Department for Education

Evaluation of the Assistive Technology Training Pilot

Research report

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CooperGibson Research

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Executive summary

In response to evidence that teachers struggled to use technology to support learners with special educational needs[1], the Department for Education (DfE) ran an Assistive Technology Training Pilot programme for 79 schools from January 2022 to March 2022. The training focused on upskilling school staff in identifying and implementing appropriate assistive technology for pupils with special educational needs and disabilities (SEND) in mainstream schools.

A nominated Assistive Technology (AT) Champion participated in 5 online live training sessions and an online virtual meeting with senior leaders and AT Champions from each school was held at the start and the end of the pilot to encourage engagement with the programme and embedding learning across the setting. Participating schools also had access to a suite of resources.

CooperGibson Research (CGR) was commissioned by the DfE to conduct an independent evaluation of the small-scale pilot which involved surveys and interviews with a small number of schools and the Assistive Technology Training Pilot delivery partners. This report presents the findings of the research.

Methodology

A mixed method approach was designed involving:

- In-depth online / virtual interviews with the Assistive Technology Training Pilot delivery partners before and after delivery.
- Online surveys with primary and secondary schools completed by AT Champions before (pre, n=71) after (post, n=61) participating in training, to explore changes in their perceptions and their experiences of participation.
- In-depth telephone or online virtual interviews with 20 primary and secondary AT Champions to explore their expectations and perceptions of the programme in more detail.

Perceptions of the Assistive Technology Training Pilot

Overall, the Assistive Technology Training Pilot has been well received. The majority (87%) of AT Champions were very or quite satisfied with the training and support they

[1] Department for Education. (2021). *Education Technology (EdTech) Survey 2020-21.* Research Report. CooperGibson Research. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/996470/Education_Technology__EdTech__Survey_2020-21__1_.pdf

received, and the expertise and approach of the trainers was praised (80% very satisfied).

Schools' experiences of the training were broadly in line with what they expected; that it would improve their awareness and understanding of assistive technology and how it could be used to support learning. The majority (61%) of AT Champions felt that the training had completely or mostly met their needs.

Delivery

The majority of AT Champions were very satisfied with the live online format of the sessions (69%), which encouraged schools to prioritise participation and commit the necessary attention to the training. In particular, the opportunity to ask questions and receive immediate responses from the trainers was highly valued.

The small-group dynamic encouraged open discussions with other participants and was useful for sharing knowledge, experiences, practical tips and support. However, awareness of the opportunity for peer networking was varied and few had actually made use of it at the time of the post-training research. Although an appetite for networking outside of the training sessions was expressed, some AT Champions noted that local connections were preferable.

AT Champions were also broadly satisfied with the timing of the sessions (57% very satisfied, 30% quite satisfied). Qualitatively, the one-hour length of the training sessions worked well for schools and the flexibility of being able to choose from different timing options and change sessions when unforeseen challenges occurred, helped to facilitate attendance.

However, satisfaction with the length of the training programme was somewhat lower, with less than half of participants very satisfied (46%). Some schools found the pace of the programme challenging, in particular finding time to complete the intersession tasks.

Session content

Overall, the majority of AT Champions were satisfied with the content of the training sessions (57% very satisfied, 31% quite satisfied). Sessions 1-5 were found to be the most useful, in particular Session 2 – Child-centred Planning and Innovation (67% very useful) and Session 3 – Implementation and Evaluation (72% very useful).

Content that focussed on raising awareness of the assistive technology available, particularly free technology, and demonstrations of specific assistive technology, was found to be the most useful and most recalled aspect of the training. A greater focus on presenting more examples of assistive technology, and more time spent on the assistive

technology that was presented, would have been valued and this was the main improvement suggested by participants. More guidance on sourcing, costs of assistive technology and what represents value for money was also requested.

Views on the opening and closing sessions were more mixed. The opening session was felt to have been useful for almost two-thirds of AT Champions (38% very useful, 28% quite useful), it encouraged engagement and set some expectations of what the programme involved. However almost one-third (31%) of AT Champions felt the opening session was not useful. Similarly, the closing session was felt to have been useful for almost two-thirds of AT Champions (28% very useful, 36% quite useful), and the sharing of schools' successes was felt to be interesting. However, 8% said the closing session was not useful and over one-quarter (28%) did not attend.

Some schools felt that the opening and closing sessions could have been more participative or that the information provided in them could have been provided by email. There were also some calls for greater clarity about the course aims ahead of participation.

Resources

The resources worked well to support the training sessions. The AT Champion website containing all the training materials (57% very useful, 38% quite useful), and the AT self-assessment audit tool and action planning framework (54% very useful, 43% quite useful) were felt to be the most useful. However, some schools noted that whilst they could appreciate that the resources were beneficial, utilising them would require further time commitment, which increased workload pressures. Some schools had not yet had time to access the resources, although they planned to do so in the future.

Perceptions of the usefulness of the other resources were positive, particularly the intersession tasks (30% very useful, 52% quite useful). However, some AT Champions found it challenging to complete them within the timescales. It also appears that the opportunity for peer networking was missed by some of the AT Champions, due to inconsistencies in their awareness of the opportunity. Appetite for building links between schools and networking outside of the training sessions was expressed, and some AT Champions noted that local connections were preferable.

