme that is essential is peer-to-peer support, which is facilitated by partnering schools for the WSS Review process.

Who: Recipients of this programme

The programme was delivered to the SENDCOs in schools allocated to the intervention arm of the trial. The head teacher or a senior leader was invited to participate in the initial (online) meeting and the second (online) one-on-one coaching session at the end of the programme.

The SENDCOs were expected to involve at least one senior leader in the self-evaluation of SEND provision.

It was suggested that peer review visits included meetings with senior leaders and other key staff involved in SEND provision, as well as observations of teachers and their pupils.

The SENDCOs worked with various colleagues, including the senior leadership team (SLT), the SEND governor, staff in the SEND team, and middle leaders, to develop the SEND Action Plan.

All stakeholder groups were involved to varying degrees in the implementation of the SEND Action Plan.

The underlying aim, in addition to developing inclusive education, was to improve the well-being, attendance levels and, in the longer term, attainment of pupils with SEND.

What: Physical or informational materials used in the programme

The WSS Review Guide, the key documentary resource, explores eight areas to help schools develop the effectiveness of their SEND practice:

- outcomes for pupils with SEND;

- the quality of teaching and learning for pupils with SEND;

- leadership of SEND;

- the efficient use of resources;

- assessment and identification;

- working with parents and carers and pupils with SEND;

- monitoring, tracking, and evaluation; and

- the quality of SEND provision.

The WSS Review Guide outlines the six key stages of the WSS Review process, with details on how to operationalise these and a detailed framework to support self-evaluation and peer review, reflecting the eight areas of focus outlined above and encouraging reviewers to identify strengths and areas for development.

Additional supporting documentation provided through the WSS Review programme and collated through a Padlet (to provide a 'one-stop shop', akin to the WSS Review gateway) included: slides from key events; links to three WSS Review webinars on distributed leadership, leading governance, and developing an inclusive curriculum; WSS Review Teacher Handbook: SEND (Thompson and Walsh, 2022); the Education Endowment Foundation (EEF) 'Special Educational Needs in Mainstream Schools: Guidance Report' (Davies and Henderson, 2025); other relevant guidance reports by the EEF on parental engagement, effective use of teaching assistants, and implementation; links to interesting and relevant research and articles; and the SEN Code of Practice.

Documentation adapted or created for the WSS Review programme included: a WSS Review report template for peer reviewers identifying strengths, areas for developments, and recommendations for next steps; a SEND Action Plan template; and a worksheet intended to support preparation for the second one-on-one coaching session.

What: Procedures, activities, and/or processes used in the programme

The WSS Review process consists of six stages:

- **Identification.** School identifies the need for a WSS Review.

- **Self-evaluation.** School completed a self-evaluation of current provision.

- **Preparation.** The peer reviewer requests preparatory information, analyses relevant data, and confirms visit.

- **School visit.** The peer reviewer visits the school, collects evidence, and delivers feedback.

- **Reporting.** The peer reviewer submits a written report within a timescale agreed with the school.

- **Follow-up.** Follow-up visits and support.

The programme was structured around five key contacts between nasen facilitators and the school/SENDCOs:

- **WSS Reviewer Training.** Self-evaluation of SEND provision, preparation for school visit, peer review process and reporting.

- **Engagement Day 1.** Supporting schools to progress from their self-evaluation and peer review to writing a SEND Action Plan identifying three priorities, actions, and key stakeholders; CPD on distributed leadership and Quality First Teaching was also delivered.

- **One-on-one support/coaching.** Focus on refining SEND Action Plans and beginning to put them into practice.

- **Engagement Day 2.** Supporting schools to implement their SEND Action Plans, with CPD on distributed leadership and adaptive teaching.

- **One-on-one support/coaching.** Reflection on progress, particularly with regard to distributed leadership and subsequent SENDCO support.

In this project, the partnering of schools was pragmatic and primarily based on the region and schools' geographic proximity. Some changes to the original partnership assignments were made for a range of reasons such as schools withdrawing from the project. This had been anticipated from the outset, so the facilitators monitored the process carefully and implemented changes swiftly. The partnering process was initiated before the first key contact point.

SENDCOs conducted the WSS Review process after the WSS Reviewer Training in October 2021 and were expected to submit their peer review report before Engagement Day 1. The SEND Action Plan was written after Engagement Day 1. The facilitators had planned to encourage SENDCOs to share the SEND Action Plan with their school's SLT and governing body, and we observed this happening in two case study schools' one-on-one coaching sessions. It was refined after the first one-on-one coaching session. SENDCOs were given a template prior to the second one-on-one coaching session to support the reflection process.

Further details on what the five key contact points covered is outlined in the 'Implementation and process evaluation (IPE) results' section below.

Who: Programme providers/implementers

The WSS Review Guide was developed in partnership with the London Leadership Strategy (run and led by serving headteachers) and the DfE. When the trial was commissioned in 2019, the WSS Review Guide had been downloaded by over 5,000 schools. It was taken forward by WSS Review, a consortium of charities, schools, and other organisations, hosted by nasen.

As part of the delivery process, two external consultants (each highly regarded in the field of SEND provision in schools) were employed to lead on the WSS Review programme. They were supported by a WSS Review project manager and further administrative support.

How and where? Mode and location of delivery

As tested in this trial, the WSS Review programme was initially meant to be delivered across six regions: North East; North West; South West; South Central England; North West London; and West Midlands. In practice, the regional boundaries were not strictly kept in order to widen the scope for recruitment of schools.

As described above, the five key contacts (three in-person, two online) were supported by additional online meetings, which served to prepare SENDCOs and ensure that the key contacts were effective.

When and how much? Duration and dosage of the programme

The programme was delivered from September 2021 to July 2022, a period of 11 months. As schools had begun to be recruited during late autumn 2019, various online meetings were held and email communications were sent while SENDCOs were waiting to begin the programme in order to keep them engaged. Table 3 summarises the duration and dosage of the programme.

Table 3: Overview of duration and dosage of the WSS Review programme

Activity	When	Mode	Full cohort / regional group / individual	Duration
WSS Reviewer Training: Introduction	June 2021–July 2021	Online	Regional group (SENDCO + SLT member)	60 minutes
WSS Reviewer Training	September 2021	In-person	Regional group	Full day
Engagement Day 1	November 2021–December 2021	In-person	Regional group	Full day
First one-on-one coaching session: Introduction	January 2022–March 2022	Online	Regional group	60 minutes
First one-on-one coaching session	January 2022–March 2022	Online	Individual	30–45 minutes
Engagement Day 2	March 2022–April 2022	In-person	Regional group	Full day
Second one-on-one coaching session: Introduction	June 2022	Online	Full cohort	45 minutes
Second one-on-one coaching session	June 2022–July 2022	Online	Individual (SENDCO + SLT member)	40 minutes
Final reflections	July 2022	Online	Full cohort	

Tailoring? Adaptation of the programme

A number of adaptations were made, partly attributable to the Covid-19 pandemic.

The original *timetable* planned to deliver these events between April/May 2020 and June 2021. The Covid-19 pandemic and school lockdowns from March 2020 meant that the project was delayed by a year with nasen providing newsletters and webinar briefings to keep participating schools engaged. The intention was to deliver events from March 2021 to June 2022. However, this was subject to further delay due to the events unfolding during the academic year 2020/2021 including further lockdowns and school closures, as well as high levels of staff and pupil absence when schools reopened. The programme began in September 2021 and ran until July 2022. Thus, it was reduced in length from 16 months to 11 months.

All five key contacts were originally planned to be held in-person, including two visits to each participating intervention school. The first school visit was originally planned to be at least half a day long (a whole day if preferred by the SENDCO). This would have included meetings with the headteacher, senior leaders, and governors to secure buy-in. The school visits were replaced by online coaching sessions and senior leadership representation was only required at the second online coaching session. The first visit needed to be online due to ongoing challenges with staff absence (particularly given that it was the wintertime). A discussion took place about whether or not the second visit might also be online. However, due to the compressed timeline for delivery eventually a decision was made to also replace this with an online coaching session.

The online coaching sessions were preceded by online group preparation sessions. This meant that the coaching sessions could be more targeted and focused as SENDCOs already understood the aims and expectations.

Resources such as templates and slide decks were adapted as the programme progressed in relation to the experiences of the facilitators both within the project and externally. Additional resources such as the WSS Teacher Handbook: SEND (Thompson and Walsh, 2022) were also shared as they were published alongside other relevant information and research that came to light.

How well (planned): Strategies to maximise effective implementation

The programme was based on existing resources that WSS Review used to deliver WSS Reviewer Training and additional coaching/support. The facilitators worked closely together to adapt these resources to meet the needs of the participating schools. They also piloted some of the resources (slide decks, templates) with schools outside the project, which had commissioned a WSS Review from the WSS Review consortium. Following delivery of events at the regional level, the facilitators reviewed the resources and revised if necessary.

A project manager and further administrative support was put in place by WSS. This meant that participating schools received regular communications. The events were well coordinated and the participating SENDCOs felt supported throughout the delivery of the intervention.

Organising delivery through five regions meant that local networks could be established, partnering schools for the peer review was easier to facilitate, and travel times to events and partner schools were minimised.

How well (actual): Evidence of implementation variability

Our observations of the delivery of the programme across the five regions suggest that implementation was consistent. The delivery team drew on the WSS Review Guide and associated materials from nasen to design and deliver the programme, with training and engagement days, for example, very similar across regions. There was high fidelity with the core components of the programme from the majority of schools, although with some variability in engagement with extra elements particularly towards the end of the programme.

Theory of change

The logic model in Figure 1 below, captures our understanding of the WSS Review programme core inputs, the WSS Review programme outputs in terms of what will be produced or happen as a result of the process, the short-term outcomes at both the school level and the pupil level, and the long-term outcomes. The short-term outcomes are effectively mediators of the causal impact on pupils. These are the changes that need to take place for the pupil experience to improve, for their sense of well-being to increase, for them to be more engaged in learning, leading to reduced absenteeism, as well as reduced fixed term and permanent exclusions. In turn, this will lead to longer term cultural shifts and ultimately to improvements in pupils' attainment and progress.

As noted above through the training and engagement days, SENDCOs were signposted to a Padlet, which was used to provide a one-stop shop of supporting documentation for the participating SENDCOs. The delivery of WSS Review that the intervention was grounded in included the SEND gateway 'to facilitate the sharing and provision of SEND-focused resources and information' (Bunter, 2018, p. 6). Although the Padlet offered a simpler range of resources than the SEND gateway, it included: slides from key events; links to three WSS Review webinars on distributed leadership, leading governance, and developing an inclusive curriculum; WSS Review Teacher Handbook: SEND (Thompson and Walsh, 2022); the EEF 'Special Educational Needs in Mainstream Schools: Guidance Report' (Davies and Henderson, 2025); other relevant guidance reports by the EEF on parental engagement, effective use of teaching assistants, and implementation; links to interesting and relevant research and articles; and the SEN Code of Practice. Some of these resources were published during the delivery of the WSS Review programme (e.g. WSS Review Teacher Handbook: SEND; Thompson and Walsh, 2022).

Also as noted above, documentation adapted or created for the WSS Review programme included: a WSS Review report template for peer reviewers identifying strengths, areas for developments, and recommendations for next steps;

a SEND Action Plan template; and a worksheet intended to support preparation for the second one-on-one coaching session.

The model was developed initially by the delivery team and revised following the IDEA (Intervention Delivery and Evaluation Analysis) workshop in September 2019.

Figure 1: The logic model

Problem in secondary school contexts
- SEND provision is not always positioned as a strategic leadership priority within school
- SENDCOs do not have the status to drive change
- Ownership of the SEND agenda is often fragmented
- SEND provision is more focused on resourcing and pastoral issues than teaching and learning
- Stakeholders lack understanding of the SENDCO's role and responsibilities
- SENDCOs may be in post prior to receiving formal training

Inputs
- Training on peer-to-peer SEND Reviews
- Coordination of peer-to-peer SEND Reviews
- Two engagement days
- Two individual school support visits
- Quality assurance of SEND Development Plan
- Ongoing telephone support

Outputs
- Self-evaluation
- Peer review report
- SEND Development Plan
- Stakeholder groups involved in development activities
- Good practice shared at regional level
- Local networks formed
- Other outputs will depend on the school priorities but will align with at least one of the eight WSS Review areas (e.g. leadership, teaching, and learning)

Mediators
School
- SLT engagement
- SENDCO qualification
- Ofsted (Office for Standards in Education, Children's Services and Skills)

Pupil
- Well-being (Strengths and Difficulties Questionnaire, SDQ)
- Attendance
- Local authority status

Moderators
School
- Exclusion rates for pupils with SEND
- Attainment gap SEND/non-SEND
- SEN Resource Unit/type
- Streaming/setting practices

Pupil
- FSM-status
- Key Stage 2 attainment
- Ethnic group
- Sex
- Summer-born

Short-term outcomes
School
- Improved understanding of school-level provision
- Changes to school SEND register (identification of need)
- SENDCO knowledge increases
- SLT knowledge increases
- Raised status of SENDCO
- Role of SENDCO shifts from pastoral to focus on teaching and learning
- Raised awareness for stakeholder groups
- Increased involvement of stakeholder groups in delivery of SEND provision
- SENDCO resourcing improves

Pupil
- Improvements to well-being at school
- Improvements to attendance and exclusions
- Improved educational experience

Long-term outcomes
School
- SEND provision becomes strategic leadership priority
- SEND targets included on School Improvement Plans
- Distributed leadership of SEND
- Strong partnerships between schools established
- Teacher understanding of SEND provisions improves
- Inclusive pedagogy develops
- Teacher confidence to teach pupils with SEND increases
- Teachers empowered to enact SEND
- School culture shifts

Pupil
- Improved attainment and progress
- Consistent experience of provision across the school

Issues

Schools in the control group were not supposed to have access to the WSS Review process during the study period. They were told that they would be able to access the WSS Review process from September 2024. We recognised from the outset that schools in the control group may have decided to develop SEND provision by accessing alternative resources during the intervention period. Over the course of the trial, both SEND and inclusion issues received renewed focus more broadly, and control schools were likely influenced by this. The IPE carried out as part of this trial (see below) gathered data about this from control school SENDCOs. The issue has been taken into account when interpreting impact analyses. In this project, 'business as usual' did not necessarily mean that no changes in practices took place; in fact, over such an extended period of time we predicted that it would be highly unlikely that there would be no changes to SEND provision among control group schools. From a research design perspective, we recognise that a school's knowledge of the trial and its allocation to the control arm of the trial could have influenced SENDCO decisions around the development of support for SEND pupils. Indeed, we considered it would be highly likely that these schools signed up to the trial because they had identified the need to develop their SEND provision and would find other means to do so. This key issue is that the contrast in 'treatment' between the two arms of the trial will have been eroded, or alternatively that there is not sufficient programme differentiation.

Delays in the project timeline due to the onset of Covid-19 and school closures from March 2020 have had many impacts on the evaluation. Most notably, it has been challenging to keep schools engaged. This resulted in substantial attrition in relation to the collection of GCSE (General Certificate of Secondary Education) data for the Year 9 cohort (the first of two cohorts whose data were to be used in the impact evaluation—the second be a cohort of Year 8 pupils in the trial schools).

Evaluation objectives

Impact evaluation primary research question

1. What is the difference in average **Marks in GCSE English Language** among **pupils with a SEND designation,**[2] in schools exposed to the WSS Review programme, compared to pupils with a SEND designation in control schools exposed to business as usual conditions?

Impact evaluation secondary research questions

2. What is the difference in average **Marks in GCSE English Language** among **all pupils** in schools exposed to the WSS Review programme, compared to all pupils in control schools exposed to business as usual conditions?

3. What is the difference in average **Marks in GCSE Mathematics** among **pupils with a SEND designation,** in schools exposed to the WSS Review programme, compared to pupils with a SEND designation in control schools exposed to business as usual conditions?

4. What is the difference in average **Marks in GCSE Mathematics** among **all pupils** in schools exposed to the WSS Review programme, compared to pupils with a SEND designation in control schools exposed to business as usual conditions?

5. What is the difference in average **Grade in GCSE English Language** among **pupils with a SEND designation,** in schools exposed to the WSS Review programme, compared to pupils with a SEND designation in control schools exposed to business as usual conditions?

6. What is the difference in average **Grade in GCSE Mathematics** among **pupils with a SEND designation** in schools exposed to the WSS Review programme, compared to pupils with a SEND designation in control schools exposed to business as usual conditions?

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[2] NB: In referring to pupils designated with a SEND, we refer to those pupils with 'SEN support' and an EHCP in place.

7. What is the difference in the probability of observing at least one **unauthorised absence** among **pupils with a SEND designation** in schools exposed to the WSS Review programme, compared to pupils with a SEND designation in control schools exposed to business as usual conditions?

8. What is the average number of **all absences** among **pupils with a SEND designation** in schools exposed to the WSS Review programme, compared to pupils with a SEND designation in control schools exposed to business as usual conditions?

9. What is the difference in the probability of observing **at least one exclusion** (fixed term or permanent) among **pupils with a SEND designation** in schools exposed to the WSS Review programme, compared to pupils with a SEND designation in control schools exposed to business as usual conditions?

10. What is the difference in the average **score for total difficulties** obtained from the pupil self-completion SDQ (Strengths and Difficulties Questionnaire) among **pupils with a SEND designation** in schools exposed to the WSS Review programme, compared to pupils with a SEND designation in control schools exposed to business as usual conditions?

11. What is the difference in the average **score for total difficulties** obtained from the pupil self-completion SDQ among **all pupils** in schools exposed to the WSS Review programme, compared to all pupils in control schools exposed to business as usual conditions?

Subgroup research question

12. What is the difference in **average Marks in GCSE English Language** among pupils that **have ever qualified for FSM** in schools exposed to the WSS Review programme, compared to pupils that have ever qualified for FSM in control schools exposed to business as usual conditions?

IPE research questions

1. How is the WSS Review programme implemented in secondary school contexts?

   a. What are the areas of focus that schools prioritise and how are these understood by stakeholders?
   b. What initiatives and/or actions are undertaken by stakeholders in response to the WSS Review programme?
   c. What levels of support do SENDCOs require and from whom?
   d. What are the strengths and challenges of the WSS Review programme, for example, pairing, networking, and training?
   e. How do different stakeholder groups (e.g. pupils, teachers, governors) experience the WSS Review programme and how does it impact on them?
   f. What factors contribute to the WSS Review programme being effective (or not)?

2. What comparable initiatives and/or actions are taken within control group schools? What is the initial position? How does this change over time?

3. How was the WSS Review programme delivered and supported in relation to compliance, fidelity, quality, reach, responsiveness, and programme differentiation?

   a. What is the reach in terms of the involvement of departments, staff members (from senior leaders to teaching assistants), governors, and other stakeholders such as parents?
   b. What is the responsiveness in terms of how each of the stakeholder groups involved engage with the outcomes of the WSS Review programme?
   c. What is the programme differentiation in relation to how the outcomes of the WSS Review programme differ from prior SEND and inclusion practices in the intervention schools?

The study protocol and statistical analysis plans can be found on the EEF website:

- Protocol (amended):
  https://d2tic4wvo1iusb.cloudfront.net/production/documents/projects/EEF_Whole_School_SEND_Protocol_-_Amended.pdf?v=1724055914

- Statistical analysis plan: https://d2tic4wvo1iusb.cloudfront.net/documents/projects/WSS-Review-SAP-2022.03.02.pdf?v=1667745687

Ethics and trial registration

Ethical approval was obtained through Manchester Metropolitan University. The original submission was made on 10 October 2019 and approval was granted following revisions on 31 October 2019. Following a project extension, an amendment was submitted and approval granted on 1 September 2020. The process includes providing details about the project design, information about the ethical procedures that will be adopted, and copies of participant information sheets and consent/withdrawal forms. We also included the Memorandum of Understanding and privacy notice. The main changes resulting from the review process were to develop a video to support the administration of the SDQ administered to pupils prior to randomisation as well as after exposure to the programme (both Year 8 and Year 9 cohorts). The video included clips of young people describing what it was like to complete the SDQ. The aim of this was to enable pupils to make an informed decision about whether or not to participate in the SDQ, without the need for them to read a lengthy participant information sheet. The teacher administering the SDQ also read out some statements that related to informed consent. The amendment also included a shift from paper-based to online administration of the SDQ in case home administration was required. The intention was to administer the online survey in schools.

The school recruitment process was as follows. The WSS Review team identified schools and collected initial data. Schools were then asked to sign a Memorandum of Understanding that provided information about the project and its aims, potential benefits for participating schools, a timetable of activities, data protection issues, and responsibilities of all parties involved. Schools then issued a withdrawal notice to all parents of pupils in Year 8 and Year 9. Parents had two weeks to respond to this although they had the right to withdraw their child at any time. FFT Education—a partner organisation responsible for data collection in schools—then collected baseline data from each school.

This trial is registered at the International Standard Randomised Controlled Trial Number (ISRCTN) registry, registration number ISRCTN11339306. The entry can be viewed here: http://www.isrctn.com/ISRCTN11339306

Data protection

Manchester Metropolitan University processed personal data of pupils and school staff for the purposes of this study and acted as evaluators. This processing is regulated by the General Data Protection Regulation (GDPR) and the Data Protection Act 2018.

- nasen were a data processor as they collected the data specified by Manchester Metropolitan University during recruitment.

- FFT Education were a data processor as they collected data specified by Manchester Metropolitan University at baseline and after the intervention had been delivered.

- Manchester Metropolitan University were a data controller in respect of personal data of pupils/and or teachers, which they processed for the purposes of the project.

- The EEF will become the data controller at the end of the project once the data is submitted to the EEF Data Archive, currently managed by FFT Education (data processor for the archive).

Manchester Metropolitan University ensured that all personal data collected and processed by the university, nasen, and FFT Education for this research project were:

- processed in a manner that was fair, transparent, and lawful;

- adequate and relevant to the study, and were processed solely for the purposes set out in this document and the trial protocol;

- accurate, and where necessary, kept up to date;

- kept in a form, which permits identification of data subjects for no longer than was necessary; and

- processed in a manner that ensures appropriate security of the personal data.

This evaluation was assessed for data protection and ethics as part of the embedded research ethics approval process in place at Manchester Metropolitan University. All personal data were treated with strictest confidence by the evaluators in accordance with the requirements of GDPR 2018.

Manchester Metropolitan University ensured that a data sharing agreement was in place as required by the GDPR and the Data Protection Act 2018. This document outlined the data sharing and protection responsibilities of the four parties involved with this arrangement (Manchester Metropolitan University, nasen, FFT Education, and the EEF).

Data was processed by Manchester Metropolitan University to ascertain the impact of the intervention on the pupil outcomes, and to make judgements about compliance and fidelity. So that the processing of personal data relating to the pupils was fair, lawful, and transparent, pupils' parents received: a parent information sheet; parental withdrawal form; and a privacy notice agreed with the university's data protection officer.

Pupils also received information about the SDQ prior to its completion and were given the opportunity to withdraw. Pupils were also able to withdraw from data processing at any time during the study.

As a public authority conducting research and analysis in the public interest, which has undergone ethical approval the lawful basis for the processing of:

- personal data is 'Public Task' – GDPR Article 6(1)(e); and

- personal data defined as special category is 'Research purposes in the public interest' – GDPR Article 9(2)(j).

Any information identifying pupils was given a unique code immediately after collection and prior to analysis in order to reduce risk. Archived data will include unique pupil numbers (UPNs) and matching to the National Pupil Database (NPD) and other administrative data may take place by the data archive manager. However, data will only be released subsequently to interested parties in an anonymised format. The information collected was used for research purposes only and no information that can identify individuals was used for any other purpose. Any personal data collected and held by the Manchester Metropolitan University, nasen, and FFT Education will be destroyed in accordance with the GDPR when it is no longer required, and no later than July 2025.

Project team

Delivery team

The programme was developed and managed by nasen. The project was led by Margaret Mulholland and Katherine Walsh at nasen. Helen Prosser at nasen, undertook all communication with schools both in relation to the delivery of the intervention and in relation to the evaluation, maintaining contact with schools throughout the study, and ensuring that schools continued to participate in the programme as well as in the evaluation.

Evaluation team

FFT Education were responsible for the collection of administrative data from schools and for the collection and processing of SDQs where the team was led by Laura James (https://fft.org.uk/).

Professor Cathy Lewin and Professor Stephen Morris took overall responsibility for the delivery of this evaluation and are co-principal investigators.

From the Education and Social Research Institute at Manchester Metropolitan University, Professor Cathy Lewin and Professor Stephen Morris were joined by Kate Wicker who acted as a research assistant.

Professor Peter Hick, Professor of Inclusive Education in the Faculty of Education at Edge Hill University was also a member of the team.

From the Policy Evaluation and Research Unit at the Manchester Metropolitan University, Dr Karolina Krzemieniewska-Nandwani and Sandor Gellen completed the team.

Professor Stephen Morris along with Dr Karolina Krzemieniewska-Nandwani took the lead on the impact evaluation, and oversaw the sample design, randomisation, statistical analysis, and reporting. Sandor Gellen undertook the cost study.

Professor Cathy Lewin, along with Professor Peter Hick and Kate Wicker, oversaw the design and execution of the IPE.

Methods

Trial design

This trial is a two-arm efficacy, cluster randomised controlled trial. Secondary schools were recruited to the study and randomly assigned one-on-one to the intervention or control conditions. Pupils entering Year 8 and Year 9 in September 2020 from schools allocated to receive the intervention were exposed to the WSS Review programme. Conversely, pupils entering Year 8 and Year 9 in September 2020 from schools assigned to the control condition remained unexposed and received 'business as usual' support. 'Business as usual' support in the context of this study would include any whole-school initiatives that aimed to achieve a more inclusive school culture or that addressed pupils' well-being and attainment in an integrated manner. The focal sample for the primary analysis were pupils in these age cohorts designated SEND at the point in time the sample was first enumerated. For the purpose of the evaluation, pupils were divided into two groups: those designated with SEND; and those not designated with SEND. This binary distinction was maintained in the impact evaluation and in a large part throughout the IPE. Pupils with SEND were those that were identified as requiring 'support' or that had an EHCP.

The primary outcome was the standardised mark obtained in GCSE English Language examinations sat by Year 9 pupils with SEND in summer 2023. Initially, it was intended that a second set of analyses would take place in which the standardised mark obtained in GCSE English examinations sat by pupils with SEND in the Year 8 cohort would be a co-primary outcome (where reporting for the Year 8 cohort would take place one year later). For both year group cohorts, examination marks were to be collected direct from schools. It is important to note that GCSE examination marks, as opposed to grades, are not available from the NPD, which made it necessary to approach schools directly to obtain them. Due to the high number of schools leaving the trial, it was decided not to proceed with collecting GCSE results and other outcomes direct from schools for the Year 8 cohort. It was felt that the sample size risked being too small to maintain the desired statistical power. As is explained below, one secondary outcome for the Year 8 cohort was collected. In summer 2023, the SDQ self-completion questionnaire was administered to the Year 8 cohort. Results from these data are reported here alongside the fuller set of results for the Year 9 cohort.

To summarise, secondary outcomes for Year 9 pupils with SEND were:

- standardised GCSE mark obtained in mathematics;

- GCSE grade obtained in English language;

- GCSE grade obtained in mathematics;

- the number of authorised absences in the school year 2022/2023 (recorded in days);

- whether at least one unauthorised absence was recorded in the school year 2022/2023;

- whether at least one exclusion from school was recorded in the school year 2022/2023; and

- the total difficulties score obtained from the pupil self-completion SDQ.

Secondary pupil outcomes for all Year 9 pupils were:

- standardised GCSE mark obtained in English language;

- standardised GCSE mark obtained in mathematics; and

- the total difficulties score obtained from the pupil self-completion SDQ.

For Year 8 pupils:

- the total difficulties score obtained from the pupil self-completion SDQ for pupils designated with SEND; and

- the total difficulties score obtained from the pupil self-completion SDQ for all Year 8 pupils.

Subgroup analysis was performed for all pupils in the Year 9 cohort that had ever qualified for FSM (Ever-FSM).

Table 4 describes the key features of the trial.

Table 4: Trial design

Trial design, including number of arms		Two-arm efficacy, cluster randomised controlled trial
Unit of randomisation		School
Stratification variable(s) (if applicable)		Regions: North East; North West; Yorkshire and Humber; East Midlands; West Midlands; London; South East; South West
Primary outcome	Variable	Mark obtained in GCSE English Language
	Measure (instrument, scale, source)	Standardised combined marks in GCSE English Language obtained via schools from exam boards
Secondary outcome(s)	Variable(s)	- Standardised mark obtained in GCSE Mathematics - Grade obtained in GCSE English Language - Grade obtained in GCSE Mathematics - Unauthorised absences (2022/2023) - Authorised absences (2022/2023) - Exclusions (fixed term/permanent) from school (2022/2023) - Total difficulties score reported
	Measure(s) (instrument, scale, source)	- Standardised combined marks obtained from exam boards via schools - Grades recorded as 0–9, where 0 is an unclassified score at GCSE, obtained from schools (equivalent to results reported by the NPD) - Count of authorised absences in the last full academic year in days absent – school records (2022/2023) - Binary zero/one response – whether at least one unauthorised absence recorded in the last full academic year (2022/2023) - Binary zero/one indicator – whether at least one exclusion recorded in the last full academic year (2022/2023) - Total difficulties score reported – child self-completion age 11–17 single-sided SDQ questionnaire
Baseline for primary outcome	Variable	Prior attainment in English reading raw score at Key Stage 2
	Measure (instrument, scale, source)	Raw score at Key Stage 2 in reading obtained from schools
Baseline for secondary outcome(s)	Variable	As appropriate: - Prior attainment in either mathematics or English reading at Key Stage 2 - Count of authorised absences – September 2019 to February 2020 - Count of all absences in the school year prior to randomisation – September 2019 to February 2020 - Total difficulties score reported prior to randomisation
	Measure (instrument, scale, source)	- For attainment baseline measures these are raw continuous scores at Key Stage 2 obtained from schools - Absence measures obtained from school records – coded as counts (authorised or all absences) for the six months from September 2019 to February 2020[1] - Total difficulties score obtained as a continuous measure derived from self-reports via SDQ pupil self-completion questionnaire for 11- to 17-year-olds

[1]Baseline measures of absence and exclusion relate to the six months from September 2019 to the end of February 2020, this is due to the closure of schools following the onset of the Covid-19 pandemic.

Participant selection

Eligible schools were state-funded secondary schools located, initially, in five English regions. Although it was intended to restrict recruitment to only five regions in England, in practice the delivery team extended recruitment beyond the boundaries of the initial five regions with schools recruited in eight regions. Because recruitment was organised regionally, it was intended that randomisation, which was carried out in June 2021, would be stratified by the five original regions that were to be the focus of recruitment. Following actual recruitment practice, randomisation was stratified by eight regions. Schools were eligible for inclusion in the trial if they met the following conditions:

- the school is a mainstream secondary school;

- the school must not have previously commissioned a WSS Review;

- the school must be located in one of the following regions (based on the Regional School Commissioner areas): North East; North West; South Central England; North West London; South West; and West Midlands. Though as we have explained above this was not adhered to; and

- the school SENDCO and other members of the SLT have not previously engaged with the WSS Review process or similar audit.

Further, only one school could qualify for inclusion in the study per MAT. This is because MATs often set policy in relation to SEND centrally, and we wish to avoid a situation where schools from the same MAT were assigned to different arms of the trial.

Within each recruited school the following pupils were in the range of the study:

- all pupils in Year 8 and Year 9 on Tuesday 1 September 2020; and

- the sample upon which the primary outcome analysis was performed was pupils designated with SEND; that is either 'support' or with an EHCP as of Tuesday 1 September 2020.

The school recruitment process proceeded as follows. The delivery team—nasen—identified and approached schools that met the selection criteria, collecting initial data, including the school's name, address, telephone number, and unique reference number (URN), along with the names and contact details of key members of staff. Schools were requested to sign a Memorandum of Understanding providing information about the project and its objectives, potential benefits for participating schools, a timetable of activities, data protection issues, and the responsibilities of all parties involved. A copy of the Memorandum of Understanding and associated recruitment documents can be found in Appendix E of the Technical Appendices published alongside this report.

Once a school signed the Memorandum of Understanding, they issued a withdrawal notice to all parents of the pupils in Year 8 and Year 9, allowing parents a two-week period to respond. However, parents retained the right to withdraw their child at any time. Subsequent to this, the delivery team collected basic background information from the school. This information was sent electronically to the evaluation team and FFT Education. FFT Education was a partner organisation working with Manchester Metropolitan University to enumerate the Year 8 and Year 9 pupil samples, collect basic pupil-level information as well as further attainment data that were used in the primary and secondary analysis. The enumeration records were used to generate an initial school/pupil record in the trial database.

The delivery and research teams recruited 156 schools to the trial containing in total, 4,178 Year 9 pupils with SEND. Of these schools, 78 were assigned to the intervention group and 78 to the control group. There were 1,924 Year 9 pupils with SEND in the intervention group and 2,254 in the control group. At endline, 102 schools were retained in the sample, 46 in the intervention group and 56 in control group. The 'as analysed' sample for the primary analysis comprised 1,839 Year 9 pupils with SEND in 100 schools, 45 intervention schools and 55 control schools. Of the 1,839 pupils, 816 were in the intervention group and 1,023 in the control group. Full discussion of sample sizes and attrition, along with reasons for school dropout, are provided in the 'Impact evaluation results' section below.

Outcome measures

Primary outcome

The primary outcome was a measure of English language attainment in the form of the combined mark received by pupils with SEND in their summer GCSE English Language examinations of 2023.

The theory of change for the WSS Review programme envisages changes to school culture, in response to a process of critical reflection, the result of which is a renewed focus on teaching and learning for pupils with SEND. This it is theorised, not only leads to improvements in well-being at school, reductions in absences, and a general improvement in the experience of school, but also to measurable improvements in attainment. Furthermore, it is also anticipated that the intervention will directly influence teaching and classroom practice towards the needs of pupils with SEND, and that these changes will be reflected in improved attainment for these pupils as well as pupils without SEND. Simply put, the WSS Review programme theory of change claims that attainment in national examinations at the end of Key Stage 4 will rise for all pupils, but particularly for pupils with SEND.

Following discussions with the intervention developers and the EEF, attainment in GCSE English Language for pupils designated with SEND, in the form of exam mark, was chosen as the primary outcome. Roughly four in ten of the GCSE cohort of 2016 had been designated with SEND at some point during their prior school career and the GCSE entry rate for pupils with SEND is very high at around 96% (Department for Education, 2020). English language was chosen as the primary outcome measure because command of written and spoken language is important in accessing learning in general and is a determinant of future advancement.

The reliance on national examinations for assessment is partly a practical decision but also one that reflects substantive concerns. From a practical perspective, adopting attainment at GCSE as the primary outcome has a number of advantages. First, considerable resources are devoted by exam boards to the writing and validation of GCSE questions, therefore, examination marks might be considered reliable and valid measures of attainment in and of themselves. Second, the costs of collecting pupil-level GCSE results are low compared to the costs of the alternative, which is administering commercial standardised assessment tests. Third, unlike administering separate standardised assessments of literacy and language, using GCSE marks as the primary outcome imposes no additional data collection burden on schools. Fourth, as a measure it is also potentially less affected by loss to follow compared to standardised assessments requiring primary data collection, though as will be discussed we encountered significant quality issues with marks from data obtained from schools as well as problems obtaining marks from schools.

While our focus is on GCSE marks, given these might be considered sensitive to small changes in attainment and provide a continuous attainment score, GCSE grades are also of interest. Grades are well understood. Results showing that an intervention influences average GCSE grade is clear and interpretable to a range of stakeholders. Moreover, as closing the attainment gap is a central concern to the EEF and it is a grade that ultimately determines advancement, the grade in English is included as a separate secondary outcome measure.

To obtain marks, schools in our sample were approached by FFT Education and asked for the combined marks obtained by individual pupils at GCSE in the summer of 2023 and provided to the school by awarding bodies. Marks received are not directly comparable across the different awarding organisations in England. For this reason, information on the awarding body used by the school for GCSE English Language and GCSE Mathematics was also collected. The mark obtained was standardised within the awarding body so that the marks could be combined across the full sample into a single outcome measure.

Secondary outcomes

As noted previously, secondary outcomes are:

- standardised GCSE combined mark obtained in mathematics;

- GCSE grade obtained in English language;

- GCSE grade obtained in mathematics;

- the number of authorised absences in the school year 2022/2023 per pupil;

- whether at least one unauthorised absence was recorded in the school year 2022/2023 per pupil;

- whether at least one exclusion from the school was recorded in the school year 2022/2023 per pupil; and

- the total difficulties score obtained from the pupil self-completion SDQ.

The effects of the WSS Review programme on each of these outcomes are estimated for pupils with SEND in the Year 9 cohort, while for all Year 9 pupils estimates based on the following outcomes are also provided:

- GCSE grade obtained in English language;

- GCSE grade obtained in mathematics; and

- the total difficulties score obtained from the pupil self-completion SDQ.

For pupils in the Year 8 cohort, there is one secondary outcome for which the effect of the WSS Review programme is calculated. It is estimated on the SEND subgroup within the Year 8 cohort and separately for all Year 8 pupils:

- the total difficulties score obtained from the pupil self-completion SDQ.

Secondary outcomes derived from national examinations

The WSS Review programme theory of change sets out expectations that changes to school culture towards greater inclusivity along with a greater focus on teaching and learning, specifically for pupils with SEND, but also among the wider pupil body, would raise attainment in national examinations in general, not just specifically in English language, and not only for pupils with SEND. For this reason, GCSE marks and grades in both English language and mathematics, obtained in summer 2023, were also collected direct from schools by FFT Education. Given the importance of attainment in mathematics for future advancement, marks in GCSE Mathematics were chosen as a secondary outcome for pupils with SEND. Furthermore, interest lies not only in performance in national examinations as a form of assessment but also achievement in terms of the grade obtained by pupils. For this reason, the grades achieved in mathematics and English language are specified as separate secondary outcomes.

The process of obtaining the marks for pupils in our sample in GCSE Mathematics was the same as that described above for GCSE English Language, though the process (as we describe below) is complicated by the fact that mathematics is a tiered subject. Grades obtained in both English language and mathematics are on a 1–9 scale with unclassified marks coded to '0'. The measures of grade achieved by pupils and used in this study is equivalent to those available through the NPD.

As alluded to, derivation of single dependent variable derived from marks obtained in GCSE Mathematics is a little more complex than the process required to obtain a standardised mark for GCSE English Language. This is because mathematics is a tiered subject, with pupils entered either for foundation or higher examinations. The foundation examinations have 'target' grades between 1 and 5, while for higher examinations 'target' grades are between 4 and 9 (with a grade of 3 available for those that score a little below a grade '4'). Each tier consists of three papers. Pupils are given a final combined mark before marks are mapped on to the 1 to 9 grade boundaries but the marks across tiers cannot be combined, as they are not directly comparable. To accommodate this lack of comparability, for each grade, we re-scaled raw marks to percentiles. For example, all foundation level raw marks that resulted in grade 1, were re-scaled to 0–11 percentiles, and so on. The re-scaling was performed separately for foundation and higher-level groups. Once the raw marks were re-scaled to percentiles, the resulting percentile scores were combined into a single variable and standardised within the awarding body.

Secondary outcomes based on pupil attendance and exclusions

The theory of change suggests that the WSS Review programme aims to bring about a change in school culture, promoting an inclusive and supportive environment as well as addressing specifically the needs of pupils with SEND in the classroom.

At the point GCSE grades were extracted from school data systems by FFT Education, data were also obtained on authorised and unauthorised absences for all Year 9 pupils for the school year 2022/2023. These data were transformed into outcome measures and used as dependent variables in the secondary analysis. For authorised absences, the outcome measure is a count of the number of authorised absences based on whole-days absent from school. For unauthorised absences, because there are fewer of these, a binary dependent variable was created for each pupil coded to '1' where at least one unauthorised absence is observed in the relevant school year, '0' otherwise. The quality of data received from schools was variable and in some cases not provided in the correct format. It transpired that although we asked schools to provide absences in days, some schools provided absences in sessions, where a session was equivalent to a half-day absent. Where we know this to be the case, we adjusted the counts received such that they represent days not sessions. In some cases, we were not totally surely whether the records were half-day or full-day absences, but our best judgement was that the resulting data contains only a limited amount of misclassification.

At the same points in time that attainment and attendance data for each pupil in the relevant year group cohorts were extracted, data on exclusions from school were also collected for the school year 2022/2023 for Year 9 pupils. Data on both temporary fixed term and permanent exclusions were collected. From these data, a binary outcome measure was derived capturing whether exclusions from school, either fixed term or permanent, were recorded in the relevant school years for each pupil. Some entries within permanent exclusion variable were greater than 1. These observations were excluded from the analysis.

Pupil well-being

As discussed above, it is anticipated and consistent with the intervention theory of change, that pupil well-being will improve because of the WSS Review programme. Pupil well-being was measured using the SDQ,[3] a behavioural screening questionnaire for 3- to 17-year-olds. The SDQ provides a measure of the psychological adjustment of the respondent (or their psychopathology) (Goodman, 2001). There are three versions of the questionnaire: one administered to parents; one administered to teachers/practitioners; and a self-completion instrument for young people. We administered the single-sided self-completion SDQ for 11- to 17-year-olds to the enumerated sample of pupils in both Year 8 and Year 9 at baseline in April/May 2021, prior to randomisation (which was carried out in June 2021), and then again in November 2022 to January 2023 (for Year 9) and May 2023 to July 2023 (for Year 8). The timing of the follow-up SDQ measurements was initially informed by the need to avoid asking pupils to complete the instrument in Year 11, when there are significant calls on teachers' time and school resources in general, though this proved difficult to maintain. Initially, administration of the SDQ for the Year 9 cohort was due to take place in June/July 2022. However, due to delays in full implementation of the WSS Review programme, stemming from school closures during the Covid-19 pandemic, it was decided to delay administration until they were in Year 11, in the autumn of 2022.

The SDQ measure of interest was the 'total number of difficulties' score. The SDQ contains 25 items, 20 of which form four subscales: emotional symptoms; conduct problems; hyperactivity/inattention; and peer problems. A score on each subscale was obtained and then the total number of difficulties derived from summing across the subscales. An additional five items form a separate prosocial behaviour scale, which we did not use in our analysis. The validity and reliability of the SDQ are discussed in Goodman and Goodman (2009; 2011) and Goodman (2001). Despite some technical weaknesses (Black, Mansfield, and Panayiotou, 2021), the widespread use of SDQ offers useful points of comparison with other studies and over time. In terms of readability issues for example, our study did not include Year 7 pupils, for whom this would be more of a concern. The SDQs at baseline and follow-up were administered online and overseen by teachers and teaching assistants. nasen provided online sessions to support schools through the process, and schools were provided with guidance on how to administer the questionnaire, which included a video for pupils to watch. Schools were also asked to complete and distribute a form to teachers that summarised the resources available if there were any concerns regarding pupils' well-being arising from their experience of completing the SDQ.

Sample size

Four substantive considerations informed sample size calculations at the protocol stage:

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[3] For full details of this measure see: https://youthinmind.com/products-and-services/sdq/.

- the costs to the developer of working with schools and the available programme budget, which determined the maximum possible size of the intervention group;

- the number of schools that the developer thought they could recruit in the time available;

- the average size of schools; and

- the likely proportions of pupils within schools that had SEND and had ever qualified for FSM (Ever-FSM).

In addition to these substantive considerations, a range of statistical and design assumptions also contributed to sample size determination. These were:

- the correlation between Key Stage 2 English raw scores (a covariate capturing prior attainment to be used in the analysis) and standardised GCSE English combined marks (the primary outcome);

- the intraclass correlation coefficient (ICC) at the school level;

- random allocation ratio of 1:1, to maximise statistical power;

- statistical inference based on two-tailed tests of statistical significance; and

- type 1 and 2 statistical error rates of 5% and 20%, respectively.

Through discussions held with the developer and the EEF, it was determined that the maximum number of schools the developer could recruit was 160 in the time available, and that following this, the developer could deliver the intervention to around 80 schools.

With an achieved sample of some 160 schools, we estimated that the average number of pupils in a year group cohort, the number of pupils that were likely to be SEND as well as the expected number of pupils that had ever qualified for FSM, would be as follows:

- Based on previous studies we expected on average of six classes in each year group in mainstream secondary schools and that each class would have approximately 30 pupils.[4]

- Thus, we expected to find on average around 180 pupils in each year group cohort per school.

- Drawing on national publicly available estimates, we expected that around 14% of pupils would be designated with SEND (Department for Education, 2019a). This meant that we expected to find 25 pupils with SEND in each year group-based cohort per school.

- Nearly a quarter of pupils in maintained secondary schools have qualified for FSM at some point in their school career (Morris, Seymour, and Limmer, 2019). As a result, we expected around 42 pupils per year group cohort, per school, to have been in receipt of FSM.

We obtained an estimate of the correlation between Key Stage 2 raw score for English and GCSE English Language attainment from analysis provided by the EEF (EEF, 2013). The assumption used for the ICC is 0.20 (proportion of the total variance at the school level), though conservative, was the assumption used for many EEF-funded studies with GCSE attainment as a primary outcome at the time.

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[4] As a peer reviewer in reviewing this report noted, this estimate is probably too high—see: **https://explore-education-statistics.service.gov.uk/find-statistics/school-pupils-and-their-characteristics**—which shows average class size in secondary school to be around 22. Overall, moving to a lower estimate of class size would have only a modest effect on our calculations as they are driven primarily by the number of schools.

Taken together these assumptions and other information led to the estimates of the minimum detectable effect size (MDES) at the protocol stage for the primary analysis of 0.20 for pupils with SEND, and 0.19 for samples based on all pupils and those Ever-FSM, respectively (see Table 13).

At randomisation, the developers had successfully recruited 156 schools. These schools were allocated one to one to two arms (intervention and control), forming two groups of equal size n=78 in June 2021. The average size of the year group cohorts in the schools recruited was 190 pupils. On average there were 27 pupils with SEND in each school and 50 FSM pupils. Maintaining the assumptions used in our calculations at the protocol stage except for using actual school size[5] (both in total, for FSM and pupils with SEND), the MDES at randomisation was 0.19 for all pupils, 0.21 for pupils with SEND, and 0.20 for the FSM pupils (see Table 13).

Table 13 also contains MDES calculated based on the pre-/post-test correlations obtained at analysis, along with the observed ICCs, and final sample sizes. Turning to sample size first, for the SEND subsample at analysis, n=1,839 pupils were retained in the sample (compared to 4,181 at randomisation) and 100 schools (compared to 156 schools at randomisation). For the overall sample, there were 15,659 pupils retained in the sample at analysis (compared to 29,699 at randomisation), drawn from 102 schools. For the Ever-FSM sample, there were 3,758 pupils retained in the sample at analysis (compared to 7,812 at randomisation) from 102 schools. The conditional ICCs obtained for the three samples at analysis, were a great deal lower than those estimates used in the sample size calculation at randomisation: for the overall sample, SEND, and FSM samples, they stood at 0.07, 0.08, and 0.09, respectively compared to 0.20, the value used in all calculations at randomisation, which was noted as possibly conservative at the time. In terms of the pre-/post-test correlations these turned out to be lower at the pupil level than those used in calculations performed at randomisation, while for the school level, they turned out to be higher. Taken together these factors lead to MDES appreciably lower at analysis than at randomisation, suggesting that the assumptions made at randomisation were excessively conservative. For all pupils (see Table 13), the MDES at analysis was 0.11, for pupils with SEND 0.16, and for FSM pupils 0.14. We examine these in detail below.

Randomisation

Stratified randomisation was performed in June 2021 with strata based on region. To attempt to recruit 160 schools, the developer was given a target to recruit around 28 schools in each of the initially identified regions in which the trial was to run (i.e. across five regions). Once the developer hit the target number of schools in a given region, randomisation was undertaken for that relevant region. A random number seed was chosen and stored separately. The following process was followed for each regional-based stratum:

- each school in the region was assigned a number from a uniform distribution in STATA Version 16 (StataCorp LLC, College Station, Texas, USA) statistical software;

- schools were arranged in ascending order on the basis of the random number;

- the ordered list of schools was split at the midpoint; and

- schools in the top half of the list were allocated to the intervention group and those in the bottom half of the list were allocated to the control group.

The randomisation was carried out by a researcher based in the Policy Evaluation and Research Unit, the Department of Sociology at Manchester Metropolitan University. Randomisation was carried out such that the researcher was blind to the identities of the schools.

The randomisation was undertaken in STATA Version 16 statistical software. A file containing the relevant commands used to perform randomisation can be found in Appendix H.

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[5] NB: 'Harmonic means' were used in sample size calculations rather than 'arithmetic means' in order to take into account varying cluster sizes, at both randomisation and analysis.

Statistical analysis

Statistical analysis was conducted on the basis of the principle on intention-to-treat. Thus, all subjects were analysed as they were randomised. The primary and secondary analyses were conducted on the completed cases sample file. The completed cases sample file consisted of all subjects that provided the necessary observations such that we could carry out the analyses specified in the study statistical analysis plan (Morris *et al.,* 2021). As discussed below, we conducted further analysis to explore the possible consequences of missing data on our sample estimates.

Primary analysis

The primary analysis consisted of estimating the average effect of the WSS Review programme, for Year 9 pupils with SEND, on their GCSE English Language combined standardised mark, obtained in 2023 summer examinations. A sample estimate of this effect was obtained from a hierarchical mixed effects linear model of the following form:

$$Y_{ij} = \beta_0 + \beta_1 T_j + \beta_2 (X_{ij} - \bar{X}_j) + \beta_3 (\bar{X}_j - \bar{X}) + \beta_4 R_j + u_j + \varepsilon_{ij}$$

Where Y_{ij} is the standardised combined English language mark for pupil i in school j. T_j is an intervention group binary indicator coded to '1' if school 'j' was allocation to the intervention, '0' otherwise. X_{ij} is pupil $i's$ Key Stage 2 raw score in reading, which is entered into the model as a pre-test covariate and as a departure for the pupil from their school mean $\bar{X}_j$. The school mean is entered into the model at level 2 as a departure from the overall mean for the sample $\bar{X}$. The covariate R_j captures the region in which school j was located, reflecting the stratification used in randomisation. The βs are the unknown parameters to be estimated, with the sample estimate of β_1 representing the effect of the WSS Review programme on English attainment for pupils with SEND in the Year 9 cohort. The terms u_j and ε_{ij} are school and pupil-level random effects that are assumed to be normally and independently distributed in the population with '0' mean and variances σ_u^2 and σ_ε^2. The ICC is therefore, $\rho = \sigma_u^2 / \sigma_u^2 + \sigma_\varepsilon^2$.

At places in discussing the results of this and other analysis, we make the distinction between 'adjusted' and 'unadjusted' analyses. To clarify these terms, an 'adjusted' analysis refers to results from a multiple regression model in which the differences in average outcomes between the two groups are calculated accounting for any remaining observed other differences between them. This 'adjustment' is achieved through including covariates alongside the intervention group indicator in the regression model, and is what is described here in this section. The term 'unadjusted' analysis refers to a simple comparison of average outcomes from models in which there are no further covariates.

The model is estimated in STATA Version 18 statistical software, using the command `mixed` and restricted maximum likelihood. Given that the dependent variable has already been standardised to combined marks obtained from different examination awarding bodies, the sample estimate of β_1 is a difference in standardised means. Thus, we conduct no further transformation of the regression output to derive an effect size. Further discussion on this topic is provided below.

Secondary analysis

The effects of the WSS Review programme on a range of secondary outcomes for SEND and all pupils in the Year 9 cohort were also estimated. In addition, we also examine the effects of the WSS Review programme on one secondary outcome for SEND and all pupils in the Year 8 cohort. All sample estimates are obtained from hierarchical mixed effects models, in linear form for continuous outcomes, logistic form for binary outcomes, and negative binomial for count outcomes. All models are estimated in STATA Version 18 statistical software.

Table 5 and Table 6 below provide further details of the multiple regression models estimated for each secondary outcome first for pupils with SEND only (Table 5) and then for all pupils (Table 6).

As mentioned above, and in addition to these analyses, we also examine the effects of the WSS Review programme on SEND and all Year 8 pupils' total difficulties score obtained from the SDQ administered to the Year 8 cohort in the

summer of 2023. Estimates come from hierarchical mixed effects linear models, with school random effects, containing the total difficulties score measured at the baseline for the Year 8 cohort, gender, FSM, and month of birth as covariates.

Appendix I contains regression model output from STATA Version 18 for all the models discussed here both primary and secondary analysis.

Table 5: Secondary analysis Year 9 pupils with SEND

Dependent variable	Model	Intervention group indicator	Region indicator	Further covariates
GCSE Mathematics standardised mark	Hierarchical linear model: random effects at school and pupil levels	Yes	Yes	• Key Stage 2 mathematics raw score at pupil and school levels • Gender • FSM • Month of birth
GCSE English grades 1 to 9	Hierarchical linear model: random effects at school and pupil levels	Yes	Yes	• Key Stage 2 reading raw score at pupil and school levels • Gender • FSM • Month of birth
GCSE Mathematics grades 1 to 9	Hierarchical linear model: random effects at school and pupil levels	Yes	Yes	• Key Stage 2 mathematics raw score at pupil and school levels • Gender • FSM • Month of birth
Count response: number of authorised absences, school year 2022/2023	Hierarchical negative binomial model: random effects at school and pupil levels	Yes	Yes	• Absences in the school year 2019/2020 September to February, at the pupil level • Gender • FSM • Month of birth
Binary response: at least one unauthorised absence in the school year 2022/2023	Random effects binary logistic regression: random effects at school and pupil levels	Yes	Yes	• Absences in the school year 2019/2020 September to February, at the pupil level • Gender • FSM • Month of birth
Binary response: at least one exclusion from school in the school year 2022/2023	Random effects binary logistic regression: random effects at school and pupil levels	Yes	Yes	• Absences in the school year 2019/2020 September to February, at the pupil level • Gender • FSM • Month of birth
Total difficulties score, SDQ	Hierarchical linear model: random effects at school and pupil levels	Yes	Yes	• Total difficulties score measured at the baseline • Gender • FSM • Month of birth

Table 6: Secondary analysis Year 9 all pupils

Dependent variable	Model	Intervention group indicator	Region indicator	Further covariates
GCSE English Language standardised mark	Hierarchical linear model: random effects at school and pupil levels	Yes	Yes	• Key Stage 2 English raw score at pupil and school levels • Gender • FSM • Month of birth
GCSE Mathematics standardised mark	Hierarchical linear model: random effects at school and pupil levels	Yes	Yes	• Key Stage 2 mathematics raw score at pupil and school levels • Gender • FSM • Month of birth
Total difficulties score, SDQ	Hierarchical linear model: random effects at school and pupil levels	Yes	Yes	• Total difficulties score measured at the baseline • Gender • FSM • Month of birth

Analysis in the presence of non-compliance

There is a wish to understand the effects of the WSS Review programme on those that comply with their intervention assignment. This is in recognition that not all schools assigned to receive the WSS Review programme will comply and implement the intervention. Therefore, we might wish to know the effects of the WSS Review programme on pupils in schools that do implement the programme in that we cannot rule out the possibility that some benefit of the scheme may have been enjoyed by some or all its pupils.

The WSS Review programme is a whole-school intervention. This means that compliance is defined at the school level. If we deem a school to be compliant, we also deem all pupils within the school to be compliant. Because of the nature of the intervention, in discussions with the EEF and the developers nasen, it was decided that schools that attended the WSS Review process initial training event would be classified as compliers, and by extension, those schools allocated to the intervention group that did not attend and had no further contact with the scheme would be classified as non-compliant. In the case of the WSS Review programme, the developers nasen could not rule out the possibility that attendance at this initial training event, at a minimum, could change aspects of the schools' teaching and support that might in turn affect pupil behaviour and outcomes. The event itself sought to convey the main features and practices encouraged by the initiative, which could be applied by those attending regardless of whether there was any further contact with the programme. It was attended by SENDCOs from 67 schools and lasted for one day. It is important to note that the control group could not access any aspect of the intervention including training.

Although quite a broad definition of compliance, it was felt that for the assumptions of the compliance analysis to hold, attendance at training was concluded to be minimally important for pupils to benefit in some way. A more stringent definition of compliance risked defining some schools and pupils as non-compliant when they could, in theory at least, have benefited from the scheme even if only minimally. In such circumstances the key assumption underpinning any compliance analysis would not hold, namely that of the exclusion restriction, and therefore, the result of any such analysis would be biased.

In the statistical analysis plan for this study, we described a process whereby we aimed to use instrumental variables estimation and two stage least squares to obtain estimates of the WSS Review programme on compliers—otherwise known as the complier average causal effect (CACE) (Morris *et al.,* 2021). This involves estimating two equations and correcting standard errors and inferential tests for the clustering of pupils by school. The first is a compliance equation in which take-up of initial training in the WSS Review programme is modelled as a dependent variable with the treatment group indicator as a covariate. The fitted value for the dependent variable is then entered into a second stage equation, which is effectively the model described for the primary analysis above, with the fitted values from the first stage equation replacing T_j. The idea was for these two models to be estimated in a single step using the command '`ivregress 2sls`' in STATA Version 18, with standard errors adjusted for heteroskedasticity and clustering using the hc2 version of cluster robust standard errors. Further, that we would report coefficient estimates from the first stage regression along with the F-Test from that model that would enable us to assess the performance of randomisation as an instrument for compliance. A statistical test for endogeneity was also proposed using '`estat endog`' command. As noted above, unbiased estimation of CACEs relies on the 'exclusion restriction'. This means that randomisation causes exogenous variation in compliance, and it does so free from any confounding effects of third or unmeasured variables influencing both compliance and the outcome. In this case, the causal effects that are recovered from the invitation to treat estimates are those on compliers only.

At analysis, estimation of CACEs was deemed to be unnecessary, and the approach discussed above uninformative. This was because non-compliance was extremely low, with only one school allocated to the intervention, and in the 'as analysed' sample, that did not attend training.

Missing data analysis

As missingness occurring before randomisation is unlikely to introduce bias in estimated effects and turned out to be limited, sensitivity tests focused on whether missing data at follow-up (which was considerable) resulted in biased or had implications for precision.

In the initial screening stage, the type of missingness was examined—whether it was missing completely at random (MCAR), missing at random (MAR), or possible missing not at random (MNAR), though it is very difficult to confirm

whether missing data process are MNAR. This involved calculating and comparing the rate of missing data in the trial arms. The level of missingness was deemed problematic and therefore, an assessment on whether available baseline covariates explained missingness was made. This involved fitting a random effects logistic regression model on the Year 9 SEND sample for whom a complete set of baseline observations were available, where the dependent variable recorded whether a pupil in the full as randomised sample provided an observation on the primary outcome at endline—referred to as a 'dropout' model. The model incorporated baseline measurements on gender, month of birth, FSM status, and Key Stage 2 reading raw scores for pupils. Further covariates at the pupil level included whether pupils had recorded any absences or exclusions over the period September 2019 to February 2020. School-level covariates included in the model included the region in which the school was located, school size, and percentages of the school roll that were SEND, English as an Additional Language (EAL), average Attainment 8 score (GCSE) in 2018/2019, and Ever-FSM.

The dropout model indicated that there were associations between several baseline covariates and the probability that an endline response on the primary outcome was observed (standardised GCSE English Language combined mark) (see Appendix I, Table 16). As a result of this and due to concerns for the overall rate of dropout, multiple imputation was performed. Multiple imputation was conducted using the `mice` package in the statistical analysis platform R. The `mice` package in R allows us to account for the multilevel structure of the data in the imputation routine, as well as in the analysis of the resulting imputed data sets. This is not the case for example with the `mice` command in STATA Version 18.

The multiple imputation process was performed on the SEND subsample of Year 9 pupils. This is the subsample upon which the primary analysis was conducted. Imputation was performed separately for intervention and control groups. The procedure involved the creation of 50 data sets, over five iterations, with missing endline and baseline values filled in using the `mice` procedure accounting for the two-level structure of the data. The primary analysis model was fitted to each of the imputed data sets and the results combined. This estimation step was performed on the imputed data set in R software using the `lm.cluster` command. We then compared the results from the multiple imputation analysis with those of the primary analysis and determined how far the primary analysis results may have been affected by MAR processes.

It is important to note, that because of the generally high level of missingness, some researchers might question the reliability of multiple imputation as implemented here (Jakobsen *et al.,* 2017).

Subgroup analyses

Subgroup analyses examined the effect of the WSS Review programme on GCSE English Language standardised marks for those pupils Ever-FSM. First a regression model of the following form was estimated for the entire Year 9 cohort using the `mixed` command in STATA Version 18 and restricted maximum likelihood:

$$Y_{ij} = \beta_0 + \beta_1 T_j + \beta_2(X_{ij} - \bar{X}_j) + \beta_3(\bar{X}_j - \bar{X}) + \beta_4 FSM_{ij} + \beta_5 FSM_{ij} \times T_j + \beta_6 R_j + u_j + \varepsilon_{ij}$$

Interest focuses on the estimate of β_5. The size of this estimate and the coverage of its confidence interval (CI) indicates whether the intervention had a differential effect on FSM pupils. A separate model for the Ever-FSM subgroup was estimated in a form identical to the equation for the primary outcome analysis but for the FSM subgroup only. From this model, we report an effect size and 95% CI for the FSM subgroup. This separate model allows us to examine the effect of the WSS Review programme for FSM pupils relative to their counterparts in the control group.

Additional analyses and robustness checks

Additional analysis and robustness checks focuses on the primary outcome analysis. These are in addition to compliance and missing data analyses discussed previously.

For the primary outcome, sensitivity analysis comprises the estimation of three further models to assess the consequences of regression adjustment for the sample estimates. The first model is a simple variance components analysis that yields an estimate of the overall mean of the primary outcome, unconditional estimate of ρ and variances at the school and pupil levels. The second model is a hierarchical linear model containing only the intervention group indicator T_j. Estimates from this model are equivalent to difference in means, and when compared to estimates from the primary analysis, permit us to assess the consequences for our estimates of the inclusion of prior attainment as a

covariate. Third, estimates from an extended regression model with additional covariates to the main primary outcome model are also presented. The additional covariates at the pupil level in the extended model are gender, Ever-FSM, and month of birth. At the school level, we include covariates in the extended model that capture the proportion of the school roll in the year 2018/2019 that qualified for FSM, proportion of the school roll that were EAL in 2018/2019, proportion of the school roll that were SEN in 2018/2019, and average Attainment 8 scores for the school in the year 2018/2019. The extended model examines consequences for sample estimates of the inclusion of these additional adjustment factors and identifies whether there are any resulting gains in precision.

Estimation of effect sizes

Effect size calculation is carried out in a slightly different way to that discussed in the statistical analysis plan.

For the primary analysis (and secondary outcomes that are also standardised, i.e. GCSE marks), we report the effect estimates obtained directly from the relevant regression model with no further standardisation. This is because the response or dependent variables in these regression models are already standardised in order that marks from different awarding bodies could be combined. Thus, the sample estimate on the intervention group dummy variable, which is the estimated effect of the WSS Review programme on the outcome, is in units of standard deviations (SDs).

For all secondary outcomes that are continuous and unstandardised, effect sizes and their CIs were obtained from the EEF 'eefanalytics' package for STATA, using the command 'crtfreq' (Vallis *et al.,* 2021). This package calculates the effect size for a continuous outcome using sample estimates of the following quantities:

$$ES = \frac{\beta_1}{\sqrt{\sigma_u^2 + \sigma_\varepsilon^2}}$$

To calculate the effect size, the sample estimate of β_1 from the adjusted or conditional model is divided by the square root of the sum of the sample estimates of σ_u^2 and σ_ε^2 from an empty model. The CIs are obtained through applying equations described in Hedges (2007) and Vallis *et al.* (2021). For binary outcomes we report the risk difference and its 95% CI based on calculating average marginal effects in the groups using STATA Version 18 command 'margins' and taking the difference in these. We run the 'margins' command after fitting a random effects logistic regression model using the command 'xtlogit'. For count outcomes, we fit mixed effects negative binomial models in STATA Version 18 using the command 'menbreg' with the reporting option irr, which returns the incidence rate ratios (IRRs) and their 95% CI.

Estimation of ICC

We report both the conditional and unconditional ICCs at the school level at the analysis stage for all outcomes both primary and secondary (see Appendix D, Table 3). This is calculated, as follows, based on sample estimates of the following parameters:

$$\rho = \frac{\sigma_u^2}{\sigma_u^2 + \sigma_\varepsilon^2}$$

For the unconditional ICC or ρ, σ_u^2 and σ_ε^2 are the unconditional variances, while for the conditional ICC or ρ, σ_u^2 and σ_ε^2 are the variances for the levels 1 and 2 random effects from a model containing the relevant covariates depending upon the outcome being considered. All ICCs and their CIs are obtained using the STATA Version 18 post-estimation command estat icc.

IPE

The IPE focused on implementation delivery, including engagement with the review process and follow-up support from WSS, implementation of Action Plans, and resultant changes to policy and practice and, for comparison, what takes place in relation to SEND provision in control schools. The IPE was underpinned by the intervention's theory of change. Particular attention was paid to diversity in how the process was implemented across schools, the reach and uptake of proposed developments and their impacts, and the costs of delivery (fixed and variable). We considered fidelity by ascertaining levels of engagement with the WSS Review process steps and activities. Other implementation dimensions

that are relevant to the delivery of the WSS Review programme include quality of provision, reach, responsiveness, and programme differentiation.

Research methods

As above, the research questions guiding the IPE were:

1. How is the WSS Review programme implemented in secondary school contexts?

    a. What are the areas of focus that schools prioritise and how are these understood by stakeholders?
    b. What initiatives and/or actions are taken by stakeholders in response to the WSS Review programme?
    c. What levels of support do SENDCOs require and from whom?
    d. What are the strengths and challenges of the WSS Review programme, for example, pairing, networking, and training?
    e. How do different stakeholder groups (e.g. pupils, teachers, governors) experience the WSS Review programme and how does it impact on them?
    f. What factors contribute to the WSS Review programme being effective (or not)?

2. What comparable initiatives and/or actions are taken within control group schools? What is the initial position? How does this change over time?

3. How was the WSS Review programme delivered and supported in relation to compliance, fidelity, quality, reach, responsiveness, and programme differentiation?

    a. What is the reach in terms of the involvement of departments, staff members (from senior leaders to teaching assistants), governors, and other stakeholders such as parents?
    b. What is the responsiveness in terms of how each of the stakeholder groups involved engage with the outcomes of the WSS Review programme?
    c. What is the programme differentiation in relation to how the outcomes of the WSS Review programme differ from prior SEND and inclusion practices in the intervention schools?

Research question 1 focused on implementation of the programme in schools, with data generated through the SENDCO surveys, case studies, and interviews with the delivery team. This approach enabled broad participation from all SENDCOs in the trial alongside in-depth data collection through the case studies and triangulation through the delivery team interviews. Research question 2, which focuses on control schools, was addressed through the SENDCO survey as well as online interviews with a purposively sampled group of control school SENDCOs. Research question 3, on fidelity and related issues, was addressed through observations of the programme in practice alongside the SENDCO survey and interviews with the delivery team and case study activities.

Table 7 below presents a summary of the planned research methods, analysis, and relationships with the logic model.

Table 7: IPE methods overview

Research methods	Data collection methods	Participants/data sources (planned sample)	Data analysis methods	Research questions addressed	Implementation/ logic model relevance
Survey (pre-/post-test)	SENDCO online survey	SENDCOs (156)	Descriptive Mixed coding Thematic analysis	1, 2, 3	• Moderators • Usual practice • Context
Semi-structured interviews	Online interviews with WSS Review staff	Key staff from WSS Review (5)	Mixed coding Thematic analysis	1, 3	• Context • Fidelity
	Online interviews with control group SENDCOs	Purposively sampled control group SENDCOs (10)	Description: pen portraits	2	• Usual practice
Observations	Observation of WSS Review Regional Training	Three (of five) events	Descriptive	1, 3	• Compliance • Activities • Fidelity • Quality

	Observation of WSS Review regional Engagement Day 1 and Day 2	Five events x two	Descriptive	1, 3	• Activities • Fidelity • Quality
Case studies (five; case study unit = pair of secondary schools; analytical approach = methodological and participant triangulation)	Document analysis	Action Plans x ten case study schools	Mixed coding Thematic analysis Cross-case analysis	1, 3	• Context • Quality • Moderators
	Observation of first WSS Review support visit	Ten case study schools	Mixed coding Thematic analysis Cross-case analysis	1, 3	• Activities • Fidelity • Quality
	Interviews with key stakeholders in case study schools	Depends on focus of school Action Plan. Five interviews x three visits x ten schools	Mixed coding Thematic analysis Cross-case analysis	1, 3	• Fidelity • Cost • Context • Moderators • Quality • Reach • Responsiveness • Programme • Differentiation
	Stakeholder groups surveys	Depends on focus of Action Plan. Maximum of three surveys x two administrations x ten schools	Descriptive crosstabulations	1	• Context • Moderators • Quality • Reach • Responsiveness
Document analysis	Analysis of Action Plans from all intervention schools	68 Action Plans	Descriptive Mixed coding	1	• Activities

Data collection and analyses were guided by the logic model. In particular, interview schedules and questionnaires were designed to collect stakeholder experiences of the inputs and outputs, and their perceptions of short- and long-term outcomes. Research instruments can be found in Appendix F of the Technical Appendices published alongside this report. Documentary evidence (e.g. SEND Action Plans and evidence of training events) was gathered and observations of the programme (e.g. coaching and training) undertaken as a form of triangulation. The outcomes of the analyses of impact data including the SDQ data were used to interrogate qualitative data further (e.g. to explain differences by moderator variables). This analysis, drawing on patterns and themes emerging, will in turn motivate further exploration and analysis of qualitative data by way of providing explanation for observed statistical estimates, and yield insights for future research.

Case studies

We planned to select ten schools as case studies, with two from each of the five participating regions. nasen distributed a call for expressions of interest on behalf of the evaluation team and we received 14 responses from interested schools. The ten case study schools were purposively selected on the basis of factors including school size, SENDCO experience, proportion of pupils eligible for FSM, and GCSE and Progress 8 scores to ensure that a range of schools that differ in ways that may affect the outcome of the intervention were included.

In practice, we completed three rounds of data collection with eight case study schools. One school in the London region that had volunteered to be a case study was withdrawn in October 2022 because it had not been possible to arrange any of the case study data collection with them. One school in the South West region withdrew as a case study in May 2023 before the third round of data collection due to a change in SENDCO.

We planned to do in-person visits to each of the case study schools on three occasions, with one researcher visiting each time. The first would be as the Action Plan was beginning to be delivered, and then further visits after one and two years of implementation.

The first visit was intended to coincide with a support visit from the WSS Review project directors where possible, to enable the support process to be observed while ensuring that disruption to schools was kept to a minimum. We had planned to observe activities relating to the implementation of the Action Plan as well as carrying out interviews with

stakeholders. However, this first in-person visit was cancelled because of Covid-19 restrictions in place at the time. Instead, we observed the support visit, which had also been moved online, and conducted an online interview with each school's SENDCO.

At the second and third visits, we were able to implement our fieldwork plans more closely. We asked SENDCOs to organise a timetable that would include talking to a range of stakeholders involved in work related to the school's SEND Action Plan alongside a Learning Walk to observe examples of changes that have been made in response to the Action Plan. It was suggested that interviews could be conducted with the SENDCO, members of senior and middle leadership, teaching assistants, and school governors. Some interviews were conducted in small groups to minimise the burden on schools. We planned to conduct at least five interviews per visit, and the number of interviewees in practice is given in Table 8. We used semi-structured interview schedules to ensure that data was generated consistently while allowing for differences in Action Plans to be explored. New interview guides were developed for each visit and for different types of stakeholders depending on the role. Key lines of questioning were around the WSS Review programme itself and its impact on the school policies, practices, and culture as well as on key stakeholders. Data from any observations was recorded through field notes, with agreement in advance that we would focus on activities or processes relevant to each school's Action Plan.

We intended to hold small focus groups with pupils at each visit to ascertain views on their experiences of school changes. In practice, this was only done on the third visit in order to maximise feedback on the impacts of the programme as they became embedded. In advance of the third visit, we asked SENDCOs to arrange a diverse focus group of up to eight pupils in Year 10 who may have felt the impacts of the Action Plan. The pupil focus group involved an activity where the pupils RAG (Red, Amber, Green) rated their own timetable in terms of how well supported they felt in each class. This was followed by a group discussion where pupils were encouraged to share their reflections on how they rated their classes, on inclusive teaching and learning in their school more generally and were prompted to feedback on specific changes that the school had made in relation to its Action Plan.

Table 8: Number of interviewees spoken to in case study schools

School	Visit 1 (February 2022–April 2022)	Visit 2 (June 2022–July 2022)	Visit 3 (May 2023–July 2023)
Case study 1, Midlands	1	10	7 plus a pupil focus group
Case study 2, Midlands	1	8	6 plus a pupil focus group
Case study 3, North West	1	9	4 plus a pupil focus group
Case study 4, North West	1	14	5 plus a pupil focus group
Case study 5, North East	1	9	4 plus a pupil focus group
Case study 6, North East	1	7	7 plus a pupil focus group
Case study 7, South West	1	6	8 plus a pupil focus group
Case study 8, South West	1	12	Not conducted
Case study 9, London	1	8	8 plus a pupil focus group

We intended to conduct surveys with stakeholder groups around the time of the second and third case study school visits. Since we were able to gather data on buy-in and experiences of the WSS Review process and its outcomes through the interviews, stakeholder surveys were only conducted with parents at the time of the third visit.

The parent survey was distributed to the remaining eight case study schools for completion in Summer Term 2022/2023. We asked SENDCOs to distribute the survey to parents of pupils with SEND in Year 9, Year 10, and Year 11, plus any additional cohorts that were relevant to the school's Action Plan. We received 82 valid responses. Table 9 displays the number of valid responses received by case study school. The response rate by school was variable, with no responses received from two case study schools of the eight case study schools and only one response from one case study school.

Table 9: Number of valid responses received to the parent survey

School	Number of valid responses received
Case Study 1, Midlands	11
Case Study 2, Midlands	0
Case Study 3, North West	0
Case Study 4, North West	1
Case Study 5, North West	22
Case Study 6, North West	5
Case Study 7, South West	8
Case Study 9, London	26
No school name given	9
Total	82

Parents' children were mainly in Year 10 (33%, n=27), Year 11 (27%, n=22), Year 9 (24%, n=20), Year 7 (9%, n=8), or Year 8 (3%, n=3). The biggest groups of respondents were then parents of the pupils in Year 10 and Year 11 that are the focus of this trial, with good representation of parents of pupils in other years that are also likely to have been impacted by the programme.

Observations of training and engagement days

Table 10 details the observations carried out. At these events, researchers made field notes on the structure and content of the sessions and our reflections on delivery and participant engagement.

Table 10: Observations carried out by the evaluation team

Element	Date	No. of observations conducted
Control school session (online)	June 2021	1
WSS Reviewer Training (online session)	June 2021–July 2021	3
WSS Reviewer Training (full-day in-person session)	September 2021	2
Engagement Day 1[6] (full-day in-person session)	November 2021–December 2021	2
Regional group meetings (online session)	January 2022–March 2022	2
One-on-one coaching (online session)	January 2022–March 2022	6 case study schools
Engagement Day 2 (full-day in-person session)	March 2022–April 2022	4
Final meeting (online session)	July 2022	1

Document analysis

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[6] We had planned to attend all five regional engagement days on both occasions because we expected that regional engagement days would be tailored to meet regional needs, and we planned to send two researchers to each of these. This was not possible however, due to staff illness and University and College Union strike action, and in practice the five engagement days were very similar in structure and content.

Key documents that were created as part of the programme were gathered from case study schools, including their peer-to-peer reports and SEND Action Plans. The SEND Action Plans were essential documents, which informed the design of data collection in case study schools (e.g. which stakeholder groups to collect data from) and were subsequently used in analyses of what happened in these schools over the intervention period.

We also analysed the SEND Action Plans from 56 out of the 68 schools participating in the intervention.[7] A thematic approach was undertaken guided by five themes that the delivery team had identified themselves in the SEND Action Plans and the WSS Review Guide. The themes, which are reported below, were further developed inductively based on the content of the SEND Action Plans.

SENDCO surveys

Online surveys were distributed three times throughout the trial to SENDCOs in both intervention and control schools. The baseline survey was conducted in November 2020, with follow-up surveys in June 2022 and June 2023. The baseline survey provided a record of SEND provision in schools (that is usual practice) prior to the intervention beginning. It was piloted with a cohort of pupils who were studying for the NASENCO qualification at Manchester Metropolitan University. The follow-up surveys enabled key changes to be identified and differences between the intervention and control group schools to be explored. Follow-up surveys in intervention schools asked about changes to SEND provision, engagement with the WSS Review programme and its strengths, challenges, and impacts. Follow-up surveys of SENDCOs in control schools established the changes made to SEND provision during the intervention period.

Table 11 summarises the number of valid responses received to each survey.[8] In the 2020 survey, there were three duplicates (all from control schools) and these were amalgamated for the purposes of analysis. There were also 13 responses from withdrawn schools (six intervention and seven control) that did not give permission for their data to be used and 13 responses from schools that withdrew prior to randomisation: these were deleted for the purposes of analysis. In the 2022 survey, there were four duplicate responses from intervention schools and three from control schools. There were also three responses from control schools that subsequently withdrew from the trial and did not give permission for their data to be used. Table 11 shows response rates declining over time, with a particularly low response rate for the third survey. This is potentially due to the length of the project and the subsequent disengagement of schools over time.

Table 11: SENDCO survey response rates

Survey	Response rate (intervention schools)	Response rate (control schools)	Response rate (total)
1. November 2020–December 2020	99% (71/72)	99% (71/72)	99% (142/144)
2. June 2022–October 2022	70% (48/69)	58% (41/71)	64% (89/140)
3. June 2023–July 2023	15% (10/68)	29% (20/69)	22% (30/137)

When we refer to survey data in this report, we state the results in terms of the numbers and percentages of responses to each question rather than the overall survey response rate.

Online interviews

Online semi-structured interviews with four members of the delivery team were carried out between October 2022 and December 2022. These interviews focused on fidelity and adaptations made to the WSS Review process, the strengths and challenges of the process, and enabling factors.

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[7] At the time of analysis, we had access to 56 SEND Action Plans that SENDCOs had submitted.
[8] NB: The number of expected responses reflects the remaining number of schools in the trial at the time.

Online interviews were conducted with four control school SENDCOs in July 2023. Participants were approached based on their survey responses in 2022, with a focus on schools where support for SEND pupils had changed or been developed.

Further data collection

The delivery team provided data on schools' engagement with key elements of the programme that enabled us to examine fidelity. This data included attendance at training and engagement days as well as support visits from the WSS Review project directors, participation in the peer-to-peer review process, and production of the SEND Action Plan. This monitoring data was collected from the delivery team through direct access to relevant records.

All data was collected by three researchers at Manchester Metropolitan University. To summarise, rigour in data collection was ensured by the following design elements:

- case study schools were selected according to specified criteria to ensure that schools reflecting different circumstances are represented;

- the parent survey was administered to a wide range of participants at case study schools;

- interviewees were selected to be representative of a range of roles;

- multiple sources of data collection in case studies (e.g. observations, interviews, surveys) supports triangulation and minimises bias; and

- interviews were semi-structured and the parameters of observation were agreed in advance so that different researchers undertook these in a similar fashion and that data are comparable.

Analysis

Interviews

Interview data, including that from case study schools, control schools, and the delivery team, were analysed qualitatively using NVivo and thematic analysis (Braun and Clarke, 2006). We used a mixed coding method, collaboratively developing a deductive coding framework derived from the logic model and deriving additional themes inductively. Coding and analysing the data thematically ensured that a consistent approach was adopted among the team. The data from control school interviews was used to form pen portraits to illustrate the range of activities that control schools undertook while the intervention was being delivered. Findings from the case studies were used to aid the interpretation of results from the impact analyses, in particular, providing the opportunity to develop further hypotheses around possible mediators and sources of heterogeneity in treatment effects to inform future research.

Observations of training and engagement days

Data collected included field notes and the resources used to support the delivery. These data were used to describe the process experienced by school staff, and to consider quality, strengths, and challenges of the WSS Review process.

Online surveys

The online SENDCO surveys included closed and open questions. Closed questions were analysed using Excel generating descriptive statistics to illustrate similarities and differences between intervention and control schools, and between baseline and post-intervention SEN provision. Responses to open questions were analysed qualitatively using NVivo and thematic analysis (Braun and Clarke, 2006). As with the interviews, a coding framework derived from the logic model was applied deductively and additional themes were derived inductively.

Costs

Cost evaluation aimed to determine the expenses associated with delivering the intervention during the trial. The main research questions derived from this objective were:

1. What were the estimated delivery costs of the WSS Review programme per school?
2. What were the estimated delivery costs of the WSS Review programme per pupil?
3. What would be the estimated cost per school and per pupil of implementing the WSS Review programme over three years?

Consequently, the cost evaluation took the form of a cost feasibility analysis, serving as a guide to the affordability of the intervention, rather than a comparison between the WSS Review and an alternative intervention.

The EEF covered the cost of delivery of the WSS Review programme. Therefore, schools assigned to the intervention group did not need to pay to complete the WSS Review programme. However, they were expected to cover release time for participating staff and travel expenses. The anticipated categorisation of costs included:

- release time and travel expenses;

- the time and expenses for SENDCO to attend WSS Reviewer Training;

- the time and expenses for the SENDCO and a senior leader to participate in a peer-to-peer review of the school, involving first a self-evaluation and then providing information as requested to their partner school's SENDCO as well as hosting a peer review visit;

- the resources and time associated with the SENDCO visiting their partner school to conduct a peer review;

- the resources and time associated with the SENDCO developing a SEND Action Plan following the peer review process;

- the resources and time associated with the SENDCO attending two engagement days; and

- the SENDCO and a senior leader participating/hosting two school visits by a WSS Review project director.

Costs were divided into pre-requisites, start-up costs, and recurring costs in accordance with the EEF's cost evaluation guidance (EEF, 2023). Cost data was collected through post-intervention headteacher and teacher surveys in schools participating in the IPE.

Timeline

Table 12: Timeline

Dates	Activity	Staff responsible / leading
November 2019–March 2020 (suspended due to Covid-19 pandemic) September 2020–October 2020	School recruitment. Memorandum of Understanding signed. NB: School recruitment was suspended due to the Covid-19 pandemic from March 2020 and recommenced at September 2020	• Helen Prosser (nasen)
November 2020–February 2021	FFT Education collect initial data from recruited schools including full sample enumeration	• Laura James (FFT Education)
November 2020–December 2020	Schools complete SLT/SENDCO survey	• Professor Peter Hick (Manchester Metropolitan University)
May 2021–July 2021	SDQ administered to Cohort 1 and 2 (Year 8 and Year 9 in September 2020) NB: SDQ administration was delayed due to further school lockdowns from January 2021 to March 2021	• Laura James (FFT Education)
June 2021	Schools randomised into either the intervention or control group	• Andrew Smith (Manchester Metropolitan University)

Dates	Activity	Staff responsible / leading
	NB: Randomisation was delayed due to further school lockdowns from January 2021 to March 2021	
June 2021–July 2021	WSS Reviewer Training introduction (online) (Manchester Metropolitan University observes)	• Katherine Walsh / Margaret Mulholland (nasen) • Professor Cathy Lewin (Manchester Metropolitan University)
September 2021	WSS Reviewer Training takes place (Manchester Metropolitan University observes)	• Katherine Walsh / Margaret Mulholland (nasen) • Professor Cathy Lewin (Manchester Metropolitan University)
September 2021–October 2021	Schools complete their self-evaluations and peer-to-peer visits	• SENDCOs
September 2021–October 2021	Ten case study schools recruited and baseline documentation collected	• Professor Cathy Lewin (Manchester Metropolitan University)
November 2021–December 2021	Engagement Day 1 (Manchester Metropolitan University observes)	• Katherine Walsh / Margaret Mulholland (nasen) • Professor Cathy Lewin (Manchester Metropolitan University)
January 2022–March 2022	One-on-one online coaching session provided by nasen to each participating school (Manchester Metropolitan University observes in case study schools)	• Katherine Walsh / Margaret Mulholland (nasen) • Professor Cathy Lewin (Manchester Metropolitan University)
March 2022–April 2022	Engagement Day 2 (Manchester Metropolitan University observes)	• Katherine Walsh / Margaret Mulholland (nasen) • Professor Cathy Lewin (Manchester Metropolitan University)
June 2022–July 2022	One-on-one online coaching session provided by nasen to each participating school	• Katherine Walsh / Margaret Mulholland (nasen)
June 2022–July 2022	Case study school visits and updated documentation collected	• Professor Cathy Lewin (Manchester Metropolitan University)
June 2022–July 2022	SLT/SENDCO survey, stakeholder groups short surveys	• Professor Cathy Lewin (Manchester Metropolitan University) • Professor Peter Hick (Manchester Metropolitan University)
July 2022	Follow-up telephone interviews with sample of control group SENDCOs	• Professor Cathy Lewin (Manchester Metropolitan University)
October 2022–December 2022	SDQ administered to Cohort 1 (Year 9 in September 2020)	• Laura James (FFT Education)
June 2023–July 2023	Case study school visits and updated documentation collected	• Professor Cathy Lewin (Manchester Metropolitan University)
June 2023–July 2023	SLT/SENDCO survey, stakeholder groups short surveys	• Professor Cathy Lewin (Manchester Metropolitan University) • Professor Peter Hick (Manchester Metropolitan University)
July 2023	Follow-up telephone interviews with sample of control group SENDCOs	• Professor Cathy Lewin (Manchester Metropolitan University)
June 2023–July 2023	SDQ administered to Cohort 2 (Year 8 in September 2020)	• Laura James (FFT Education)
September 2023–November 2023	GCSE and pupil data for Cohort 1 (Year 9 in September 2020) collected	• Laura James (FFT Education)

Dates	Activity	Staff responsible / leading
March 2024–May 2024	Data linking, cleaning, and structuring	• Dr Karolina Krzemieniewska-Nandwani (Manchester Metropolitan University) • Professor Stephen Morris (Manchester Metropolitan University)
June 2024–July 2024	Impact analysis	• Dr Karolina Krzemieniewska-Nandwani (Manchester Metropolitan University) • Professor Stephen Morris (Manchester Metropolitan University)
July 2024–August 2024	IPE analysis	• Professor Cathy Lewin (Manchester Metropolitan University) • Kate Wicker (Manchester Metropolitan University) • Professor Peter Hick (Manchester Metropolitan University)
August 2024	Reporting	• Dr Karolina Krzemieniewska-Nandwani (Manchester Metropolitan University) • Professor Stephen Morris (Manchester Metropolitan University) • Professor Cathy Lewin (Manchester Metropolitan University) • Kate Wicker (Manchester Metropolitan University) • Professor Peter Hick (Manchester Metropolitan University)

Impact evaluation results

Participant flow including losses and exclusions

School recruitment and attrition

Of the schools approached by the developers nasen, 956 schools expressed an initial interest in participation. From these 956 schools, 121 did not meet the study inclusion criteria, 5 had a problematic school structure (e.g. they could be part of the same MAT), 650 schools were given a Memorandum of Understanding to sign but did not return it, and 24 despite signing a Memorandum of Understanding and returning it, did not attend the compulsory school briefing session. The remaining 156 schools were successfully recruited to the trial and randomised one-on-one to the intervention and control groups.
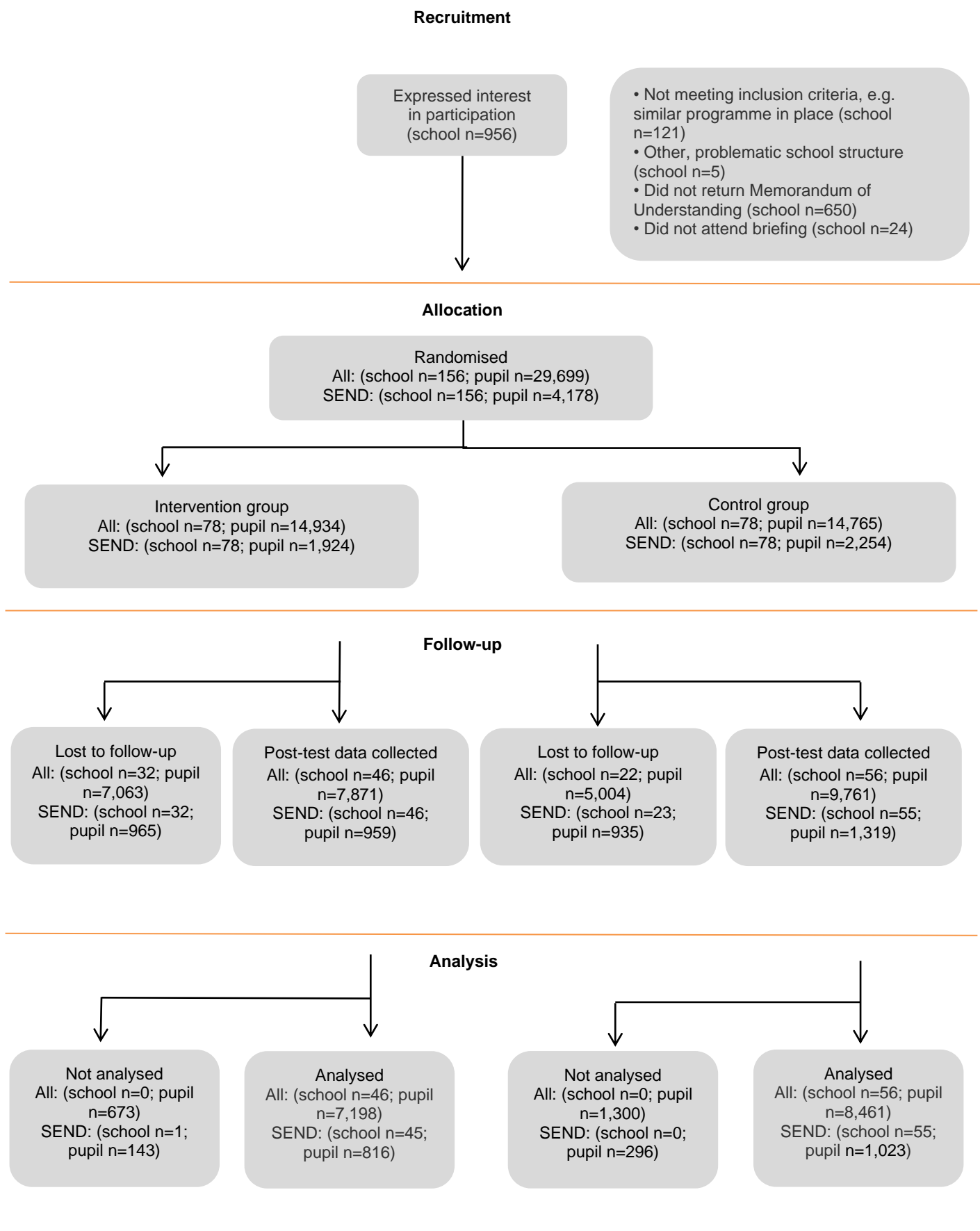
Of the 156 schools randomised, by follow-up, 32 schools were lost from the sample in the intervention group and 22 schools in the control group. As a result, 46 schools were retained in the sample in the intervention group and 56 schools in the control group, and from whom we sought endline measures on primary and secondary outcomes. Following collection of endline measures, we were able to retain 100 schools in our 'as analysed' sample for the primary analysis.