Immediate outcomes

By the end of the pilot, the majority of AT Champions were in the early stages of sharing their learnings with their school, raising awareness about assistive technology with staff, having discussions with SLT or testing the use of newly discovered assistive technology with some pupils. Many of the AT Champions surveyed felt that the training will help them

to tackle some of the key barriers they faced in using assistive technology, in particular awareness and understanding of the assistive technology that is available (66%) and teacher skills and confidence with utilising assistive technology (67%), support from senior leadership (66%) and having the time to learn how to use assistive technology effectively (66%), all of which were key aims of the programme.

Whilst AT Champions were keen to widen the reach of the programme and had plans to implement the assistive technology they had learned about more widely, they felt they needed more time to reflect on what they had learned and to put it into action. However, some concerns were raised by staff interviewed who had non-senior roles or were from larger schools, that they would not have the necessary influence to encourage wider use of assistive technology amongst other staff.

Opinions as to whether the training had met schools' needs were somewhat mixed, primarily because of an expectation that there would be a greater focus on specific assistive technology and how it could be used.

Impact of the Assistive Technology Training Pilot

Overall, the majority of AT Champions were positive about the impact of their involvement in the Assistive Technology Training Pilot on their own knowledge and confidence.

A significant[2] improvement in awareness and familiarity with a number of different types of assistive technology was seen after participating in the training, particularly for text-to-speech and speech-to-text applications (knew a lot about them pre 9%, post 57%) and page display tools (knew a lot about them pre 7%, post 54% respectively) which were discussed in the training sessions. AT Champions were excited and surprised at how easy it was to access and implement freely available assistive technology tools.

Importantly, a significant increase in AT Champions' ratings of their confidence after participating in the training was seen across all areas. Confidence was highest after the training for using assistive technology to support pupils in their learning and the increase in the proportion of AT Champions who gave a rating of 8-10 (where 1 represents 'not at all confident' and 10 represents 'very confident') between the pre and post stages was the greatest (pre 10%, n=7, post 48%, n=29). Large increases in those giving a rating of 8-10 were also seen for assessing the effectiveness and impact of assistive technology used to support pupils (pre 7%, n=5, post 43%, n=26) and identifying the relevant assistive technology to meet pupils' needs (pre 3%, n=2, post 36%, n=22).

[2] Significance testing was conducted on pre and post-training data, see section 1.4.

Some impacts on other staff were noted by interviewees where learnings had been cascaded, however, given the timescales, this was still in the early stages. The majority of AT Champions recognised that the training would contribute towards improvements in the future across their school. In particular, they felt that the training would contribute to a great or moderate extent towards increasing the use of assistive technology (84%), improving the use of assistive technology to best effect (77%), removing barriers to learning for pupils with SEND (75%) and raising the profile and awareness of assistive technology across the school (74%). The majority also believed that the training would contribute to a great or moderate extent towards improvements in the use of assistive technology for other pupils without SEND (67%) and pupils with English as an additional language (EAL) (66%).

Feelings about the potential impact of assistive technology use on workload were mixed. Whilst AT Champions could see the potential for assistive technology to create efficiencies and reduce workload, they had not yet seen this benefit. They also acknowledged that workload could temporarily increase, as they adapted to using the technology within their practice. More training on how to use specific assistive technology would help to minimise this impact on schools.

The vast majority of AT Champions already recognised before they participated in the training that the use of assistive technology can have a positive impact on the confidence, behaviour, engagement, independence and progress / outcomes of pupils with SEND in their school, and this did not change across the pilot. Some examples of positive impact were beginning to emerge, however, as already noted, schools had not yet had time to implement much of their learnings.

Challenges and improvements

Positively, the majority (61%) of AT Champions who completed the post-training survey said they experienced no challenges with participating in the training. The timescale of the programme was the main challenge mentioned by survey respondents (21%) and interviewees, primarily not having time to complete intersession tasks or digest the content and implement learnings between sessions. Conflict with other commitments or issues in school exacerbated this challenge. Some concerns were also raised in the surveys and interviews about their ability to widen and embed the use of assistive technology within their school, due to a range of factors including lack of access to assistive technology, technical challenges, lack of strategic influence of the AT Champion, differences in staff engagement levels and challenges around the use of assistive technology for certain year groups, such as examination or statutory assessment year groups.

AT Champions were keen to hear even more about the different types of assistive technology and how it can help to support pupils' learning needs, along with guidance on sourcing and value for money considerations. They also suggested that the training would be improved by providing the sessions over a longer time period or extending the programme further, giving more time for intersession tasks to be completed and learning to be actioned.

Areas for future development

A number of potential areas for consideration for future development of the Assistive Technology Training Programme emerged:

- Clarity from the start about the aims of the training, what it will deliver and the commitment required to complete activities between sessions to manage schools' expectations.
- Focus on building awareness and practical knowledge of how to use assistive technology tools is important to ensure the programme meets schools' needs.
- Include more content and support on assistive technology strategy and whole-school approaches, efficient spending on assistive technology and how the technology can increase staff efficiency.
- Build time into the programme to look through the supporting resources during the sessions to help schools to capitalise on their value.
- Review and amend the intersession tasks to increase relevance and reduce burden.
- Extend delivery of the programme to allow more time for intersession tasks to be completed, and for learnings to be digested, shared and implemented.
- Review the content of the opening and closing sessions and consider whether this information could be delivered in an alternative format.
- Greater focus on facilitating peer networks.
- Further research with participants, allowing some time for changes to be made in the schools, would provide a better understanding of the longer-term impact of the training on pupils and wider staff.

1. Introduction

From January 2022 to March 2022, the Department for Education (DfE) ran a pilot of an Assistive Technology Training Programme for up to 100 schools, focused on upskilling school staff in identifying and implementing appropriate assistive technology for pupils with special educational needs and disabilities (SEND) in mainstream schools. This is in response to evidence that teachers struggled to use technology to support learners with special educational needs[3].