Pupil recruitment and attrition

In schools that signed a Memorandum of Understanding and were randomised, there were a total of 29,699 Year 9 pupils at randomisation, 4,178 of which were SEND. Of the 29,699 pupils, 14,934 were in schools allocated to the intervention group, including 1,924 pupils with SEND, and a further 14,765 were in schools allocated to the control group, of whom 2,254 were SEND. By follow-up, we retained 17,632 Year 9 pupils in the sample, of which 2,278 were SEND.

For the 7,063 pupils lost from the intervention group and the 5,004 pupils lost from the control group the chief reasons for their attrition from the 'as analysed' primary analysis sample was failure by schools to provide GCSE English Language raw scores. Schools cited high volume of workload as the most frequent reason for not being able to provide these data. We also found it difficult to obtain records from schools where the school personel had changed and new staff were unfamiliar with the study and reluctant to cooperate.

Figure 2: Participant flow diagram

Recruitment

Expressed interest
in participation
(school n=956)

• Not meeting inclusion criteria, e.g.
similar programme in place (school
n=121)
• Other, problematic school structure
(school n=5)
• Did not return Memorandum of
Understanding (school n=650)
• Did not attend briefing (school n=24)

Allocation

Randomised
All: (school n=156; pupil n=29,699)
SEND: (school n=156; pupil n=4,178)

Intervention group
All: (school n=78; pupil n=14,934)
SEND: (school n=78; pupil n=1,924)

Control group
All: (school n=78; pupil n=14,765)
SEND: (school n=78; pupil n=2,254)

Follow-up

Lost to follow-up
All: (school n=32; pupil
n=7,063)
SEND: (school n=32;
pupil n=965)

Post-test data collected
All: (school n=46; pupil
n=7,871)
SEND: (school n=46;
pupil n=959)

Lost to follow-up
All: (school n=22; pupil
n=5,004)
SEND: (school n=23;
pupil n=935)

Post-test data collected
All: (school n=56; pupil
n=9,761)
SEND: (school n=55;
pupil n=1,319)

Analysis

Not analysed
All: (school n=0; pupil
n=673)
SEND: (school n=1;
pupil n=143)

Analysed
All: (school n=46; pupil
n=7,198)
SEND: (school n=45;
pupil n=816)

Not analysed
All: (school n=0; pupil
n=1,300)
SEND: (school n=0;
pupil n=296)

Analysed
All: (school n=56; pupil
n=8,461)
SEND: (school n=55;
pupil n=1,023)

Baseline data collection

As discussed in the 'Methods' section above, the primary analysis involved obtaining an estimate of the effect of the WSS Review programme on GCSE English Language combined marks from a multiple linear mixed effects regression model, containing an intervention group indicator variable, a variable capturing the region in which a school was located and the pupils' Key Stage 2 English reading raw score, used as a measure of prior attainment. The baseline measure discussed here, and the other covariates described elsewhere, were collected direct from schools by FFT Education.

In relation to the primary analysis and the main adjusted analysis, at baseline we obtained observations on Key Stage 2 English reading test scores (raw and scaled) for 27,775 pupils in the Year 9 cohort. This means we had 1,924 missing values. There were no missing values for the region covariate at baseline.

Collection of endline GCSE marks

The primary outcome, for the SEND Year 9 subgroup, was the combined mark obtained in their GCSE English Language summer 2023 exams. These along with other data required for the primary analysis were collected direct from schools by FFT Education. Unfortunately, we were not able to collect GCSE English Language marks and other variables required to estimate the primary analysis model for a relatively large number of Year 9 pupils with SEND. For a further not insubstantial number of cases, the marks provided contained obvious errors and inconsistencies, requiring that the pupils concerned be removed from the sample. As we have seen, at randomisation, there were 156 schools in the study, 78 in the intervention group and 78 in the control group, with 1,924 Year 9 pupils with SEND in intervention schools and 2,254 in control schools. At analysis we retained 816 pupils with SEND in the final sample that were in intervention schools, with 1,108 pupils with SEND lost from the intervention group sample. Likewise, we retained 1,023 Year 9 pupils with SEND in the control group sample, implying a loss of 1,234 pupils between randomisation and analysis.

Looking first at Year 9 pupils with SEND in the intervention group:

- 206 pupils withdrew from the study either because their school formally left the study, or they withdrew individually;

- 759 pupils were lost because the school did not provide GCSE English Language raw mark data at endline;

- 79 pupils were lost because GCSE English Language raw mark data contained obvious errors; and

- 64 pupils were lost from the intervention group because their school did not provide the necessary data on prior attainment.

In the control group:

- 178 pupils withdrew from the study either because their school formally left the study, or they withdrew individually;

- 758 pupils were lost because the school did not provide GCSE English Language raw mark data at endline;

- 200 pupils were lost because GCSE English Language raw mark data contained obvious errors; and

- 96 pupils were lost from the intervention group because their school did not provide the necessary data on prior attainment.

Figure 2 above illustrates the flow of schools and pupils through the trial from start to finish. It confirms that the primary analysis, for the Year 9 SEND subsample, was based on completed cases from 100 schools, 45 schools in the intervention group containing 816 Year 9 pupils with SEND, and 55 schools in the control group containing 1,023 Year 9 pupils with SEND.

In Table 13 below we examine the MDES given samples anticipated at: the protocol stage; achieved at randomisation; and achieved at analysis, for all pupils, as well as SEND and FSM subgroups. Our discussion below focuses on the MDES for the SEND subgroup as these pupils are the focus of the primary analysis.

At the protocol stage, our goal was to achieve 80% power for detecting an effect size of 0.20 of an SD given 160 schools, at the 95% level of statistical significance. This calculation assumed a baseline/endline correlation (i.e. the correlation between the endline attainment outcome and the measure of prior attainment) of 0.70 at the pupil level and 0.32 at the school level, and an ICC of 0.20. At protocol we anticipated a sample of 160 schools with an average of 25 pupils with SEND in a year group cohort. At randomisation, we re-calculated the MDES based on the size of the sample 'as randomised'. As mentioned elsewhere, 156 schools were randomised containing an average of 27 pupils with SEND in a year group cohort.

At analysis, we again re-calculated the MDES. This time using the sample sizes retained at analysis, the observed baseline/endline correlation and the observed ICC. Looking at the SEND subsample for the primary analysis, and despite having lost 56 schools between randomisation and analysis, the MDES 'at analysis' was appreciably lower than that at randomisation, MDES=0.16 versus MDES=0.21. This represents an improvement in design sensitivity and is accounted for by what transpired to be excessively conservative assumptions made at the protocol and randomisation stages (see Table 13).

Table 13: MDES at different stages

		Protocol			Randomisation			At analysis		
		Overall	SEND	FSM	Overall	SEND	FSM	Overall	SEND	FSM
MDES		0.19	0.20	0.19	0.19	0.21	0.20	0.11	0.16	0.14
Pre-/post-test correlations[1]	Level 1 (pupil)	0.70	0.70	0.70	0.70	0.70	0.70	0.56	0.52	0.54
	Level 2 (class)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Level 3 (school)	0.32	0.32	0.32	0.32	0.32	0.32	0.75	0.73	0.64
ICCs	Level 2 (class)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Level 3 (school)	0.20	0.20	0.20	0.20	0.20	0.20	0.07	0.08	0.09
Alpha		0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Power		0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
One-sided or two-sided?		Two	Two	Two	Two	Two	Two	Two	Two	Two
Average cluster size		180	25	42	163	17	31	154	18	37
No. of schools	Intervention	80	80	80	78	78	78	46	45	46
	Control	80	80	80	78	78	78	56	55	56
	Total:	160	160	160	156	156	156	102	100	102
No. of pupils	Intervention	14,400	2,000	3,360	14,768	1,924	3,721	7,198	816	1,649
	Control	14,400	2,000	3,360	14,934	2,257	4,091	8,461	1,023	2,109
	Total:	28,800	4,000	6,720	29,702	4,181	7,812	15,659	1,839	3,758

[1]Pre-/post-test correlations were calculated from random effects generalised least squares regressions using the command xtreg in STATA Version 18, for models with and without the main pre-test covariate. n/a=not applicable.

Using the software PowerUp we can disaggregate the relative contributions of: i) a smaller achieved sample size at analysis; ii) a reduced observed ICC; and iii) observed higher baseline/endline correlations, to the overall reduction in the MDES between randomisation and analysis for the SEND Year 9 subgroup:

- If we hold all other values used in our MDES calculations constant at their values assumed at randomisation, changing only the number of schools and average school size to that obtained at analysis, the MDES for the SEND subgroup rises from 0.20 to 0.26. Representing a decline in effective design sensitivity.

- If we further adjust our calculation using the observed ICC of 0.08 rather than the assumed 0.20, the MDES for the SEND subgroup falls from 0.26 to 0.18. This represents a substantial gain in design sensitivity.

- If finally, we further adjust our calculation to incorporate the observed baseline/endline correlations rather than those assumed at randomisation, the MDES falls further from 0.18 to 0.16.

This suggests that the fall in the MDES seen at analysis is due in the main to an excessively conservative assumption made regarding the ICC at randomisation.

Attrition

In this section, we summarise the discussion of sample size and attrition set out previously. Out of the total randomised SEND Year 9 cohort of pupils, 1,839, constituting 44% of the randomised cohort, possessed valid baseline and endline attainment scores and were consequently incorporated into the primary outcome analysis. The attrition rates in the intervention and control groups were 58% and 55%, respectively. Around 42% of schools in the intervention group left the study, while only 29% of schools in the control group did so (see Table 14).

Table 14: Pupil-level attrition from the trial, primary outcome sample, Year 9 pupils with SEND only

		Intervention	Control	Total
No. of pupils	Randomised	1,924	2,254	4,178
	Analysed	816	1,023	1,839
Pupil attrition (from randomisation to analysis)	Number	1,108	1,231	2,239
	%	58%	55%	56%
No. of schools	Randomised	78	78	156
	Analysed	45	55	100
School attrition (from randomisation to analysis)	Number	33	23	56
	%	42%	29%	36%

Pupil and school characteristics

Table 15 below compares the observed covariate values (means and proportions) for intervention and control groups for the samples at randomisation. The covariates are measured at the school and pupil levels. This comparison enables us to judge how similar or different schools and pupils with SEND in the two arms of the trial were at the point they were created through random allocation. Randomisation itself does not guarantee equivalence between groups.

Looking first at the school level (n=156), we see that schools in the two arms of the trial are distributed similarly by region. They also have similar proportions of EAL (intervention 14% vs control 16%), FSM (intervention 23% vs control 26%) and pupils with SEND (intervention 12% vs control 14%). The average Attainment 8 score among schools in the intervention group in 2018/2019 was 48.3 while for control schools in 2018/2019 was 45.8.

At the pupil level, looking at pupils with SEND only (n=4,178), we see relatively small differences in proportions and mean covariate values between the two groups for gender (percentage male) (intervention 64% vs control 60%), FSM (intervention 39% vs control 43%), as well as by month of birth (Table 15). Looking at continuous covariates measured at the pupil level, we see very similar values among pupils in the two trial arms, with the most notable difference being in unauthorised absences in the two groups of 4.45 days (intervention group) and 5.76 days (control group), respectively; equivalent to an effect size of -0.09.

Overall, our judgement is that randomisation produced two groups that were well balanced.

Table 15: Baseline characteristics of groups as randomised

School level (categorical)	National-level mean	Intervention group		Control group	
		n/N (missing)	Count (%)	n/N (missing)	Count (%)
Region: East Midlands			11 (14.1)		8 (10.3)
East of England			3 (3.9)		4 (5.1)
London			9 (11.5)		9 (11.5)
North East			7 (9)		7 (9)
North West		78/78 (0)	14 (18)	78/78 (0)	14 (18)
South East			4 (5.1)		4 (5.1)
South West			14 (18)		13 (16.7)
West Midlands			12 (15.4)		14 (17.9)
Yorkshire and the Humber			4 (5.1)		5 (6.4)
School level (continuous)		n/N (missing)	Mean (SD)	n/N (missing)	Mean (SD)
School size 2018/2019	972.8	78/78 (0)	1,188 (422)	78/78 (0)	1,151 (370)
Proportion of all pupils EAL 2018/2019	0.17	78/78 (0)	0.14 (0.18)	78/78 (0)	0.16 (0.2)
Proportion of all pupils Ever-FSM 2018/2019	0.28	78/78 (0)	0.23 (0.12)	78/78 (0)	0.26 (0.14)
Proportion of all pupils with SEND 2018/2019	0.13	78/78 (0)	0.12 (0.05)	78/78 (0)	0.14 (0.06)
Attainment 8 average score 2018/2019	46.7	77/78 (1)	48.3 (7.1)	77/78 (1)	45.8 (7)
Pupil level (categorical)		n/N (missing)	Count (%)	n/N (missing)	Count (%)
Gender, male		1,924/1,924 (0)	1,238 (64)	2,254/2,254 (0)	1,361 (60)
Month of birth: 1		1,924/1,924 (0)	142 (7.4)	2,254/2,254 (0)	152 (6.7)
2			152 (7.9)		162 (7.2)

Pupil level (continuous)		n/N (missing)	Mean (SD)	n/N (missing)	Mean (SD)	Effect size
3			150 (7.8)		164 (7.3)	
4			135 (7)		176 (7.8)	
5			141 (7.3)		176 (7.8)	
6			144 (7.5)		139 (6.2)	
7			137 (7.1)		187 (8.3)	
8			166 (8.6)		185 (8.2)	
9			183 (9.5)		214 (9.5)	
10			179 (9.3)		186 (8.3)	
11			189 (9.8)		243 (10.8)	
12			206 (10.7)		270 (12)	
Designated SEND		1,924/1,924 (0)	1,924 (100)	2,254/2,254 (0)	2,254 (100)	
FSM pupil		1,924/1,924 (0)	752 (39)	2,254/2,254 (0)	959 (43)	
Pupil level (continuous)		n/N (missing)	Mean (SD)	n/N (missing)	Mean (SD)	Effect size
Key Stage 2 raw score English reading	25	1,769/1,924 (155)	25.5 (11.3)	1,973/2,254 (281)	25.9 (11.2)	-0.03
Key Stage 2 raw score Mathematics	53	1,772/1,924 (152)	55.2 (28)	1,988/2,254 (266)	56 (27.2)	-0.01
Unauthorised absences September to February 2019/2020 (average number of days reported)	3.89	1,849/1,924 (75)	4.45 (13.6)	2,199/2,254 (55)	5.76 (16.1)	-0.09
Authorised absences September to February 2019/2020 (average number of days reported)	8.87	1,849/1,924 (75)	12.9 (18.5)	2,199/2,254 (55)	12.7 (16.5)	-0.01
Exclusions September to February 2019/2020 (number of permanent or temporary exclusions)	0.21	1,868/1,924 (56)	0.22 (1.32)	2,197/2,254 (57)	0.17 (0.85)	-0.03

Table 16: Baseline characteristics of groups as analysed, Year 9 SEND cohort for primary outcome

School level (categorical)	National-level mean	Intervention group		Control group		
		n/N(missing)	Count (%)	n/N(missing)	Count (%)	
Region: East Midlands			8 (17.8)		3 (5.5)	
East of England			2 (4.4)		3 (5.5)	
London			4 (8.9)		6 (11)	
North East			2 (4.4)		5 (9.1)	
North West		45/45 (0)	9 (20)	55/55 (0)	9 (16.4)	
South East			2 (4.4)		4 (7.3)	
South West			9 (20)		10 (18.2)	
West Midlands			6 (13.3)		11 (20)	
Yorkshire and the Humber			3 (6.7)		4 (7.3)	
School level (continuous)		n/N(missing)	Mean (SD)	n/N(missing)	Mean (SD)	
School size 2018/2019	972.8	45/45 (0)	1,146.1 (442.3)	55/55 (0)	1,108.7 (400.1)	
Proportion of all pupils EAL 2018/2019	0.17	45/45 (0)	0.15 (0.18)	55/55 (0)	0.15 (0.19)	
Proportion of all pupils Ever-FSM 2018/2019	0.28	45/45 (0)	0.26 (0.13)	55/55 (0)	0.28 (0.14)	
Proportion of all pupils SEND 2018/2019	0.13	45/45 (0)	0.13 (0.05)	55/55 (0)	0.14 (0.04)	
Attainment 8 average score 2018/2019	46.7	45/45 (0)	47.5 (6)	55/55 (0)	45.4 (7.1)	
Pupil level (categorical)		n/N(missing)	Count (%)	n/N(missing)	Count (%)	
Gender, male		816/816 (0)	500 (61)	1,023/1,023 (0)	616 (60)	
Month of birth: 1		816/816 (0)	58 (7.1)	1,023/1023 (0)	67 (6.6)	
2			66 (8.1)		59 (5.8)	

		n/N(missing)	Mean (SD)	n/N(missing)	Mean (SD)	Effect size
3			65 (8)		67 (6.6)	
4			49 (6)		72 (7)	
5			64 (7.8)		90 (8.8)	
6			56 (6.9)		73 (7.1)	
7			70 (8.6)		82 (8)	
8			75 (9.2)		99 (9.7)	
9			68 (8.3)		98 (9.6)	
10			74 (9.1)		73 (7.1)	
11			79 (9.7)		122 (11.9)	
12			92 (11.3)		121 (11.8)	
Designated SEND		816/816 (0)	816 (100)	1,023/1,023 (0)	1,023 (100)	
FSM pupil		816/816 (0)	279 (34)	1,023/1,023 (0)	384 (38)	
Pupil level (continuous)		n/N(missing)	Mean (SD)	n/N(missing)	Mean (SD)	Effect size
Key Stage 2 raw score English reading	25	816/816 (0)	26.1 (11.5)	1,023/1,023 (0)	25.9 (11.4)	0.01 (-0.151; 0.171) p-value=0.903
Key Stage 2 raw score Mathematics	53	809/816 (7)	56.8 (28.2)	1,014/1,023 (9)	56.3 (27.5)	0.014 (-0.149; 0.176) p-value=0.87
Unauthorised absences September to February 2019/2020 (average number of days reported)	3.89	800/816 (16)	2.9 (9.2)	1,012/1,023 (11)	4.1 (12.6)	-0.153 (-0.291; -0.016) p-value=0.029
Authorised absences September to February 2019/2020 (average number of days reported)	8.87	800/816 (16)	10.8 (13.7)	1,012/1,023 (11)	10.4 (12.8)	0.015 (-0.136; 0.167) p-value=0.841
Exclusions September to February 2019/2020 (number of permanent or temporary exclusions)	0.21	809/816 (7)	0.06 (0.49)	1,010/1,023 (13)	0.06 (0.46)	0.004 (-0.085; 0.096) p-value=0.917

Table 16 compares the covariate values (means and proportions) for intervention and control groups 'at analysis'. At analysis, the situation is somewhat different to that at randomisation, in that it is not just the process of randomisation itself that can lead to differences between groups but also processes of attrition. Between randomisation and analysis, schools and pupils can leave the study. If this occurs at different rates and for different reasons by trial arm, school and pupil samples can become unbalanced. The source of these imbalances, should they occur, are not just due to random fluctuations but are systematic and so raise the question as to whether such imbalances will lead to statistical estimates from the sample that are biased.

Looking first at school-level covariates (Table 16), and as we have seen already, our sample is somewhat unbalanced, in terms of absolute size, by intervention and control arm (intervention n=45 vs control n=55). This clearly gives cause for concern. We can see some imbalances in the distribution of schools by region in the two arms. For example, there are eight schools in the East Midlands in the intervention group and only three in the control group. Likewise, in the control arm there are more schools from the West Midlands than there are in the intervention arm (intervention n=6 vs control n=11). For the school-level covariates in general, however, the two arms do look relatively balanced. For example, in the intervention arm, schools typically report around 13% of their school roll as SEND, while in the control arm 14% of their school roll as SEND.

Turning to compare the covariate summary values across intervention and control arms at the pupil level (SEND n=1,839) we first note that the absolute size of the samples in the two arms is again, and unsurprisingly, quite different. As has been noted already, the 'as analysed' sample comprises 816 Year 9 pupils with SEND in the intervention group, compared to 1,023 in the control group. This again raises the question as to how free from bias estimates derived from this sample might be? Having said this, by month of birth, FSM, prior attainment, authorised absences and exclusions, the two groups are reasonably similar. One exception to this is the number of days lost to unauthorised absences. Generally, the rate of unauthorised absence is low (remembering that they relate to a six-month period September 2019 to February 2020 pre the Covid-19 pandemic) but it does appear to be notably higher among control group pupils with SEND than in the intervention group (intervention 2.9 days vs control 4.1 days; effect size= -0.15).

In summary, the imbalance in absolute sample sizes between the two arms of the trial that opened up between randomisation and analysis does give cause for concern. By analysis (for the primary analysis sample), the intervention group comprised a sample of 45 schools containing 819 pupils with SEND in the Year 9 cohort. In contrast, the control group comprised a sample of some 55 schools and 1,023 pupils. Despite this, at both the school and pupil levels, samples in the two arms of the study are not particularly unbalanced, at least not on the basis of observable values, but this does not mean we can rule out unmeasured imbalances. Furthermore, the loss of sample will mean that, all else equal, statistical estimates derived from the 'as analysed' completed cases file will be less precise than they might otherwise have been. Overall, results from our analysis need to be interpreted with caution and the extent of sample loss should be kept in mind throughout.

Outcomes and impacts

Primary analysis

The primary outcome is the standardised GCSE English Language combined mark obtained by pupils with SEND in the summer examinations of 2023. Of the 156 schools randomised, 100 schools provided the necessary data and data of sufficient quality for these marks to be calculated, and the corresponding pupil included in the primary analysis. As we have seen, the completed cases file at analysis comprised 1,839 SEND Year 9 pupils, 816 in the intervention group and 1,023 in the control group, which when compared to the samples at randomisation represented attrition of 58% and 55%, respectively. Histograms examining the distributions of the standardised GCSE English Language combined marks in intervention and control groups (Figure 3) and Key Stage 2 English reading raw scores by group (the prior attainment pre-test covariate) (Figure 4) are provided below.

Turning to the results themselves, the unadjusted mean standardised GCSE English Language combined mark in the intervention group was 0.08 (95% CI: -0.05 to 0.22) and in the control group 0.04 (95% CI: -0.07 to 0.15) (Table 17). The unadjusted standardised mean difference was 0.05 (95% CI: -0.13 to 0.22) (Appendix D, Table 1). The total outcome variance was 1.00 (which is unsurprising as the outcome is standardised), with variances of 0.87 at the pupil level and 0.13 at the school level (Appendix D, Table 3). The ICC was 0.13 (95% CI: 0.09 to 0.19) (Appendix D, Table3). To remind the reader, unadjusted results represent a simple comparison of mean outcomes between intervention and

control groups. This is in contrast adjusted results, which are those from a multiple regression model that includes covariates.
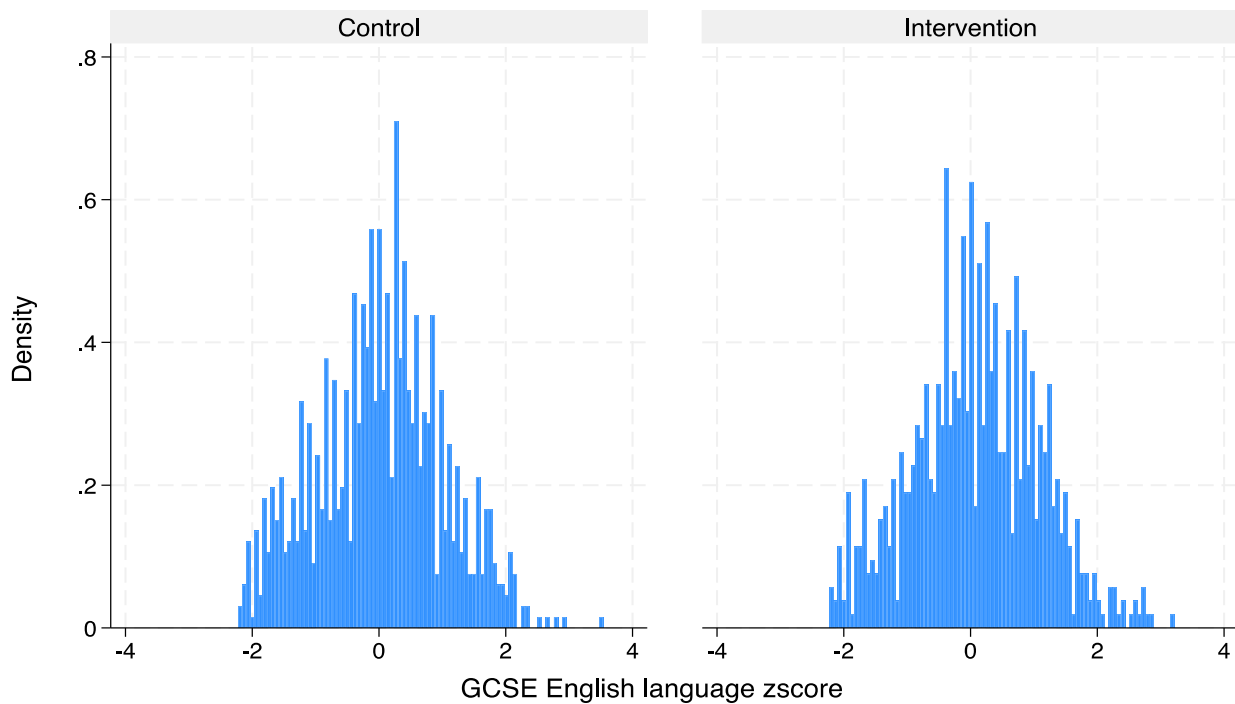

Figure 3: The distributions of standardised GCSE English Language scores (primary outcome) control and intervention groups
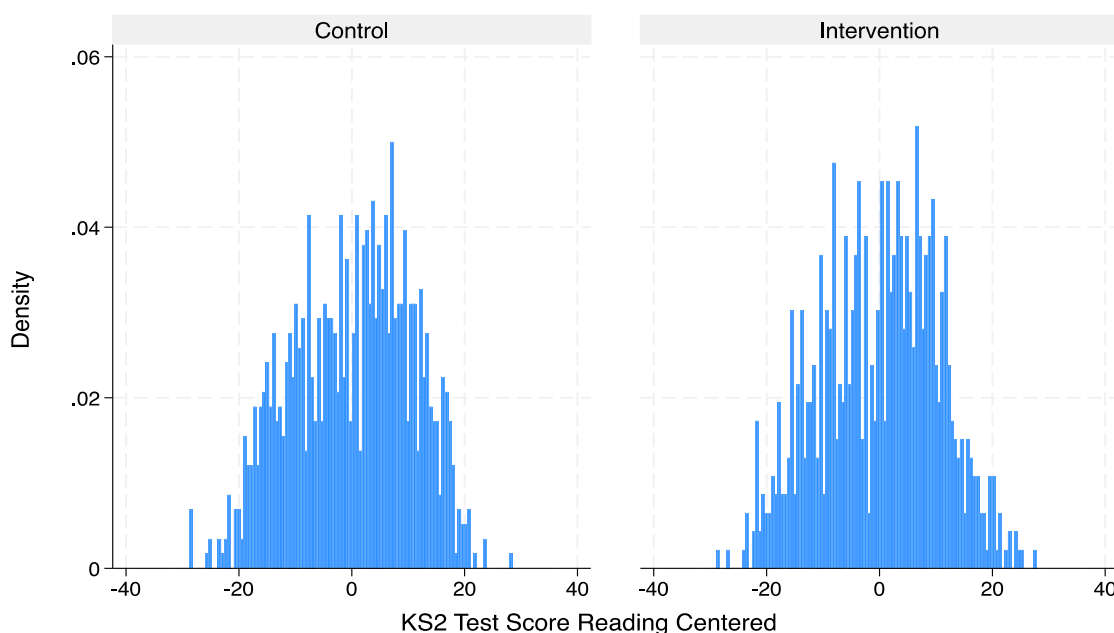

Figure 4: The distributions of Key Stage 2 Reading attainment raw scores (baseline covariate) control and intervention groups

The adjusted difference in mean standardised GCSE English Language combined mark was obtained from a mixed effects multiple linear regression model, as discussed in the 'Methods' section above. A quantile-quantile (Q-Q) plot of the residuals from this regression is displayed in Figure 5. Results from the model show an adjusted difference in mean standardised GCSE English Language combined marks between intervention and control groups of 0.05 (95% CI: -0.08 to 0.17) (see Table 17). It should be remembered that because the dependent variable in this analysis is standardised, all results discussed here are standardised differences in means. In other words, Year 9 pupils with SEND in the intervention group scored 5% of 1 SD higher in their summer 2023 GCSE English examinations than the control group. Very crudely, this is equivalent to around one months of additional progress for intervention group compared to control group pupils. The 95% CI for this estimate ranged from -0.08 to 0.17. This means that our sample data are compatible with a wide range of values for the true difference in GCSE English attainment between the two groups (at the 95% level). This range of values includes zero and some negative values, implying control group pupils obtaining higher marks than those in the intervention group. We cannot rule out such possible effects based on our data. The p-value for test of the nil null hypothesis is p=0.46. This means that the probability we would observe a difference in GCSE English attainment of 0.05 or higher (the effect we see here), under the null hypothesis (of no difference in marks between the two groups), is 0.46. The effect size we have observed would not be that surprising in a situation where the WSS Review programme had no effect on GCSE marks.
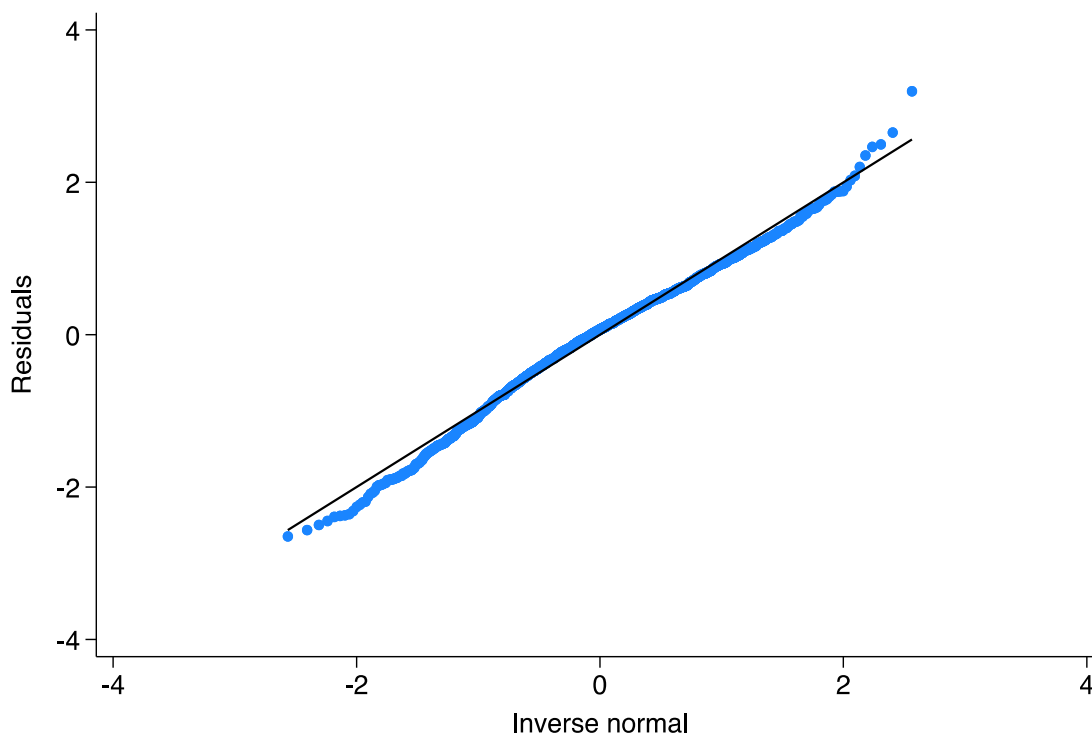

Figure 5: Q-Q normality plot residuals from the adjusted primary analysis

Reminding ourselves that the 'effective MDES' for the SEND subgroup at analysis was 0.16 (see Table 13), we also note that both this value and zero fall within the 95% CI for the effect size, which runs from -0.08 to 0.17. This means that, based on our data, neither can be rejected as the true value for the impact of the WSS Review programme on English language attainment, and therefore, we might consider the statistical tests as inconclusive and under-powered. However, we also note that at the design stage the choice to power the study to detect an effect size of 0.20 was made. If this value remains our best prediction of the effectiveness of the WSS Review programme, or a minimally important difference, we note that it falls outside the 95% CI. This could be taken to mean our best prediction for the effectiveness of the WSS Review programme can be rejected as the true value for the impact of the WSS Review programme at the 95% level of confidence, while a zero effect cannot be rejected, and our test on these terms is more definitive.

For the main mixed effects multiple linear regression model (the adjusted model), the total variance of the outcome was 0.70, comprising variances of 0.64 at the pupil level and 0.06 at the school level. The ICC was 0.08 (95% CI: 0.05 to 0.13) (Appendix D, Table 3).

Table 17: Primary analysis

| Outcome | Unadjusted means (post-intervention) | | | | Effect size | | |
| | Intervention group | | Control group | | | | |
	n (missing)	Mean (95% CI)	n (missing)	Mean (95% CI)	Total n (intervention; control)	Standardised difference in means (95% CI)	P-value
Year 9 pupils with SEND standardised scores on GCSE English Language	816 (1,108)	0.08 (-0.05; 0.22)	1,023 (1,234)	0.04 (-0.07; 0.15)	1,839 (816; 1,023)	0.05 (-0.08; 0.17)	0.46

Secondary analysis

A range of analyses were conducted looking at further outcomes for the Year 9 SEND cohort, and the full Year 9 cohort. These analyses are described in the 'Methods' section above. Results from these analyses for the Year 9 SEND only cohort and the full Year 9 cohort are displayed in Table 18. Table 18 also includes analyses of the SDQ outcomes for the Year 8 cohort.

In the statistical analysis plan for this study, we set out an approach to adjusting hypothesis tests to take account of multiple testing, and the likelihood of type 1 error rate inflation when tests are interpreted together. After seeing the data and because most tests performed did not reach statistical significance at the 95% level, we have decided not to carry out these further adjustments. This is because the adjustments will not make any difference to our substantive conclusions.

GCSE Mathematics marks and grades for pupils with SEND

For the SEND pupil cohort, we considered the effects of WSS Review on two secondary mathematics outcomes: i) the standardised combined GCSE Mathematics mark; and ii) the GCSE Mathematics grade achieved. Both outcomes were collected direct from schools, and both relate to results from summer 2023 examinations.

On average, pupils with SEND in the intervention group had a mean unadjusted combined *standardised* mathematics mark of 0.01 (95% CI: -0.11 to 0.13) (Table 18) while in the control group 0.07 (95% CI: -0.10 to 0.23) (Table 18). The unadjusted standardised difference in means between intervention and control groups was -0.05 (95% CI: -0.26 to 0.16) (Appendix D, Table 1) while the adjusted standardised difference was 0.00 (95% CI: -0.14 to 0.14) (Table 18).

For the unadjusted model, the total outcome variance was 1.02, comprising variances of 0.88 at the pupil level and 0.14 at the school level (Appendix D, Table 3). The ICC was 0.14 (95% CI: 0.09 to 0.21) (Appendix D, Table 3). For the adjusted model the total variance of the outcome was 0.50, comprising 0.44 at the pupil and 0.06 at the school levels (Appendix D, Table 3). The ICC for the adjusted model was 0.11 (95% CI: 0.07 to 0.18) (Appendix D, Table 3).

Turning to the GCSE Mathematics grade outcome, pupils with SEND in the intervention group on average obtained a grade of 3.48 (95% CI: 3.29 to 3.66) (Table 18) while control group pupils obtained a grade of 3.39 (95% CI: 3.16 to 3.62) (Table 18). An unadjusted difference in means of 0.10 of a grade was observed (95% CI: -0.20 to 0.40) (Appendix D, Table 1), and an adjusted mean difference of 0.07 of a grade (95% CI: -0.13 to 0.27) (Appendix D, Table 1). The adjusted mean difference in units of grade translated into an effect size (Hedges' g) of 0.05 (95% CI: -0.10 to 0.21) (Table 18). This is approximately equivalent to pupils with SEND in the intervention group making one month's additional progress in mathematics compared to their control group counterparts.

For the unadjusted model, the total outcome variance was 3.59, comprising variances of 3.12 and 0.47 at the pupil and school levels, respectively (Appendix D, Table 3). The ICC was 0.13 (95% CI: 0.09 to 0.18) (Appendix D, Table 3). For the adjusted model the total outcome variance was 1.81 made up variances of 1.62 at the pupil level and 0.19 at the school level. The ICC was 0.11 (95% CI: 0.07 to 0.15) (Appendix D, Table 3).

These two results appear to contradict one another in that there is no evidence of an effect of the WSS Review programme on the mark obtained in mathematics but some weak evidence for an effect on the grade. This difference in results is likely due to the high sample loss associated with the marks data relative to the much lower sample loss for the grade outcome. It proved a great deal more difficult to obtain marks data from schools than grade data. This can be partly explained by the fact that schools are seldomly asked to provide combined mark data relative to data capturing grades. An appreciable amount of the marks data was also of poor quality containing obvious errors. Mathematics marks data also had to go through a complex set of transformations (explained previously) before they would be combined across tiers. The total sample size available at analysis for the GCSE standardised mathematics combined mark (pupils with SEND only) was 1,312, whereas for GCSE grade we retained 2,181 pupils in our sample at analysis (Table 18). This is clearly a big difference and the most likely explanation for the two results appearing inconsistent.

GCSE *English Language grade, pupils with SEND*

The primary analysis considered the effect of the WSS Review programme on the standardised GCSE English Language combined mark obtained by pupils with SEND, here we look at the effects of the WSS Review programme on their achieved GCSE English Language grade. In their summer GCSE English Language examinations, pupils with SEND in the intervention group achieved an average grade of 3.68 (95% CI: 3.49 to 3.87) (Table 18), while the equivalent grade obtained in the control group was 3.60 (95% CI: 3.40 to 3.80) (Table 18). The unadjusted difference in average grades was 0.09 of a grade (95% CI: -0.19 to 0.37) (Appendix D, Table 1) and the adjusted difference 0.10 of grade (95% CI: -0.09 to 0.28) (Appendix D, Table 1). The adjusted difference in grades obtained is equivalent of an effect size (Hedges' g) of 0.07 (95% CI: -0.06 to 0.21) (Table 18) or to around one month's additional progress in English among pupils with SEND in the intervention group compared to those in the control group. This result is consistent with that obtained in the primary analysis for pupils with SEND where the outcome was measured in standardised combined marks rather than grades.

The total outcome variance in the unadjusted model was 2.96, 2.54 at the pupil level and 0.42 at the school level. The ICC was 0.14 (95% CI: 0.1 to 0.2) (Appendix D, Table 3). For the adjusted model the total outcome variance was 1.91 with variances of 1.78 at the pupil level and 0.13 at the school level (Appendix D, Table 3). The ICC for the adjusted model was 0.07 (95% CI: 0.04 to 0.11) (Appendix D, Table 3).

Absence and exclusions for pupils with SEND

In terms of absences and exclusions we considered three outcomes: i) the number of authorised absences in the school year 2022/2023 (measured in days as a count outcome); ii) whether a pupil recorded at least one unauthorised absence in the school year 2022/2023 (recorded as a binary response coded to '1' if yes, '0' otherwise); and iii) whether the pupil had been excluded from school at least once in the school year 2022/2023 (also recorded as a binary response coded to '1' if yes, '0' otherwise).

The mean number of authorised absences reported among SEND intervention group pupils was 32.6 days (95% CI: 26.9 to 38.2) (Table 18) while for control group pupils with SEND 34.6 days (95% CI: 29.9 to 39.3) (Table 18). Effect sizes are defined as IRRs obtained from both an unadjusted and adjusted negative binomial mixed effect regression models. The unadjusted IRR was 0.96 (95% CI: 0.70 to 1.32) (Appendix D, Table 1) while the adjusted IRR was 0.95 (95% CI: 0.69 to 1.31) (Table 18 and Appendix D, Table 1).

For readers less familiar with results from count outcome regression models, we provide an explanation in what follows. Results obtained directly from a mixed effects negative binomial regression model are usually understood as either the difference in the log of the expected counts (in this case the number of days absent) in the intervention and control groups or the log of the ratio of the expected counts. In some sense, the counts can be thought of as rates, the number of days absent divided by the total number of days. Thus, we can obtain a ratio of the rates or ratio of incidence, where the rate is referred to as an incidence. An IRR of less than 1 reveals that the incidence of authorised absences in the intervention group is lower than that in the control group, in this case by about 5% (i.e. $1 - 0.95 \times 100$). If the IRR was greater than 1, the incident rate of authorised absences would be higher in the intervention group. Note that the CI for the adjusted IRR includes '1', which means that our data are compatible with the incidence of unauthorised absences in the intervention group being equivalent.

Turning now to consider unauthorised absences expressed as a binary response. The proportion of pupils with SEND in the intervention group with at least one unauthorised absence in the school year 2022/2023 was 66% (95% CI: 0.60

to 0.71) (Table 18), while among the control group was 67% (95% CI: 0.61 to 0.72) (Table 18). These are quite high rates of unauthorised absence per pupil, though it should be born in mind that these data relate to a post-Covid-19 world in which absence from school had become a notable problem, and pupils with SEND tend to have higher rates of absence. They also relate to a full school year, whereas baseline absences related to a six-month period. Effect sizes for binary outcomes are reported as risk differences and are calculated from the predicted margins for intervention and control conditions, across the full sample, that are subsequently converted into probabilities, averaged across the conditions, and then differenced. The predicted margins are obtained from random effects logistic regression models without and with adjustment. Our results show that the unadjusted difference between intervention and control groups in the risk of an unauthorised absence was a risk difference of -0.01 (95% CI: -0.09 to 0.07) (Appendix D, Table 1). In the adjusted analysis we obtained a risk difference estimate of -0.00 (95% CI: -0.07 to 0.07) (Table 18 or Appendix D, Table 1). The adjusted analysis reveals that there is no difference between intervention and control group pupils with SEND in terms of whether an unauthorised absence was recorded in the reference school year. The ICC for the unadjusted model was 0.22 (95% CI: 0.16 to 0.3) (Appendix D, Table 3) and for the adjusted model 0.21 (95% CI: 0.15 to 0.28) (Appendix D, Table 3).

Next, we consider whether pupils with SEND were excluded from school at least once in the school year 2022/2023. This outcome is expressed as a binary response coded to '1' if at least one exclusion event is observed for a given pupil, '0' otherwise. The percentage of intervention group pupils with SEND for whom at least one exclusion event was observed in the year 2022/2023 was 11% (95% CI: 0.08 to 0.14) (Table 18) while for control group pupils it was 12% (95% CI: 0.10 to 0.15) (Table 18). These appear to be high per pupil exclusion rates, though it should be borne in mind that pupils with SEND are more likely to be excluded. The unadjusted difference in the risk of an exclusion event occurring between pupils with SEND in the intervention and the control groups was -0.02 (95% CI: -0.06 to 0.02) (Appendix D, Table 1). In the adjusted analysis, an estimated risk difference of -0.02 was also obtained (95% CI: -0.06 to 0.01) (Table 18 and Appendix D, Table 1). There is no meaningful evidence of a reduction in the risk of exclusion among intervention group pupils relative to pupils in the control. group. The ICC for the unadjusted model was 0.17 (95% CI: 0.10 to 0.26) (Appendix D, Table 3). For the adjusted model the ICC was 0.11 (95% CI: 0.06 to 0.2) (Appendix D, Table 3).

Well-being for pupils with SEND

The final secondary outcome examined for pupils with SEND is the total difficulties score derived from four of the five subscales that go to make up the items included in the self-completion SDQ. The questionnaire was administered during Autumn Term 2022. The total difficulties score ranges from 0 to 40, with higher scores indicating greater difficulties. The mean total difficulties score for pupils with SEND in the intervention group was 14.1 (95% CI: 13.8 to 14.4) (Table 18), while for pupils with SEND in the control group it was 13.6 (95% CI: 13.2 to 14.0) (Table 18). Unadjusted and adjusted differences in mean total difficulties, in the intervention as compared to the controls group, were obtained from linear mixed effects multiple regression models. The unadjusted difference in means was 0.66 of a point (95% CI: -0.22 to 1.56) (Appendix D, Table 1) and the adjusted difference in means 0.14 of a point (95% CI: -0.56 to 0.83) (Appendix D, Table 1). The adjusted difference in means is equivalent to an effect size (Hedges' g) of 0.03 (95% CI: -0.11 to 0.16). This difference between the two groups is small, suggesting total difficulties are slightly higher in the intervention group but the estimate is imprecise with a CI containing 0 and therefore, negative and positive values.

For the unadjusted model the total outcome variance was 38.33, comprising variances of 37.94 and 0.39 at the pupil and school levels (Appendix D, Table 3). The ICC for the unadjusted model was 0.01 (95% CI: 0 to 0.13) (Appendix D, Table 3). In the adjusted analysis, the variances at the pupil and school levels were 24.18 and 0.00, respectively leading to an ICC of 0 (Appendix D, Table 3).

GCSE English Language marks for all Year 9 pupils

We also looked at three secondary outcomes for the entire Year 9 cohort. The first of these was the standardised GCSE English Language combined mark obtained in summer 2022/2023 examinations. The results can be found in Table 18 as well as Appendix D, Table 1.

The mean standardised combined GCSE mark achieved by intervention group pupils was 0.03 (95% CI: -0.07 to 0.12) (Table 18), while for the control group was -0.01 (95% CI: -0.10 to 0.08) (Table 18). The unadjusted standardised difference in means was 0.04 (95% CI: -0.09 to 0.07) (Appendix D, Table 2), while the standardised adjusted difference

in means 0.08 (95% CI: -0.00 to 0.17) (Appendix D, Table 2). The magnitude of the standardised adjusted difference in means is equivalent to around one month's additional progress in English enjoyed by the intervention group pupils over their control group counterparts. The CI for the adjusted difference in means has a lower limit on 0. The p-value for a test of the null hypothesis is p=0.06, which suggests that the probability of observing an effect of 0.08 or larger under the null hypothesis is around 6%. Broadly, one might conclude, that to obtain the effect size we observed would be surprising under the null hypothesis and thus that there is weak evidence that the WSS Review programme has led to an improvement in GCSE marks among intervention group pupils relative to those in the control group. Having said this, caution should be exercised in interpreting these results due to the general high levels of missing data and loss to follow-up. This is the only result that comes close to rejection of the null hypothesis at the 95% level of confidence in the secondary analysis, and p-values have not been adjusted for multiple tests.

The total outcome variance in the unadjusted model was 0.98, comprising variances of 0.88 and 0.1 at the pupil and school levels (Appendix D, Table 3). The ICC was 0.1 (95% CI: 0.08 to 0.13) (Appendix D, Table 3). In the adjusted model, the total outcome variance was 0.62, made up of a variance of 0.58 at the pupil level and 0.04 at the school level (Appendix D, Table 3). The ICC in the adjusted model was 0.06 (95% CI: 0.05 to 0.09) (Appendix D, Table 3).

GCSE Mathematics marks for all Year 9 pupils

Turning to attainment in mathematics at GCSE, we examined the effect of the WSS Review programme on the standardised combined mathematics marks obtained in the summer 2023 examinations. The mean standardise GCSE Mathematics combined mark in the intervention group was 0.01 (95% CI: -0.09 to 0.10) (Table 18), while in the control group it was -0.01 (95% CI: -0.13 to 0.11) (Table 18). The standardised unadjusted difference in means was 0.01 (95% CI: -0.14 to 0.17) (Appendix D, Table 1), while the standardised adjusted difference in means was 0.06 (95% CI: -0.06 to 0.18) (Appendix D, Table 1). This represents approximately one month's additional progress in mathematics experienced by the intervention group relative to the control group, though the estimate imprecise with a wide CI including 0 and a p-value for the test of the null hypothesis of p=0.35 (Table 18).

The outcome variance in the unadjusted model was 0.99, comprising variances of 0.89 and 0.1 at the pupil and school levels (Appendix D, Table 3). The ICC 0.1 (95% CI: 0.07 to 0.14) (Appendix D, Table 3). The total outcome variance in the adjusted model was 0.49, with variances of 0.43 at the pupil level and 0.06 at the school level (Appendix D, Table 3). The ICC was 0.12 (95% CI: 0.09 to 0.17) (Appendix D, Table 3).

Well-being for all Year 9 pupils

The final secondary outcome examined for the full Year 9 cohort was their total difficulties score derived from the SDQ. Pupils in the intervention group reported a total difficulties score of 14.0 (95% CI: 13.8. to 14.2) (Table 18), compared to a score of 13.6 for the control group (95% CI: 13.4 to 13.8) (Table 18). An unadjusted difference in mean total difficulties score of 0.48 of a point was obtained (95% CI: -0.03 to 0.99) (Appendix D, Table 1), in contrast to an adjusted difference in means of 0.22 of a point (95% CI: -0.09 to 0.53) (Appendix D, Table 1). The adjusted difference in means is equivalent to an effect size of 0.05 (95% CI: -0.02 to 0.11) (Table 18).

The outcome variance in the unadjusted model was 39.52, comprising variances of 38.55 and 0.97 at the pupil and school levels (Appendix D, Table 3). The ICC was 0.02 (95% CI: 0.02 to 0.04) (Appendix D, Table 3). The total outcome variance in the adjusted model was 22.78, with variances of 22.53 at the pupil level and 0.25 at the school level (Appendix D, Table 3). The ICC was 0.01 (95% CI: 0.01 to 0.02) (Appendix D, Table 3).

Well-being for Year 8 pupils with SEND

The first of two secondary outcomes examined for the Year 8 cohort was the total difficulties score for pupils with SEND derived from the SDQ. Pupils in the intervention group reported an average total difficulties score of 15.1 (95% CI: 14.2 to 15.9) (Table 18), compared to a score of 14.6 for the control group (95% CI: 14.0 to 15.2) (Table 18). An unadjusted difference in mean total difficulties score of 0.43 of a point was obtained (95% CI: -0.62 to 1.49) (Appendix D, Table 2), in contrast to an adjusted difference in means of 0.21 of a point (95% CI: -0.71 to 1.14) (Appendix D, Table 2). The adjusted difference in means is equivalent to an effect size of 0.04 (95% CI: -0.13 to 0.21) (Table 18).

The outcome variance in the unadjusted model was 41.74, comprising variances of 40.7 and 1.04 at the pupil and school levels (Appendix D, Table 3). The ICC was 0.03 (95% CI: 0.00 to 0.13) (Appendix D, Table 3). The total outcome variance

in the adjusted model was 27.1, with variances of 26.3 at the pupil level and 0.8 at the school level (Appendix D, Table 3). The ICC was 0.03 (95% CI: 0.01 to 0.13) (Appendix D, Table 3).

Well-being for all Year 8 pupils

The final secondary outcome examined for the Year 8 cohort was the total difficulties score for all pupils derived from the SDQ. Pupils in the intervention group reported an average total difficulties score of 13.7 (95% CI 13.3. to 14.2) (Table 18), compared to a score of 13.8 for the control group (95% CI: 13.4 to 14.2) (Table 18). An unadjusted difference in mean total difficulties score of -0.09 of a point was obtained (95% CI: -0.7 to 0.53) (Appendix D, Table 2), in contrast to an adjusted difference in means of -0.05 of a point (95% CI: -0.42 to 0.32) (Appendix D, Table 2). The adjusted difference in means is equivalent to an effect size of -0.01 (95% CI: -0.08 to 0.06) (Table 18).

The outcome variance in the unadjusted model was 41.44, comprising variances of 40.1 and 1.34 at the pupil and school levels (Appendix D, Table 3). The ICC was 0.03 (95% CI: 0.02 to 0.05) (Appendix D, Table 3). The total outcome variance in the adjusted model was 26.54, with variances of 26.28 at the pupil level and 0.26 at the school level (Appendix D, Table 3). The ICC was 0.01 (95% CI: 0 to 0.02) (Appendix D, Table 3).

Table 18: Secondary analysis

| Outcome | Unadjusted means (post-intervention) | | | | Effect size | | |
| | Intervention group | | Control group | | | | |
	N (missing)	Mean (95% CI)	N (missing)	Mean (95% CI)	Total n (intervention; control)	Standardised difference in means/IRR/RD (95% CI)	P-value
Year 9 pupils with SEND							
GCSE Mathematics standardised mark for pupils designated SEND	599 (1,325)	0.01 (-0.11; 0.13)	713 (1,544)	0.07 (-0.10; 0.23)	1,312 (599; 713)	0.00 (-0.14; 0.14)	0.99
GCSE Mathematics 1–9 grade for pupils designated SEND	970 (954)	3.48 (3.29; 3.66)	1,211 (1,046)	3.39 (3.16; 3.62)	2,181 (970; 1211)	0.05 (-0.10; 0.21)	0.49
GCSE English Language 1–9 grade for pupils designated SEND	969 (955)	3.68 (3.49; 3.87)	1,205 (1,052)	3.60 (3.40; 3.80)	2,174 (969; 1,205)	0.07 (-0.06; 0.21)	0.29
Count response: Number of authorised absences – school year 2022/2023 for pupils designated SEND	1,072 (852)	32.6 (26.9; 38.2)	1,460 (794)	34.6 (29.9; 39.3)	2,532 (1,072; 1,460)	IRR: 0.95 (0.69; 1.31)	0.75
Binary response: At least one unauthorised absence in the school year 2022/2023 for pupils designated SEND	1,065 (859)	0.66 (0.60; 0.71)	1,419 (838)	0.67 (0.61; 0.72)	2,484 (1,065; 1,419)	RD: -0.00 (-0.07; 0.07)	0.96
Binary response: At least one exclusion from school in the school year 2022/2023 for pupils designated SEND	1,096 (828)	0.11 (0.08; 0.14)	1,474 (783)	0.12 (0.10; 0.15)	2,570 (1,096; 1,474)	RD: -0.02 (-0.06; 0.01)	0.24
Total difficulties score: SDQ for pupils designated SEND	365 (1,559)	14.1 (13.8; 14.4)	499 (1,758)	13.6 (13.2; 14.0)	864 (365; 499)	0.03 (-0.11; 0.16)	0.7
Year 9 all pupils							
GCSE English Language mark (standardised) for all pupils	7,198 (7,570)	0.03 (-0.07; 0.12)	8,461 (6,473)	-0.01 (-0.10; 0.08)	15,659 (7,198; 8,461)	0.08 (0; 0.17)	0.06
GCSE Mathematics mark (standardised) for all pupils	5,216 (9,552)	0.01 (-0.09; 0.10)	5,684 (9,250)	-0.01 (-0.13; 0.11)	10,900 (5,216; 5,684)	0.06 (-0.06; 0.18)	0.35

Total difficulties score: SDQ for all pupils	3,659 (11,109)	14 (13.8; 14.2)	3,946 (10,988)	13.6 (13.4; 13.8)	7,605 (3,659; 3,946)	0.05 (-0.02; 0.11)	0.17
Year 8 pupils							
Total difficulties score: SDQ for pupils designated SEND	319	15.1 (14.2; 15.9)	443	14.6 (14.0; 15.2)	762	0.04 (-0.13; 0.21)	0.65
Total difficulties score: SDQ for all pupils	2,638	13.7 (13.3; 14.2)	3,596	13.8 (13.4; 14.2)	6,234	-0.01 (-0.08; 0.06)	0.8

RD=risk difference.

Missing data analysis

The protocol and statistical analysis plan specified a range of analyses with the aim of examining the consequences of missing data for the primary analysis. These analyses are explained in the 'Methods' section above.

In total 2,339 pupils with SEND from the sample of 4,178 at randomisation did not provide the necessary data so that they could be included in the primary analysis sample. Of these, 384 withdrew from the study, either individually or as a result of their school withdrawing. For a further 1,517 we failed to obtain a GCSE mark. Of the remaining sample, 279 records contain errors, which meant the mark could not be calculated. Finally, 160 pupils with SEND provided the necessary data except for the Key Stage 2 reading raw score necessary for covariate adjustment in the primary analysis.

A random effects logistic regression model was estimated on the sample of 3,222 pupils that either provided all the necessary data upon which the main primary outcome model could be estimated or provided the necessary data but for an observation on the dependent variable. We refer to this model as the dropout model. This model did not assess observations for which one or more of the covariates were missing. Therefore, the dropout model was analysed on a sample of 3,222 pupils, while the imputation model (discussed below) was estimated on a sample of 3,794 pupils. The dependent variable in the dropout model was a binary response coded to '1' if the pupil concerned provided an observation on the GCSE mark, '0' otherwise. A full set of covariates, captured at baseline, were entered into the model to explore the extent to which the factors represented by these covariates were associated with the probability of observing a valid GCSE mark. Results from the model are provided in Appendix I, Table 16. They show that whether a pupil receives FSM, their school absences, and whether they have been excluded from school are associated with the probability of providing an English language GCSE mark. At school level, the percentage of pupils receiving FSM was associated with the probability of a pupil providing an English language GCSE mark. Average Attainment 8 for year 2018/2019 was also found to be associated with providing an observation on the primary outcome and so added to the dropout model.

We performed multiple imputation to fill-in missing observations in the dependent variable and other covariates with plausible values based on an imputation model, using chained equations and the package `mice` in R statistical software, for the SEND only subsample, n=3,794 (with 47% of missing observations for GCSE English Language mark). Imputation was performed separately for intervention and control groups. The following variables were used in the imputation model: GCSE English Language z-score, region, month of birth, gender, FSM, any absence, any exclusion, Key Stage 2 reading raw score, percentage FSM, percentage EAL, percentage SEN, school size, and average school Attainment 8 score for year 2018/2019. Missing values were imputed using `2l.lmer` and `2l.bin` methods within `mice` R package. In total, we created 50 imputed data sets over five iterations. Convergence of each of the imputed variables was assessed visually. Results from across these imputed data sets were combined in R statistical software, using `mice` and `miceadds` packages, on the basis of Rubin's rule, and the command `lm.cluster`. The results can be found in Appendix I. Both the imputation and estimation models took account of the multilevel nature of the data.

An adjusted difference in GCSE standardised combined English language marks between intervention and control groups of 0.067 (95% CI: -0.045 to 0.18) was obtained from the combined analysis based on the imputed data sets. When we compare this to the primary analysis, we see an estimated effect of the WSS Review programme on GCSE marks of similar size (see Table 17). Multiple imputation adjusts statistical estimates based on the assumption of MAR. This assumes that we can correct for the problem of missingness using information from the observed part of our data set. As the results from the primary analysis model estimated on the imputed data sets are somewhat similar to that obtained in the primary analysis conducted on the completed cases sample file, we conclude that MAR processes, while

not entirely absent, have little substantive bearing on our results. Having said this, the results of multiple imputation should be interpreted with caution. We do not know whether there are unobserved processes driving missingness. There was also some evidence of instability in the imputations in that the results appeared to depend quite noticeably on the inclusion, or otherwise, of the school level Attainment 8 covariate. Furthermore, there is a large proportion of missing data (47% for GCSE English Language raw score) and in such circumstances, imputation results should always be interpreted with care (Jakobsen *et al.,* 2017).

Subgroup analyses

In this section, we examine the effects of the WSS Review programme on the combined GCSE standardised English language mark obtained by the full Year 9 FSM subgroup. This involved first fitting a regression model as the primary analysis (the same sample) but including a further interaction between the intervention group indicator and the Ever-FSM indicator. Second, re-estimating the main impact regression model on the full Year 9 FSM subsample only.

The interaction model revealed an effect of 0.03 (95% CI: -0.02 to 0.09) (see Appendix D, Table 1). The adjusted mean difference in the primary outcome between the FSM-only intervention and control groups was 0.13 (95% CI: 0.01 to 0.24) (see Appendix D, Table 1). This difference is equivalent to two months' additional progress and the CI, although quite wide, excludes 0. These results suggest that FSM pupils in the intervention group did better than their counterparts in the control group, although the interaction result was quite modest (effect size=0.03) with a p-value of p=0.256. If we interpret the results of the primary analysis as indicating that WSS Review had a modest impact over all (effect size=0.05), despite the relatively large p-value (p=0.46), then we might conclude that the FSM group, at the very minimum, gained as much from the WSS Review programme as their non-FSM counterparts in the intervention group.

Additional analyses and robustness checks

In this section, three additional models are discussed that seek to further examine results from the primary analysis discussed above. The output from these models is reproduced in Appendix I, Tables 1 to 3. The three additional models are:

1. A linear regression model with random effects at the school and pupil levels taking the form of a variance components model, which contains no covariates nor the intervention group indicator variable. This model is estimated in order to examine the mean and variance of the primary outcome.

2. A linear regression model with random effects at the school and pupil levels containing the intervention group indicator variable only. This model is estimated so that the unadjusted difference in means as well as its CI can be obtained.

3. A linear regression model with random effects at the school and pupil levels containing the intervention group indicator variable and further covariates, including those in the primary regression model, plus gender, Ever-FSM, month of birth, proportion of the school roll FSM, EAL, and SEND as well as performance of the school in Key Stage 4 national examinations (Attainment 8) for the school year 2018/2019. This model seeks to examine the extent to which primary analysis results are sensitive to the inclusion of an extended set of covariates.

Looking at the first model a mean response of 0.06 (95% CI: -.03 to 0.14) is obtained (see Appendix I, Table 1). The total variance of the outcome was 1.00 (again, this should be unsurprising given that the primary outcome has been standardised) comprising variances of 0.87 at the pupil level and 0.13 at the school level. Thus, the ICC was 0.13 (95% CI: 0.09 to 0.19) (see Appendix I, Table 1).

The second model provides an unadjusted difference in means in the primary outcome between the intervention and control groups. Results show a difference in means of 0.05 (95% CI: -0.13 to 0.22) (see Appendix I, Table 2), a point estimate equal to that found in the primary adjusted analysis, though unsurprisingly with a wider 95% CI. The total variance of the outcome was 1.00 comprising variance of 0.87 at the pupil level and 0.13 at the school level. The ICC was 0.13 (95% CI: 0.09 to 0.19) (Appendix I, Table 2). The ICC is larger than that found in the primary analysis of 0.08, suggesting that the covariates included in the primary model did reduce between school variance in the outcome.

Finally, the third model provides an estimate of the fully adjusted difference in mean outcomes between intervention and control groups. An effect of -0.01 is observed (95% CI: -0.11 to 0.09) (see Appendix I, Table 3). This is clearly attenuated

compared to the effect observed in the primary analysis and effectively 0. The CI is wide revealing a lack of precision in this estimate, and that effects that are negative and that run to an effect size of -0.11 are compatible with our data as well as positive effects up to 0.09 (at the 95% level). The total variance of the outcome in the fully adjusted model was 0.63, comprising variances of 0.61 at the pupil level and 0.02 at the school level. Thus, the ICC was 0.03 (95% CI: 0.02 to 0.07) (see Appendix D, Table 3).

Implementation and Process Evaluation results

Fidelity

This section addresses research question 3: How was the WSS Review programme delivered and supported in relation to fidelity, quality, reach, responsiveness, and programme differentiation?

As stated in the protocol, fidelity relates to schools following the full WSS Review programme. This includes attendance at training and engagement days, conducting a peer review, producing and implementing a SEND Action Plan (sometimes referred to as a SEND Development Plan), and hosting a support visit by one of the two WSS Review project directors. The research question will be answered in relation to the programme as adjusted (due to Covid-19) rather than as originally intended. The section draws on observation and survey data, programme monitoring data provided by the delivery team, and programme resources related to the events including presentations, online chat, and email communications with attendees.

We note that while this subsection summarises data relating to reach, responsiveness, and programme differentiation, the analysis underlying these points is presented in subsequent sections of the IPE results.

Adaptations made to the original WSS Review process during the trial

We conducted interviews with four members of the delivery team in nasen: the two WSS Review project directors (the main facilitators) who oversaw the review process, delivered the training and conducted the coaching; the project manager; and the head of WSS Review. We asked them how the process followed in this trial compared to the process that is documented in the WSS Review Guide. The delivery team reported that the guide provides basic principles and a structure that can be applied flexibly to context. nasen, for example, has standard training slides, which facilitators deliver flexibly. The delivery team told us that overall, the trial followed the guide closely and that the WSS Review programme was delivered consistently across the five regions. This was confirmed through our observations and review of materials used to support the process. One of the delivery team members also commented that the team adhered to the key principles of the WSS Review process but responded flexibly in relation to individual SENDCO needs. One of the reasons that flexibility was required was the differing range of prior experiences that SENDCOs had. For example, some were new to their school, some were new to the role, and some were already on the SLT and some were not yet. The flexibility was described by one of the delivery team as '*adapting and scaffolding*' (delivery team interview) the process. The training and engagement days delivered in each region were perceived to be very similar with one of the WSS Review project directors noting that them and their colleague could '*finish each other's anecdotes*' (delivery team interview). One of the delivery team also said that the training and engagement days were designed to achieve a good balance between them delivering relevant information and providing opportunities for SENDCOs to reflect and collaborate. The delivery team recognised the need for consistency in their delivery and support provision across the different regions, in order to support the evaluation fully.

The WSS Review programme was originally planned to take place from March 2020 to June 2021, over a period of 16 months. Due to the pandemic, which led to a national lockdown and school closures from March 2020, the timelines of the project were reviewed, and the start was delayed until September 2021, although pre-process online meetings took place before that as outlined below. Crucially, this meant that the timeline of the WSS Review programme was compressed in comparison to the original plan, running over around 11 months rather than 16 months. Given the challenging situation that schools were facing in the lead up to running the process and during this period, the delivery team had to work harder than normal to keep the schools engaged. This contributed to the decision made by the delivery team to replace the planned first support visit to each intervention school with an online regional group meeting followed by an online one-on-one coaching session with each SENDCO. It was considered to be a more effective use of time and also took into consideration the impact of sickness absence on the availability of the SENDCO. Two of the delivery team commented in their interviews that the online conversations were similar to the conversations that would have been had if the first support visit had taken place.

As reported by the delivery team, key differences between the review programme that MATs and local authorities could commission and the intervention as delivered include:

- The process followed in the trial was iterative (multiple contact points) and scaffolded as compared to what might usually be experienced by MATs and local authorities and certainly by schools following the WSS Review Guide themselves.

- The self-evaluation and peer review templates provided to schools were slightly adapted in layout and content from the WSS Review Guide resources. For example, the self-evaluation template had a column added for 'key stakeholders'. The SEND Action Plan template was created specifically for the trial as was the one-on-one worksheet that was used to prepare for the second coaching session.

- Based on prior experiences and a recognition that SENDCOs do not always fully understand the concept of distributed leadership, this was emphasised during the contact points (evidenced through the content of slide decks for the in-person events).

- Flexibility was required due to Covid-19, with school visits not possible and some sessions, including both one-on-one coaching sessions, delivered online. The delivery team confirmed that the aim of these changes was to maintain the principles of the process. Online regional sessions explaining the aims of the one-on-one coaching sessions were run prior to them, which meant that the coaching could be more targeted. Representation from the SLT was required at the second coaching session.

- Additional structures such as Padlet (an online post-it board) and Circle Time (a guided discussion, facilitated face-to-face in this case) were introduced during the process. Padlet was designed to ensure that SENDCOs did not feel overwhelmed and could access all supporting resources easily (a 'one-stop shop'). Circle Time was introduced to give everyone a voice and facilitate collaboration and peer learning.

One of the delivery team noted that typically a local authority would be involved in supporting the process, that the pairing process is not usually facilitated by the WSS Review delivery team, that there is often more focus on self-evaluation than peer review and that not every SENDCO would feel confident to do this part of the process (largely dependent on their level of experience). Another delivery team member pointed out that the process followed in the trial would not be followed by a school downloading the WSS Review Guide (guidance on the WSS Review process) and that this trial involved facilitation by very competent and knowledgeable SEND experts.

Below we describe key elements of the WSS Review programme as it was delivered in this trial.

Key data on fidelity

We present below monitoring data on engagement with 11 aspects of the WSS Review programme. We also present data that focuses on seven core aspects. The data suggests that for most schools, fidelity with the core components of the programme was high. However, engagement fell towards the end of the programme and particularly with short online sessions.

Table 19 below lists the 11 steps that schools were expected to complete as part of the WSS Review programme, matched with data indicating the extent to which these steps were implemented with fidelity. All data in the table were provided by the delivery team. Data is given for the 68 intervention schools that remained in the trial throughout the project.

The original plan was to offer five key contact points involving the WSS Review project directors and the SENDCOs (either in regional groups or one-on-one) plus two main activities, the peer review and writing the SEND Action Plans. We note that there were a number of extra online sessions added into the process due to Covid-19 lockdowns and the delayed start of the project. These included sessions in July 2020 and September 2020 (for recruitment purposes) and January 2021 (to maintain commitment and update on the trial). The nasen team also held a one-hour online session for control schools in June 2021 to explain the benefits and support available as part of the trial (to maintain commitment).

In Table 19, the data show that at all stages there were a small number of schools that did not appear to engage with the programme. This was particularly the case with the in-person and online sessions; engagement was nearly complete in terms of the WSS Review process and producing a SEND Action Plan. Attendance declined towards the end of the programme, particularly at the online group meetings and on Engagement Day 2.

Table 20 below summarises schools' engagement with the 11 components of the programme as defined in Table 19 below.

Table 19: Components of the WSS Review process and indicators of fidelity

Original criteria	Adapted criteria	Fidelity indicator
Attendance at WSS Reviewer Training (June 2020)	Attendance at a one-hour online session (June 2021–July 2021)	60 schools attended session; eight did not attend[1,2,3]
	Attendance at a full-day WSS Reviewer Training (September 2021)	67 schools attended training; one did not attend[4]
Participation in a peer-to-peer review (June 2020–July 2020)	Participation in a peer-to-peer review (October 2021)	67 schools completed the peer-to-peer review process; one did not[5]
Attendance at Engagement Day 1 (September 2020)	Attendance at Engagement Day 1 (November 2021–December 2021)	60 schools attended Engagement Day 1; eight did not attend[6]
Production of a SEND Action Plan (September 2020–January 2021)	Production of a SEND Action Plan (November 2021–March 2022)	65 SEND Action Plans were received; three were not received[7]
First support visit from the WSS Review project director (October 2020–January 2021)	Attendance at an online regional group meeting (January 2022–March 2022)	65 schools attended this meeting; three did not attend
	Participation in a one-on-one online coaching session with the WSS Review project director (January 2022–March 2022)	65 schools attended a meeting; three did not attend
Attendance at Engagement Day 2 (January 2021–February 2021)	Attendance at Engagement Day 2 (March 2022–April 2022)	51 schools attended Engagement Day 2; 17 did not attend
Second support visit from the WSS Review project director (March 2021–June 2021)	Attendance at an all-cohort online meeting, June 2022	35 schools attended this meeting; 33 did not attend
	Participation of both SENDCO and a senior leader in a one-on-one online coaching session (June 2022–July 2022)	SENDCOs from 62 schools attended; six did not attend. In the case of at least 25 schools, a senior leader attended[8]
	Attendance at an all-cohort online meeting (July 2022)	22 intervention schools attended this meeting; 46 did not attend

[1] We do not have data on how many SLT members attended these sessions.

[2] We have partial data on why schools were unable to attend training and engagement days. Reasons include illness, staff shortages, trust Covid-19 restrictions, an Ofsted (Office for Standards in Education, Children's Services and Skills) visit, and a medical emergency in school.

[3] Schools that were unable to attend training or engagement days were offered a follow-up call and sent the materials including slides and videos. No schools accepted the offer of follow-up calls.

[4] The school that did not attend is non-compliant.

[5] This school did not complete the peer review process because their partner school withdrew from the trial. Instead, they completed a self-evaluation and received a visit from a SENDCO in another school in the trial.

[6] In two cases, deputy SENDCOs attended Engagement Day 1 instead of SENDCOs. Schools were expected to return their peer-to-peer evaluation reports prior to the day: all schools did this except two schools that returned on the day and two schools who returned afterwards, and one school who completed a self-evaluation only.

[7] In one case, the school continued to engage with the process and it is assumed that they did complete a SEND Action Plan; in two cases it is unknown whether the school completed a SEND Action Plan.

[8] Monitoring data from the delivery team suggests that this is the case; for some schools this was not recorded so the figure may be higher.

Table 20: Schools' engagement with 11 components of the programme

	Of the 11 components:						
	Missed none	Missed one	Missed two	Missed three	Missed four	Missed five	Missed six
No. of schools (N=68)	4	22	20	15	6	1	0

The data shows the majority of schools (64/68) missed at least one out of 11 components.

Table 21 focuses on engagement with the main seven components of the programme: peer review; production of SEND Action Plan; plus attendance at the initial training; two engagement days; and two coaching sessions.

Table 21: Schools' engagement with seven core components of the programme

	Of the seven core components:			
	Missed none (excellent fidelity)	Missed one (very good fidelity)	Missed two (adequate fidelity)	Missed three or more (poor fidelity)
No. of schools (N=68)	39	20	9	0

As shown in Table 21, while the majority of schools had very good or excellent fidelity (59/68), a small proportion of schools (9/68) had adequate fidelity to the core components of the programme. While SENDCOs that missed the short online sessions would have more easily caught up and may have watched the recordings that were circulated following each session, missing out on two key components would have a greater impact on the extent to which those SENDCOs engaged with the intervention.

Delivery of the training and support

Below we outline the content and delivery of the training and engagement sessions for SENDCOs in the intervention arm of the trial with a focus on the quality of what was delivered. We draw on notes made by the evaluation team during their observations alongside slides presented at each event and chat records from online meetings where relevant. We find that the programme was very well implemented and very well received by schools.

School pairing process

In order to facilitate the peer-to-peer review, the WSS Review project directors paired schools together. Various criteria were used to support this process including travel distance, not having prior contact, being from different local authorities, and having similar local issues. One of the delivery team commented during an interview that the additional online meetings held to keep schools engaged prior to the process starting meant that the WSS Review project directors had some awareness of individual SENDCOs and their contexts prior to the pairing process, although it was noted that this did not make a significant difference to the outcomes. The pairings had to be renegotiated in a small number of cases including creating a triad because a school had dropped out, to find a school that was easier to travel to for a SENDCO who used public transport, and because it came to light that a pair of schools had worked together before. The delivery team felt that this process went well, although constraints such as regional boundaries (resulting from the design of the evaluation) posed some small challenges.

WSS Reviewer Training, June 2021–September 2021

These training events were organised by region. Each region had two events, which all SENDCOs were expected to attend. The sessions were planned to be similar across all five regions. As noted above, a degree of flexibility was required as SENDCOs had different prior experiences and the WSS Review project directors needed to ensure that by the end of the training day they all felt confident to conduct a self-evaluation of SEND provision in their own school and conduct a peer review of SEND provision in another school.

The first session was online, for one and a half hours, and SENDCOs were invited to attend with a colleague who was a member of their school's SLT. We observed three of these online sessions (in London, the North East, and the South West). The aim of the session was to introduce the trial to participant schools in preparation for the autumn training days. The session involved an overview of the trial, tailored information on the timeline and schools involved in each region, and breakout rooms where SENDCOs were invited to discuss what they were excited and worried about in terms of taking part in the trial. SENDCOs commented that they were looking forward to collaborating with other schools (especially learning from those in different local authorities), raising the profile of SEND provision in their schools, and improving outcomes for pupils. Concerns were around the time commitment and paperwork required. SENDCOs were then given an introduction to the WSS Review process, including excerpts from the WSS Review Guide, and signposted to resources. They later went into breakout rooms with their partner schools to discuss their motivations for taking part in the trial and what they would like to focus on and achieve. After this session, region-specific slides were shared with SENDCOs to share with their schools to raise awareness of the trial activities.

The second event held in each region was an all-day session for SENDCOs only. The focus of the day was on building an understanding of the WSS Review process and learning how to self-evaluate and peer review SEND provision. Following an introduction to the WSS Review process, SENDCOs were talked through on how to complete the self-evaluation. The facilitators presented and led focused discussion on key points including: the role of senior leadership; teaching and learning for pupils with SEND; engagement with parents and carers; drawing on the suggested themes in the WSS Review Guide; and prompting SENDCOs to reflect on their provision and how it could be strengthened. The second focus was on preparing for the peer visit. Draft agendas were shared alongside examples of documents to exchange and topics to discuss. Attendees were shown the reporting template and examples of effective feedback. Finally, they were signposted to further support and resources from WSS Review as well as relevant reports and research.

We observed two of these full-day events. The days had a clear structure, reproduced across the regions, as evidenced by documents such as agendas and slide decks provided by the delivery team. They were highly interactive, involving short presentations using a slide deck and group or paired discussions. The discussions were lively and engaged, with SENDCOs exchanging experiences and ideas. Peer discussions were followed by whole-room feedback, which the facilitators then used to share further ideas and examples from their practice and refer to the WSS Review process. The day was team-taught by the WSS Review project directors, who delivered passionate and engaging presentations and led responsive interactions. Key topics reiterated throughout the day included securing the involvement of stakeholders in SEND provision and learning and teaching for pupils with SEND. The day prepared SENDCOs for the next stage of the process, for example, through discussions around topics in the WSS Review Guide with partner schools that promoted reflection that would feed into SEND Action Plans. The facilitators frequently referred to further resources and research, and SENDCOs were invited to stay on at the end of the day to plan their self-evaluations and peer review visits.

The evaluation team was given access to three sets of slides used in previous iterations of the WSS Review process. We compared these to the training slides used in the trial and found that broadly similar information was offered to attendees, with some slides using the same material. There was some difference in emphasis that can be explained by non-trial schools usually having one training session compared to the longer term and scaffolded nature of the trial with multiple contact points. For example, the trial slides at the training day contained more detailed support on self-evaluation and much less on using the findings of the self-evaluation and peer review process.

Engagement Day 1, November 2021–December 2021

Engagement Day 1 was designed to support schools to progress from their self-evaluation and peer review to writing a SEND Action Plan. The SEND Action Plan template was shared with attendees in advance along with two key documents.[9]

> *For the first engagement day we really went through you know the how to, not how to write an Action Plan, but how to reflect on the SEND Review process to turn that into an Action Plan and what were the key points of it and how they can be building this into a whole-school initiative and not just something the SENDCO would do.* (Delivery team interview)

Prior to Engagement Day 1, one of the WSS Review project directors analysed the themes arising from the WSS Reviews as well as their 'wider system knowledge' and identified five key themes to focus on. These themes were the role of the SENDCO, the graduated approach, interventions, the deployment of teaching assistants, and the identification of SEND.

We observed that the days began with a Circle Time activity that invited all SENDCOs to reflect on the strengths in their contexts and share these reflections with the whole group. The facilitators continued this participatory approach throughout the day. Activities were designed to promote discussion between SENDCOs in pairs and small groups, and SENDCOs were encouraged to network beyond their partner school, for example, during an extended lunch break. Ideas and practices were shared both by the facilitators and by attendees throughout the day in energetic conversations.

The core topics discussed during the day were distributive leadership of SEND provision and Quality First Teaching, alongside how to compile a SEND Action Plan based on the self-evaluation and peer review process. The facilitators exemplified the WSS Review process through a recent review they had conducted. They embedded evidence on inclusive practice throughout the day. Key topics referred to during the day included strong steers away from deficit language and towards strengths-based approaches, developing shared understandings of SEND provision within the school, and reframing interventions at a whole school rather than individual level. Towards the end of the day SENDCOs began to think about and develop their SEND Action Plans, and the facilitators walked around the room to monitor and advise as necessary. Following the session, a link to a Padlet of resources (which SENDCOs themselves could contribute to) was shared with the cohort. It included slides and worksheets as well as links to relevant articles, research,

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[9] The EEF 'A School's Guide to Implementation: Guidance Report' (Sharples, Eaton, and Boughelaf, 2024) and the EEF 'Special Educational Needs in Mainstream Schools: Guidance Report' (Davies and Henderson, 2025).

legislation, guidance reports, and other resources. Resources were also distributed through regular newsletters alongside updates on the trial.

Online regional group meeting, January 2022–March 2022

There were five of these online one-hour regional group meetings held to prepare SENDCOs for their first one-on-one online meeting with a WSS Review project director, where the discussion would focus on refining the SEND Action Plans and beginning to put them into practice. The WSS Review project directors received the SEND Action Plans in advance of this group meeting and were able to tailor discussions accordingly. Part of the introduction involved SENDCOs completing a poll to report their reflections on their peer evaluation, progress on the SEND Action Plan, and engagement of colleagues in the process, information which fed into the planning of the Engagement Day 2. The meetings were recorded in case any SENDCOs were unable to attend the live event. Observations from two of these sessions suggested that the facilitators sought to create a welcoming space and encouraged SENDCOs to share reflections on their positions and progress. The facilitators fed back key themes from the WSS Reviews overall and referenced research and resources that could support SENDCOs to focus on those areas. SENDCOs were asked to prepare for their coaching sessions by bringing their SEND Action Plans and reflecting on their progress and next steps.

Engagement Day 2, March 2022–April 2022

The focus of this full-day session was on supporting schools to implement their SEND Action Plans. There were a series of slides that focused on distributive leadership of SEND through research, case studies, and questions for SENDCOs to consider about their own setting, and a similar series on adaptive teaching with a focus on the EEF document 'SEND in Mainstream Schools' (Davies and Henderson, 2025).

One of the delivery team reflected that the structure of the day was designed to increase the amount of time that SENDCOs had to have structured conversations with each other and decrease the input from facilitators. A Circle Time at the beginning invited SENDCOs to share with the group what was evolving well and what they would like to discuss during the day, with the facilitators providing input to extend the discussion. The day was well scaffolded; during the section on distributed leadership, for example, there were animated discussions between SENDCOs interspersed with theory and direction from facilitators, building up to a more detailed individual task. The individual work allowed SENDCOs deeper reflection on their contexts while the group discussions enabled the sharing of practice with peers.

Part of the day was a 'carousel' of activities, involving small group discussions on three particular topics (pupil passports, interventions, and curriculum pathways), chosen by the WSS Review project directors since they were identified on many school SEND Action Plans. SENDCOs spent ten minutes discussing their school's progress on the topic and were instructed to move between tables and to speak to different people. During these group discussions, SENDCOs were observed showing interest in each other's situations, sharing contexts, practices and tips, comparing experiences, and writing down ideas.

Facilitators made links between models of practice, examples from their own experience, and what they knew of schools' contexts, prompting SENDCOs to consider what could be learned from these other contexts and giving them concrete ideas on how to transition to new ways of working. Adaptive teaching, for example, was introduced through an example of a school that the facilitators had worked with where subject leads were not aware of what adaptive teaching was. One of the facilitators went on to explain the idea in reference to the EEF resource and discussed how it might be put into practice. Reflective questions were then proposed to prompt group discussion of SENDCOs' own contexts. Facilitators sometimes walked around the room during small group discussions, engaging with tables, addressing key questions, and refining discussions. There was also evidence that facilitators were responsive to context and had built an understanding of specific regional concerns; in one region they slightly altered the structure of the day to provide a higher level of input earlier on.

All-cohort online meeting, June 2022

This 45-minute meeting was conducted while SENDCOs were implementing their SEND Action Plans and beginning to review their progress, in preparation for the second visit from a WSS Review project director. We did not observe this meeting, and here reference the slides, email communication with SENDCOs, and meeting chat.

The session supported SENDCOs to prepare for the one-on-one coaching session. Attendees were encouraged to reflect on their progress so far, particularly in terms of how stakeholders had become involved in SEND provision and the integration of SEND in the School Improvement Plan. They were given a template to complete, in preparation for the one-on-one coaching session with space for reflection on the five key themes that the WSS Review project directors had identified in the peer-to-peer reviews. Each of these five themes was discussed in the session, underpinned by research and leading to specific examples of how SENDCOs might take forward practice on that theme. The core idea of distributed leadership was also discussed.

All-cohort online meeting, July 2022

We observed this 45-minute session, which focused on the next steps in the schools' progress. This session would not normally take place and was designed to bring all the trial schools back together for final reflections. Key messages that had been disseminated throughout the trial were reiterated: the distributed leadership of SEND and shared accountability for SEND provision, the graduated approach, adaptive teaching, and shared definitions of inclusion. The presentation linked to research, guidance, and examples from the facilitators' practice throughout and highlighted key questions for SENDCOs to consider and take forward in their setting. Key resources, for example, the WSS Review Guide, and regional networks were signposted.

Reach

Our third research question asks how the WSS Review programme was delivered and supported in relation to reach; defined here in terms of the extent to which stakeholders were aware and engaged with the programme. Stakeholder groups had variable levels of engagement with the programme; in terms of middle leaders, for example, in four case study schools at least one middle leader who we spoke to was unaware of the programme, while in three case study schools they had been briefed and in one of these case study schools had been involved in the peer review visit.

As addressed under research question 1a below, SENDCO motivation to include stakeholders in the programme was evidenced in SEND Action Plans, particularly in terms of distributing the leadership of SEN. This was unsurprising given the emphasis on distributed leadership by the WSS Review project directors. However, stakeholders' awareness of the SEND Action Plans was mixed across schools. Few stakeholders that we spoke to had direct input into identifying the SEND priorities or developing the SEND Action Plan. Senior leaders tended to have the clearest understanding of the WSS Review programme and its outcomes. Middle leaders and school governors tended to be aware of the priorities, while teaching assistants tended not to be, although in each of these groups the picture was mixed.

Responsiveness

While the picture was variable in terms of the involvement of stakeholders in the WSS Review programme, there were higher levels of engagement with its outcomes. Actions plans commonly drew on the contributions of a range of stakeholders, as discussed under research question 1b below. Stakeholders mentioned in SEND Action Plans included parents, pupils, teaching assistants, teachers, department heads, pastoral leads, and senior leadership. For example, department heads and teachers were particularly engaged with contributing to the distributed leadership of SEN through improving their knowledge of pupils and implementing new teaching strategies.

As discussed, under research question 1e, the process impacted on stakeholders in a range of ways. The process perhaps impacted most directly on SENDCOs, particularly in terms of their knowledge, confidence, and working relationships. In terms of stakeholders, the data describes changes to ways of working, in terms of teaching and learning, teaching assistant deployment, documentation, and processes, with resultant impacts in terms of the provision that pupils received.