CooperGibson Research (CGR) was commissioned by the DfE to conduct an evaluation of the pilot. This report presents the findings of the research.

1.2 Aims and objectives of the evaluation

The overall aim of the evaluation was to understand whether teachers feel more able to meet the needs of pupils' with SEND after participating in the Assistive Technology Training Programme. The evaluation also aimed to:

- Inform the viability and identification of the benefits of future assistive technology training to inform other training programmes.
- Support dissemination of good practice and identify any lessons learned.

The objectives of the research were to:

- Understand participants' needs and expectations before the training commenced and whether they were met by the programme.
- Identify any perceived changes in knowledge, awareness, perceptions and practice as a result of participating in the programme.
- Understand levels of satisfaction with the training and support received through programme.
- Explore the immediate and perceived future benefits of participating in the programme for schools, teachers and pupils.
- Identify any challenges around participating in the training programme and improvements which could be made for future delivery.

[3] Department for Education. (2021). *Education Technology (EdTech) Survey 2020-21.* Research Report. CooperGibson Research. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/996470/Education_Technology__EdTech__Survey_2020-21__1_.pdf

1.3 Assistive Technology Training Pilot overview

The Assistive Technology Training Pilot sought to test a sector-led approach to increasing awareness and confidence of teachers and increasing effective use of assistive technology in mainstream schools. The pilot aimed to:

- Upskill staff in mainstream schools in the use of, assessment for and anticipated outcomes of assistive technology.
- Give schools what they need to embed effective assistive technology use in a long-term digital strategy.
- Provide training for schools in a way that limits the impact of budgetary pressures and staff workload.
- Offer schools the opportunity to build peer support networks which continue beyond the programme.

nasen, the National Association for Special Educational Needs, and assistive technology provider, Microlink, have collaborated to design and deliver the programme. A nominated Assistive Technology (AT) Champion[4] participated in 5 online live training sessions between January and March 2022. In addition to the structured programme, an online virtual presentation with senior leaders and AT Champions from each school was held at the start and the end of the pilot to encourage engagement with the programme and embedding learning across the setting. Participating schools also had access to a suite of resources, including an AT Champion website which contained the session slides, intersession tasks and recordings, an Assistive Technologies Audit Tool and framework, a resource bank and the Microlink E-learning platform. AT Champions were also given the opportunity to keep in touch with the other AT Champions in their training group outside of the training sessions.

Initially, 83 schools signed up to the programme, however 4 schools dropped out ahead of commencement due to staffing challenges, leaving 79 schools remaining; 56 primary schools and 23 secondary schools. Table 21 (Appendix 1) details the profile of the participating schools.

1.3.1 Programme design

The delivery partners described the development of the training programme as being underpinned by the fundamental principle of removing barriers to learning and increasing confidence in identifying and using assistive technology. Design and delivery of the programme took into account a number of challenges around the use of assistive technology in schools:

[4] An individual selected by each school to participate in the training.

- A lack of understanding of what assistive technology means.
- The wide variety of approaches to the management of SEND in schools.
- The wide range of IT infrastructure and capabilities across schools.

As a result, the training programme was developed to allow for a wide range of different starting points of schools:

> We found you had to plan for an incredible variety of starting points, but still somehow create a framework that inspires growth, development, exploration, transformation, from wherever the school is. That was one of the most fundamental design challenges. – *Delivery partner*

The programme was comprised of:

- An opening session, attended by the AT Champion and a member of the senior leadership team (SLT), to engage schools with the programme and outline its aims. A Member of Parliament spoke at this session.
- Five weekly, one-hour training sessions attended by the AT Champion:
    - Session 1: Introduction and Goal Setting.
    - Session 2: Child-centred Planning and Innovation.
    - Session 3: Implementation and Evaluation.
    - Session 4: Action Planning.
    - Session 5: Sharing your Knowledge and Planning for Change.
- A closing session, attended by the AT Champion and a member of the SLT, to share experiences and successes.

Schools were split into small primary or secondary groups of 7-12 participants with 2 trainers per group. During the training sessions, the groups were split into two smaller breakout groups, to encourage relevant professional dialogue and the development of peer networks.

The same training materials were utilised across all participating schools and only minor changes were made to the training content during the programme, apart from the closing session which focussed on the experiences of participants and sharing success stories, so was developed during the course of delivery.

1.3.2 Training session attendance

Attendance at the training sessions was recorded by nasen and is detailed in Table 1.[5] In total, 51 AT Champions (65%) attended all 5 training sessions. Full attendance was higher amongst secondary school participants, although the difference was not significant due to the low base sizes (primary 59%, n=33, secondary 78%, n=18).

Table 1: Training session attendance

Session	Total Counts	Total %	Primary Counts	Primary %	Secondary[6] Counts	Secondary %
Session 1 – Introduction and Goal Setting	70	87%	49	88%	21	91%
Session 2 – Child-centred Planning and Innovation	63	80%	43	77%	20	87%
Session 3 – Implementation and Evaluation	61	77%	42	75%	19	83%
Session 4 – Action Planning	63	80%	44	79%	19	83%
Session 5 – Sharing your Knowledge – Planning for Change	60	76%	42	75%	18	78%

Base: All participating schools (79)

Source: nasen

1.4 Research methodology

A mixed method approach was designed for the evaluation involving:

- In-depth online virtual interviews with the Assistive Technology Training Pilot delivery partners before and after delivery, to understand aims and structure of the programme, how it was delivered, and their experiences of designing and delivering the training programme.