This was not universal in terms of all stakeholders or all schools; in the midline survey, for example, nearly a third of respondents said that the leadership of SEND provision was not more distributed. However, in many cases there was clear engagement with the processes and outcomes of the WSS Review programme from a range of stakeholders.

Programme differentiation

Research Question 3 asks about programme differentiation, in terms of how the practice of SEND provision in intervention schools differs from prior SEND and inclusion practices. As will be explained in the findings of the IPE below,

SEND Action Plans generated as part of the WSS Review programme were ambitious and in general set out a clear series of actions to support change. We have evidence of many of the short-term outcomes in the logic model being realised and often also the beginnings of long-term outcomes being achieved.

Detailed with the data under research question 1b in particular, there are many examples of changes in SEND provision as a result of the WSS Review programme. The knowledge and awareness of the SENDCO and other stakeholder groups of inclusive provision was raised. There were role changes as school staff took on new responsibilities in the delivery of SEND provision. Evidence suggested processes were becoming more strategic as new ways of managing data were implemented. Staff were working in more joined-up ways, with the SENDCO in particular working in closer collaboration with a greater range of colleagues on SEND provision. We saw changes made to teaching and learning, with staff describing improved understandings of pupils and taking on elements of more inclusive practice. Finally, we saw cultural changes in terms of the profile of pupils with SEND, the role of the SENDCO, and SEND provision more generally being raised on the school agenda.

Our interviews generated particular examples of change. One middle leader described how in the past referral processes were managed on email with no specific procedure, whereas following the work on the SEND Action Plan there was now a proforma and clear procedures. Another described how in the past there was a general awareness of Wave 1 strategies but that now there were systems in place to support teachers to deliver them. A school governor explained that participating in the WSS Review programme had led to a more strategic and consistent approach to SEND provision as well as a clearer focus on inclusivity. The SENDCO (who was present in the interview) went on to explain that they were new to the post and would have led a process of change anyway, but that the WSS Review programme enabled them to plan, prioritise, and communicate the changes effectively.

In general, we identified a range of impacts of the WSS Review programme on schools' SEND provision. Under research question 1f, we discuss a range of factors that may encourage or impede the effectiveness of the process.

Summary of key findings

- There were deviations from the WSS Review programme and the WSS Review process due to both the design of the trial and to Covid-19 restrictions. Overall, the delivery team sought to maintain consistency across the regions and adhere to the principles of the WSS Review programme.

- Fidelity to the core processes of the WSS Review for most schools was high. However, there were a minority of schools with only adequate fidelity to the core components, and levels of engagement dropped at some point towards the end of the programme.

- The key themes in the delivery of training and support were:

  o effective and engaging team-teaching by knowledgeable WSS Review project directors;

  o scaffolded process with SENDCOs supporting them to make progress at each stage;

  o a focus on building peer networks through activities on engagement days and online breakout rooms;

  o a focus on evidence-based practice, with clear references made throughout to relevant research and how ideas could be put into practice; and

  o repeated engagement with key topics in SEND provision alongside a responsiveness to school priorities.

- While stakeholder groups had variable involvement in the actual process of the WSS Review programme, we found that engagement with its outcomes in terms of implementing the SEND Action Plan was high, and that there were a range of ways in which SEND provision had changed in schools that took part in the process.

Usual practice

This section summarises usual practice in all schools at baseline as well as concurrent interventions implemented by intervention schools during the trial. Changes to control schools' practices during the trial are detailed later in the report.

The section draws on data from the three SENDCO surveys.

Usual practice at baseline

SENDCO experience

Survey results (see Figure 6) show similar levels of SENDCO experience across both arms of the trial. There were SENDCOs with a range of levels of experience in both arms, with more experienced SENDCOs comprising the largest single group of respondents.

	Intervention	Control
■ 4+	30	28
■ 3	12	16
■ 2	12	13
■ 1	17	14

■ 1 ■ 2 ■ 3 ■ 4+
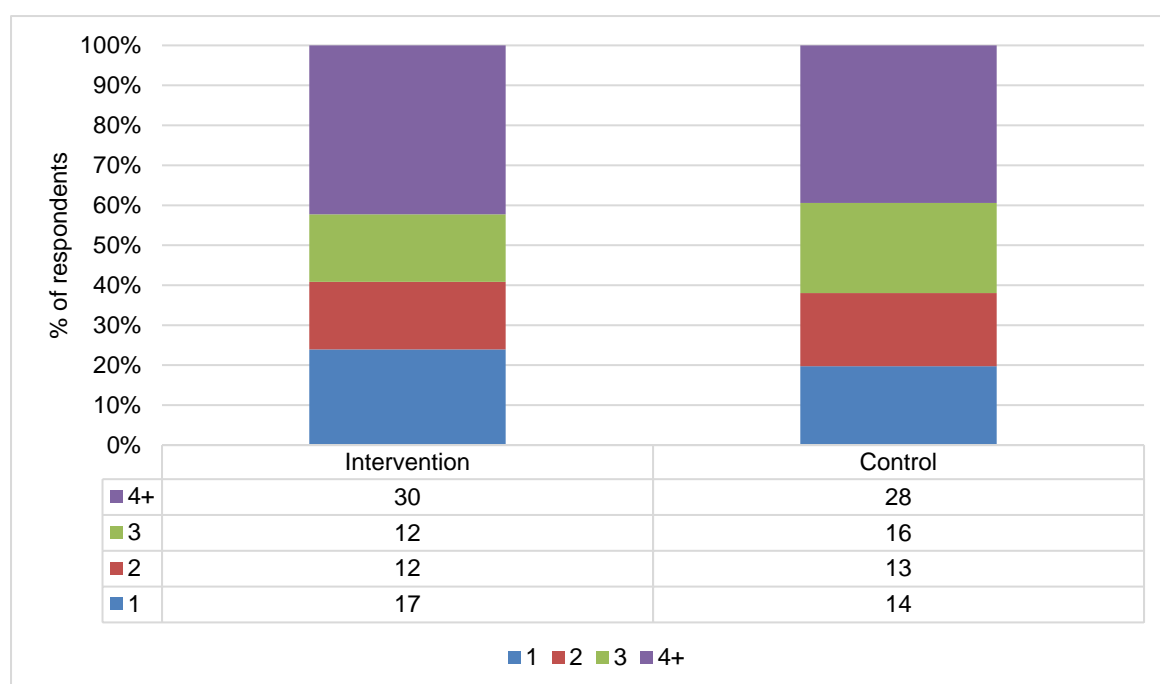
Figure 6: Number of years that SENDCOs have been in post, in intervention, and in control schools at baseline[10]

In both arms of the trial, SENDCOs were more likely to say that they were not part of the SLT at their school at baseline. A higher proportion of SENDCOs in intervention schools (47%, n=33) compared to control schools (40%, n=28) reported that they were part of the SLT. SENDCOs in the intervention group were more likely to say that their role on the SLT was specifically related to their SENDCO role (76%, n=25) compared to the control group (68%, n=19).

A slightly higher proportion of SENDCOs in control schools (82%, n=58) compared to intervention schools (77%, n=55) held the award NASENCO at baseline. The proportions of those that did not hold the award NASENCO but were working towards it were very similar across both arms of the trial, with SENDCOs more likely to be working towards it than not (intervention schools: 'yes' [n=9, 56%], 'no' [n=7, 44%]; control schools: 'yes' [n=7, 54%], 'no' [n=6, 46%]).

Relationships between SENDCOs and SEND governors

We asked SENDCOs about their relationships with the SEND governors in their schools. SENDCOs in the control group (85%, n=58) compared to the intervention group (80%, n=57) were slightly more likely to say that they had spoken to or met with the SEND governor in their school.

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[10] SENDCO Baseline Survey: 'How many years have you been in your current SENDCO post?'

We asked SENDCOs how many times they had met or spoken with their school's SEND governor in the previous school year (2019/2020; Figure 7). Meeting the SEND governor three times or more was the most popular response across both groups of respondents, with SENDCOs in intervention schools more likely than those in control schools to have met or spoken to their SENDCO twice or more (73%, n=41 in invention schools, and 60%, n=34 in control schools).
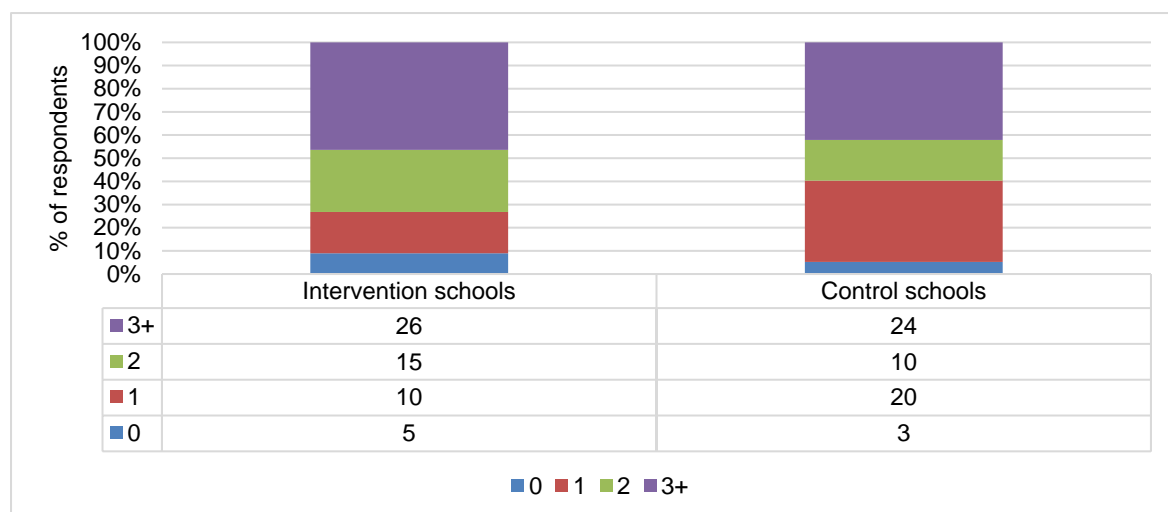

	Intervention schools	Control schools
■ 3+	26	24
■ 2	15	10
■ 1	10	20
■ 0	5	3

■ 0 ■ 1 ■ 2 ■ 3+

Figure 7: The number of times that SENDCOs had met or spoken with their SEND governor in the school year 2019/2020[11]

SENDCO role

The proportions of protected time that SENDCOs have for their roles was similar across both groups of respondents, with a variety of responses and at least 80% of respondents in each group having one day or more.

Around 68% (n=48) of SENDCOs in intervention schools reported receiving additional salary points, compared to 63% (n=44) in the control group. Control group SENDCOs were more likely however, to report that they were on the leadership pay scale (46%, n=33) compared to intervention group SENDCOs (44%, n=31).

Support for SENDCOs

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[11] SENDCO Baseline Survey: 'How many times did you meet or speak with your SEND governor last school year (including online)?'

Across both arms of the trial, a majority of respondents agreed or strongly agreed that they felt well supported in their roles (Figure 8). However, respondents were less likely to agree that they had enough administrative support (Figure 9).
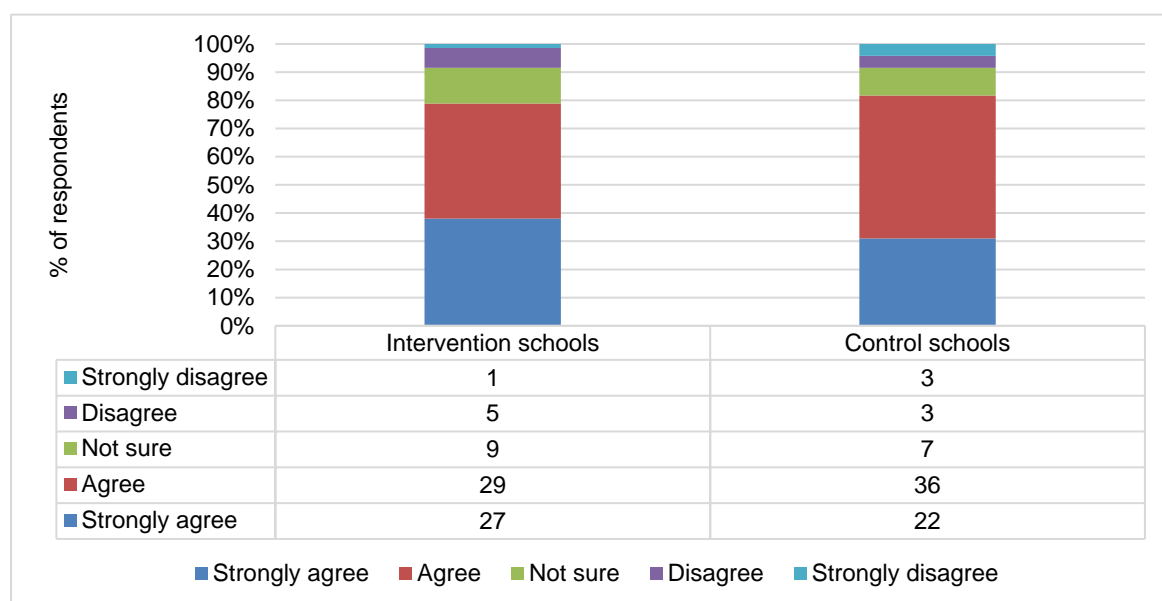

	Intervention schools	Control schools
■ Strongly disagree	1	3
■ Disagree	5	3
■ Not sure	9	7
■ Agree	29	36
■ Strongly agree	27	22

■ Strongly agree   ■ Agree   ■ Not sure   ■ Disagree   ■ Strongly disagree

Figure 8: Whether SENDCOs felt well supported in their roles at baseline[12]

	Intervention schools	Control schools
■ Strongly disagree	11	4
■ Disagree	16	27
■ Not sure	10	4
■ Agree	27	22
■ Strongly agree	7	14

■ Strongly agree   ■ Agree   ■ Not sure   ■ Disagree   ■ Strongly disagree
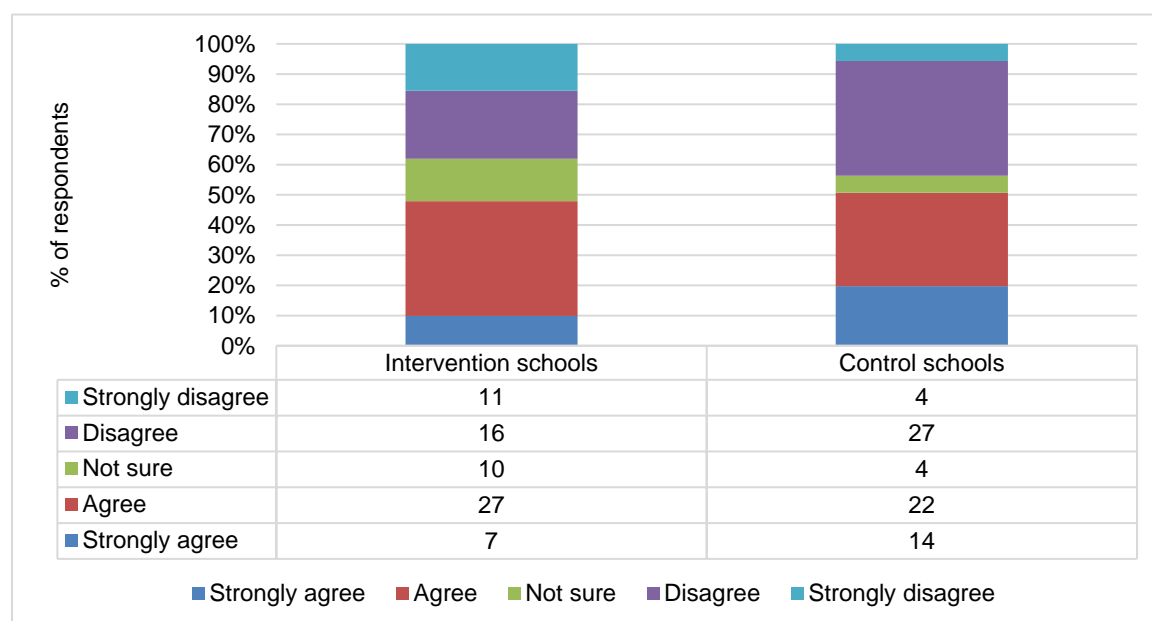
Figure 9: Whether SENDCOs had enough administrative support in their roles at baseline[13]

We asked SENDCOs to give us details of any professional support networks that they participated in online or face-to-face in their role as SENDCO. Most respondents referred to local or regional networks, clusters, or forums organised by local authorities or MATs:

I attend SEND briefings organised by the local authority twice yearly. (SENDCO, Baseline Survey)

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[12] SENDCO Baseline Survey: 'Please indicate the extent to which you agree or disagree with the following statements. I feel well supported in my role as SENDCO'.
[13] SENDCO Baseline Survey: 'Please indicate the extent to which you agree or disagree with the following statements. I have enough administrative support in my role as SENDCO'.

> *We have a Grammar School SENDCO Liaison group which is very helpful and strong and really helps with the particular issues we face in our system.* (SENDCO, Baseline Survey)

Many respondents mentioned private or charitable sources of support. Most commonly this was nasen, and other organisations that SENDCOs were supported by included Edukey, Evidence for Learning SEND, and Special Needs Jungle. These organisations provided membership, webinars, and discussion forums. Some respondents (26/130 respondents) also described using informal sources of support, including Facebook groups, X (formerly Twitter), and informal local groups. The purposes of engaging with these sources of support were described in terms of information sharing, training, sharing advice, and focusing on particular topics:

> *As part of [a local authority area] all SENDCOs are invited to termly SENDCO Forums, where all of the SENDCOs meet and presentations are given from various service providers in the borough, there are also some CPD opportunities within these meetings.* (SENDCO, Baseline Survey)

> *Local SEND update briefings (3 times annually) provide an opportunity to work with SENDCOs and other staff from various settings and stages of education to gain advice and support.* (SENDCO, Baseline Survey)

SEN provision

In control schools there were slightly more schools with higher numbers of pupils receiving SEN support (Figure 10) or with an EHCP (Figure 11) compared to intervention schools.
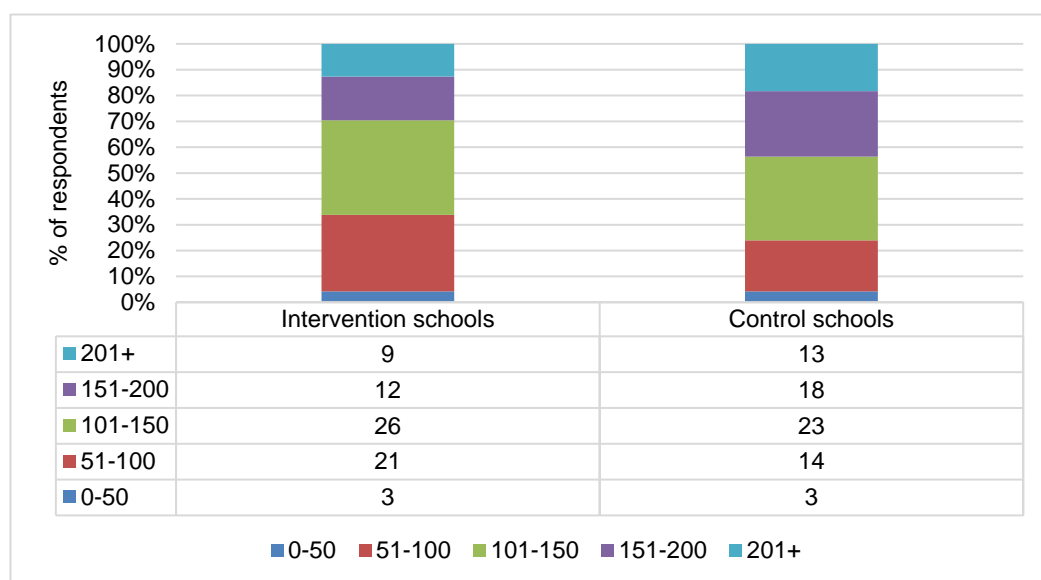

	Intervention schools	Control schools
201+	9	13
151-200	12	18
101-150	26	23
51-100	21	14
0-50	3	3

Figure 10: The number of pupils identified as receiving SEN support in trial schools at baseline[14]

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[14] SENDCO Baseline Survey: 'How many pupils are currently identified as receiving SEN support in your school?'.
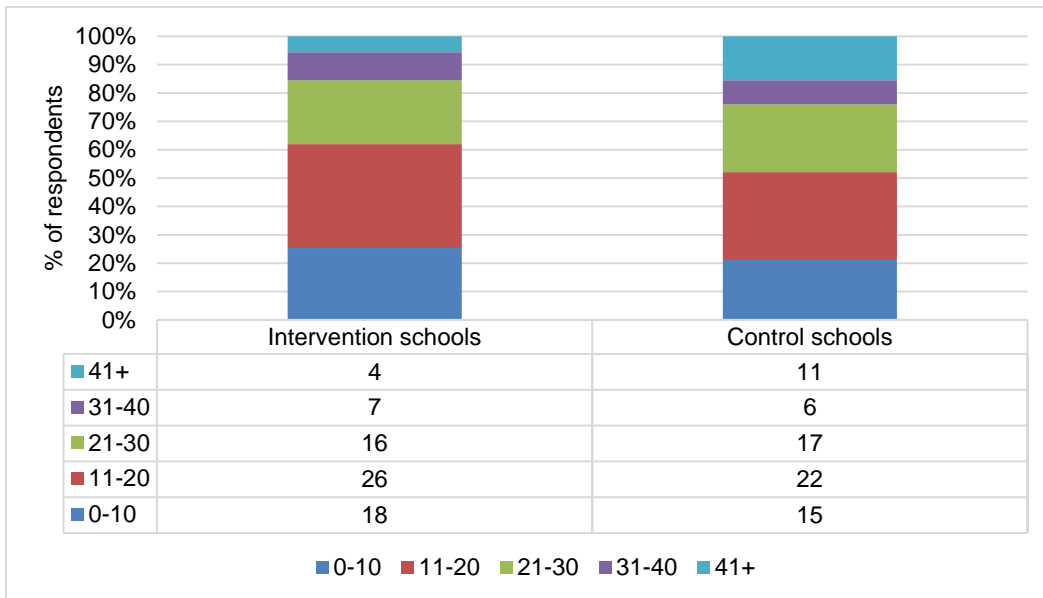
Figure 11: The number of pupils with an EHCP in trial schools at baseline[15]

SENDCOs reported that the number of teachers that worked with them as part of their SEND team or department were similar across both arms of the trial.[16] We asked SENDCOs to tell us about the links that they had with subject departments. Respondents commonly (53/135 respondents) said that they or their team attended departmental meetings either regularly or as required:

> *I attend Head of Department meetings to ensure I have an overview of their roles/worries regarding SEN concerns but also use it to keep the level of awareness high for inclusion and to raise my own issues/agenda items to departments.* (SENDCO, Baseline Survey)

Some respondents (16/135 respondents) also wrote about the links that teaching and learning assistants had with subject departments through holding responsibility for particular subjects:

> *Our TAs [teaching assistants] are linked to a subject faculty and liaise with each faculty. They attend faculty meetings.* (SENDCO, Baseline Survey)

In addition, some respondents mentioned subject departments leading on or closely supporting interventions delivered by the SEND department, having clear procedures for sharing information with and supporting subject departments, and having SEND representatives in departments. Many respondents said that their links were informal, involving open door policies, regular email contact, and further liaison as necessary. Fewer said that they did not have any particular links with subject departments.

The vast majority of SENDCOs reported that they managed three or more learning support staff or teaching assistants in both intervention schools (96%, n=68) and control schools (97%, n=68). In both intervention and control schools, learning support staff or teaching assistants tended to be attached to individual pupils rather than subject departments, however, especially in the control arm, a significant proportion of respondents selected 'both'.

Most schools in both groups told us that they did have a designated classroom for supporting pupils identified with SEND. For control schools, it was 79% (n=56), and for intervention schools, this was less at 70% (n=50). SENDCOs reported that these rooms had a range of names including, for example, the Assisted Learning Department, Student

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[15] SENDCO Baseline Survey: 'How many pupils currently have an EHCP in your school?'.
[16] SENDCO Baseline Survey: 'How many teachers work with you as part of your SEND team or department?'. Intervention schools: '0' (54%, n=38); '1' (20%, n=14); '2' (14%, n=10); '3+' (13%, n=9). Control schools: '0' (52%, n=37); '1' (21%, n=15); '2' (18%, n=13); '3+' (8%, n=6).

Support, the Inclusion Room, and The Hub. SENDCOs described a range of spaces, ranging from single rooms to whole buildings.

> *[One] small classroom that also doubles as the SEN office—where all of the TAs [teaching assistants] work from.* (SENDCO, Baseline Survey)

> *It is a purpose built building, with offices, a social area (with kitchen facilities), disabled toilet and shower, 2 classrooms, SALT [speech and language therapy] and OT [occupational therapy] room and a sensory room.* (SENDCO, Baseline Survey)

The rooms had various uses including meetings with pupils, interventions, small class or one-on-one work, individual working, to access provision from outside providers, before or after school, lunchtime clubs, and a space for meeting SEMH needs.

> *A safe space for some students, a workspace for others at times, a 1:1 intervention room for individuals or very small groups, used for Access arrangements testing, students on crutches who can't get upstairs.* (SENDCO, Baseline Survey)

Some SENDCOs reported that the space was used flexibly, with pupils able to access as required, while others said that use of the space was timetabled for lessons only. Staff often included the SENDCO, assistant SENDCO, teaching assistants, mainstream teaching staff, and specialist staff such as counsellors.

Most schools in both groups told us that they did have a designated classroom for supporting pupils withdrawn from lessons for disciplinary reasons. For intervention schools this was 70% (n=50) and for control schools it was slightly less at 65% (n=46). A range of names were given to this unit across both groups of schools, including inclusion unit, exclusion unit, and others including isolation, reflection, and behaviour support. SENDCOs reported that this room was usually used for pupils who are sanctioned under the schools' behaviour management system. Pupils were often asked to undertake a reflective activity and restorative conversations as well as completing school work.

> *The students are expected to sit quietly and have the opportunity to reflect in their own designated Reset book (questions are provided). They can also get on with work.* (SENDCO, Baseline Survey)

Depending on the reason for withdrawal, pupils are expected to have short visits followed by a return to class, others are detained for one day, for a series of days or weeks, or have regular visits. The room was commonly staffed by a pastoral staff, teachers, or teaching assistants.

CPD

We asked SENDCOs a series of three questions about CPD in the previous academic year (2019/2020). In terms of CPD time allocated to SEND issues for the whole school (Figure 12), very few schools across both groups allocated no time, however, the biggest proportion in both groups was allocated less than one day. A higher proportion of respondents in intervention schools allocated one day or more compared to control schools.
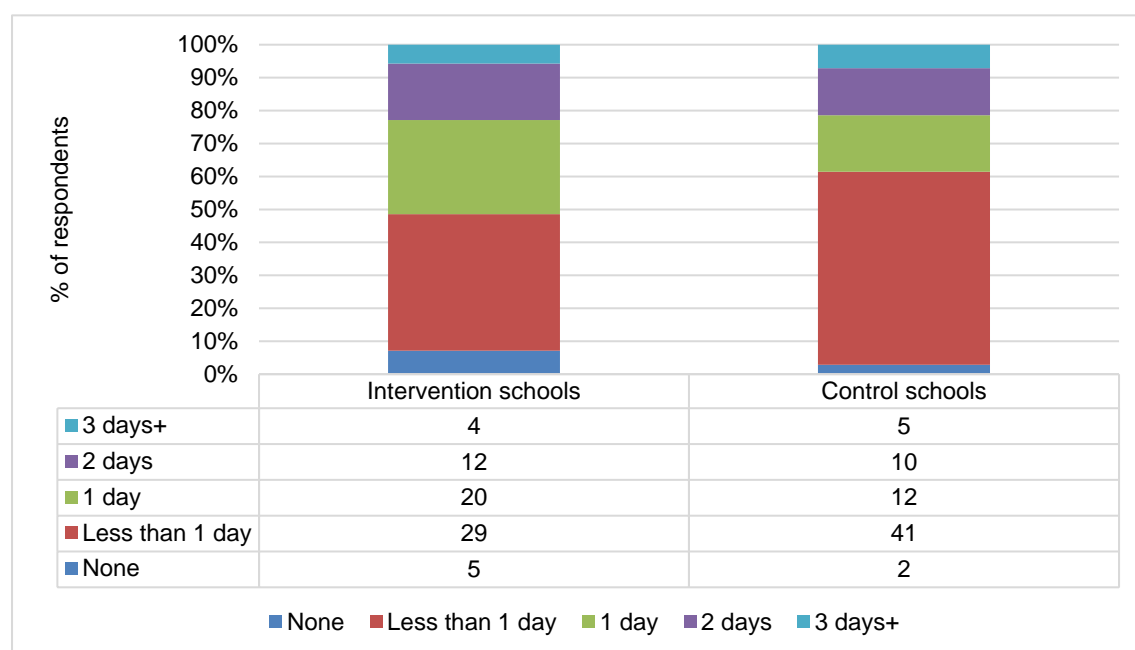
	Intervention schools	Control schools
■ 3 days+	4	5
■ 2 days	12	10
■ 1 day	20	12
■ Less than 1 day	29	41
■ None	5	2

■None   ■Less than 1 day   ■1 day   ■2 days   ■3 days+

Figure 12: The amount of CPD time allocated to SEND issues for the whole school in the academic year 2019/202017

In terms of CPD time for subject departments, the results were similar across both groups: around 70% of schools allocated less than one day or no time to SEND issues in subject departments' professional development activities, while around 30% allocated at least one day. Schools in both groups were more likely to have allocated at least one day to SEND issues in the SEND team's CPD programme compared to that of subject departments and the whole school. Control schools were however, more likely to allocate less than one day or no time to their SEND staff's CPD compared to intervention schools.

The re-opening of schools post-Covid-19 lockdowns

The baseline survey was distributed during the Covid-19 pandemic and so we asked schools about the impacts of the lockdowns on SEND provision.

In both groups, a large majority of respondents indicated that the learning and pastoral support for *all pupils* in their school had been adapted since it reopened in September 2020. For intervention schools, this was 96% (n=67) and for control schools it was less, at 87% (n=62). Many respondents described how Covid-19 restrictions had affected the delivery of learning and pastoral support. This included pupils working in year group bubbles, different models of blended learning that involved both onsite and online learning, and both teachers and teaching assistants maintaining social distance from pupils. Respondents also described how learning support had been adapted, including the provision of catch-up lessons, online teaching, and additional teaching assistant support. Many respondents also described increased provision of SEMH support. This included the increased availability of pastoral teams, a focus on mental health in Personal, Social, and Health Education lessons, monitoring of pupils' well-being, focused interventions, and one-on-one support where necessary.

In both groups, a large majority of respondents indicated that the learning and pastoral support *for pupils with SEND* in their school had been adapted since it reopened in September 2020. For intervention schools, this was 94% (n=67), and for control schools it was 96% (n=67). Many said that support had been targeted and was open to fewer pupils. Due to Covid-19 restrictions, many schools were withdrawing pupils for support rather than providing it in classrooms, seeking to maintain year group bubbles, providing less one-on-one support, and reducing the support visits from outside agencies. Physical space for socially distanced interventions and support was also commonly raised as an issue that

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17 SENDCO Baseline Survey: 'How much professional development time per annum was allocated to SEND issues for the whole school last academic year?'

limited the level of support available to pupils. At the same time, the answers displayed a diversity of experiences across settings and many respondents said that intervention support had been adapted or extended.

Across both groups, a majority of respondents told us, in response to a follow-up question that was more specific, that the balance of in-class support and support by withdrawal had changed since their school reopened in September 2020. For intervention schools, this was 65% (n=46) and for control schools 63% (n=44). Many respondents, when asked to explain how it had changed, said that there was less support by withdrawal being provided for a range of reasons including staff shortages, bubble systems, and space restrictions. Some respondents also identified limitations to the in-class support provided including staffing and social distancing and said that there had been an increase in support by withdrawal.

The survey responses in relation to the impact of lockdowns on SEND provision highlight the range of challenges that SENDCOs faced at the time. In relation to withdrawal of pupils with SEND from classrooms, the picture is unclear, reflecting the complexity of the post-Covid-19 position.

Usual practice in control schools during the trial

Survey data on the initial position of control schools is described in the 'Usual practice at baseline' section above. Greater detail of the responses given to midline and endline surveys by SENDCOs in control schools is provided in Appendix G of the Technical Appendices published alongside this evaluation report. A synthesis of the findings from these surveys is presented below followed by four pen portraits of SEND provision developments undertaken in control schools during the trial.

We followed up with SENDCOs through the survey about their level of *experience.* In 2022, as expected, the sample of SENDCOs in control schools were becoming more experienced compared to baseline and now more than 60% had four or more years' experience (compared to around 40% at baseline). In 2023, the proportion of respondents with more than four years' experience continued to increase, while more than a fifth of respondents were new to the school. At midline (2022), 90% (n=36) said that they held the NASENCO qualification and 1% (n=4) said that they did not. This was an increase from baseline, when 82% of respondents held the qualification. None of those who said that they did not have the qualification were working towards it. At baseline, roughly half of those that did not have it were working towards it.

In relation to their abilities to *influence strategic decision-making*, the proportion of SENDCOs who said they were members of the SLT increased from baseline (40%) to midline (51%) and remained at a similar level at endline (47%). There was an increase each year in the proportion of SENDCOs who reported having three days or more protected to fulfil their role. SENDCOs reported meeting SEND governors more frequently at midline than at baseline. However, this trend was not continued at endline (although we received fewer responses to the endline surveys as explained above).

In the midpoint survey, we asked how their *engagement with professional support networks* had developed in the previous 18 months. Some respondents said that their networks had stalled: they had been unable to attend due to increased workload or Covid-19 restrictions. Some said that network meetings had moved online, although in some cases were starting to happen in-person again, which tended to be seen as a positive development. Similar to baseline, other respondents continued to describe networks among groups of SEND professionals either through local authorities or MATs, or links with colleagues in specialised roles, for example, educational psychologists and online social networks. The purpose of the networks was to share resources and discuss ideas and challenges. One respondent mentioned a focus on SENDCO well-being. One mentioned doing peer-to-peer reviews through their local authority.

In the endline survey, teachers in control schools were asked to give details of the networks that they were currently a part of. Most mentioned local authority and MAT networks, and smaller numbers were engaged in networks through social media or organisations including nasen.

Responses to midline and endline surveys suggest that the number of pupils with an EHCP and the number of pupils on the SEN register increased in control schools.

In relation to *staffing levels*, there was no change over the duration of the project in the number of teachers working in SEND departments. Most SENDCOs at control schools (2022: 65%, n=26; 2023: 65%, n=13) said that *the deployment*

of teaching assistants did not change. In the remaining schools, SENDCOs in control schools described these changes mainly in terms of teaching assistants moving into subject departments.

At midline, SENDCOs in control schools (54%, n=22) told us that the *links with subject departments* had changed in the last 18 months. Some described working more collaboratively with subject departments, for example, teaching assistants working in departments and advising on lesson planning, and the SENDCO working with subject leads on quality assurance. Others described improved communications, usually in terms of involvement in departmental meetings. There was also reference made to the distributed leadership of SEN provision, with teaching staff and middle leaders more aware of and taking steps towards having more responsibility for SEN provision. At endline (2023 survey), SENDCOs in control schools (45%, n=9) described changes in terms of increased collaboration on curriculum and lesson planning, a greater distributed understanding of SEN provision, for example, through CPD, and improved communications, mainly through attendance at subject meetings.

Similarly to baseline, SENDCOs most commonly reported that less than one day had been allocated during the year for *professional development* for the whole school and also for subject departments on SEND issues.

In the midline and endline surveys, many SENDCOs in control schools said that new staff had been recruited and/or described a range of initiatives that had been introduced since the onset of the pandemic to support the SEMH of pupils in their school. At endline, SENDCOs reported a number of ongoing impacts of school lockdown on pupils and staff in their school. The main responses were concerned with high levels of school refusal and an increase in SEMH needs. SENDCOs also described a generally higher and more complex level of need, including an increase in behavioural issues, learning needs, and difficulties with social skills. Smaller numbers mentioned a decrease in parental engagement, poor staff well-being, and challenges with teaching assistant recruitment.

Changes made to SEND provision

In the 2022 survey, we asked control school SENDCOs about the changes that had been made to SEN provision in their school in the previous 18 months. Many SENDCOs mentioned that the increasing needs of pupils had shaped their SEND provision. In some cases, this had resulted in the recruitment of additional staff and providing additional training to staff, particularly around support for pupils with SEMH.

SENDCOs mentioned examples of changing practices. This included new interventions and the use of evidence to target and assess interventions. Some mentioned improvements to the administration of SEND provision, for example, pupil passports. The purchase of provision mapping software was mentioned in many responses. Some described new approaches, for example, an increase in in-class support rather than interventions. Other SENDCOs described increased collaboration with teaching staff, changes to teaching assistant deployment, and increased emphasis on particular specialised areas, for example, autism.

A small proportion of responses described SEND provision as a major school priority in the previous 18 months. A small number also described distributing the leadership of SEND, particularly to teaching staff and middle leaders.

One respondent (of the 41 who answered this question) said that their school had started a WSS Review regional project and three said that they were taking a whole-school approach to SEND provision. Two SENDCOs reported that there had been increases in the number of staff in SEND teams linked to SEND becoming a whole-school priority.

When we asked this question at endline, SENDCOs in control schools named changes to practice including the introduction of sensory and therapy rooms, SEMH provision, emotional literacy support assistant (ELSA) sessions, and increased communication with home. Changes to the administration of SEN provision included the introduction of provision mapping software and the formalisation of assessment access arrangements. Some schools had focused on particular areas of need, for example, neurodiversity, SEMH, moderate learning difficulties, on particular areas of activity for example, referral, and one SENDCO said that their school was taking a whole-school approach to SEND. One said that their school was moving to focus on relationships rather than behaviours and had adopted the PACE (Playfulness, Acceptance, Curiosity, and Empathy) approach. Some SENDCOs mentioned changes to staffing and in some cases this seemed to be increases to the number of staff in SEND teams.

Engagement with initiatives to develop SEN provision

We asked SENDCOs whether their school had engaged with any initiatives or programmes aimed at developing SEND provision over the previous 18 months. Around 59% (n=24) said 'yes', and 42% (n=17) said 'no'. In 2023, half (50%, n=10) said 'yes', and half said 'no' (50%, n=10).

In the midline survey, SENDCOs in control schools who had engaged with initiatives or programmes aimed at developing SEND provision over the last 18 months told us that these were organised by local authorities, health authorities (e.g. a mental health schools team) or through a private provider like the National College. Others said that they had accessed support through, for example, Covid-19 catch-up funding, private consultants, or had sought to increase their expertise in certain specialised areas, for example, seeking to become an attention deficit hyperactivity disorder (ADHD) Friendly School or a Trauma-Informed School.

When SENDCOs described what these developments involved, this included SENDCO support networks, training or sharing good practice, and collaborating on the development of SEN provision in their school. One SENDCO said that their school had engaged in a peer review process, and three SENDCOs said that they had completed the WSS Review process. It is unclear how they accessed the resources to conduct the WSS Review process given that nasen restricted access for control schools. However, it is possible that the resources could have been accessed via a local authority or MAT and shared with control schools that way.

In 2023, SENDCOs in control schools reported engagement with various programmes including the Autism in Schools project, the Dyslexia Friendly Quality Mark, the Developing Local Provision project, the nasen Assistive Technology Test and Learn Programme, and the Thinking Reading programme. A few mentioned training, including on Dyadic Developmental Practice, and speech and language provision from the National Health Service (NHS). Two respondents said that they had engaged in the WSS Review process and one respondent said it had participated in peer reviews between schools.

For most respondents, these initiatives were in collaboration with their local authority (n=10) or an external partner commissioned by their school (n=10). For two respondents it was in collaboration with their MAT, and two respondents also chose 'other', specifying that the development was conducted within the school.

In 2023, again for more respondents the changes were planned in collaboration with their local authority (n=6), with fewer respondents saying that they were in collaboration with an external partner (n=2) or the MAT (n=1). One SENDCO said that the changes were planned with another source of support and specified the NHS.

Interviews with SENDCOs

We now present vignettes summarising the development of SEN provision in four case study schools. The interviewees were selected based on responses to the midline survey. They had all described developments, which were similar to those undertaken in intervention schools.

SENDCO, London region

The SENDCO was appointed in 2018 with a strategic and operational remit. The strategic remit was to reorganise, restructure, and identify weaknesses in SEND provision. A deputy SENDCO was subsequently appointed to lead on the operational aspects. In 2018, SEND provision was poorly organised. Now the SEND department is statutory compliant but practices at a classroom level are still being developed. In the last two years there has been a big focus on mental health support, with specific training for staff and therapy interventions such as Rebound, and Drawing and Talking. More broadly, the school has set-up monthly meetings for groups with similar needs so they can get to know each other and the school is focusing on literacy. There are new posts: a school counsellor; EWP (Education Well-being Practitioner); and every year group has a pastoral support officer who is ELSA trained. The school wanted to do the MPTA (Maximising the Practice of Teaching Assistants) course but did not get it off the ground. Instead, the SENDCO, deputy, educational psychologist, and speech and language therapist ran eight CPD sessions over the year for the teaching assistants. Communication with staff was improved through investment in provision mapping software and behaviour management software so that staff could access live information.

The school has tried various ways of deploying teaching assistants—by key stage, by subject area, and has settled on area of need. Staff are expected to use behaviour management software and to use the strategies identified by the WSS SEND team for individual pupils. The department have written a bank of strategies, which are broad enough to be used

across different subjects. Staff are also asked to refer any pupils who have been missed. All SEND pupils are assessed in the same way as their peers but with access support in place (e.g. reader pens). Assessments are 40 minutes (in a 55-minute lesson) and those who need extra time can have it. Every subject from Year 7 to Year 11 has workbooks—purposely written to deliver the curriculum in school and designed for all pupils to complete. There are no textbooks. It is optional in the sixth form. Staff are told they should be scaffolding effectively for those who need it. However, the range in all classes (except mathematics) is wide. The school has focused on raising expectations. But there are perceived issues around 'teaching to the top' for all pupils via the workbook approach.

In 2021/2022 SEND became a whole-school priority, the SEND team expanded, behaviour management and provision mapping software were acquired, and the local authority initiated a programme 'Ambitious for SEND' (https://suttoninformationhub.org.uk/pages/ambitious-for-send-programme). This involved schools participating in SEND clusters, meeting ten times a year, and a peer review process, which included a self-review document. The SENDCO at Carshalton hosted SENDCOs from two other schools. Neither the cluster meetings nor the WSS Review process were considered to have made much of a difference. The school was already undergoing self-review of almost every aspect of the school so was aware of the challenges in SEND provision that needed addressing.

SENDCO, South West region

The school has been focusing on encouraging every teacher to take responsibility for SEND, although the school operates across a split site (by subject area), which has made this more challenging, partly due to more longer serving staff being based at this site. The SENDCO was planning to change their base to the other site in the following academic year. A new space for SEND pupils had been established on this other site and was not seen to be operating as intended. Access to this space was more strictly controlled than it had been previously, with an overarching aim of keeping pupils with SEND in the classroom as much as possible, but it was suggested that the school may have gone 'too far the other way'. The SENDCO had plans to address these issues on the other site through their move.

The SENDCO felt that a lot of CPD had been offered to teaching staff to facilitate the change. The school had purchased provision mapping software and all pupils with additional needs had learning passports. Some teachers were perceived to take account of this information and some were not. The SENDCO had arranged for pupils' reading ages to be assessed on a regular basis. Staff had been provided with literacy training to support pupils with low reading ages and a whole-school literacy programme had also been implemented. The SENDCO had also introduced form time reading three times a week across the school. Other literacy and speech and language interventions were also offered to meet pupils' needs. Pupil literacy was a key focus as it was believed to underpin improvements in SEND outcomes.

Another driver of change was the establishment of faculty SEND champions, generally more experienced colleagues. They were provided with CPD and mentoring so that they could deal with any SEND issues arising in their faculties. An operational SENDCO had been appointed internally and released from teaching for approximately two days per week. This new post was given responsibility for exam administration.

In relation to professional support networks, the school had recently left its previous MAT and joined another one from January 2023. The new MAT held meetings for SENDCOs once a term and offered support via email in between these. The SENDCO noted that it was helpful to swap ideas and to be able to discuss challenges with others. They also said that they read extensively to support their professional development. Furthermore, the process of changing MATs meant that there had been external input from different school improvement personnel. This engagement had provided a form of peer review from which new ideas, such as encouraging all teaching staff to sign up to nasen.

The SENDCO had also been involved in a whole-school coaching programme as a lead coach, reflecting his knowledge and expertise.

SENDCO, North East region

The SENDCO at this school said, during the interview, that they had participated in the WSS Review process and a peer review prior to joining the project. The school joined a MAT in 2020 providing an additional support network for the SENDCO. In 2021, the SENDCO participated in an online peer review process with another school in the MAT, which was based on the WSS Review process. Engagement in this process was partly attributed to the school's headteacher who was described as ambitious and focused on school improvement following a school inspection in 2015. The approach to SEND provision at the school was described as being different to other schools in the MAT due to the low

numbers of support staff employed (only two at the time, which was a deliberate strategy). The SENDCO felt that the main outcome of this review was that it highlighted capacity issues. It also 'confirmed the direction we wanted to go in' but that some of the current processes 'needed sharpening up'.

The two teaching assistants retired shortly after that and the school appointed an assistant SENDCO and a teaching assistant with responsibility for SEMH, who subsequently left and was not replaced. The support needs of pupils with SEND were then provided by mathematics and English teachers at the school by providing them with hours on their timetables to do so. They have been timetabled to provide individual support on a ratio of 1:3. The SENDCO was also taken off timetable for a short period but had been (temporarily) assigned more teaching from September 2024 (one and a half days per week) to address a recruitment issue.

The SENDCO was part of three networks: nasen, a network for SENDCOs in the MAT, and a network for SENDCOs in the local authority. The local authority SENDCO annual conference was perceived to be the most useful in relation to updates on service provision. However, the SENDCO felt that the conference did not provide any new ideas for SEND provision at the school. For example, the most recent local authority SENDCO conference had focused on the WSS Teacher Handbook: SEND (Thompson and Walsh, 2022) and the EEF resources to support SEND provision. The SENDCO at this school said that these documents had been used at the school for the last two academic years to support planning and professional development (the WSS Teacher Handbook: SEND was launched in January 2022; Thompson and Walsh, 2022). The school website and school SEND documents highlight that every teacher is a teacher of SEND and recent inspections in 2023 praised the school for its focus on inclusivity.

The SENDCO also mentioned signing up to a WSS research project focusing on the deployment of numeracy and literacy teaching staff (rather than learning support assistants) to support pupils with SEND. However, work and home commitments meant that the SENDCO had to withdraw from this.

SENDCO, North West region

This SENDCO reported that the capacity of the SEN team had been increased to support increasing numbers of pupils with SEMH following Covid-19. This had led to an increase in the number of pupils on the SEN register.

The SENDCO described the development of inclusive education at the school. There had been a 'push' on the curriculum to encourage teachers to make adaptations for pupils with SEND. This included talking about the shift in a regular SEND slot at briefings (which has continued) and sending teachers information about relevant strategies. However, these activities were not having the desired effect. Subsequently, all staff have a professional development target related to SEND in order to support the development of the curriculum so that every teacher is accountable for meeting the need of the pupils with SEND. The professional development has also been stepped up led by both the SENDCO and the local authority SEND team. 'Practice clinics' have also been established so that the SENDCO can model effective adaptations for pupils with SEND. Monitoring teachers' practice means that some staff can be provided with additional coaching if necessary.

The SENDCO has also started attending department meetings, which again have a regular SEND slot. This was used to share good practice and discuss challenges that individual teachers were facing. Teaching assistants have been redeployed to departments so that pupils with SEND become more independent. This has had the added benefit of consistency for the teaching assistants (rather than switching between subjects constantly). They also attend subject planning meetings.

The school has online data management tools to support provision mapping and pupil passports.

The SENDCO had been partnered with another school through a partnership programme at which SENDCOs from a range of schools had led on initiatives and fed back, as well as sharing good practice. A SEND peer review process had taken place. This network had finished in July 2022 but the SENDCO was now participating in a local authority SENDCO network, which was perceived to be really useful. Other sources of professional development mentioned by the SENDCO included undertaking the National Professional Qualification in Senior Leadership, social media, SENDCO colleagues, and personal research.

Usual practice in intervention schools during the trial

SENDCO experience

As would be expected, in 2022 there was a rise from baseline in the proportion of staff with four or more years of experience. The responses to this question in 2023 show a similar pattern, with half of the respondents (n=5, 50%) having five or more years of experience in post and the other half (n=5, 50%) having one to four years' experience. The patterns of change are similar to control schools.

When asked whether they hold the NASENCO qualification at midline, 39 SENDCOs in intervention schools (81%) said 'yes' and nine (19%) said 'no'. This is an increase from baseline, when 77% of SENDCOs in intervention schools held the NASENCO qualification. Both intervention and control schools saw an increase during the trial in SENDCOs holding the NASENCO qualification, with control schools starting and remaining at a higher level than intervention schools. Similarly to baseline, of those that said 'no', roughly half were working towards it (n=5) versus not (n=4). While intervention and control schools started in a similar position, at the 2022 midpoint of the trial the situation was quite different as no respondents in control schools were working towards the NASENCO qualification while half of the SENDCOs that did not have it in intervention schools were working towards it.

Relationships between SENDCOs and SEND governors

When asked whether they had met or spoken with the SEND governor in their school outside of formal meetings of the governing body, the majority had, with 40 (83%) responding 'yes' and eight responding 'no' (17%). A similar proportion (80%) responded positively to this question at baseline. The proportions were very similar across schools in both arms of the trial at both survey points.

Of those that said they had spoken with or met their school's SEND governor, there was an increase in the proportion of SENDCOs meeting their SEND governors more frequently in 2021/2022 compared with 2020/2021 (Figure 13). In 2021/2022, 90% of respondents had met with their school's SEND governor at least twice and over a quarter had met four times or more. Over these two years we can see an overall decrease in the number of SENDCOs who only met their school SEND governor once or not at all, and an increase in the numbers of those who met them twice or more. The figures for 2019/2020 gathered at baseline however, were also weighted to more frequent meetings, perhaps suggesting the impact of Covid-19-related lockdowns on these results. In addition, although less pronounced, for control schools there was also a reduction between 2020/2021 and 2021/2022 in SENDCOs meeting their SEND governor once or less and an increase in the numbers meeting twice or more.
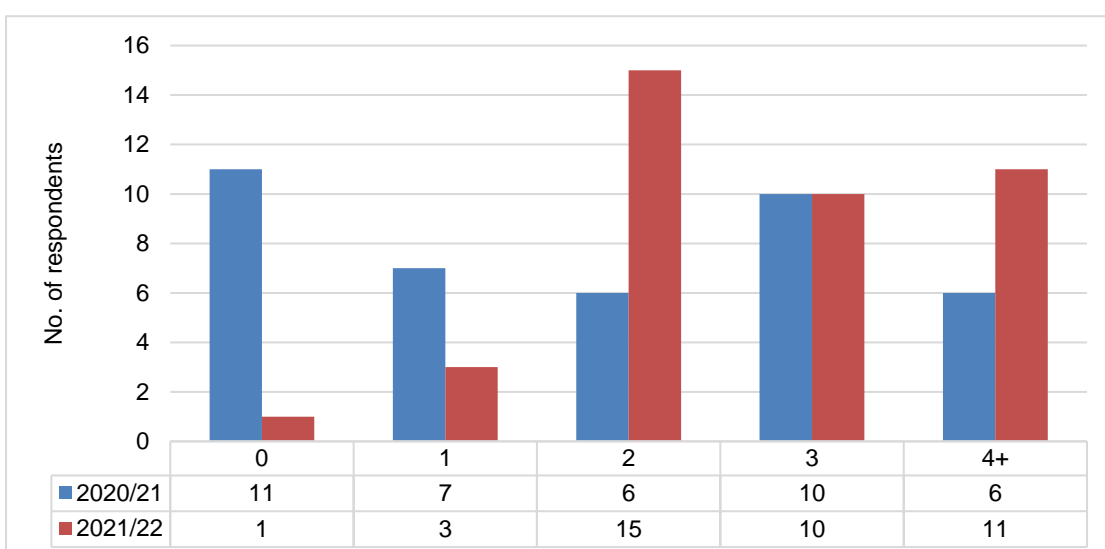

	0	1	2	3	4+
2020/21	11	7	6	10	6
2021/22	1	3	15	10	11

Figure 13: The number of times SENDCOs in intervention schools had spoken with their school's SEND governor across two school years[18]

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[18] Intervention schools 2022 SENDCO survey: 'How many times did you meet or speak with your SEND governor this/last school year (including online), outside of formal meetings of the full Governing Body?' NB: The 2023 data have not been reported here due to the low response rate.

SENDCO role

Figure 14 shows that, similar to baseline, while a fifth of respondents had less than one day protected for their SENDCO role, respondents tended to have two or more days per week protected. In 2023, the responses were fairly evenly distributed.
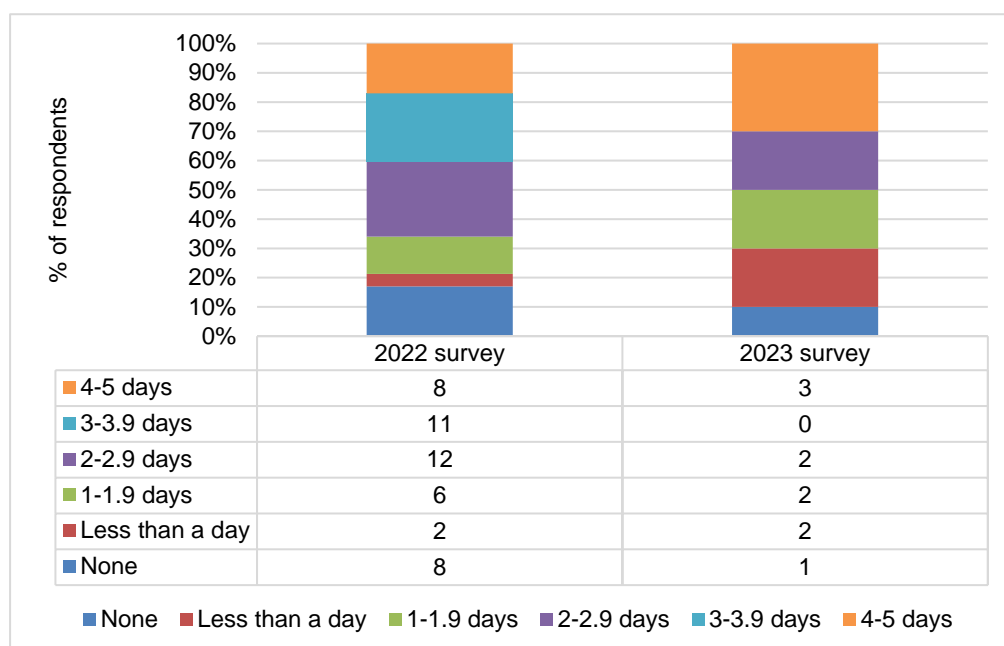
	2022 survey	2023 survey
■ 4-5 days	8	3
■ 3-3.9 days	11	0
■ 2-2.9 days	12	2
■ 1-1.9 days	6	2
■ Less than a day	2	2
■ None	8	1

■ None   ■ Less than a day   ■ 1-1.9 days   ■ 2-2.9 days   ■ 3-3.9 days   ■ 4-5 days

Figure 14: The amount of respondents' time protected for their SENDCO role each week at midline and at endline[19]

When asked whether they receive any additional salary points, 30 (63%) survey respondents in the intervention group said 'yes' while 18 (38%) survey respondents said 'no'. This is a small reduction from baseline, when 68% of respondents in intervention schools confirmed that they received additional salary points. Across both intervention and control schools, the proportions of respondents receiving additional salary points dropped slightly between the two data points (baseline and midline) and remained slightly higher in intervention schools.

When asked whether they are as SENDCO, on the leadership pay scale in their school, 22 (46%) said 'yes' while 26 (54%) said 'no', proportions similar to baseline. The proportions remained lower than in control schools, despite the proportions in control schools falling during the trial.

Support for SENDCOs

We asked SENDCOs again at midline and endline about how supported they felt in their role. In 2022, most respondents agreed or strongly agreed that they were well supported but were more likely to disagree that they had enough administrative support. This was a similar response pattern to baseline. In 2023 however, the proportions strongly agreeing or agreeing that they were well supported in their role fell, while those disagreeing rose. The proportion of those disagreeing that they had enough administrative support also rose. The control responses in contrast remained steady despite starting at a similar baseline, although the low response rate to the 2023 survey limits the importance of this finding.

When asked how their professional support networks had developed over the past 18 months, in most cases SENDCOs continued to describe local, regional, or Trust-based networks. A small number said that they were in contact with SENDCOs that they had met through the WSS Review programme, and a smaller number through informal networks. The main changes that SENDCOs referred to were Covid-19-related, particularly in terms of meetings moving online and then beginning to move back to in-person. SENDCOs talked about receiving briefings and training, as well as support and sharing good practice.

> *I am in greater contact with SENDCOs across the South West and I am also able to keep up to date*
> *with the local and national picture for SEND more easily through involvement in these networks.*
> (SENDCO, Intervention school, Midline survey)

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[19] Intervention schools 2022 and 2023 SENDCO surveys: 'How much of your time is protected for your SENDCO role each week?'

I have now become part of a group who I have met through the course. (SENDCO, Intervention school, Midline survey)

SEN provision

Updated figures on the number of pupils in intervention schools who receive SEN support and have an EHCP as provided by SENDCOs are in Figure 15a and b. Overall there was an increase in the number of SENDCOs reporting higher numbers of pupils receiving SEN support or having an EHCP compared to baseline. This was a similar trend to that in control schools.

Most respondents said that the number of pupils identified as receiving SEN support in their school had increased significantly in the last 18 months (n=31, 65%). Fewer said that it had stayed about the same (n=16, 33%) or decreased significantly (n=1, 3%). These figures were similar to those from control schools.
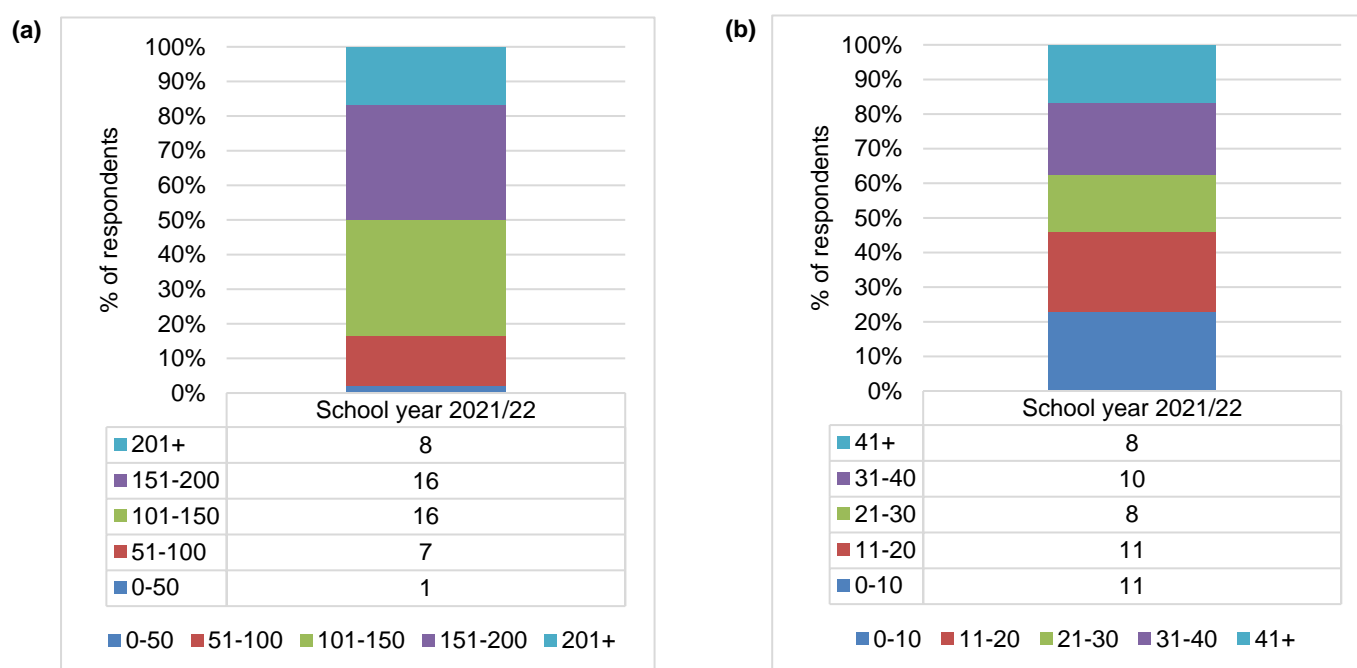
Figure 15: At the point of the midline survey (a) the number of pupils receiving SEND support in intervention schools, and (b) the number of pupils with an EHCP in intervention schools[20]

In the 2022 survey, a third of respondents (n=16, 33%) reported that they did not have any teachers working with them as part of their SEND team, while two-thirds (n=32, 67%) had at least one. Nearly a quarter had three or more (n=11, 23%). This represents an increase in the number of SENDCOs that reported working with teachers as part of their team since baseline and is quite different to control schools whose SENDCOs were less likely to report working with teachers as part of their team.

In the 2022 survey, 33 (70%) SENDCOs reported changes in the links between the SEND department and subject departments in their school in the last 18 months compared to 14 (30%) who said there had been no changes. In 2023, five respondents (50%) said there had been changes and five respondents (50%) said there had not been changes. While the figures fell across both intervention and control schools, intervention schools were more likely than control schools at both data points to say that there had been changes in the links between the SEND department and subject departments in their schools in the last 18 months.

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[20] Intervention schools SENDCO survey 2022: 'How many pupils are currently identified as receiving SEN support in your school?' and 'How many pupils currently have an EHCP in your school?'

Of those that said there had been changes in the links between the SEN department and subject departments, respondents explained that in many cases this involved more frequent communications between subject departments and the SEND team, including in meetings.

> *Now attend curriculum leaders' meetings to ensure dissemination of SEND information and advice and guidance.* (SENDCO, Intervention school, Midline survey)

In many cases, respondents indicated an increased distributed leadership of SEN provision, for example, the creation of SEND representatives in each department, accountability on SEN for middle leaders, and collaborative planning.

> *We have worked with subject leads on the Strategy Cards that provide information for staff on the most effective strategy to support students with SEND. We now co-produce these instead of the SEND Team producing them.* (SENDCO, Intervention school, Midline survey)

> *TAs [teaching assistants] are now aligned to a subject area. They attend meetings and provide input to subject development, bring back questions/concerns and share information with the TA team.* (SENDCO, Intervention school, Midline survey)

In 2023, we asked for further examples of recent change. Responses were similar to 2022, including closer collaboration with departments on teaching and learning strategies, quality assurance, teaching assistant allocation, and distributing the leadership of SEN provision to departments through SEND champions or similar.

The sample includes SENDCOs who manage a wide variety of numbers of staff, with most respondents managing mid-size departments (Figure 16). This is similar to control schools.
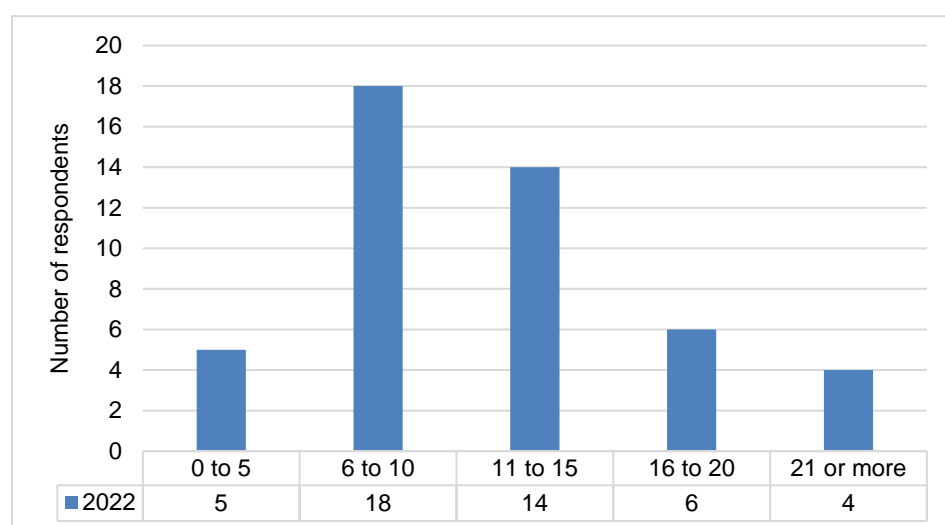

	0 to 5	6 to 10	11 to 15	16 to 20	21 or more
■ 2022	5	18	14	6	4

Figure 16: The number of learning support staff and teaching assistants managed by SENDCOs[21]

In the majority of cases, respondents indicated that learning support staff were allocated to individual pupils (n=15, 31%), compared to being responsible for group interventions (n=6, 13%) or assigned to subject departments (n=3, 6%). Many respondents (n=24, 50%) chose 'other' and explained that some staff were assigned to year groups, and in some schools, assignment was a combination of all depending on need.

In 2023, again having learning support staff allocated to individual pupils (n=4, 40%) was a more popular response than 'assigned to subject departments' (n=1, 10%) or being responsible for group interventions (n=1, 10%). Again, choosing 'other' was a popular response (n=4, 40%), and respondents explained that learning support staff were allocated to a combination of individuals and group interventions as well as attending lessons based on year groups. The figures are

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[21] Intervention schools 2022 survey: 'How many learning support staff or teaching assistants do you manage?'

broadly similar to control schools, although in 2023 the proportions of responses in control schools were more evenly spread.

In the midline and endline SENDCO surveys, we asked whether the way that teaching assistants were deployed had changed recently. At midline, 33 respondents (69%) answered 'no', with 15 (31%) respondents answering 'yes'. In 2023, seven (70%) respondents answered 'no', with three (30%) respondents answering 'yes'. A slightly lower proportion (at both data points) of intervention schools SENDCOs compared to control school SENDCOs said that the way the learning support staff or teaching assistants in their school were deployed had changed.
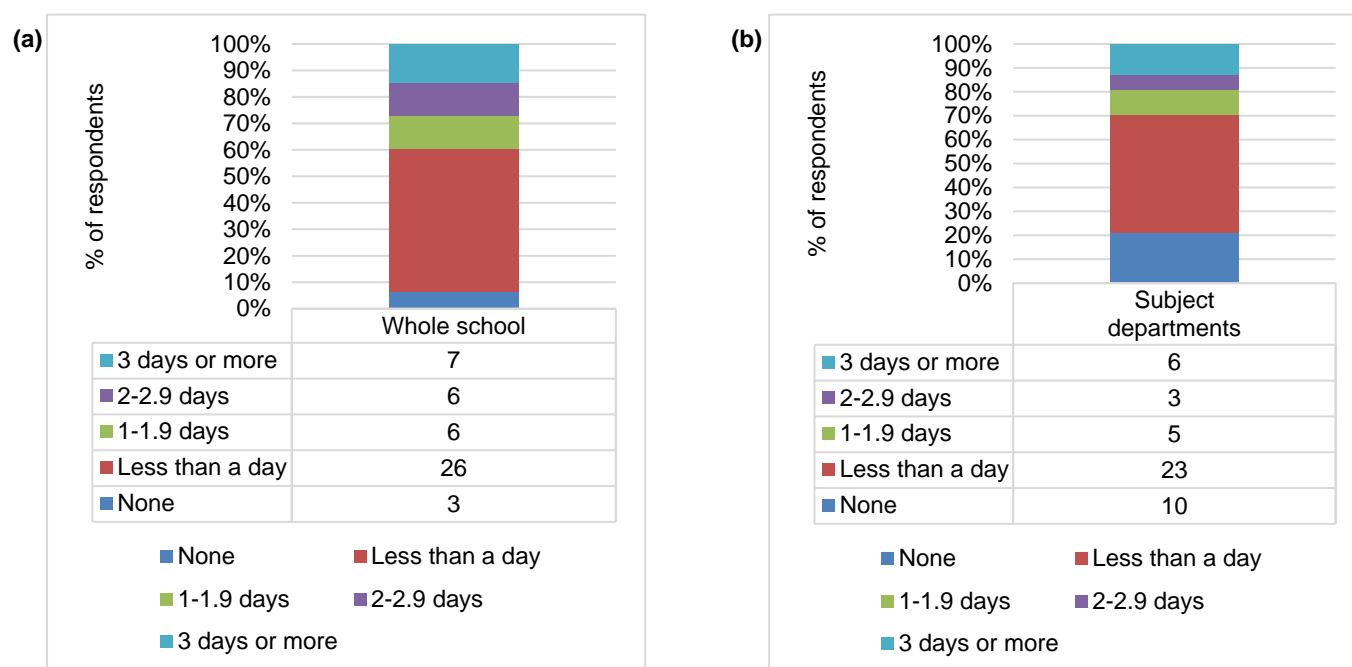
In 2022, respondents reported a change in emphasis to how teaching assistants were deployed, towards subject departments, interventions, or one-on-one support, as well as adjustments related to social distancing. In 2023, two respondents explained that teaching assistants were focused more on delivering interventions rather than being allocated to individual pupils, and one said that due to timetabling, teaching assistants were being allocated to year groups instead of subject departments.

CPD

In the school year 2021/2022, most intervention schools allocated less than one day for CPD on SEND issues for the whole school (Figure 17a). There was a decrease of 11% in schools who offered one day or more CPD on SEND issues for the whole school compared to baseline.

Similarly to baseline, around 30% of schools allocated at least one day to CPD on SEND issues for subject departments (Figure 17b). There was an increase of 10% in schools offering three days or more.

Both intervention and control schools were likely to offer less than one day of CPD on SEND issues to the whole school, however, intervention schools were more likely than control schools to offer two days or more. In terms of the CPD for subject departments, intervention schools were more likely to offer none but also more likely to offer two days or more.

(a)

	Whole school
■ 3 days or more	7
■ 2-2.9 days	6
■ 1-1.9 days	6
■ Less than a day	26
■ None	3

(b)

	Subject departments
■ 3 days or more	6
■ 2-2.9 days	3
■ 1-1.9 days	5
■ Less than a day	23
■ None	10

Figures 17: The amount of professional development time per annum allocation to SEND issues for (a) the whole school and for (b) subject departments in intervention schools in the academic year 2021/2022[22]

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[22] Intervention schools 2022 SENDCO Survey: 'How much professional development time per annum was allocated to SEND issues for the whole school [and subject departments] this academic year (2021/2022)? Please estimate and select the most appropriate answer category'.

In terms of CPD on SEND issues for staff in SEND teams, over 70% of schools allocated at least one day, with a large proportion (45%) offering three days or more. These figures were slightly reduced from baseline. While more control than intervention schools offered at least one day, intervention schools were more likely to offer three days or more.

Covid-19

We asked in the two follow-up surveys for descriptions of initiatives that had been introduced since the onset of the pandemic to support the emotional well-being and mental health of pupils. Many responses described providing training to school staff, for example, as ELSA, or employing new staff, particularly counsellors. SENDCOs also reported working with external providers to deliver SEMH support, including private, public, and charitable organisations like the mental health support teams run by the NHS and the DfE. Some responses indicated that schools were working to raise awareness of mental health needs through the curriculum, displays and assemblies as well as initiatives such as peer mentoring and other targeted interventions. A smaller number of responses referred to the creation of new spaces for supporting pupils in school.

In 2023, we asked the same question. Respondents described the provision of specialised interventions, the creation of new roles at school focused on SEMH, training for staff, and collaboration with external health services.

In 2023, we asked SENDCOs how they would characterise the ongoing impact of the lockdowns arising from Covid-19 on pupils and staff in their school. A key theme in responses was an increase in SEMH needs coupled with worsening behaviour, social communication skills, and motivation for learning. Four respondents highlighted an increase in emotionally based school avoidance, three respondents mentioned a lack of resilience among pupils as well as staff, and two respondents mentioned difficult relations between schools and parents.

Summary of key findings

- At baseline, SENDCO roles across intervention and control schools were broadly similar in terms of SENDCO seniority, qualifications, experience, and renumeration. Around 47% of intervention school SENDCOs were members of the SLT compared to 40% of the control group SENDCOs. Four out of five SENDCOs across the two arms of the trial held the NASENCO qualification.

- The situation was also broadly similar in terms of SENDCOs' engagement with SEND governors, the amount of time they had protected and how well supported they felt. Four out of five SENDCOs across the two arms of the trial said that they had spoken to or met with the SEND governor. A similar proportion said that they felt well supported while approximately half of the intervention and control school SENDCOs felt that they had enough administrative support.

- Intervention schools were more likely to provide CPD to the whole school at baseline, with 50% of intervention schools offering one day or more compared to 40% of control schools. Across both arms of the trial, around 70% of schools allocated less than one day or no time to SEND issues in subject departments' professional development activities, while around 30% allocated at least one day. Schools in both groups were more likely to have allocated at least one day to SEND issues in the SEND team's CPD programme compared to that of subject departments and the whole school. Most SENDCOs across both arms of the trial were members of professional networks for SEND, typically facilitated by the MAT or local authority. Some were also in online networks.

- In terms of SEN provision, at baseline SENDCOs in control schools reported having higher numbers of pupils requiring provision, while there was similarity in terms of the number of teachers and teaching assistants working in the SEN department. While the majority of schools had a dedicated space to support SEND provision, intervention schools were slightly less likely than control schools to do so.

- At baseline, the majority of schools in both groups reported adapting learning and pastoral support when schools reopened following Covid-19-related school closures. Notably, schools increased support for pupils with SEMH.

- During the trial, a substantial amount of development of SEND provision took place at control schools:

  o more SENDCOs became members of the SLT and they were reported having more protected time than at baseline;

  o professional network engagement continued with one SENDCO referring to a local authority peer review process;

  o SENDCOs reported increases in the numbers of pupils identified with SEND, pupils with SEMH, and absenteeism;

  o there was a development of stronger links with subject departments in 54% of schools;

  o they reported improvements in administration and data management through the acquisition of behaviour management software, which supports pupil passports and provision mapping software;

  o other changes included new interventions, increased collaboration with teaching staff, teaching assistant re-deployment, designated SEND spaces, improved parental engagement, and increased staffing levels;

  o a small proportion indicated that SEND was a school development priority and a small proportion referred to developing distributed leadership;

  o one school mentioned participating in a WSS Review regional project and three mentioned developing a whole-school approach to deliver SEND in the midline survey; and

  o almost three in five SENDCOs at control schools, in 2022, referred to participating in initiatives and programmes to develop SEND provision with three mentioning the WSS Review process.

- Control school SENDCOs who were interviewed talked in-depth about a range of developments of their SEND provision including:

  o the acquisition of behaviour management and provision mapping software (three of four);

  o engaging in a self-review (one of four) or a peer review process (three of four);

  o distributed leadership focus (all four);

  o developing inclusive teaching (three of four); and

  o increasing staffing levels (two of four).

- During the trial across both intervention and control schools there was an increase in the experience and qualifications of participating SENDCOs, and a small drop in the numbers of respondents receiving additional salary points. Compared to baseline, proportions were similar in terms of the amount of time that SENDCOs had protected for their role and how supported they felt.

- Across both intervention and control schools there were reported increases in the numbers of pupils receiving SEN support, and an increase in the number of SENDCOs meeting their school SEND governors more frequently. In contrast to control schools, intervention schools there was more of an increase from baseline in the proportion of SENDCOs who reported working with higher numbers of teachers in their team, and SENDCOs in intervention schools were more likely than those in control schools to say there had been changes to links with subject departments. However, control schools were slightly more likely to say that the deployment of teaching assistants had changed.

- There was a reduction over time in the amount of CPD provided for the whole school across both intervention and control schools. The amount provided for subject departments remained steady

except for a slight reduction in control schools. In terms of CPD for SEND teams, intervention schools reported a reduction while control schools reported an increase.

- SENDCOs in both groups reported a range of initiatives and ongoing increased pupil need following the pandemic.

Implementation of the WSS Review programme

This section addresses research question 1: How is the WSS Review programme implemented in secondary school contexts?

(a) What are the areas of focus that schools prioritise and how are these understood by stakeholders?

Based on our analysis of the SEND Action Plans from 56 schools participating in the intervention, we identified eight themes reflecting the main foci of the SEND Action Plan priorities:

- distributed leadership;

- resources;

- language (reduction in deficit language);

- SENDCO role and SLT;

- teaching and learning;

- SEND provision and support for pupils;

- assessment and identification;

- interventions;

- outcomes.

Priorities relating to distributed leadership included those relating to teachers and other school staff, parents, and the SEND governor. Some SEND Action Plans specifically referred to distributed leadership while others referred to, for example, involving more parents or supporting teachers. This theme also includes priorities that refer to staff professional development. The resources theme included data management tools (e.g. to record and communicate SEND information), staffing (including administrative support and teaching assistants), and other funding requirements. Priorities relating to teaching and learning concerned Quality First Teaching and associated activities such as adaptations to the curriculum and differentiation. SEND provision and support refers to meeting statutory needs, overall provision across the school, and adaptations/support for pupils with SEND. Assessment and identification included the SEN register, assessment of needs, provision of support, and transition. Priorities concerning interventions included introducing specific interventions, evaluating the existing provision, and provision mapping. Finally, outcomes included academic outcomes, behaviour, attendance and exclusion, and well-being.

An example of the priorities identified in one school's SEND Action Plan is provided in Table 22.

Table 22: An example of three identified SEND Action Plan priorities

Priority	SEND Action plan
1	The development of high-quality teaching for pupils with SEND: 'every teacher a teacher of SEND'
2	Ensure timely in and out of class interventions are well planned and impact is assessed leading to rapid and dependable progress particularly at Key Stage 4
3	Ensure that all stakeholders have a voice that informs and influences direction and progress

When interviewing different stakeholder groups across the case study schools, we asked questions about their understanding of their school's priorities.

At case study schools, SLTs were often the stakeholder group with the clearest overview of their schools' engagement with the WSS Review programme and of initiatives arising in response to it. This reflected their strategic roles, their greater access to information, and the opportunities afforded to them for team briefing and discussion. Their sense of ownership and engagement with the process was, for example, indicated in interviews by framing the priorities identified through the WSS Review process in terms of their own school development plans and by reference to their school values and culture.

The middle leaders that we spoke to were generally aware of the priorities on the SEND Action Plan and able to speak about them. In five schools, they were aware of the SEND Action Plan and were able to talk about their rationale. In three schools, the middle leaders were less familiar with the SEND Action Plan but could understand and explain the priorities.

Across the case study schools, the teaching assistants who were interviewed had different levels of understanding of the areas of focus that schools had been identified. At three of the nine case study schools, teaching assistants had a good awareness of their school's WSS Review priorities. Staff at these schools were able to talk about them and mentioned their involvement in the peer review process and in one case had contributed to the development of the priorities. Teaching assistants at the remaining six case study schools had limited awareness and/or had been shown the SEND Action Plan shortly before the researcher visited the school to talk to them.

In four out of the seven case study schools where we spoke to a SEND governor, the priorities were well understood and agreed with by the SEND governor, who was able to explain the meaning of the priorities and their importance. Of the three remaining schools, in one school the SEND governor had seen the SEND Action Plan and had some awareness of the priorities, and in the other two schools the SEND governor had little knowledge of the WSS Review programme and had not seen the SEND Action Plan.

(b) What initiatives and/or actions are taken by stakeholders in response to the WSS Review programme?

Unsurprisingly, the range of initiatives and actions taken by stakeholders reflects the themes arising from the SEND Action Plan priorities. Schools faced a number of contextual challenges when implementing their plans. For example, two middle leaders and teaching assistants at four schools mentioned an overwhelming level of demand for SEND provision and the gaps in learning that were a result of school closures associated with Covid-19. In combination with staffing turnover and capacity issues this meant that staff had to manage competing demands and perceived that they had insufficient time to fulfil their roles. However, stakeholders from across the case study schools described a number of developments that had taken place.

Distributed leadership

Middle leaders in case study schools commonly referred to the distributed leadership of SEND. This included at three schools implementing adaptive teaching and Quality First Teaching strategies themselves or for their departments. Middle leaders at four schools described ways in which schools were clearly communicating pupil needs and teaching strategies to staff. In one school, the middle leader had led their department in auditing SEND provision using a template provided by the SENDCO, which had led to changes in aspects of teaching practice. In another school, heads of department were increasingly involved in the quality assurance of SEN department lessons through lesson visits and book checks. Middle leaders in one school described working more closely with the SENDCO, joining up their efforts around particular pupils.

Teaching assistants' views of this varied across case study schools. Staff at six of the nine schools specifically highlighted aspects such as 'whole-school responsibility for SEND', a big focus on Quality Teaching First, and supporting teachers to develop appropriate strategies for high-quality teaching. Teaching assistants from two schools mentioned learning briefings for the whole school. At one of these schools, SEND information and resources were also provided in the staff room.

Changes to *the roles of teaching assistants* also reflected the shift to distributed leadership of SEND. Deployment of teaching assistants was mentioned at most schools but varied with some deployed by year group, some by subject area, some one-on-one, and others referring to the 'Helicopter' approach rather than the 'Velcro' approach.

Middle leaders in three schools talked about making changes to how teaching assistants were deployed in their classroom. This referred to teaching assistants taking more active involvement in classroom teaching, teachers becoming increasingly responsible for the deployment of teaching assistants in their classrooms, and middle leaders having teaching assistants on their quality assurance cycles. It contributes to the objective of making SEN provision the responsibility of all staff. One middle leader said that in practice this change had been difficult due to power imbalances in the classroom, and another said that guidance on deployment was not particularly different to the past.

Many teaching assistants (from six of nine case study schools) perceived that their role had changed and that they had greater levels of responsibility, feeling that teachers viewed them in a different way. They described circumstances in which communication between teachers and teaching assistants increased as well as attendance at year group or department meetings at which SEND was often on the agenda. Most of them spoke about changes to their deployment although these varied depending on previous practices. Overall, teaching assistants felt that they spent less time supporting an individual pupil (often described as the 'Velcro' approach) and more time offering support to any pupils in the classroom (referred to as the 'Helicopter' approach).

In one school, the SEND governor was aware of the SENDCO clarifying to staff the role of teaching assistants, for example, through CPD.

In relation to *professional development*, stakeholders described their different experiences.

Middle leaders at four schools had received or helped to deliver relevant CPD, for example, on adaptive teaching and strategies for supporting pupils with autism spectrum disorder (ASD).

Professional development opportunities for teaching assistants varied across the case study schools. At one school for example, the teaching assistants talked about weekly, whole-school professional development but felt that it was not relevant for them. However, in many other schools teaching assistants felt that there were more (and relevant) opportunities for them to engage in professional development. Whole-school learning briefings were offered at two of the case study schools. In contrast, teaching assistants at two schools felt that professional development opportunities were lacking.

Stakeholders at many case study schools referred to initiatives to develop *parental engagement*.

A middle leader in one school was working with the SENDCO on parental engagement, making information available to parents on the support available.

Teaching assistants at two of the case study schools reported a variety of initiatives that increased parental engagement. At one school, a SEN support email for parents to contact the school more easily had been introduced as well as a 'Parent Cafe'. In addition, parents were involved in pupil reviews and consulted on future plans for improving SEND provision. At another school, it was noted that communications to parents of pupils with SEND had developed.

In one school, the SEND governor talked extensively about work to improve parent engagement and peer support structures for parents, for example, setting up a parent forum and drop-in sessions with the SENDCO.

Resources

Stakeholders described improved *data management* to support SEND provision. In two schools, middle leaders described work to make pupils' learning targets and teaching strategies easier for staff to access. For example, a head of department explained that a new online management information system had been introduced enabling SEND information to be recorded, shared, and reviewed.

Teaching assistants at seven schools also talked about similar experiences in relation to data management (often shifting from paper to online systems). They perceived that they now had greater responsibility for maintaining this documentation (e.g. pupil support plans) as well as easier access. In two schools, it was noted that as a result of the changes, more pupil reviews were taking place. Similarly, identification of pupil needs was perceived to have improved at two schools.

In one school, the SEND governor had been involved in work to improve the format of personal plans to make them more useful in the classroom.

In relation to *staffing*, one school had bought in a specialist speech and language therapist two days a week who primarily undertook pupil assessments and provided professional development for staff, as well as promoting other SEND initiatives to staff such as SEN boxes in the classrooms.

In one school, teaching assistants perceived support staffing levels had increased.

In relation to other resourcing to support SEND provision, teaching assistants at one school felt that resources to support SEND pupils had increased (e.g. an online mathematics package). In another school, the SEND space had been rebranded to appeal to full age range.

Language

Middle leaders at one school had recently received guidance on positive language in pupils' annual reviews from the SENDCO and would be putting it into practice.

In one school, the SEND governor talked about a SEND Action Plan priority on developing a shared and constructive language and how the SENDCO had distributed concrete guidance on this.

SENDCO role and SLT

One of the delivery team noted that SENDCOs were resistant to start with and felt that some of the ideas presented were not relevant for their own contexts. However, over the course of the process the SENDCOs were perceived to develop their understanding of the importance of identifying opportunities for school improvement in SEND provision. SENDCOs were perceived by one of the delivery team to have '*gained agility in the way they thought about their role*' (delivery team interview).

Teaching and learning

At one school the SENDCO led a whole-school review of teaching and learning, with the support of the SLT. This involved lesson observations and fed into the planning process for CPD opportunities for teachers. At another school, senior leaders described how they collaborated with the SENDCO to develop plans for the annual programme of staff CPD based on an analysis of areas of need identified for pupils with SEND who were in transition from primary school.

Interestingly, at one school, a teaching assistant commented that lessons had become more intense as teachers were able to cover more material with support structures in place for the pupils with SEND who needed it.

At three schools, teaching assistants commented that some teachers were not engaging fully with the processes in place to support inclusive teaching (e.g. documentation on pupils' needs) and therefore, some pupils' needs were not being met in their view.

SEND support for pupils

At one school, support for pupils with SEND was enhanced through a targeted programme of parental engagement, involving a parent/carer survey and a programme of workshops and events. The SENDCO described how fostering a culture of community involvement became a significant component of the schools' strategy for developing more inclusive practices.

Assessment and identification

At one school, the SENDCO described how a focus on assessment and identification involved a streamlining of data systems, bringing together SEND information alongside other pupil data. This process involved reviewing staffing and roles, for example, identifying a SEND team across subject departments and enabling all staff to access single-page pupil profiles.

Middle leaders in three schools described work around referrals. In two schools, for example, there was an improved process for reporting concerns to the SEN department. In another, middle leaders were now responsible for monitoring referrals from teachers and assessing these before deciding whether to escalate them to the SEN department.

In another school, the SEND governor described how the school had formalised identification procedures, in particular in terms of clarifying the categories of need that the pupils were allocated to.

Interventions

Middle leaders in three schools had been involved in work around interventions. As part of a priority to ensure the cost effectiveness of interventions, one middle leader had been involved in close negotiations with the SENDCO on how to use funding. In two schools, middle leaders were now involved in reviewing pupil progress for the SEN department after an intervention had been delivered.

Teaching assistants at three of the case study schools talked about the number of interventions being offered increasing. They highlighted that short interventions that could be delivered without impacting on other lessons (e.g. during tutor time) were the most cost-effective. In another of these schools, the teaching assistants described how interventions had become more targeted because more thought had been given to them. Interestingly, at one school teaching assistants perceived that pupils were being withdrawn more from lessons to do interventions for mathematics and English than they had been previously.

Outcomes

At one school, a focus on outcomes for pupils identified with SEND involved using the school's data systems to establish a regular practice of reviewing progress for pupils with SEND within each department.

Summary

In summary, a range of initiatives was identified by schools arising from their SEND Action Plans. These were not always focused solely on pupils identified with particular categories of SEND but often reflected a broader approach to developing more inclusive practices. Given that the implementation of initiatives arising from the review took place in the context of a period of Covid-19 recovery, this shows how the WSS Review programme can be responsive to circumstances and school characteristics.

(c) What levels of support do SENDCOs require and from whom?

SENDCOs are clearly central to the implementation and success of the WSS Review programme. In the case study schools, SENDCOs tended to see the WSS Review programme as key to developing their role strategically. The WSS Review programme strengthened their capacity to invest in strategic developmental work, rather than being fully absorbed with 'fire-fighting' tasks responding to pupils and staff in relation to SEND needs on an individual basis. In some cases, this approach yielded tangible benefits in how their role was configured. For example, in one school the SENDCO was promoted to lead SENDCO for a MAT; in another, they joined the SLT.

The trial offered an additional level of external support in the form of regional development and networking days and individual consultancy meetings facilitated by consultants with nationally recognised expertise. This support was highly regarded by SENDCOs and seen as a strength of the process, as noted below.