[5] Attendance at the sessions was also asked in the pre and post-training surveys. However, this data was collected in the weeks after participation, therefore accuracy of participants' recall of the individual sessions attended may have been affected and the answers given by AT Champions did not always match the attendance data collected by nasen. nasen attendance data was deemed to be more accurate as it was recorded at each session.

[6] Due to the low base size (n=20), data for secondary schools should be treated with caution.

- Online surveys: 70 surveys completed before (pre) and 61 surveys completed after (post) participating in training, to explore changes in AT Champions' perceptions of the training programme and their experiences of participation.

- In-depth telephone or online virtual interviews with 20 AT Champions after completing their training, to explore in more detail their needs and expectations of participating in the programme, perceptions of the programme, whether the training met their needs, and changes made as a result of participating in the programme.

Key measures were designed to focus on areas related to the AT Training Pilot Theory of Change (see Appendix 3), such as: levels of awareness of assistive technology and its application, levels of staff confidence in using assistive technology, their ability to identify, use and assess assistive technology relevant to pupils' needs, their ability to meet pupils' needs, whether assistive technology is being embedded in a long-term strategy / whole school approach and the existence of barriers to the identification, assessment and use of assistive technology.

Significance testing was conducted comparing pre and post-training survey data to identify any statistically significant differences using z-tests. Throughout the report, the term 'significantly' has been used to identify where pre and post-data has been deemed to be significantly different at the 95% confidence level.

1.5 Pre and post-training survey sample profile

Overall, 70 out of 79 schools completed the pre-training survey, which is equivalent to a response rate of 89% (Table 2). Responses to this survey were received from 50 primary schools and 20 secondary schools and the response rate was consistent across the phases.

Table 2: Pre (before) training survey response rates

	Total	Primary	Secondary[7]
Total number of schools	79	56	23
Number of survey responses	70	50	20
Response rate	89%	89%	87%

Base: Primary (56), Secondary (23)

Source: AT Training Pilot participating schools and AT pilot pre-training survey

[7] Due to the low base sizes (pre n=20, post n=17), data for secondary schools should be treated with caution.

The post-training survey was sent out to the 70 AT Champions who had completed the pre-training survey and was completed by 61 respondents, which is equivalent to a response rate of 87% (Table 3).

Table 3: Post (after) training survey response rates

	Total	Primary	Secondary[8]
Total number of schools	70	50	20
Number of survey responses	61	44	17
Response rate	87%	88%	85%

Base: Primary (50), Secondary (20)

Source: AT pilot pre and post-training surveys

The profile of the schools that responded to the pre and post-training surveys are detailed Appendix 1 (Tables 22 to 25). Overall, there was a broad mix of responding schools in terms of type, size, region and percentage of pupils receiving free school meals (FSM)[9]. The majority of schools (pre 71%, n=42, post 57%, n=35) were given an Ofsted rating of 'good'. Around two-fifths (pre 39%, n=27, post 38%, n=23) of schools had an above average proportion of pupils with SEND and around three-fifths (pre 61%, n=43, post 62%, n=38) had a below average proportion of pupils with SEND.

Tables 4 and 5 detail the role of the AT Champions that responded to the pre and post surveys. The majority (pre 74%, n=37, post 80%, n=35) of primary schools that responded to the surveys had nominated senior leaders, teachers or Special Educational Needs Coordinators (SENCOs) to be their AT Champions. AT Champions at secondary schools were more likely to be teachers (pre 35%, n=7, post 35%, n=6) or teaching assistants / learning support staff (pre 25%, n=5, post 24%, n=4) although the differences cannot be deemed significant due to the low base sizes for secondary schools. The majority (pre 69%, n=48, post 72%, n=44) of AT Champions had been in the teaching profession for 10 or more years.

[8] Ibid.
[9] Department for Education (2018), Free school meals: guidance for schools and local authorities - GOV.UK (www.gov.uk)

Table 4: Pre (before) training survey respondent role

Respondent Role	Total Counts	Total %	Primary Counts	Primary %	Secondary [10] Counts	Secondary %
School senior leader	19	27%	16	32%	3	15%
Teacher	17	24%	10	20%	7	35%
SENCO	14	20%	11	22%	3	15%
Teaching assistant / Learning support	9	13%	4	8%	5	25%
Middle leader	6	9%	5	10%	1	5%
Inclusion manager / leader	5	7%	4	8%	1	5%

Base: Primary (50), Secondary (20)

Source: AT pilot pre-training survey

Table 5: Post (after) training survey respondent role

Respondent Role	Total Counts	Total %	Primary Counts	Primary %	Secondary [11] Counts	Secondary %
School senior leader	18	30%	16	36%	2	12%
Teacher	17	28%	11	25%	6	35%
SENCO	12	20%	8	18%	4	24%
Teaching assistant / Learning support	8	13%	4	9%	4	24%
Middle leader	3	5%	3	7%	-	-
Inclusion manager / leader	3	5%	2	5%	1	6%

Base: Primary (44), Secondary (17)

Source: AT pilot post-training survey

[10] Ibid.
[11] Ibid.

1.6 Interview sample profile

A sample of 20 schools was selected to participate in the in-depth interviews with consideration of the following criteria to ensure feedback was gained from a range of perspectives:

- A mix of high, medium and low assistive technology confidence at the time of completing the pre-training survey.[12]
- A balanced representation of schools by phase, with secondary schools uplifted slightly to allow more meaningful analysis to take place.
- The percentage of pupils in the school with SEND compared to the mean.
- A mix of roles of the AT Champions.
- Inclusion of schools that did not complete a pre-training survey, where they had engaged with the training.