However, the key support required by SENDCOs was from their headteachers. The endorsement of headteachers for the engagement of schools with the WSS Review programme was critical to supporting SENDCOs, by demonstrating how the process was aligned with school priorities and in enabling the engagement of senior colleagues. At a strategic level a key support provided to SENDCOs through the WSS Review programme itself was strengthening the positioning of SEND issues as central to school improvement, rather than the sole responsibility of the SENDCO and their team.

Where SENDCOs were members of the SLT this was most effective; and in one case a SENDCO attributed their appointment to the SLT to their involvement in the WSS Review programme. Where SENDCOs could demonstrate a close alignment of their SEND Action Plan with school development plans and with the priorities of the SLT, they felt that resourcing requirements were more likely to be addressed. For example, SENDCOs described how they were able to appoint more assistants; or to draw on teachers as representatives from subject departments in addressing outcomes for pupils with SEND. In one case study school, the SEND governor talked about the lack of administrative support for the SENDCO and how the amount of administration impacted on the time that they had to do in-person work in the school.

(d) What are the strengths and challenges of the WSS Review programme, for example, pairing, networking, training?

This question has been addressed through considering responses to SENDCO surveys and stakeholder interviews from case studies. We first present survey response relating specifically to resources and networking opportunities, and second, we present perceptions of the strengths and challenges identified from both SENDCO surveys and stakeholder interviews.

Resources: Reading materials

Reading materials were discussed and shared throughout the WSS Review programme. The facilitators set-up a Padlet as a repository for the resources that they shared through the training day, engagement days, and other online group meetings. The intention was to create a 'one-stop shop' and make it easier for the SENDCOs to locate and access key documents. A large majority of survey respondents had accessed the resources through Padlet (n=39, 74%) versus other means (n=10, 19%), and very few had not accessed at all (n=4, 8%). Figure 18 describes the range of uses to which these resources were put by SENDCOs and suggests that integrating them into CPD practices at school and sharing them with senior leadership and teaching assisstants were particularly popular uses.
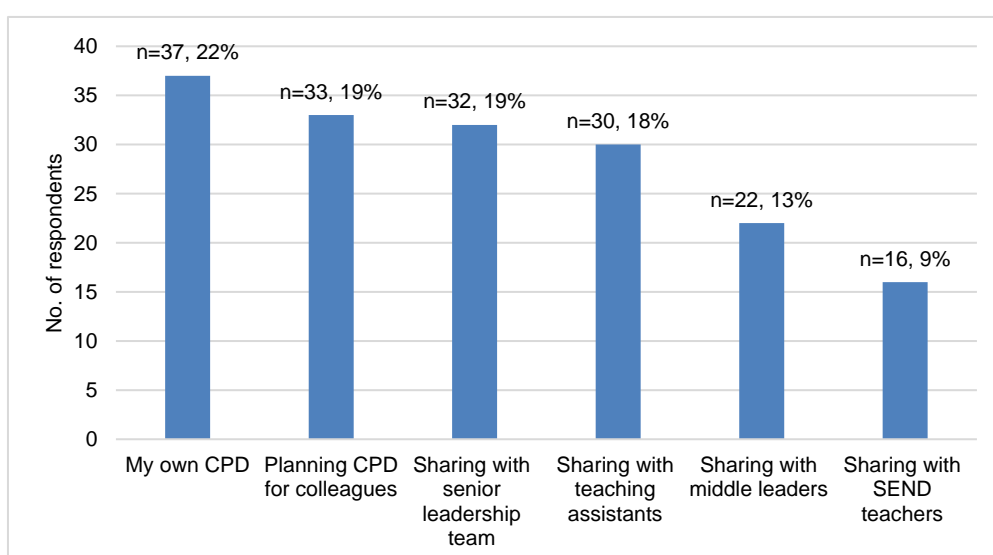

Figure 18: How SENDCOs used the reading materials shared through the WSS Review programme[23]

Networking

We asked SENDCOs in the 2022 survey whether they had had any further communication with peers that they had met through the WSS Review. Nearly half of those that responded to this question told us that they had had further communication with their partner school (n=24, 46%). A smaller proportion had had contact with other schools in the region taking part in the WSS Review (n=9, 17%), and just over a third had had neither (n=19, 37%). The level of engagement dropped only slightly when SENDCOs were asked whether they continued to communicate with their partner school (n=21, 42%) or other schools in the region taking part in the WSS Review (n=7, 14%), with nearly half choosing neither (n=22, 44%).

Those that did stay in touch said that the contact was mainly electronic, through email, phone, text, or social media, and in a smaller number of cases in-person. SENDCOs found the relationships useful for sharing best practice and resources, supporting with challenges and discussing next steps in the development of SEN provision in their setting.

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[23] Intervention schools 2022 SENDCO Survey: 'How have you used these resources? Please click all relevant options'.

The SENDCO and I from my partner school have kept in regular contact and held meetings to discuss progress or brainstorm for solutions when faced with difficulties. (SENDCO, Intervention school, Midline survey)

The occasional email to check in. From the review though it has been clear the need for greater collaborative work so I have worked to develop stronger SEND networks within our trust. This is a great foundation for broadening out the networks further in the future. (SENDCO, Intervention school, Midline survey)

In the 2023 survey, we followed up on this to find out whether SENDCOs had longer term contact with colleagues that they had met during the process. Out of the ten responses, five said that they were still in touch with their partner school, two with other schools in the region taking part in the WSS Review, and three selected neither option. The contact was a mix of email and in-person, including socially, to collaborate, for example, on staff training, and for support and advice.

Strengths from delivery team perspectives

The four members of the delivery team highlighted a range of perceived strengths of the implementation of the WSS Review programme in this trial. The WSS Review process itself was highlighted as a strength. Two of the delivery team noted that the pairing process supported collaborative partnerships and that the peer review process was very valuable. Pairing schools from different local authorities can be beneficial because the SENDCOs can learn about different approaches to supporting SEND. Training and support provided over a period of time is more effective than a one-off session (as is typically experienced by schools undertaking the WSS Review process). The WSS Review process can lead to whole-school change and ensure that staff think differently about pupils with SEND. Two members of the delivery team noted that involving the headteacher or a senior leader in the process can support buy-in and engagement. Developing shared responsibility for SEND across a school can mean that a SENDCO does not feel so isolated. The initial one-on-one online coaching session was perceived to be more effective than a school support visit because they were much more focused, enabling the WSS Review project directors to provide constructive and strategic feedback. In addition, they were easier to arrange with fewer logistical challenges. Overall, the one-on-one coaching was perceived to be a very valuable part of the process. The small adaptations such as adding a 'key stakeholders' column to the self-evaluation form were also perceived to be strengths, supporting the SENDCO to consider how to shift to a whole-school shared responsibility for SEND.

Strengths from SENDCOs' perspectives

For SENDCOs who responded to the 2022 survey, a core strength of the WSS Review programme was the opportunities that it offered to engage with other SENDCOs. Discussing ideas, sharing resources, and building a support network were all mentioned. There was also a sense that SENDCOs valued time shared with others in the same professional position.

Working with colleagues who have a unique role in schools. The chance to share ideas and the stresses and responsibilities that come with the role. (SENDCO, Intervention school, Midline survey)

Many survey respondents valued the opportunities for reflection engendered by the process, particularly through the self-review and peer review.

Being able to strategically think and plan how SEND is embedded across the school. (SENDCO, Intervention school, Midline survey)

Gaining a really in-depth understanding of the strengths and development points for our school in regard to SEND. (SENDCO, Intervention school, Midline survey)

Many survey respondents described their learning from the process, in terms of research and theory in SEN provision, as a particular strength. The expertise of the WSS Review project directors, provided through the training sessions as well as the coaching, was highly valued.

It has been intellectually stimulating as it was structured and delivered in a very intelligent way. I loved all the sessions—every single one. Gave me time to think and reflect and learn from others. Loved the way that [the WSS Review project directors] approached the whole trial: I have NEVER EVER had

such interesting insight into research and practice of SEND. (SENDCO, Intervention school, Midline survey)

Some survey respondents said that they appreciated the structured nature of the review process that gave focus to improvement activities, with a clear timeline.

Other survey respondents felt that the WSS Review programme had empowered them and raised the profile of SEND provision in their school.

Raise SEND on the whole-school agenda and lead to audit and strategic planning for SEND improvement. (SENDCO, Intervention school, Midline survey)

It has given me the confidence to ask for more support and for distributing work to form teachers/CL [curriculum leader]/HoY [head of year], etc. SEND is a whole-school issue and I think it has made me stronger in bringing this message home to colleagues. (SENDCO, Intervention school, Midline survey)

All the SENDCOs in the case study schools found the external support offered by the WSS Review programme to be a strength of the process. The regional networking days were highly regarded for building their confidence and creating a sense of momentum and shared endeavour. Access to expert consultancy was important in encouraging SENDCOs to engage more effectively with middle leaders in particular.

The case study SENDCOs consistently described the peer review experience within the WSS Review process as a key strength and often maintained a degree of relationship with their partner school on an ongoing basis beyond the requirements of the trial. The opportunity to visit another school and to receive external feedback from a colleague was identified as a source of valuable support and professional development. In one case, the SENDCO felt that practice in the paired (non-case study) school was less well developed but still found the peer review process to be beneficial.

Strengths from senior leaders' perspectives

Several headteachers used engagement with the WSS Review programme to underline the importance of embedding a commitment to developing more inclusive practices within the culture of their school. In one case study school, the process enabled a headteacher to draw the SENDCO into their SLT.

The WSS Review programme gave SLTs a clear framework to align initiatives for developing more inclusive practices across a range of domains, with strategic plans and operational priorities. In several case study schools, senior leaders were able to confidently articulate a shared vision for developing more inclusive practices in relation to their particular areas of leadership responsibility. This was seen as important in building the capacity of schools to respond more effectively to increasing pupil needs for support on returning to school post-lockdown, for example.

Strengths from SEND governors' perspectives

SEND governors in three schools believed that the WSS Review programme had given SENDCOs confidence in their leadership through the combination of evidence, expert guidance, and peer support. Two SEND governors believed that the process put SEN provision high on the whole-school agenda, rather than isolating it to the SEN department. Two SEND governors believed that it usefully brought fresh ideas and a broader perspective to settings. One SEND governor believed that the process provided the tools to create deep changes through planning, prioritising, and reviewing SEN provision.

Strengths from middle leaders' perspectives

Three middle leaders felt that the process, particularly the creation of the SEND Action Plan, supported SENDCOs to prioritise and plan effectively. One middle leader said that the process helpfully funnels a relatively small amount of highly relevant guidance to the SENDCO. One middle leader said that it usefully enabled engagement with other settings and consultants to give the school external perspectives on SEN provision. One middle leader said that the WSS Review programme had raised particular issues around SEN provision on the school's agenda, given them 'more clout', and enabled them to address the issues more quickly than would have been the case.

As the teaching assistants and other support staff had not been party to the WSS Review programme they were largely unable to comment on the strengths and challenges of it. One inclusion manager recognised that it could be helpful to visit another school (the peer review process) but noted that ideas are not always transferable.

Challenges from delivery team perspectives

The delivery team outlined a number of challenges to be aware of if replicating the process that was followed in the trial. There needs to be sufficient time for the self-evaluation to be conducted in order to consult all stakeholders fully and ensure that all relevant information is made available for the peer reviewer. The compressed timeline in this project (as a result of Covid-19) made delivery challenging and in particular affected the feasibility of undertaking the second support visit in the second half of Summer Term 2022. It was deemed not possible to accommodate face-to-face visits to all 68 schools remaining in the trial. In order to be equitable, the delivery team changed this aspect of the process to an online one-on-one coaching session. One relatively small challenge of switching to online coaching and not undertaking school visits in-person was that the facilitators did not have an opportunity to get other perspectives on local contexts or to observe potential issues through touring the school. Unsurprisingly, managing delivery in the aftermath of the pandemic was considered to be challenging.

Challenges from SENDCOs' perspectives

The main challenge reported by SENDCOs who responded to the 2022 survey was time. In particular, this was time to attend meetings during the school day, to complete the paperwork required by the process, to follow-up effectively from meetings and workshops, and to maintain momentum with the project throughout the school year. The explanation given was most often related to existing workloads.

A small number of survey responses referred to buy-in from staff. One SENDCO said that they found it challenging to persuade their school's SLT to fully engage with the process and two SENDCOs said that it was a challenge to drive whole-school change without the active involvement of SLT and wider school staff.

Some respondents referred to aspects of school context that created challenges for achieving whole-school change in practice. This included transitioning to an academy, the level of provision in local authority, and a change in SENDCO during the project. Some comments also referred to the context of Covid-19 and its implications in terms of staff absence and level of pupil need, creating challenges for both completing project activities and implementing the SEND Action Plan. A small number of respondents also noted that in-person coaching had not been available due to Covid-19 and would have been valued.

It is possible that those schools that agreed to become case study schools were in some respects better placed to engage not only with the evaluation activities but with the WSS Review programme in terms of the level of headteacher and senior leadership commitment and support. They did not identify this as a challenge. However, SENDCOs in case study schools, unsurprisingly, identified other similar challenges to those identified through the survey responses. These SENDCOs also referred to the challenges of prioritising the time needed to attend networking and engagement events. In some schools, SENDCOs experienced difficulties initially in generating momentum in drawing in middle leaders across subject departments. In most case study schools, a major challenge was posed by responding to greatly increased levels of need for pupil support, following the return to school after the Covid-19 lockdowns.

Challenges from SEND governors' perspectives

One SEND governor identified a challenge in the process in terms of the SENDCO allocating time to the project and justifying that to school. A second challenge that they named was SENDCOs thinking critically about best practice and whether it would apply to their setting or not, rather than adopting ideas uncritically.

(e) How do different stakeholder groups (e.g. pupils, teachers, governors) experience the WSS Review programme and how does it impact on them?

Impacts on SENDCOs

We asked SENDCOs in the 2022 survey about the main impacts of the WSS Review programme in their school. Many survey respondents told us that the WSS Review programme had had an impact on them as SENDCO. This included increased knowledge relevant to SEND provision and increased confidence in driving change.

Many SENDCOs who responded to the survey also said that the WSS Review programme had had an impact on their leadership of the strategic delivery of SEND provision. They said that the process had supported them to reflect on, plan and prioritise SEND provision in their school, and that the profile of SEND provision in the school had been raised and its intent sharpened. In three case study schools, middle leaders also said that the project had raised the profile of SEN provision in their school, opening spaces for discussion, bringing aspects of SEN processes into whole-school practice, and creating impetus for change. Teaching assistants at one case study school also echoed the opinion that the profile of SEND provision had been raised. SENDCOs also felt that their relationships with the SLT had strengthened and collaboration with middle leadership had increased.

In 2023, we asked again about overall impacts in school. Answers were very similar to the above with the addition of the SENDCO feeling better supported by colleagues. Two schools mentioned positive feedback from Ofsted.

In the midline survey (2022), we asked SENDCOs in intervention schools whether they were a member of their school's SLT. Around 57% (n=26) answered 'yes' and 43% (n=20) answered 'no'. This represents a 10% rise in positive responses compared to intervention schools at baseline. In the endline survey in 2023, seven (70%) answered 'yes' and three (30%) answered 'no', although the representativeness of these figures is minimal due to the low response rate. Overall, then there was a positive trajectory in SENDCOs in intervention schools becoming members of their school's SLT across the time of the trial while for control schools the levels fluctuated with only a small increase overall.[24]

Out of those that told us that they were a member of their school's SLT, 22 (85%) said that their role on it was specifically related to their SENDCO role. This is an increase from baseline, when 76% of SENDCOs in intervention schools responded positively to this question. In 2023, six (86%) answered that their membership of the SLT was specifically related to their SENDCO role. This continued increase in SENDCOs whose role on their school's SLT was specifically related to their SENDCO role was also seen in control schools.

With regard to *SENDCO relationships with the SLT*, when asked whether they were working more closely with them since the introduction of the WSS Review programme at midline, 31 SENDCOs (65%) said 'yes' and 17 SENDCOs (35%) said 'no'. At endline in 2023, three SENDCOs (30%) said 'yes' and seven SENDCOs (70%) said 'no'. SENDCOs gave examples of how they were working more closely with the SLT, including for example, being involved in teaching and learning strategies, quality assurance mechanisms (e.g. Learning Walks), and CPD planning. Many respondents said that they were now joining SLT meetings either more regularly or as a full member. A smaller group said that their role was now part of the SLT.

> *There is a more joined-up approach strategically, particularly between curriculum leadership and SEN.* (SENDCO, Intervention school, Midline survey)

> *Tighter aligning of the T&L [teaching and learning] priorities alongside the SEND Review. We were sort of moving in this direction anyway as well using incremental coaching as the vehicle for this but the WSS Review process has accelerated that alignment.* (SENDCO, Intervention school, Midline survey)

In 2023, one respondent reported that they were now on the SLT, one explained that they had worked closely with SLT on the WSS Review programme, and one said that they were now working more closely on a teaching and learning strategy.

Impacts on senior leaders

Senior leaders focused primarily on their particular areas of responsibility, and how these aligned with overall school priorities. At the same time, participating in the WSS Review programme enabled them to demonstrate how they were contributing to developing more inclusive practices at a strategic level. For example, in one school, members of the SLT articulated clearly how they were able to lead on embedding more inclusive pedagogy within their teaching and learning strategy; and on prioritising inclusive practice within the school CPD programme.

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[24] At baseline, 40% (n=28) of SENDCOs in control schools said that they were a member of their school's SLT, at midline it was 51% (n=21) and at endline it was 47% (n=9).

Impacts on middle leaders and teachers: Distributed leadership

We asked SENDCOs whether the leadership of provision for pupils with SEND had become more distributed across their school since the introduction of the WSS Review programme. In 2022, 35 respondents (73%) answered 'yes' and 13 respondents (27%) answered 'no'. In 2023, six respondents (60%) said 'no' and four respondents (40%) said 'yes'.

Respondents gave a range of examples of the distributed leadership of SEND provision in their school. In many cases, this was in terms of increased responsibility for teaching staff to take an active role in SEN provision. Some survey participants felt that the awareness of and commitment to adaptive teaching had been raised among teaching staff. SENDCOs also perceived that accountability for middle leaders in the leadership of SEN provision including planning and quality assurance had increased.

> *Introduction of SEND Teacher Records so that teaching staff outline how they meet need and this is QA'd [Quality Assured] by department heads and senior leaders.* (SENDCO, Intervention school, Midline survey)

> *Heads of Departments taking a greater focus through their self-evaluation on SEND and ensuring that all curriculum planning has [pupils with SEND] at the centre of it.* (SENDCO, Intervention school, Midline survey)

Many of the responses related to the senior leadership of schools, with respondents reporting increased roles in quality assurance of SEN provision, CPD, and general awareness of SEN provision as a shared responsibility. Other responses pointed to a more general acceptance of responsibility for SEN provision across schools.

> *There is much more of a recognition of how SEND is everyone's responsibility, so for example the T&L [teaching and learning] SLT Lead will deliver CPD that always incorporates elements of SEND CPD—it is no longer just the remit of the SEND team.* (SENDCO, Intervention school, Midline survey)

In 2023, we asked how the leadership of SEND provision had become further distributed over the previous year. Respondents described changes to the responsibilities of middle leaders to include the leadership of aspects of SEN provision and the more active involvement of teachers in delivering and administrating provision.

Middle leaders provided their perspectives on the impacts of the project on themselves and teachers in their schools. In three case study schools, middle leaders felt that changes to assessment and referral process had made the process more straightforward and clear, meaning support was being established at an earlier stage, and in one case had made teaching staff consider referrals more carefully and attempt to address in the classroom rather than immediately delegating to the SEN department. In one of these three schools, a middle leader commented that as a result of the project work, there was an increased emphasis in school on Quality First Teaching and whole-school responsibility for SEN provision. In a further school, the work had led to teachers having more awareness of available strategies, reflection on their own practice, and have been able to adjust their practice where necessary. For the middle leaders themselves in this school, the project gave them the opportunity to reflect on their provision and has scaffolded more detailed discussions than would otherwise have happened. In another case study school, CPD on adaptive teaching was regarded as useful for all pupils and had influenced teaching and learning across the department.

Teaching assistants also commented on the impact of the project on their teaching colleagues. A teaching assistant at one school noted that there were hints of distributed leadership of SEND but that it was still early days. Whole-school responsibility for SEND was also highlighted in three further schools with staff across the school developing a better understanding and taking more responsibility for pupils with SEND. The development of stronger relationships with other staff (e.g. behavioural team, pastoral team) was also noted. Teaching assistants at one school felt that teachers had become more confident about making referrals. A shift towards more positive language was noted in a different school but the teaching assistants were still modelling this for teachers so it was considered to be work in progress.

In seven schools, it was perceived that there was a greater emphasis on universal teaching than there had been previously and that inclusive teaching had improved. Teaching assistants at three of these schools felt that teachers were more aware of pupils' needs through the data management systems employed, which were perceived to provide information on issues and strategies more easily and concisely. It was specifically noted in two of these schools that inclusive teaching was more organised, with more routines and practices to support it established ensuring that provision

was more inclusive. In another of these schools, 'SEN boxes' had been placed in classrooms to support teachers. In another school, teaching assistants said that many lessons that they support now proceed at a faster pace than they had done previously although this brought challenges with it due to the amount of material covered.

Impacts on teaching assistants

In one school, the middle leaders reported that teaching assistants had recently been more proactive in terms of requesting information about lesson plans and resources, pupil assessments, and so were more involved in teaching, and they also reported better working relationships with teaching assistants.

Teaching assistants at all nine case study schools talked about how their role had changed and that they had been given more responsibility. At seven of these schools, teaching assistants said that their relationship with teachers had become more collaborative with teachers seeking advice from teaching assistants and respecting their opinions and actions. At one school, a teaching assistant noted that there had been an increase in interventions (although this was partly attributed to Covid-19), which they felt was more rewarding than classroom support where their contributions are less noticeable. The 'Helicopter' approach rather than the 'Velcro' approach means that teaching assistants can support more pupils in the classroom. Teaching assistants at one school who had shifted to being in a department rather than a year group (covering many different curricula areas) felt more confident. Teaching assistants at three schools felt that they had developed a better understanding of inclusive pedagogies as a result of changes in the school and professional development opportunities that were offered. In one of these schools, they also said that they now feel part of a team whereas they had not done previously. They also noted in two schools that they had more direct contact with parents than they had done previously.

Impacts on pupils

Some survey respondents commented on the impact on pupils, including raising the profile and level of support and quality of education for pupils with SEND.

Middle leaders, in four case study schools, felt that changes in documentation and processes led to changes in how information about pupils was collected and shared had led to a better understanding of pupils and better tailored support as well as more transparency around the purpose of staff input. In two of the other case study schools, middle leaders reported that work on the SEND Action Plan had led to pupils having increased focus in the classroom, quality and consistency of pupils' work, and confidence in attempting work. In another, changes made through the SEND Action Plan were believed to have led to a reduction in the number of pupils with SEND being removed from classrooms for behavioural reasons.

Teaching assistants at three schools felt that more pupils had been recognised as having needs than before. At five schools, it was reported that pupils with SEND did not feel that they had been singled out as much as they did previously. At one school, pupils were consulted half-termly and asked to comment on what was working and what was not in relation to SEND support, thus becoming stakeholders rather than recipients. Pupils had greater agency, a stronger voice, and were developing greater trust in adults at two schools. As a result, they were becoming more confident and developing greater independence. Teaching assistants at one school said that some pupils were making more progress than they had done in the past. At four schools, it was noted that pupils were not withdrawn from classes as much as they had been previously. At one school, pupils with SEND had more opportunities to experience success and were perceived to have better relationships with their teachers. It was noted that pupils at this school whose needs had not yet been identified were likely to benefit from universal teaching approaches. Pupils with SEND at this school were also using designated spaces more often and taking ownership of them.

We asked parents about whether the support that their child had been offered at their school in the last two years had improved or worsened. Around 45% (n=37) said that it had improved, 16% (n=13) said that it had got worse, and 38% (n=31) said that it had stayed the same. In terms of communications from their child's school about their needs over the previous two years, 37% (n=30) said that communications had improved, 20% (n=16) said that they had got worse, and 43% (n=35) said that they had stayed the same. When asked whether their child's attitude to school had changed over the last two years, 61% (n=50) said 'yes' and 37% (n=30) said 'no'. Of those that said it had changed, 30% (n=25) said

that it had improved, 27% (n=22) said that it had got worse, and 4% (n=3) said that it had stayed the same. Overall, on all three of these points, the majority of parents believed that they had either improved or stayed the same.

Impacts on parents

In the endline survey, when asked about the overall impacts in schools two of the ten SENDCOs who responded mentioned that parents' awareness of school support for pupils with SEND had increased.

Teaching assistants at two case study schools perceived that there had been more contact with parents and that the passport was a more accessible means of communication, strengthening parental voice.

We asked parents whether they had noticed any changes in the SEN support offered by their child's school in the preceding two academic years (2021/2022 and 2022/2023). Around 23% (n=19) said that they had noticed changes in the SEND support and communication in 2021/2022, with most comments referring to pupils being provided with bespoke support. When asked about 2022/2023, there was an increase to 43% answering that they had noticed a change. This perhaps suggests that changes were becoming more embedded. Comments explained that schools had made proactive communications, were responsive to family concerns, and flexible in their provision.

> *Increased communication from senior management and learning support staff.* (Parent, Intervention case study school, Survey)

> *My son's needs changed and I was offered a variety of options to help him.* (Parent, Intervention case study school, Survey)

Parents were invited in the survey to give further comments about the SEND support and communications offered by their child's school. A significant minority (n=15) were positive. Positive comments related both to effective communication and openness to collaboration with families as well as excellent academic and pastoral support of pupils. However, the majority of comments (n=40) were negative, some strongly so. Negative comments were given in relation to a number of issues. Parents commented extensively on delayed communication or a lack of communication from schools, including a lack of responses to parental communication. They named inadequate academic support in terms of teaching and learning not being tailored to their children and a lack of teacher understanding of SEN provision. The inconsistency of support was an issue, with plans not being updated or not being actioned. Parents described delays in schools taking action, not recognising pupils' needs, or responding to parents' concerns or suggestions. They talked about SEN departments being underfunded and not having the capacity to fulfil their roles effectively. A small number of comments expressly disagreed with the school's approach to SEN provision, in two cases calling it 'outdated'. They identified an outcome of these issues in terms of perceiving that their children had made insufficient educational progress. In general, parents' comments reflected feelings of frustration, both in terms of trying to communicate and collaborate with schools and in terms of the standard of education given to their children. We should caution here that response rates to parental surveys were low and that there is likely to be a bias towards parents who are unhappy with the SEND provision at their school.

(f) What factors contribute to the WSS Review programme being effective (or not)?

The WSS Review programme was most effective where there was a clear sense of *engagement and ownership* of the process, not only from the SENDCO and headteacher, but across a wider layer of senior and middle school leaders. This was evidenced for example, in the clarity and consistency of understanding of initiatives taken in response to the WSS Review programme and how they aligned with school priorities. For example, in one case study school, the SENDCO and senior leaders were able to articulate a process of embedding inclusive practice across the curriculum in terms of developing more inclusive pedagogy for all pupils, not only those with identified SEN. Another SENDCO described how their school introduced 'Quality First Teaching Boxes' into all classrooms, to encourage teachers to adopt more responsive approaches to any pupils experiencing difficulties in learning, through access to materials supporting a range of adaptive learning activities.

It is important to note that the implementation of the WSS Review programme coincided to a degree with the recovery of pupils and schools from the effects of the national lockdowns in response to Covid-19. In this context, the support needs of pupils were changing and in many cases schools were responding rapidly. For example, in one school the

SENDCO described how they set-up additional resourced provision internally to meet the needs of pupils who were experiencing anxiety and felt unable to learn in regular classrooms.

The delivery team highlighted a number of success factors from their perspectives. First, *the SENDCO being a member of the* SLT in order to influence decision-making (noted by two of the delivery team) and more generally *the support of the SLT for SEND provision* (noted by two of the delivery team). The trial processes such as signing the Memorandum of Understanding and committing to releasing the SENDCO were noted to be beneficial. Teaching assistants at one school also perceived that SLT support and inclusion of SEND in the School Improvement Plan had contributed to success. The importance of internal support for the SENDCO from senior leaders, pastoral staff, and the SEN team was also echoed by one of the SEND governors. Second, *the facilitators' SEND experience (including in school contexts meaning that SENDCOs could relate to them), knowledge and passion was* noted by three of the delivery team as being a key success factor*:*

> *We also had to be reflective of that in anything that we were delivering because we had to have SENDCOs understand that we got what they were going through but I think that with me working [in a leadership role in a MAT] they knew that I got it.* (WSS Review programme facilitator)

Middle leaders in two schools noted that *SENDCO engagement and leadership* are key to success, believing that the SENDCO having the motivation, vision, and leadership to create the SEND Action Plan and a strong SEN department to deliver it were essential ingredients. One SEND governor also felt that SENDCO experience and a good team were key ingredients for success, noting that the WSS Review programme enabled them to build on what had already been achieved and focus efforts towards bringing the whole school on board.

The delivery team also shared their thoughts in relation to the WSS Review programme itself. *SENDCO experience and confidence* was perceived to support the effectiveness of the peer review process and the facilitators brokered relationships and set-up expectations. This contrasts with typical experiences of schools participating in the WSS Review process beyond the trial, which normally set-up the peer review themselves. The *online group sessions* (organised by region) provided before the first one-on-one online coaching session was perceived to help prepare SENDCOs to get the most from this part of the process (noted by two of the delivery team). The *individual coaching* element of the process enabled facilitators to highlight how generalised ideas could be put to work in a SENDCOs own school; it was considered easier to be more targeted in online coaching than it would have been during an in-person school visit. Switching to online delivery of this aspect of the process was perceived to be a more effective use of time. The addition of the 'key stakeholders' column in the SEND Action Plan was perceived to contribute to securing 'buy-in' from stakeholders. The good working relationships between members of the delivery team were also noted to be beneficial as was having two facilitators as they could bounce ideas off each other. The *quality of the resources* was also identified as a success factor. The principles of the review process (collaborative, supportive, non-judgemental, peer networking) were perceived to be beneficial and helped to build a sense of community, which meant that SENDCOs did not feel so isolated. Teaching assistants also felt that *developing a collaborative culture* was a key success factor.

Teaching assistants outlined a number of perceived success factors in relation to delivering on the SEND Action Plan priorities in their schools. Resources and documents such as online data management tools and establishing a model classroom (mentioned by teaching assistants at two schools). At one of these schools increasing staffing levels was also noted by teaching assistants to be a success factor. Teaching assistants at another school highlighted the importance of establishing routines and all staff being flexible and adaptable in relation to successfully developing WSS provision. Similarly, one SEND governor in a case study school suggested that bringing school staff on board through having a clear picture of what good SEND provision looks like and regularly sharing that best practice across the school is important. They also mentioned that the SENDCO is experienced and has a good team and a good space for pupils already, and the WSS Review programme enabled them to build on that and focus efforts towards bringing the whole school on board.

In relation to future developments of the WSS Review programme, the delivery team noted that online meetings and online coaching might continue to be employed. They were also considering reviewing the resources and the WSS Review Guide as a result of participating in the trial. They might also offer more guidance in relation to the peer review element of the process to ensure that SENDCOs have a deeper understanding of their role and the need to be a critical friend. The additional column on the SEND Action Plan identifying stakeholder engagement was also likely to be taken forward.

Summary of key findings

Developments that took place were largely shaped by the foci of WSS Review programme as well as supporting documents such as those published by the EEF and WSS (e.g. the Teacher Handbook: SEND; Thompson and Walsh, 2022). They related to: distributed leadership; resources (including data management tools); avoiding deficit language; the SENDCO role and involvement in the SLT; inclusive teaching and learning; SEND provision and support; assessment and identification of SEND; interventions; and a greater focus on outcomes.

Stakeholders in participating schools had differing levels of understanding of SEND Action Plan priorities depending on their position in the school with senior leaders unsurprisingly being more involved. The most significant shifts included: the SENDCO shifting from operational to strategic leadership; the development of inclusive teaching (although not all staff engaged with this); and improved resources and processes to support SEND provision.

The WSS Review programme and the support of the SLT was a significant success factor. Similarly, SENDCO engagement, knowledge, and confidence (which developed as a result of the programme) were perceived to contribute to successful outcomes. The quality of resources provided as part of the programme was also perceived to contribute to success.

Stakeholders felt that the strengths of the WSS Review programme were:

- the framework, peer review process, and surrounding package of training, coaching, and support;

- the development of SENDCO's knowledge and confidence in strategic leadership of SEND provision;

- opportunities for networking with other SENDCOs;

- the use of Padlet as a 'one-stop shop' of supporting resources; and

- development of 'buy-in' from SLT and middle leaders.

The challenges included:

- Covid-19, which led to increases in pupils' needs and high levels of staff absence;

- SENDCOs found it challenging to prioritise their time;

- drawing in middle leaders and other staff was sometimes challenging;

- a small number of SENDCOs reported difficulties engaging their SLT; and

- staff turnover (particularly of SENDCOs).

The perceived impacts included:

- improved strategic leadership of SEND and more SENDCOs being part of the SLT;

- increased knowledge and confidence of SENDCOs and other staff;

- increased distributed leadership of SEND resulting in strengthened relationships between different stakeholder groups and a more collaborative approach to delivering inclusive teaching;

- raising the profile of SEND across the school;

- more effective data management though the acquisition of online tools;

- assessment and identification of SEND improved as did SEND pupil support;

- development of inclusive teaching across the schools; and

- increased parental engagement.

Cost

The average cost per pupil per year for schools implementing the WSS Review programme was estimated following the EEF costing guidance released in 2023 (EEF, 2023). As outlined in Principle 6 of the guidance, cost estimates were made 'based on what it would cost to procure those resources in the market' (EEF, 2023: p. 3). A year is defined as a year of implementation, aligning with the academic year. This costing model calculated costs based on the mean number of eligible pupils per school included in the evaluation (n=18). Since the WSS Review programme was implemented at the school level, costs are reported per school as well as per pupil. Table 23 details the resources required to implement the programme, following the ingredients method (Levin *et al.,* 2018).

Table 23: List of resources (ingredients)

Category	Item
Personnel for preparation and delivery	WSS Review process training event
	Peer review
	Engagement days
	Virtual one-on-one coaching sessions
	Completing the SEND Action Plan
	Other activities regarding implementation
	Supply cover
Training event	Travel cost
	Subsistence cost
Peer review visit	Travel cost
	Subsistence cost
Engagement day	Travel cost
	Subsistence cost
Supply cover	Supply cover for training/engagement day/peer review visit
Materials	Required material for implementation

Time

Most activities related to the WSS Review programme were intended to be delivered during the SENDCO's (and senior leader's) normal working hours. Additionally, SENDCOs in the intervention arm were mandated to participate in the initial training event, a peer review (which included one day released to visit the partner school and one day released to write the partner school's peer review report), and two engagement days. All these activities required a full day as detailed in Table 24.

According to the teacher survey, the average time dedicated to training by SENDCOs was eight hours. The total time devoted to peer review was 16 hours for SENDCOs (ranging from 0 to 40 hours), and an additional seven hours by the dedicated senior leader (although the reported time differed across respondents, ranging from 0 to 61 hours). The senior leader involved in the peer review was most typically the headteacher, or the deputy headteacher, but one school reported the involvement of an assistant SENDCO (25 hours). Most schools also reported minimal involvement of other members of staff (i.e. faculty head, nurture room staff, learning support assistant, human resources/training/finance staff, chair of school governors, pupil panel, inclusion manager, or teaching assistant).

Other activities, such as the virtual one-on-one coaching session, required minimal time from SENDCOs and the senior leader (four hours and two hours on average, respectively). The completion of the SEND Action Plan took on average eight hours from the SENDCOs with an additional average of one-hour of assistance from the senior leader. Minimal time devoted to other activities was also reported: an average of three hours from the SENDCOs and an additional four

hours from the senior leaders were devoted to resource evaluation; analysis of school data and evidence gathering; arranging and coordinating visits; self-evaluation; case studies; and CPD events (see Table 24).

Table 24: Total time devoted by personnel for training, peer review, as well as for preparation and delivery

| | | Year one | |
		No. of staff per school	Mean no. of hours (min, max)[1]
Training event	SENDCO	1	8 (1, 15)
Peer review	SENDCO	1	16 (0, 40)
	Senior leader	1	7 (0, 61)
Engagement Day 1	SENDCO	1	8 (1, 15)
Engagement Day 2	SENDCO	1	8 (1, 12)
Virtual one-on-one coaching session 1	SENDCO	1	2 (1, 3)
Virtual one-on-one coaching session 2	SENDCO	1	2 (1, 3)
	Senior leader	1	2 (1, 3)
Completing the SEND Action Plan	SENDCO	1	8 (2, 25)
	Senior leader	1	1 (0, 4)
Other activities regarding implementation	SENDCO	1	3 (0, 20)
	Senior leader	1	4 (0, 29)

[1] Evaluators may use any measure of dispersion they consider appropriate, for example, SD, minimum, maximum, range, percentiles, among others.

Financial costs

Programme delivery costs

As part of the trial, schools assigned to implement the WSS Review programme were exempt from covering the delivery expenses, including training costs. These, however, need to be valued according to its market price in accordance with Principle 6 of the EEF cost guidance (EEF, 2023).

As explained by nasen, the specific training model used in the trial is not currently offered, so a direct price comparison is not possible. However, the closest equivalent is the WSS Reviewer Training course, a one-day programme designed to support SENDCOs and leaders in reviewing their own provision or acting as peer reviewers in other settings, which costs £1,200. A commissioned review, where a SEND specialist visits the school to assess provision and provides a report on areas for development using the school's data, follows a different model. In the trial, the focus was on self-review and peer review using the WSS Review Guide. All related materials were freely accessible on the WSS webpage under 'WSS Review Guides'. While full access to the guides and resources requires membership, the membership is free.

Travel and subsistence costs

Intervention schools were required to cover travel and subsistence expenses related to the training day, peer review visits, and engagement days. The average cost for travel and subsistence was £140 per school (ranging from £23 to £643). Since all schools responding to the survey highlighted the necessity of covering these costs, this is regarded as essential expenditure. Schools considering participating in the programme should factor this into their budget.

Staff cover

Around 60% of respondents indicated that at least some supply cover for activities directly related to the implementation of the WSS Review programme, including the training event, peer review visits, and engagement days, was necessary.

For instance, where SENDCOs had timetabled lesson commitments, these required cover. The average cover time was four hours, and approximately £100 was allocated for cover per school.

Materials

The only material provided was a hard copy of the WSS Review Guide, which was at no cost to the schools. The cost survey asked schools whether any additional equipment or materials specifically required for the implementation of the WSS Review programme were purchased. The most frequent costs were related to printing materials. Although most schools indicated that they did not purchase any equipment or materials specifically for the implementation of the WSS Review. One school reported purchasing three iPads for observations, and two schools decided to buy into Provision Map with a yearly subscription fee. However, iPads and Provision Map are not required to participate in the programme; rather iPads would have been purchased to implement the SEND Action Plan, and Provision Map would have been acquired as a result of identifying it as a need through the self-evaluation, peer review, and action planning processes. Therefore, these materials are not considered to be integral to the WSS Review process.

Overall costs

Costs related to training, materials, and support for relevant personnel amount to an average cost of £1,457 per school over a three-year period.

Table 25 outlines the total cost per pupil per year for three years based on the trial costs. Since the programme is a one-year professional development initiative, schools did not repeat any of the activities they completed during the programme. As a result, all costs are considered start-up expenses that were incurred during the first year.

It is important to note that this calculation assumes an average of 18 eligible pupils per school per year. With a total cost of £27 per pupil per year, the WSS Review programme is classified as a 'very low-cost programme' (EEF, 2023: p. 28). Table 25 shows the average costs of the implementation of the programme, per ingredient.

Table 25: WSS Review implementation costs, per ingredient

| Category | Cost ingredient | Start-up or recurring? | Nominal values | |
			£ Year one	Total (over three years)
Training event	Training course fee	Start-up	£1,200	£1,200
	Travel fees	Start-up	£25	£25
	Subsistence costs	Start-up	£15	£15
Engagement days	Travel fees	Start-up	£50	£50
	Subsistence costs	Start-up	£25	£25
Peer review	Travel fees	Start-up	£14	£14
	Subsistence costs	Start-up	£11	£11
Supply cover	Supply cover for training/engagement day/peer review	Start-up	£100	£100
Materials	Printing out materials	Start-up	£17	£17
Cost per school per year			£1,457	£1,457
Number of eligible pupils per school per year			18	54
Total cost per pupil per school per year				£27

Conclusion

Table 26: Key conclusions

Key conclusions
1. Pupils with SEND in WSS Review schools made one additional month's progress in GCSE English Language, on average, compared to pupils with SEND in other schools. This result has a very low security rating.
2. Among pupils eligible for free school meals (FSM), those in WSS Review schools made two additional months' progress in GCSE English Language, on average, compared to those in other schools. This result also has very low security due to high levels of missing data.
3. Pupils with SEND in WSS Review schools had positive outcomes for absence and exclusions and negative well-being outcomes compared to pupils with SEND in other schools. These results also have very low security.
4. The programme was delayed and disrupted due to Covid-19, with key changes including the reduction of the programme (from 16 months to 11 months) and the move to support staff online rather than in-person. This, alongside a change in support for pupils with SEND in control schools to be more aligned with the intervention schools, could have had an impact on programme outcomes.
5. Despite adaptations made to deliver through Covid-19 restrictions, the programme was delivered in a manner consistent with its design and evidence from case studies suggests that the programme was implemented well and led to positive changes in terms of SEND leadership provision across the school, as well as schools' orientation towards pupils with SEND.

Impact evaluation and IPE integration

This study is a two-arm efficacy, cluster randomised controlled trial, with whole schools randomised one-on-one to intervention and control groups. In total, 156 schools were randomised to the two arms of the trial with 78 schools in each group. The study commenced in November 2019 but school recruitment was suspended in March 2020 and resumed in May 2020 due to the onset of the Covid-19 pandemic. The original timeline was revised, and delivery of the intervention was postponed for 12 months. Following further school closures in January 2021, the start of the intervention was postponed further until September 2021 and the timeline for delivery of the programme was compressed from 16 months to 11 months. An additional online meeting was held in June 2021–July 2021 to help prepare SENDCOs in the intervention schools for the face-to-face WSS Review process training held in September 2021.

The study design required that data on the primary outcome—the standardised combined GCSE mark in English Language. These were collected direct from schools in the Autumn Term to Winter Term 2023/2024 period for the Year 9 cohort. The trial therefore, required schools to be kept engaged in the study over an extended period, amounting to around five years in some cases. This proved extremely challenging given the disruption schools experienced particularly during the earliest phases of the trial.

The unfortunate consequence of this was that the study saw high levels of school and pupil attrition as well as, toward the end of the study, disappointing levels of cooperation with data collection. Of the 78 schools allocated to the intervention group, 33 were lost to the 'as analysed' sample by endline (42%). Likewise, of the 78 schools allocated to control, 23 were lost by endline (29%). At the pupil level, this led to an achieved sample 'at analysis' of 816 pupils with SEND in intervention schools, or 42% of the sample that were randomised. In the control group, 1,023 pupils with SEND were retained in the sample by analysis, or 45% of the randomised sample. The main reason for diminished sample sizes was the difficulty in obtaining GCSE marks data from schools at endline; that is after five years of their involvement in the study. Many schools refused to cooperate with data collection at this point. A number of schools also formally withdrew from the intervention citing a lack of staff capacity and general pressure on resources. It is important to remember, in relation to a point made at the beginning of this report, that GCSE marks are not available in the NPD. This means that missingness on the primary outcome could not have been addressed by matching our sample to records in the NPD.

Missing data at this scale causes several problems and calls into question the reliability of findings. Three of the most pressing challenges are discussed here. First, because the absolute size of the sample is diminished, results are more uncertain than they might otherwise have been. This manifests itself in statistical estimates with CIs wider than otherwise. Second, if the processes that cause pupils and schools to leave the study or fail to cooperate with data collection differ in the two arms of the trial this can lead to statistical estimates that are biased. While we can assess any differences in the composition of the two groups that open-up between randomisation and endline in terms of variables that are measured, there may be concerns about differences in unmeasured variables, or hidden biases. Third, some of

the techniques we have used to explore the consequences of missing data on our statistical estimates work less well when the rate of attrition is high, that is with attrition rates above 40% (Jakobsen *et al.,* 2017).

In Table 16, we compared the SEND intervention and control groups by measured variables at analysis. Despite sample loss being high, and the rate of attrition varying in the two arms, the two groups at analysis still looked quite similar. In addition, we conducted multiple imputation to fill-in some of the missing values in the data with estimates of the values these missing responses may have taken, had they been observed. This is under the assumption that the processes that lead to missingness can be modelled accurately using a full set of measured baseline and other variables. Recall that the primary analysis, on the completed cases sample file (in which we have simply deleted any cases that have missing data), yielded an impact estimate equivalent to an effect size of 0.05 (95% CI: -0.08 to 0.17, p=0.46) or one month's additional progress compared to the control group. When the analysis is re-run, and the missing values in the data are filled in using multiple imputation, we obtain an effect size of 0.07 (95% CI: -0.05 to 0.18). Although the results of the analysis based on imputation do differ to the main primary analysis results, they do not do so to an extent that might change any substantive conclusions.

Despite these difficulties, which need to be kept to the fore, in the rest of this section we summarise the results of the impact analysis and interpret them in the light of findings from the IPE.

The primary analysis indicates that pupils with SEND in intervention schools made one month's additional progress, as measured by the combined standardised mark they received in their GCSE English Language exams, compared to their control group counterparts. This estimate, however, comes with an appreciable level of uncertainty. It is the best estimate we have for the effect of the WSS Review programme on SEND pupil's English attainment, but it is only one of the estimates compatible with the data. Other values compatible with our data, for the true effect of the intervention on pupils with SEND, include negative values in which intervention group pupils score less on average in their GCSE English Language exams than pupils in the control group.

We looked at whether FSM pupils (both those with SEND and non-SEND) in intervention schools did better in terms of their GCSE English Language mark, than FSM pupils in control schools. This comparison yielded one of our clearest results. FSM pupils in intervention schools scored higher in their English exam and made an equivalent of two months' additional progress over their counterparts in the control schools (effect size=0.13; 95% CI: 0.01 to 0.24). Though the associated 95% CI for this estimate is quite wide, it does not contain 0. A separate model in which the FSM indicator is interacted with the intervention group indicator suggested that we could not extend the claim to say that FSM pupils benefit disproportionately from the scheme when compared to others.

Turning to look at secondary outcomes, we find similar effects for pupils with SEND in terms of their performance in GCSE Mathematics but with a high degree of uncertainty. There appears to be no evidence that pupils with SEND in intervention schools have lower absence or exclusion rates than pupils in control schools, and their well-being does not appear to be any different to control group pupils with SEND. For all pupils, including those with SEND, we again find that the WSS Review programme led to pupils making around one month's additional progress in English and mathematics, compared to pupils with SEND in control schools. These estimates come with less uncertainty than those for the SEND only samples, due to the larger sample size, however, the estimates are still quite imprecise.

These findings are somewhat disappointing when we consider the optimism that prevailed at the start of the trial. At the outset, it was felt acceptable for the study to be powered to detect an effect size of 0.20. In other words, it was expected that the intervention might give rise to an effect of this magnitude or close to it. In the end, an effect size of a quarter of this was obtained for pupils with SEND on the primary outcome. The crucial question therefore, is why? Why did we not find a larger effect size? Putting to one side the fact that we might have been overly optimistic at the outset, the IPE does provide evidence as to why effect sizes turned out to be smaller than anticipated.

The IPE suggests that the WSS Review programme, despite being implemented in the aftermath of the Covid-19 pandemic, was delivered consistently across schools and in a manner in-keeping with its design principles. School staff at all levels of seniority could point to positive developments in schools' orientation toward pupils with SEND, strong examples of using SEND Action Plans effectively, as well as other concrete examples of how practice had changed 'for the better'. There were, however, challenges encountered. The compressed timetable for delivery of the project led to less time for self-evaluation and consultation—due to the fallout from the Covid-19 pandemic many intended visits, and face-to-face encounters, were switched to online. SENDCOs, in case study schools, mentioned problems in prioritising

attendance at networking events, managing the demands on their time due to engagement with the WSS Review programme alongside other pressing demands, as well as engaging SLT and middle managers. Across all levels, in the aftermath of the Covid-19 pandemic, staff absences and heightened pupil need presented significant obstacles to surmount. Nevertheless, the general impression we have formed from case studies and survey responses is that the WSS Review programme was well implemented, with fidelity, and therefore, on these terms, this study represents a good test of its effectiveness.

For an explanation as to why we find effect sizes smaller than anticipated, two factors stand out. First, the results presented in this report are for the Year 9 pupil cohort. The study was designed to also track a cohort of Year 8 pupils. Due to the Covid-19 pandemic, the Year 9 pupils were exposed to the outcomes of the WSS Review programme for a shorter duration than was initially anticipated. At the outset, the programme of work with SENDCOs and schools was due to run for 16 months. In the end it ran for 11 months. Furthermore, it was anticipated that the implementation of SEND Action Plans to develop SEND provision would not be completed before the end of the programme of work, and that further changes in provision might take place from September 2022 onwards. In fact, it was the younger Year 8 cohort who were expected to be exposed to the outputs of the programme for a length of time sufficient for the full effects of the programme to be seen. The Year 9 cohort was included in the study to pick up any early effects. Unfortunately, due to a rapid decline in schools cooperating with the necessary data collection, endline data collection with the Year 8 cohort was felt inviable. In some senses, therefore, we have a slightly suboptimal test of the intervention's effectiveness, which may explain the relatively small and imprecise effect sizes seen in both primary and secondary analysis.

Second, the IPE suggest we need to consider what was happening in control schools during the study. At the outset, before intervention schools implemented the WSS Review programme, both intervention and control schools engaged in similar practices and devoted similar levels of resourcing to SEND matters. Crucially, during the trial, support for pupils with SEND in control schools changed markedly and in ways that mirrored important aspects of the WSS Review programme. Among these changes included an increased tendency for SENDCOs to join the school SLT, the development of distributed leadership, greater engagement with professional networks (facilitated through MATs or local authorities), stronger links with subject departments, more collaboration with teachers and teaching assistants, more sophisticated use of data and software to plan provision, engaging in self-review, and the adoption of new SEND-focused interventions. Some control schools even mentioned that they had participated in the WSS Review process or had adopted whole-school strategies to develop SEND provision. All this means that what pupils with SEND in many control schools received started to look a lot like the WSS Review programme. While we suspect that the WSS Review programme enabled intervention schools to respond more quickly than control schools to the impact of the Covid-19 pandemic on pupils, their advantage possibly eroded as the study went on and as control schools effectively caught up. This erosion of the contrast in the support and resources devoted to SEND provision between intervention and control schools is likely to explain, at least in part, why we do not observe a larger impact of the programme.

These findings do raise the question as to whether the WSS Review programme could generate a meaningful effect against a backdrop of rising concern for pupils with SEND more broadly. This is because its content is quite general (with the possible exceptions of its networking and consultancy aspects) and follows naturally from concerns schools and teachers may have, as well as consisting, in the main, of easy to introduce and straightforward initiatives with equivalent resources available from a range of existing and readily available sources. The WSS Review programme could be seen as embodying many aspects of a consensus around how to address the needs of pupils with SEND and therefore, cannot easily differentiate itself and offer something truly innovative and unique when compared to practice widespread across the sector.

Evidence to support the logic model

In this section, we return to the logic model and ask how far findings from the impact evaluation and IPE provide support or otherwise for the theorised representation of the intervention captured in the logic model. It is important to interpret these findings in the light of the discussion above relating to control group activity and the length of exposure to the outputs of the WSS Review programme among the Year 9 cohort. That is, even if we do find support for the programme logic model, this does not mean that the programme has demonstrated efficacy, in the sense of producing change that would have not otherwise occurred. As we have seen, there is evidence that control group schools were engaged in activities not unlike that encouraged through the WSS Review programme. Thus, a perfectly implemented programme is no guarantee of impact even if it is implemented effectively with fidelity

.**Required inputs**

The intervention logic model sets out the requirements for a range of training and support as the key inputs into the WSS Review programme. According to the logic model, for the programme to lead to change in outcomes of interest for pupils with SEND, these inputs need to be delivered to schools and SENDCOs. Not only this, but these inputs need to be taken up, consumed, and acted upon by schools. In other words, for the programme to work as anticipated schools and SENDCOs need to engage with programme inputs. Key programme inputs were:

- initial pairing of schools;

- two WSS Reviewer Training events;

- Engagement Day 1, devising a SEND Action Plan in the light of peer review;

- coaching one-on-one online focusing on SEND Action Plans;

- Engagement Day 2, supporting schools to implement their SEND Action Plans, with CPD on distributed leadership and adaptive teaching; and

- further one-on-one coaching, initial meeting and then online one-on-one coaching reflecting on progress.

In relation to these inputs, we find that:

- Pairing was carried out by nasen project directors—schools within a reasonable distance of one another but in different local authorities were paired. The process took place largely as intended except for the creation of one triad due to a school dropping from another pair.

- WSS Reviewer Training events were conducted regionally and initially took the form of two sessions, the first of which was online and lasted for an hour and half, while the second was face-to-face and lasted one day. SENDCOs attended the first session with a senior colleague from their school. These training events had a clear structure, reproduced across the regions. They were highly interactive, and discussions were lively and engaged, with SENDCOs exchanging experiences and ideas. Peer discussions were followed by whole-room feedback, which the facilitators then used to share further ideas and examples from their practice, referring to the WSS Review process. From a total of 68 schools retained in the intervention, 60 had representatives at the first WSS Reviewer Training event and 67 at the second event.

- Engagement Day 1 was designed to support schools to progress from their self-evaluation and peer review to writing a SEND Action Plan. The SEND Action Plan template was shared with attendees in advance. In total of 60 of the 68 schools remaining in the intervention attended Engagement Day 1. The training and engagement days delivered in each region were perceived to be very similar and designed to achieve a good balance between communicating relevant information and providing opportunities for SENDCOs to reflect and collaborate.

- Engagement Day 2 focused on supporting schools to implement their SEND Action Plans. The day was designed so that SENDCOs had more time to speak to each other, with less input from the WSS Review project directors. The day was well scaffolded; during the section on distributed leadership, for example, there were animated discussions between SENDCOs interspersed with theory and direction from facilitators. The individual work allowed SENDCOs to reflect more deeply on their contexts while the group discussions enabled the sharing of practice with peers. Discussion topics were chosen by the WSS Review project directors to be consistent with the content of SEND Action Plans. However, only 51 of the 68 schools remaining in the intervention attended Engagement Day 2. Reasons for low attendance at Engagement Day 2 were staff shortages, Covid-19-related barriers, and an Ofsted visit. Schools that could not attend were offered a follow-up call and sent materials including slides and videos. Schools that did not attend did not take up the offer of a follow-up visit.

- Online one-on-one coaching—due to school lockdowns the initial project timelines were compressed (running for 11 months rather than 16 months). In addition, during Spring Term 2022, there were high levels of staff absence due to ongoing issues with Covid-19. This meant that instead of visiting schools for one-on-one coaching meetings, the WSS Review project directors replaced these with a combination of online regional group meetings and online one-on-one coaching sessions. Project staff did not feel that the move online detracted from the input that schools received but noted that they did not have an opportunity to get other perspectives on local contexts nor to observe potential issues through touring schools. Online regional sessions explaining the aims of the one-on-one coaching session were run prior to them, which meant that the coaching could be more targeted. SENDCOs were asked to prepare for their coaching sessions by bringing their SEND Action Plans and reflecting on their progress and next steps. Representation from the SLT was required at later coaching sessions. Around 65 of the 68 schools remaining in the intervention attended the first online regional meetings and 65 schools received a one-on-one online coaching session. An all-cohort online meeting was conducted toward the end of the delivery period, this was attended by just over half of schools (n=35).

- The initial one-on-one online coaching session was perceived by the WSS Review project directors to be more effective than school support visits because they were much more focused, enabling them to provide constructive and strategic feedback. In addition, they were easier to arrange with fewer logistical challenges. Overall, the one-on-one coaching was perceived to be a very valuable part of the process. The expertise of the WSS Review project directors was highly valued.

- There was higher attendance at the one-on-one coaching sessions and lower attendance at the online group meetings and at Engagement Day 2. This suggests that schools started to disengage toward the end of the intervention.

Programme outputs

The WSS Review programme inputs or resources generated outputs, which in turn are required, according to the programme logic model, if the programme is to influence outcomes. The main programme outputs, which are anticipated to lead to positive change were:

- school self-evaluation;

- peer review reporting;

- school SEND Action Plans;

- stakeholder involvement in SEND Action Plans; and

- local network development.

With this in mind, the IPE—case studies and surveys—suggest the following:

- As the title of the SEND Reviewer Training suggests, one of the purposes of these events was to train schools to conduct self-evaluation. The WSS Review project directors noted that SENDCOs often started the process with different levels of prior experience and qualification and therefore, required different levels of input. At training days, the focus was very much on self-evaluation with less time spent discussing how self-evaluation fed into peer review. The onset of the Covid-19 pandemic and its aftermath meant that project timescales became compressed. It was felt that this resulted in self-evaluation processes that were not, in some cases, given sufficient time.

- We were not given access to all self-evaluations. As a result, it is not clear how many were completed. However, we can assume that self-evaluations were carried out before the peer visits and reports—all schools except one had a peer visit and so we might assume that close to all schools completed a self-evaluation.

- Peer review is a key feature of the WSS Review process and was designed to feed directly into the development of the SEND Action Plans. Peer reviews were carried out by schools in pairs. There was a sense in which this was another element of the programme in which some SENDCOs would lack confidence and need support. The WSS Reviewer Training described above was designed to address this. Of the 68 schools that remained in the programme, 67 completed a peer review. Generally, there seemed to be good awareness among senior leaders at the school that a peer review process had been underway. Unsurprisingly, most middle leaders and teaching assistants were not aware of the peer review process given its focus on strategic rather than operational development. Among case study schools, there was a sense that peer review had been a valuable process. Case study SENDCOs consistently described the peer review experience within the WSS Review process as a strength of the programme. Survey respondents saw peer review as providing a valuable opportunity for reflection, gaining in-depth understanding of the strengths and development points for schools.

- School SEND Action Plans were an important output of the programme and seen as key in driving more inclusive school cultures and within this, greater emphasis on SEND. The evaluation team received 65 school SEND Action Plans, with three schools failing to produce one. SENDCOs received training in the development of the SEND Action Plans at the full-day WSS Reviewer Training and at Engagement Day 1. The WSS Review project directors focused a lot of their subsequent work on encouraging schools to deliver on their plans both through regional group meetings and one-on-one coaching. Implementation of the SEND Action Plans was a central theme of Engagement Day 2 with activities designed to home-in on elements within the SEND Action Plans that the WSS Review project directors were aware of.

- SEND Action Plans generated were ambitious and in general set out a clear series of actions to support change. We have evidence of many of the short-term outcomes in the logic model being realised and the beginnings of long-term outcomes being achieved. A range of initiatives was identified by schools arising from their SEND Action Plans. These were not always focused solely on pupils identified with particular categories of SEND but often reflected a broader approach to developing more inclusive practices.

- The programme delivery team specified that stakeholder input into plans was a key programme output. Stakeholders' formal awareness of the SEND Action Plans was mixed across schools. They were, however, engaged with the outcomes of the process even if their knowledge of the detail of the SEND Action Plan was limited, and stakeholders were in general committed to implementation.

- Finally, the programme aimed to improve local peer-to-peer networks, which SENDCOs could draw upon. To some extent, the Covid-19 pandemic and its aftermath did affect the capacity of SENDCOs to fully engage with networks. Control group SENDCOs had access to networks available through their MAT or via their local authority. Only a small number of intervention group SENDCOs appeared to maintain contact with peers that they met through the programme, and most SENDCOs appeared to have access to local networks through other means. Generally, the networking opportunities provided through the programme were welcomed and seen as confidence building, creating momentum, and a sense of shared endeavour.

Mediators and moderators

Certain factors were hypothesised in advance to act as mediators and moderators of the WSS Review programme. At the school level, these included the engagement of SLT and the existing levels of experience and qualifications of SENDCOs. Pupil-level factors thought to be important mediators were levels of well-being and attendance. Among the initial or pre-existing factors that might moderate the effects was FSM status.

The impact evaluation examines the effects of the WSS Review programme on well-being and attendance of pupils with SEND as well as whether attainment was raised for pupils Ever-FSM at baseline, both relative to Ever-FSM pupils in the control group and non-FSM pupils in the intervention group. Other evidence to address these aspects of the logic model come from the IPE.

We find at the pupil level:

- No evidence to support the hypothesis that the WSS Review programme led to improved levels of well-being among pupils, nor evidence that the programme might reduce absences nor exclusions from school (discussed further in the following section). In these terms, we do not have evidence to support the hypotheses that improvements in well-being and reductions in absences act as potential causal pathways through, which the effects of the intervention on attainment might be mediated.

- Looking at Ever-FSM pupils (both pupils with and without SEND that were eligible for FSM) we find that they make two months' additional progress, based on their GCSE English Language marks, compared to FSM pupils in control schools. The p-value for this result is 0.03, which suggests that our estimate is incompatible with a situation where the programme had no impact on FSM pupils. We did not find evidence, however, to support the notion that FSM pupils benefited from the intervention more than others.

While at the school level:

- There was some evidence from surveys, that SENDCO representation on school SLTs rose relative to that in control schools, particularly in the early phases of the programme, suggesting that school leaders were engaging more with SEND issues. Still only half of SENDCOs that responded to the survey said that they were on the school SLT. Those that were, were so explicitly for their SEND remit. There was also evidence, again from surveys SENDCOs were more likely to meet with school SEND governors than they were previously.

- In the case studies, we found one example where the SENDCO said that they found it challenging to persuade their school's SLT to fully engage. In two case studies, respondents mentioned that it was a challenge to drive whole-school change without the active involvement of SLT and wider school staff. Having said this, broadly it was acknowledged that SLT relations with SENDCOs and indeed other teaching staff had strengthened—around two-thirds of survey respondents had seen improvements. Broadly across all stakeholders, the involvement of SLT in driving change was seen as crucial.

- In terms of SENDCO experience, seniority, and qualifications, there was a very mixed picture at the start of the trial. There was a sense that some less experienced SENDCOs lacked confidence in the self-evaluation and peer review processes; however, nasen project directors went to considerable lengths to work with less experienced SENDCOs.

- A slightly higher proportion of SENDCOs in control schools (82%, n=58) compared to intervention schools (77%, n=55) held the NASENCO qualification at baseline. The proportions of those that did not hold the award but were working towards it were very similar across both arms of the trial, with SENDCOs more likely to be working towards it than not (intervention schools: 'yes' [n=9, 56%], 'no' [n=7, 44%]; control schools: 'yes' [n=7, 54%], 'no' [n=6, 46%]).

Short- and long-term outcomes

The programme theory embodied in the intervention logic model hypothesised several outcomes that were anticipated to change in response to the programme, both at the pupil and school levels. The majority of pupil-level outcomes were examined in the impact evaluation. These outcomes were improvements in well-being, improved attendance, and reduced exclusions in the short run as well as improvements in attainment over the long run. Evidence for outcomes at the school level comes from the IPE. These centre around an increased focus on SEND, greater emphasis on teaching and learning for pupils with SEND, raised awareness, and improved resourcing in the short run. In the longer run, the WSS Review programme was hypothesised to lead to SEND provision becoming a more strategic consideration within the school, greater distribution of leadership on SEND issues across the school, and better understanding of, responsibility for and confidence with SEND provision among teachers.

Looking first at short-term or intermediate outcomes for pupils with SEND, we find that:

- Intervention group pupils with SEND reported a total difficulties score (derived from the SDQ) that was very slightly higher than their control group counterparts, which we interpret as indicating a lack of meaningful difference between the two groups due to its modest size. In other words, we find there is no evidence to support the hypothesis that the WSS Review programme leads to improvements in pupils' well-being.

- Authorised absences were very slightly lower among intervention group pupils compared to pupils in the control group. Again, this is interpreted as a lack of support for the hypothesis that the WSS Review programme will lead to reduced absences among pupils.

- There was no difference in the incidence of unauthorised absences between intervention and control group pupils, while pupil exclusions were very slightly lower among the intervention group when compared to control group pupils.

- Taken together these results imply a lack of support for the hypotheses that the WSS Review programme will lead to improved pupil well-being as well as reduced absences and exclusions from school.

- These results need to be interpreted in the light of the high levels of missing data, reduced duration of exposure of Year 9 pupils to the outputs of the WSS Review programme, and a high degree of activism targeting pupils with SEND in control schools.

At the school level, evidence from the IPE indicates that:

- the profile of SEND provision and distributed responsibility for it did tend to rise across schools;

- there was evidence of more effective data management and use of online tools as well as improved assessment and identification of SEND along with enhanced support; and

- there was also evidence of inclusive teaching practices becoming more commonplace across the schools as well as increased parental engagement.

Turning to consider long-term outcomes for pupils with SEND, we find that:

- There is weak evidence, with a high degree of uncertainty, in support of the hypothesis that the WSS Review programme can lead to improvements in attainment for pupils with SEND.

- Pupils with SEND made on average one month's additional progress as measured by their standardised combined score obtained in GCSE English Language examinations, compared to control group pupils. This result is derived from a relatively modest effect size with a wide CI suggesting a fair degree of uncertainty in this estimate.

- Likewise, we find that intervention group pupils with SEND performed very slightly better than their control group counterparts in terms of the GCSE English Language grade they obtained as well as in terms of their GCSE Mathematics grade.

- Looking at *all pupils* (including pupils with SEND), we find that those in intervention schools made one month's additional progress compared to control group pupils in both GCSE English Language and GCSE Mathematics (combined standardised marks). For all pupils (as opposed to pupils with SEND only) results come with less uncertainty—particularly for GCSE English Language— nonetheless, we interpret these results as providing weak evidence in support of the hypothesis that the WSS Review programme leads to improvements in attainment for all pupils within schools using the scheme.

At the school level, evidence from the IPE suggests that:

- There was improved strategic leadership of SEND with more SENDCOs joining the SLT.

- There was evidence of increased distributed leadership of SEND resulting in strengthened relationships between different stakeholder groups and a more collaborative approach to delivering inclusive teaching.

- In some senses the change we see in school leadership and improvement in SEND provision imply that pupil-level outcomes might be expected to be more pronounced when compared to what was actually observed. Although somewhat speculative, this could be due to the effects of WSS Review programme taking longer to emerge and thereby limiting the impact it could have on the Year 9 cohort.

Interpretation

To our knowledge, this study represents the first attempt to assess the causal effects of a whole-school programme that aims to encourage a more inclusive school culture and thereby, improve educational outcomes for pupils with SEND. This means that there is not a wealth of existing studies against which we can compare our findings, nor that can directly inform the interpretation of our results. The difficulty of our task is added further, by the circumstances, which prevailed during the study, most notably the onset and aftermath of the Covid-19 pandemic. The pandemic had consequences for both the evaluation, the behaviour of control schools, as well as the way the programme was implemented.

Given this dearth of rigorous evidence, how then might we understand our findings in the light of policy and practice developments? In the five years or so leading up to the outbreak of Covid-19 there was considerable policy activism around SEND provision. How meaningful this was in resource terms is open to question, but this activism can be understood as reflecting some of the themes running through the academic literature on school inclusivity. In this literature, whole-school approaches to developing inclusive practices are seen as central to promoting equitable education systems. In relation to pupils with SEND, this reflects a turn from seeking to integrate particular groups of pupils within existing provision, towards supporting schools to develop greater capacity to include a diverse range of vulnerable learners. It 'is less about the introduction of techniques or new organisational arrangements, and much more about processes of social learning within particular contexts' (Ainscow, 2022: p. 6)—good practice for pupils with SEND is often seen as good practice for all pupils.

Following the publication of the SEND Code of Practice in 2014 (Department for Education 2015), the previous government focused on strengthening inclusive teaching and developing distributed accountability for meeting the needs of pupils with SEND. The WSS Review process was funded by the government as part of this drive and formed an element of the SEND Schools Workforce contract, which ran from 2018 to 2022. This led to a wide range of resources and professional development to support SENDCOs, senior leaders, school SEND governors, and classroom teachers. For example, in January 2022 nasen published a handbook for teachers, which provided a digest of inclusive pedagogy including subject-specific guidance (Thompson and Walsh, 2022). Given the overlap between disadvantaged pupils and those with SEND, the EEF also published a range of resources from March 2020, including a guidance report highlighting five recommendations for schools (Davis and Henderson, 2025).

The previous government also launched the Universal SEND Services programme from 2022, due to run until 2025, awarding the contract to nasen, leading a partnership including WSS consortium members such as the Autism Education Trust and The Education and Training Foundation. This has allowed these organisations to continue to provide professional development and resources to support SENDCOs and other stakeholders involved in SEND provision. In addition, key messages such as distributed accountability for SEND, inclusive pedagogies, and the importance of parental and learner voices were continuously emphasised. The programme facilitates professional development groups and regional networking, among other activities.

In March 2023, the DfE published the 'Special Education Needs and Disabilities (SEND) and Alternative Provision Improvement Plan: Right Support, Right Place, Right Time' (Department for Education, 2023). This review of SEND provision aimed to strengthen inclusive education still further through establishing national standards, placing a strong emphasis on the quality of teaching, and improving the early identification of need as well as encouraging early intervention (Department for Education, 2023). The intention was to reduce the requirements for additional support through EHCPs by meeting the needs of pupils with SEND earlier. The previous government had planned to revise the SEND Code of Practice and publish three practice guides by the end of 2025.

What this policy environment amounts to, given wider resource constraints, is an emerging consensus around how to address the needs of pupils with SEND within a resource constrained environment. In many ways, the WSS Review programme tested here, can be seen as a formalisation or integration of the key features of this consensus. What is clear, however, is that many of the resources available through the programme and many of the behaviours it encouraged, were widely available and promoted across all schools, including those allocated to the control group, during the period of this study. As a result, what remained unique in the WSS Review programme might be argued to have been rather marginal.

The effects of the Covid-19 lockdowns on schools led to increased levels of emotional distress and mental health difficulties in schools over this period (Mansfield *et al.,* 2022). This is likely to have further contributed to attendance issues we see in our results, and which are consistent with a reported increase in emotionally based school avoidance. We suspect that the Covid-19 pandemic, particularly its consequences for vulnerable and disadvantaged children, may have given control schools further impetus to engage more intensively with the wider SEND policy agenda. There is a lot of evidence from our work that control schools engaged in review processes and professional networks and undertook the development of more inclusive pedagogies. In addition, as of January 2024, 82% of secondary schools were academies (Department for Education, 2024c) and the vast majority of these were in MATs. It is commonplace for MATs to have a SEND leader, to provide a SEND framework, and to facilitate cross-MAT SENDCO meetings (Flemons and Walker, 2024). In addition, auditing or reviewing, and action planning is reported to be commonplace in MATs while peer reviewing is growing in popularity (Flemons and Walker, 2024).

Given the general environment, it is perhaps not surprising that we find only weak and uncertain evidence in favour of the hypotheses that WSS Review programme can raise attainment for SEND pupils, and indeed all pupils. Possibly had the control group schools not been so active in the pursuit of similar goals and activities we may have uncovered larger effect sizes. Had we been able to encourage schools to supply the data we required these larger effect sizes may have been accompanied by less uncertainty. Afterall, there is evidence that the programme did stimulate processes of change within schools, for example, by engaging with evidence from external peer review; mobilising a culture of collaboration, enacted through increasing distributed leadership of provision for pupils with SEND; more effective use of data and so on. The problem with this interpretation is that it does not detract from the overriding concern that the WSS Review programme has rather been overtaken by direction of SEND policy and the consequent change in practice within schools. At best, it might be considered a marginally more consistent and systematic manifestation of a wider set of recommended practices around SEND. Having said this, it is possible that the WSS Review programme enabled schools to adjust more quickly than they might otherwise to the post-Covid-19 school landscape.

One further point is worthy of attention, which suggests, to some extent, an alternative explanation for our weak findings. Due to the amount of missing data in the Year 9 cohort the decision has been taken not to attempt to collect outcome data for the Year 8 cohort, on the basis that missingness was likely to be even higher. From the outset, it was always expected that the full effect of the programme was more likely to be seen in the later Year 8 cohort than the earlier Year 9 cohort. It could be argued that the disappointing results we have are because we are reporting on the Year 9 outcomes. Concerns around this are heightened due to the decision not to pursue data collected with the later cohort where the effects of the programme might be more fully captured. We return to discuss this issue in the 'Future research and publications' section below. This point stands apart from the general concerns around bias in our results stemming from the high levels of missingness affecting the primary analysis sample.

At a more general level, some commentators may not be surprised to see our findings for other reasons. As noted in the 'Introduction' section of this report, the context for the implementation of the WSS Review programme in this trial was characterised by both increasing levels of child poverty, indicated by rising proportions of pupils eligible for FSM and rising numbers of children identified as SEND. The period over which this study ran, was also marked by the national lockdowns and by post-Covid-19 recovery as well as an ongoing crisis of local authority funding to support pupils with SEND. It is worth stressing again the consequences of the Covid-19 pandemic for vulnerable pupils. All these factors contributed to a challenging environment for SENDCOs. Seen from this perspective, attempts to address the needs of pupils with SEND were always likely to struggle against substantial headwinds.

Limitations and lessons learned

In this section, we turn our attention to the challenges encountered in delivering this evaluation and what lessons might be learned. At the outset, it is worth stressing again that this study took place during a period of serious instability in

schools. As mentioned elsewhere, the Covid-19 pandemic and its aftermath led to multiple repercussions for the evaluation. As a result, caution should be exercised in drawing general conclusions from our experience. Nonetheless, we commence with a discussion of some of the difficulties experienced in delivering the impact evaluation and then move on to discuss the IPE.

Once attainment in the form of GCSE English Language result was chosen as the primary outcome for this study, it was decided to capture attainment in terms of the combined mark pupils achieved rather than rely on the grade obtained. Many evaluations specify GCSE grades or a combined measure of GCSE attainment in the form of Attainment 8 as a primary or secondary outcome. This is convenient because GCSE grades can be obtained from the NPD, which avoids the need to approach schools directly to obtain the required data. This is not the case with marks, which are not available in the NPD and need to be collected direct from schools. Relying on the NPD reduces the burden on schools and should reduce the amount of missing data. The disadvantage of this approach is that the grade obtained varies on a limited 0 to 9 scale. The combined mark varies over a much wider range of possible values. The former is therefore, a coarsened or summary measure of attainment when compared to the combined mark. An intervention could lead to an improvement (or deterioration) in the mark obtained, which might not be reflected in the grade a pupil obtains. There are also questions around whether specifying marks might improve statistical power relative to a grade outcome (Smith, Morris, and Armitage, 2022).

Our view is that for a study as long as this one (the length of time it ran was extended due to the Covid-19 pandemic), relying on schools to cooperate with data collection for such an extended period is risky. At the point we attempted to collect data on marks for the Year 9 cohort, in Autumn Term 2023, some schools had been involved in the study for over five years. Many schools had seen significant staff turnover during this period. This meant that we were often requesting data from school staff who were unfamiliar with the trial and that had no personal commitment to it. Schools were familiar with providing grade information to third parties but less familiar with providing marks. Furthermore, over this period, schools were under a lot of pressure, partly due to the aftermath of Covid-19, but also due to general pressure on resources. These issues resulted in disappointing levels of missingness in the final analysis. We also asked schools to provide us information on attendance. This also turned out to be problematic, with schools providing information in different units of measurements (days vs sessions absent) and it was not always possible to tell in which unit this information was provided. There were also quality issues encountered with exclusion data. Overall, this sample loss and its negative consequences outweighed any gains that might have been achieved from working with marks data. Losses in sample led to the decision to cancel data collection among the Year 8 cohort. For these reasons, we would argue that for trials running for more than two years, where researchers wish to use national curriculum tests or GCSE results as outcomes, reliance should not be placed on attempting to collect results direct from schools, but instead researchers should link their trial data to the NPD and therefore, use grades or national curriculum test scores as outcomes. To summarise, our attempt to use the combined marks obtained at GCSE did not meet with success. In addition, the quality of the data we received from schools, including absence data as well as marks, was not good.

Turning now to consider lessons learned from the IPE. First, we encountered some difficulties in being able to identify whether changes in practice reported by respondents were the result of the programme or caused by other factors. This is not an uncommon problem in observational or qualitative work. We attempted to address this issue through providing respondents with prompts, such as presenting SENDCOs we were interviewing with copies of the school's SEND Action Plan. It is difficult for us to know whether this worked and therefore, to be sure around attribution. In future studies, more direct and explicit lines of questioning might be preferable as means of drawing out concrete actions taken as a consequence of the intervention.

Second, and relating specifically to this evaluation, we did not fully appreciate at the outset the difference between the WSS Review process and the WSS Review programme. This reflects the complexity of the programme. We should have asked the delivery team more questions during the set-up meetings to establish what exactly was being offered to schools and how it compared to what schools outside the trial could access. The more general point here is that, evaluators and commissioners need to be much clearer on the extent to whole school or CPD programmes such as the one evaluated here have 'escaped into the wild' and therefore, in their key elements be accessed one way or another by control schools.

Future research and publications

We have explained the disappointing results from this evaluation primarily in terms of activity in the control group eroding the treatment contrast between the two arms of the trial, the consequences of the Covid-19 pandemic, and/or that the full impact of the intervention might be seen more fully in the Year 8 cohort (the Year 9 cohort analysis was always expected to produce early results). Added to this is the lingering suspicion that missing data may have led to bias in our results. As a result of these latter two concerns, further research is proposed linking the data from this trial to the NPD. The proposal is to link both the Year 8 and Year 9 cohort trial records to GCSE English and GCSE Mathematics grade information as well as Attainment 8 outcomes. This will likely result in data files with less missingness. Taken together this suggested way forward will enable us to assess: i) the extent to which the Year 9 cohort results might be biased; and ii) the impact of the programme on the Year 8 cohort, the cohort in which we might expect the full effects of the programme to be captured.

A series of publications in academic journals are also envisaged.

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Appendix A: EEF cost rating

Table 1: Cost rating

Cost rating	Description
£ £ £ £ £	*Very low:* less than £80 per pupil per year.
£ £ £ £ £	*Low:* up to about £200 per pupil per year.
£ £ £ £ £	*Moderate:* up to about £700 per pupil per year.
£ £ £ £ £	*High:* up to £1,200 per pupil per year.
£ £ £ £ £	*Very high:* over £1,200 per pupil per year.

Appendix B: Security classification of trial findings

And Rating	Criteria for rating			Initial score		Adjust		Final score
	Design	MDES	Attrition					
5 🔒	Randomised design	<= 0.2	0-10%					
4 🔒	Design for comparison that considers some type of selection on unobservable characteristics (e.g. RDD, Diff-in-Diffs, Matched Diff-in-Diffs)	0.21 - 0.29	11-20%	4 🔒	➡			
3 🔒	Design for comparison that considers selection on all relevant observable confounders (e.g. Matching or Regression Analysis with variables descriptive of the selection mechanism)	0.30 - 0.39	21-30%			Adjustment for threats to internal validity **[0]**	➡	
2 🔒	Design for comparison that considers selection only on some relevant confounders	0.40 - 0.49	31-40%					
1 🔒	Design for comparison that does not consider selection on any relevant confounders	0.50 - 0.59	41-50%					
0 🔒	No comparator	>=0.6	>50%					0 🔒

Threats to validity	Risk rating	Comments
Threat 1: Confounding	Low	
Threat 2: Concurrent Interventions	Moderate	Schools in the control group—which were not supposed to access the WSS Review during the study period. However, they were still likely to engage in other initiatives aimed at improving SEND provision. But this was anticipated by the evaluators
Threat 3: Experimental effects	Low	Well designed and conducted
Threat 4: Implementation fidelity	Low	Compliance was aligned with the logic model and was very high. However, it was noted that the study took place during a period of instability in schools, which may have influenced both the implementation, and the outcomes observed
Threat 5: Missing Data	High	The study experienced substantial attrition: 58% of pupils in the intervention group and 55% in the control group were lost between randomisation and analysis. The team conducted a missing data analysis, including logistic regression models to explore predictors of dropout and multiple imputation to estimate missing values.
Threat 6: Measurement of Outcomes	Low	The measures used were standard and appropriate in theory
Threat 7: Selective reporting	Low	Study is pre-registered and impact evaluation follows the published study plan and SAP.

Initial padlock score: 4

Reason for adjustment for threats to validity: The study experienced substantial attrition: 58% of pupils in the intervention group and 55% in the control group were lost between randomisation and analysis and this is a threat of missing data leading to the security rating of this evaluation to be at 0 padlocks (attrition >50%)

Final padlock score: initial score adjusted for threats to validity = 0 Padlocks

Appendix C: Changes since the previous evaluation[25]

Table 1: Changes since the previous evaluation[26]

	Feature	Pilot to efficacy stage	Efficacy to effectiveness stage
Intervention	Intervention content	Describe any changes to the content	Describe any changes to the content
	Delivery model	Describe any changes in the delivery mechanism (e.g. from developer-led to train-the-trainers; in-person vs online; etc.)	Describe any changes in the delivery mechanism (e.g. from developer-led to train-the-trainers; in-person vs online; etc.)
	Intervention duration	Describe any changes in the duration of delivery (e.g. shortened due to the inclusion of a pre-test)	Describe any changes in the duration of delivery (e.g., shortened due to the inclusion of a pre-test)
Evaluation	Eligibility criteria	Describe any changes in the eligibility criteria for participation in the evaluation (schools, year groups, students etc.)	Describe any changes in the eligibility criteria for participation in the evaluation (schools, year groups, students etc.)
	Level of randomisation	Not applicable to pilots	Describe any changes to the design from efficacy to effectiveness stage to the level of randomisation
	Outcomes and baseline	Not applicable to pilots	Describe any changes to the design from efficacy to effectiveness stage in: ○ Outcomes ○ Baselines
	Control condition	Not applicable to pilots	Describe any changes to the design from efficacy to effectiveness stage to the control condition

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[25] Please delete this section if it is not applicable.
[26] Delete columns from the table if they are not applicable or adjust titles as relevant.

Appendix D: Effect size and ICC estimation

Table 1: Effect size estimation

Outcome	Unadjusted differences in means	Adjusted differences in means	Intervention group		Control group		Pooled variance
			n (missing)	Variance of outcome	n (missing)	Variance of outcome	
Primary analysis (pupils with SEND only)							
Year 9 pupils with SEND standardised scores on GCSE English Language	0.05 (-0.13; 0.22)	0.05 (-0.08; 0.17)	816 (1,108)	1.01	1,023 (1,234)	1	1
Secondary outcome (pupils with SEND only)							
GCSE Mathematics standardised mark for pupils designated SEND	-0.05 (-0.26; 0.16)	0.00 (-0.14; 0.14)	599 (1,325)	0.93	713 (1,544)	1.1	1.02
GCSE Mathematics 1–9 mark for pupils designated SEND	0.1 (-0.2; 0.4)	0.07 (-0.13; 0.27)	970 (954)	3.29	1,211 (1,046)	3.86	3.59
GCSE English Language 1–9 mark for pupils designated SEND	0.09 (-0.19; 0.37)	0.10 (-0.09; 0.28)	969 (955)	2.89	1,205 (1,052)	3.02	2.96
Count response: Number of authorised absences – school year 2022/23 for pupils designated with SEND	IRR: 0.96 (0.7; 1.32)	IRR: 0.95 (0.69; 1.31)	1,072 (852)	N/A	1,460 (794)	N/A	N/A
Binary response: At least one unauthorised absence in the school year 2022/2023 for pupils designated with SEND	RD: -0.01 (-0.09; 0.07)	RD: -0.00 (-0.07; 0.07)	1,065 (859)	N/A	1,419 (838)	N/A	N/A
Binary response: At least one exclusion from school in the school year 2022/2023 for pupils designated with SEND	RD: -0.02 (-0.06; 0.02)	RD: -0.02 (-0.06; 0.01)	1,092 (832)	N/A	1,461 (796)	N/A	N/A
Total difficulties score: SDQ for pupils designated with SEND	0.66 (-0.22; 1.55)	0.14 (-0.56; 0.83)	365 (1,559)	36.7	499 (1758)	39.5	38.4
Secondary analysis (All pupils)							
GCSE English Language mark (standardised) for all pupils	0.04 (-0.09; 0.07)	0.08 (0; 0.17)	7,198 (7,570)	0.95	8,461 (6,473)	1.01	0.98
GCSE Mathematics standardised mark for all pupils	0.01 (-0.14; 0.17)	0.06 (-0.06; 0.18)	5,216 (9,552)	0.96	5,684 (9250)	1.03	0.99

			Intervention group		Control group		
Outcome	Unadjusted differences in means	Adjusted differences in means	n (missing)	Variance of outcome	n (missing)	Variance of outcome	Pooled variance
Total difficulties score: SDQ for all pupils	0.48 (-0.03; 0.99)	0.22 (-0.09; 0.53)	3,659 (11,109)	39.08	3,946 (10,988)	39.95	39.56

Subgroup analysis

			Intervention group		Control group		
Primary analysis model FSM subgroup only	0.05 (-0.09; 0.19)	0.13 (0.01; 0.24)	1,649 (2,072)	0.99	2,109 (1,612)	0.99	0.99
FSM by intervention group interaction model	-0.00 (-0.07: 0.07)	0.03 (-0.02: 0.09)	7,198 (6,323)	N/A	8,461 (5122)	N/A	N/A

Table 2: Effect size estimation

			Intervention group		Control group		
Outcome	Unadjusted differences in means	Adjusted differences in means	n (missing)	Variance of outcome	n (missing)	Variance of outcome	Pooled variance

Year 8

Total difficulties score: SDQ for pupils with SEND	0.43 (-0.62; 1.49)	0.21 (-0.71; 1.14)	319	39.61	443	43.27	41.68
Total difficulties score: SDQ for all pupils	-0.09 (-0.7; 0.53)	-0.05 (-0.42; 0.32)	2,638	40.22	3,596	42.35	41.42

Table 3: Outcome variances and estimated ICCs

	Unadjusted/unconditional model			Adjusted conditional model		
	Estimated pupil-level variance	Estimated school-level variance	ICC (95% CI)	Estimated pupil-level variance	Estimated school-level variance	ICC (95% CI)
Year 9 pupils with SEND subsample						
Primary outcome: GCSE standardised combined mark	0.87	0.13	0.13 (0.09; 0.19)	0.64	0.06	0.08 (0.05; 0.13)
GCSE Mathematics standardised mark for pupils designated with SEND	0.88	0.14	0.14 (0.09; 0.21)	0.44	0.06	0.11 (0.07; 0.18)
GCSE Mathematics 1-9 grade for pupils designated with SEND	3.12	0.47	0.13 (0.09; 0.18)	1.62	0.19	0.11 (0.07; 0.15)
GCSE English Language 1–9 grade for pupils designated with SEND	2.54	0.42	0.14 (0.1; 0.2)	1.78	0.13	0.07 (0.04; 0.11)
Count response: Number of authorised absences – school year 2022/2023 for pupils designated with SEND	N/A	0.70	N/A	N/A	0.69	N/A
Binary response: At least one unauthorised absence in the school year 2022/2023 for pupils designated with SEND	N/A	0.95	0.22 (0.16; 0.3)	N/A	0.85	0.21 (0.15; 0.28)
Binary response: At least one exclusion from school in the school year 2022/2023 for pupils designated with SEND	N/A	0.66	0.17 (0.1; 0.26)	N/A	0.42	0.11 (0.06; 0.2)
Total difficulties score: SDQ for pupils designated with SEND	37.94	0.39	0.01 (0; 0.13)	24.18	0	0 (0; 0)
Year 9 All pupils						
GCSE English Language mark (standardised) for all pupils	0.88	0.1	0.1 (0.08; 0.13)	0.58	0.04	0.06 (0.05; 0.09)
GCSE Mathematics standardised mark for all pupils	0.89	0.1	0.1 (0.07; 0.14)	0.43	0.06	0.12 (0.09; 0.17)
Total difficulties score: SDQ for all pupils	38.55	0.97	0.02 (0.02; 0.04)	22.53	0.25	0.01 (0.01; 0.2)
Year 8 pupils with SEND subsample						
Total difficulties score: SDQ for pupils with SEND	40.7	1.04	0.03 (0; 0.13)	26.3	0.8	0.03 (0.01; 0.13)
Year 8 All pupils						
Total difficulties score: SDQ for all pupils	40.1	1.34	0.03 (0.02; 0.05)	26.28	0.26	0.01 (0; 0.02)

Further appendices

Please see separate document for technical appendices:

Appendix E: Recruitment documents

Appendix F: Research instruments

Appendix G: Further details about usual practice

Appendix H: Randomisation and primary analysis code

Appendix I: Statistical outputs

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