The final sample achieved is outlined in Appendix 2 and included:

- 12 primary schools and 8 secondary schools.
- 9 schools with an above average percentage of pupils with SEND and 11 with below average.
- 7 AT Champions with a high assistive technology confidence level, 6 with a medium confidence level and 5 with a low confidence level, plus 2 AT Champions that did not respond to the pre-training survey.

1.7 Methodological considerations

There are a number of methodological considerations to note when considering the findings provided in this report:

- This is a small-scale pilot which included a relatively small number of schools. Furthermore, some of the schools involved in the pilot did not complete the pre and post-training surveys, reducing the sample sizes available for analysis further. Due to the small sample sizes, quantitative sub-group analysis has not been possible.

[12] An aggregated confidence score was calculated using the sum of the ratings (on a scale of 1-10) provided by AT Champions for the pre-training survey confidence question (section 4.1.2). The schools were then ranked in order based on the aggregated confidence score and grouped into low, medium and high categories by dividing the range of scores into thirds.

- Significance testing was produced comparing pre and post-training survey data to identify any statistically significant differences and some significant differences were found. However, we can't necessarily attribute the significant differences directly to the training and no control group was identified for wider comparisons. Further research would be needed with larger sample sizes, over a longer time period to ascertain the impact of the training.

- The sample was a self-selected sample, drawn from the EdTech survey respondents who had consented to be contacted for further research who were then invited to participate in the pilot. This limits the representativeness of the sample, as participants are likely to already be interested in learning more about assistive technology. However, this is not necessarily a problem given that those who would be interested in taking up any similar, future training would also likely have the same interest in learning more about assistive technology. In addition, overall, there was a broad mix of participating schools in terms of type, size, region and percentage of pupils receiving free school meals (FSM).

- In some schools, the AT Champion was unable to attend all of the training sessions and some changes of AT Champions during the course of the pilot were also made. This may have impacted upon the comparability of the pre and post-training survey data and the responses of AT Champions to the post-training survey.

- The training pilot was relatively short, delivered over a period of 5 weeks, with research completed immediately before and after participation. Due to this short timescale, schools may not have had sufficient time to implement what they had learned, nor see any impact of the training. It would be useful to conduct future research with participants, allowing some time for changes to be made in the schools, to provide a better understanding of the impact of the training.

- Analysis was conducted to identify whether there was a linear correlation between the number of SEND pupils or percentage of SEND pupils and AT Champion's perceptions of their own confidence before they participated in the Assistive Technology Training Pilot. Correlations were very low (r between 0.02-0.25) indicating that there was no significant linear relationship, therefore this data has not been included within this report.

2. Perceptions of the AT Training Programme

This section describes AT Champions' perceptions of the AT training, including why they decided to participate and their initial expectations of the training. It covers satisfaction with the delivery approach, timing and length of the sessions, content of the sessions and supporting resources, and the extent to which the training met schools' needs.

2.1 Rationale for involvement

The AT champions interviewed stated that participation in the training was primarily driven by the headteacher or another member of the SLT. In a few cases, the Special Educational Needs Coordinator (SENCO) or the AT Champion themselves either drove, or were involved in, the decision-making.

Reasons for participation included high and/or increasing levels of SEND pupils in school and the desire to review their existing provision and/or make it more effective.

The key goals that AT Champions hoped to achieve from participating in the Assistive Technology Training Pilot were to:

- Improve and maximise the use of assistive technology to support learning, with particular reference to pupils with SEND, and some reference to those with English as an Additional Language (EAL).
- Improve their own awareness and understanding of assistive technology and that of wider school staff, including appreciating what technology they already have available.

> We wanted to look at technology to help other students who have Teaching Assistants and to make them more independent…and to better my knowledge of what assistive technology was on the market.
> – *Teaching assistant, Secondary school*

- Improve pupil achievement, wellbeing and learner independence.
- Other mentions included improving teacher workload and understanding how assistive technology could support pupils with exams.

2.2 Satisfaction with and usefulness of the programme

The vast majority (87%, n=53) of AT Champions responding to the survey were very or quite satisfied with the training and support they received during the AT Training Pilot and over half stated they were very satisfied (56%, n=34). Around one-tenth (11%, n=7) were

neither satisfied nor dissatisfied and just one respondent felt dissatisfied (quite dissatisfied 2%, n=1).

Overall, the mechanics and content of the training sessions were well received by AT Champions responding to the post-training online survey, with the majority being very or quite satisfied (Table 6).

Table 6: Satisfaction with elements of the AT training

Training Element	Very dissatisfied %	Quite dissatisfied %	Neither %	Quite satisfied %	Very satisfied %
Expertise of the trainers	-	-	2%	18%	80%
Live online format for delivering the training sessions	-	-	5%	26%	69%
Timing of the training sessions	2%	-	11%	30%	57%
Content of the live training sessions	2%	3%	7%	31%	57%
Content of the resources	2%	-	10%	36%	52%
Length of the training programme	2%	2%	13%	38%	46%

Base: All post-survey respondents (61)

Source: AT pilot post-training survey

2.2.1 Delivery approach

Satisfaction with the expertise of the trainers was very high amongst the AT Champions that responded to the post-training survey, with 80% (n=49) saying they were very satisfied (Table 6). AT Champions interviewed valued being able to ask questions of expert trainers who were supportive in their knowledgeable responses, usually offering these immediately or posting links to resources via the chat function. Trainers were also praised by many for their attributes including being ‘passionate’, ‘inspiring’, ‘inclusive’ and ‘helpful’. A few interviewees had made use of the option to pose questions after the sessions in person or via email, which was appreciated.

Trainers were also identified as being non-judgemental, recognising that participants had different starting points. This latter point, for one interviewee helped remove a potential barrier:

> Sometimes with IT, you don't want to ask as you don't want to be the only one. – *SENCO, Primary school*

The majority of respondents to the post-training online survey (69%, n=42) were also very satisfied with the live online format for training delivery (Table 6) and this was also viewed positively by the AT Champions interviewed and the delivery partners. One AT Champion said they made use of a session recording due to illness. Live online delivery was considered to be advantageous compared to pre-recorded sessions because:

- It demanded attention and was more likely to be prioritised and committed to.
- The opportunity to ask questions and receive immediate responses was highly valuable, for example, for AT Champions with lower levels of assistive technology knowledge.
- Interactions with trainers and other participants contributed to knowledge gains and offered support.

> Live sessions were a lot more helpful as if you had a question, you'd get an instant reply, and you'd get to speak to teachers who were literally on-hand and within 30 seconds of asking a question, someone else will have an answer. – *Teaching assistant, Secondary school*

Delivery partners felt that engagement during the training sessions was good and that the small-group format facilitated discussion and sharing of experiences between participants.

AT Champions interviewed found it useful to hear from other participants about what they had been implementing in their settings, practical insights into 'pitfalls', 'glitches' and how to mitigate these, or how to overcome implementation barriers.

> It was just interesting to listen to people at other schools to find out the things that they were doing and also the things they come up against, because sometimes it's hard to get it past senior leadership. – *Teaching assistant, Secondary school*

Breakout rooms were also a positive feature and a mutually supportive environment – knowing that others were in the 'same boat', such as similar contexts, stage of development or facing similar issues. The size of these breakout rooms, around six

participants, made them feel personable, aided relationship building, and encouraged contribution to the discussion.

However, a few AT Champions noted that participant contributions were not always specifically relevant to their school's needs and, as a result, the case studies and reflections in later sessions were not as helpful. More time devoted to presentation of assistive technology and training on its use was suggested as a better use of the time.

2.2.2 Timing and length of delivery

Almost three-fifths (57%, n=35) of AT Champions that responded to the online survey were very satisfied with the timing of the training sessions and a further 30% (n=18) were quite satisfied (Table 6). Qualitatively, the timing and length of sessions, at an hour-long, were viewed positively. The delivery partners were happy with the length and number of sessions and had been able to cover all of the intended content.

Most of the AT Champions interviewed did not experience any issues in attending sessions within the given timeslots. The flexibility of the programme was helpful for supporting attendance; the ability to select from alternative training session dates and times, variations in school holidays were taken into account, and having a dedicated time each week. This was also noted by the delivery partners as an advantage of the delivery approach.

Although the majority (84%, n-51) of AT Champions were satisfied with the length of the training programme, the proportion that were very satisfied was lower than for the other aspects of delivery (46%, n=28). A minority were very or quite dissatisfied with these elements. As noted in the challenges section (see section 6), the relatively short timescales for the programme (5 weekly sessions) made it difficult for AT Champions to complete the intersession tasks, reflect on what they had learned and put it into action.

2.2.3 Session content – sessions 1-5

Overall, the content of the live training sessions was well received by AT Champions responding to the online survey, with the vast majority being very (57%, n=35) or quite (31%, n=19) satisfied (Table 6).

All of sessions 1-5 were felt to be useful by the majority (Table 7). The most useful sessions were:

- Session 2 – Child-centred Planning and Innovation (67% very useful, n=41).
- Session 3 – Implementation and Evaluation (72% very useful, n=44).
- Session 4 – Action Planning (64% very useful, n=39).

Table 7: Usefulness of the AT live online training session

Session	Did not attend %	Not at all useful %	Not very useful %	Quite useful %	Very useful %
Opening session	3%	3%	28%	28%	38%
Session 1 Introduction and Goal Setting	2%	2%	2%	36%	59%
Session 2 – Child-centred Planning and Innovation	-	2%	2%	30%	67%
Session 3 – Implementation and Evaluation	-	2%	7%	20%	72%
Session 4 – Action Planning	3%	-	5%	28%	64%
Session 5 – Sharing your Knowledge and Planning for Change	-	3%	10%	38%	49%
Closing session	28%	3%	5%	36%	28%

Base: All respondents (61)

Source: AT pilot post-training survey

The AT Champions interviewed found the most helpful sessions to be those which focused on trainers' demonstration of specific assistive technology. The sessions raised their awareness of assistive technology that was both recommended and freely available, and enabled them to return to school to explore its use:

> Those were the two [reader program and accessibility software] that I particularly found useful because it gave us tools to really use in school. – *SENCO, Primary school*

> It was learning about the [reader program and accessibility software] to aid the students that we currently have with something so simple that we can download with just a few clicks. – *Teaching assistant, Secondary school*

Their recollection of other content was more limited. A minority of AT Champions interviewed stated sessions which focused on the audit tool were helpful.

AT Champions were positive about the knowledge they had gained and this would enable them to take their next steps with assistive technology in school.

> I think it was just good because it's amazing how many people don't know what is available. So, we had a kind of school partnership meeting last week and I took the [reader programme] and showed everyone and not one of the schools in the LA were using it and didn't know that it was available. - *Inclusion lead and SENCO, Primary school*

AT Champions also believed that the focus on strategy was helpful, including adopting an incremental approach to wider implementation in schools with support from senior leaders, advice on assistive technology policy development and the pupil-centred approach to evaluating assistive technology impact. For example, one interviewee stated it helped them to consider factors they might not have thought of otherwise, such as budgetary constraints and where introducing assistive technology fits with the school Self Evaluation Form (SEF).[13]

However, several AT Champions interviewed considered more time could have been devoted to presenting more examples of assistive technology and requested more training or longer sessions on the assistive technology that was presented as they did not have the time to try out the technology between sessions.

> It started very well and they brought technology to our attention in sessions one and two, and I just felt that after that, the majority of the sessions were about how we had got on with implementing them within our schools, and I felt if I could have got more from the course if it had been a little more show and tell. – *Teacher, Secondary school*

2.2.4 Session content – opening and closing sessions

Opinions of the opening and closing sessions were more mixed (Table 7):

- Almost two-thirds (66%, n=40) of post-training survey respondents found the opening session useful.
- However almost one-third (31%, n=19) stated it was not useful.
- A similar proportion felt the closing session was useful (64%, n=39).

[13] Department for Education (2021), *School resource management self-assessment checklist. Support notes for 2021 to 2022.* https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1046489/School_resource_managament_self-assessment_checklist_notes_for_2021-22.pdf

- However, just over one-quarter (28%, n=17) of survey respondents said they did not attend the closing session.

Views on the opening and closing sessions were also mixed amongst the AT Champions interviewed. Some interviewees were positive about the opening session, which helped clarify training intentions and purposes:

> It just kind of clarified exactly what we were doing and the reasons that it's needed. The session reinforced that the focus was about creating greater independence for pupils and that was one of the key things that I really wanted to focus on. – *Assistant headteacher and SENCO, Primary school*

A few commented positively on the Member of Parliament's presence in terms of communicating assistive technology's importance, while one participant thought there could have been more emphasis on participation rather than listening. Some felt that they needed more information on course aims and purpose prior to the opening session. A suggestion was that the information could have been shared by email to save time for headteachers who attended.

Positive views on the closing session were expressed by some AT Champions interviewed. Their comments centred on:

- Being able to hear in the video montage what participants had been implementing in their schools, including what worked well and barriers faced, especially those outside of their breakout room groups. These also included links to resources via the chat function.
- The positive, celebratory emphasis on participants' achievements to date.
- Stating next steps and recapping the use of the audit tool.
- Benefits, in one case, for an SLT staff member around the focus on wellbeing as this was a school improvement focus for them.

2.2.5 Programme resources

Just over half (52%, n=32) of the AT Champions surveyed were very satisfied with the content of the resources and a further 36% (n=22) were quite satisfied (Table 6).

The most useful elements were the AT Champion website (containing the session slides, intersession tasks and recordings of the training sessions) and the AT audit tool (AT self-evaluation and action planning framework and supporting documents) (Table 8). Almost all AT Champions felt these elements were very or quite useful (95% n=58, 97% n=59 respectively).

Table 8: Usefulness of the AT training resources[14]

AT Training Resource	Don't know / did not use %	Not at all useful %	Not very useful %	Quite useful %	Very useful %
AT Champion website	3%	-	2%	38%	57%
AT audit / self-evaluation and action planning framework and supporting documents	2%	-	2%	43%	54%
Microlink E-learning platform	18%	-	3%	48%	31%
Intersession tasks	3%	-	15%	52%	30%
AT Spark documents	18%	-	5%	48%	30%

Base: All respondents (61)

Source: AT pilot post-training survey

Most AT Champions interviewed stated that having free access to the nasen website was helpful for accessing assistive technology resources and would be a valuable repository to support their work. Mention was made in a few cases that the resources provided were 'fantastic' or 'high quality', with the session PowerPoint presentations serving as a permanent resource to which they could refer back.

Practice example

A secondary school teaching assistant has used both Resource Banks 1 and 2 from the nasen website. She has appreciated how easy they have been to find and read, with so many ideas and resources in one place and is continuing her exploration of these.

> Having the pre-prepared PowerPoints, you knew what you were going into for that session and, as I have set time to work on my assistive technology work, it gave time before and after each session to have a look through…and debrief my SENCO. – *Teaching assistant, Secondary school*

Qualitatively, the AT audit tool was the resource specifically referred to the most as a valuable tool and the delivery partners noted that the AT audit framework was a key

[14] The sum of the percentages may not be equal to the combined percentage due to data rounding.

resource and one of the most downloaded from the programme. Interviewees felt the audit tool had, or would help them with:

- Identifying strengths and development areas.
- Dialogue with senior leaders in terms of improving the use of assistive technology.
- Supporting thinking, for example, about school readiness and potential barriers.
- Action planning and review of progress.

> I know what when I show my headteacher she'll go, “Crikey, we could be here”. It's quite a nice visual and then obviously the part that goes into more detail as well with what you're going to do with each section, which was good too. –*Teacher, Primary school*

Opinions on the other resources were slightly more mixed:

- The majority of respondents also felt the Microlink E-learning platform (79% very or quite useful, n=47) and AT Spark documents (77%, n=47) were useful.
- However, the proportion saying they were very useful was lower for these elements compared to the AT Champion website and AT audit tool (Table 8).
- Almost one-fifth stated that they did not use or were not sure about how useful these elements were (18%, n=11) suggesting that these respondents had not engaged with these elements.

Perceptions of the intersession tasks were also more mixed:

- Less than one-third (30%, n=18) of survey respondents stated the intersession tasks were very useful.
- Half (52%, n=32) said that they were quite useful.
- Furthermore, 15% (n=9) indicated that the intersession tasks were not useful.

Similarly, mixed messages were received about the intersession tasks from the AT Champion interviewees. Some felt the intersession tasks provided opportunities to develop use of assistive technology presented in sessions and to think about its implementation through using the audit tool.

> We had to feedback on what we'd done with the tasks and how we'd got on and whether we'd implemented anything in school. So it made us accountable - we needed to go away and do our homework. But then when we came back and there were things that we weren't so sure on it gave us the opportunity to discuss that as a group. – *Assistant headteacher, Primary school*

A few specifically mentioned how it was useful to try out assistive technology with a specific pupil and report back on that.

Practice example

In a secondary school, the AT Champion stated how the intersessional tasks had stimulated her thinking between each session. The knowledge she had gained to date from the course had helped her think differently about how she might support pupils. This was applied in the intersessional task, enabling her to identify how she might support a pupil with some assistive technology and write a mini case study to share with other participants at the next session.

However, a few AT Champions interviewed found it difficult to complete the intersessional activities, either due to time pressure or lack of opportunity. Having longer for these was suggested in some cases, for example, to mitigate against potential individual circumstances affecting completion and potentially enabling more evidence to be offered when reporting back. For a few, the activities caused feelings of stress or internal pressure, although as one of these interviewees acknowledged, there was no pressure from trainers to complete them – a positive point made by several AT Champions interviewed.

A few interviewees had not yet had the opportunity to use the online resources but aimed to do so, and one was concerned about the resource bank carrying expectations of additional time spent outside of training.

2.2.6 Peer networking

Just over two-fifths (42%, n=26) said they had found the opportunity to keep in touch with the other AT Champions outside of the training sessions very or quite useful. However, one-fifth (20%, n=12) felt that this element had not been useful and a further 10% (n=6) were not sure. Furthermore, just over one-quarter of the AT Champions surveyed (28%, n=17) did not engage with this element.

Perceptions of the potential for the training to build greater links between schools was mixed:

- Almost one-third (31%, n=19) of AT Champions felt that it had or would contribute towards this aspect to a moderate or great extent.
- Just over one-quarter (26%, n=16) thought that it would contribute to some extent.
- A similar proportion thought it would contribute to a small extent, or not at all (28%, n=17).

- A further 15% (n=9) were not sure about this aspect, or felt it was too early to make a judgement.

In the interviews, there appeared to be some inconsistency around understanding of, and provision for, post-training networking. In most cases, interviewees were not aware of such provision. Several of the AT Champions interviewed considered that such networking opportunities would be helpful if they were established. However, a few considered this would not be beneficial due to workload considerations or that a national network would be potentially less useful than local connections. It was also reported that at the end of the last session there had been the option to share emails. Where this had been the case, one was yet to do so and the other had not yet made contact as they had only just completed the closing session and so it was too soon to do so.

3. Immediate outcomes of the Pilot

As a relatively short programme, schools were at varying stages of sharing and implementing their learning from the Assistive Technology Training Pilot within their setting. Post-training research was conducted immediately after they completed the programme and as such, many schools had not yet had sufficient time to action what they had learned and it was difficult for them to identify the tangible impact of the training so far. This section explores the immediate outcomes of the training, including AT Champions' perceptions of whether the training had met their needs, the barriers that they felt the training would help them to address, and outlines early evidence of sharing of learnings.

3.1 Meeting schools' needs

Opinions as to whether the training had met schools' needs were somewhat mixed. Around three-fifths (61%, n=39) of AT Champions responding to the survey indicated that the AT training had completely or mostly met their schools' needs, with a further 30% (n=18) indicating it had somewhat met their needs (Table 9).

Table 9: Extent to which the assistive technology training met schools' needs (post)

Extent to which needs were met	%
Completely	25%
Mostly	39%
Somewhat	30%
Very little	3%
Not at all	-
Don't know	3%

Base: All respondents post survey (61)

Source: AT pilot post-training survey

Responses from the AT Champions interviewed were also mixed. Those who considered there had been enough training and support felt they had gained sufficient knowledge and were well-equipped to take their next steps. Those who did not agree largely wanted more training on specific assistive technology beyond that provided. A few referred to the potential offer made of a further session in the future and considered this would be helpful, for example, to catch up on developments in assistive technology since attending the training.

3.2 Addressing barriers to using assistive technology

Before participating in the training (pre), AT Champions were asked about the barriers to the effective use of assistive technology in their school. Following the training, AT Champions were asked to indicate which barriers they felt the training had or would help them to address (Table 10).

The most commonly mentioned barriers before the training were awareness and understanding of the assistive technology that is available (pre 77%, n=54), and teacher skills and confidence in using assistive technology (pre 74%, n=52). Positively, after participating in the pilot the majority of AT Champions felt that the training had or would help them to tackle these barriers (post 66%, n=40 and 67%, n=41 respectively). The majority of AT Champions also felt that the training had or would help them to tackle barriers around having the time to learn how to use assistive technology (post 66%, n=40 versus pre 69%, n=48).

After participating, around half of AT Champions felt that the training would help them to tackle barriers around the availability of assistive technology in school (56%, n=34), understanding of how assistive technology benefits pupils (51%, n=31) and consistency in the support provided to pupils using assistive technology (49%, n=30).

However, AT Champions were less likely to think that the training would help them with knowledge about where to source assistive technology (post 34%, n=21), despite it commonly being mentioned as a barrier before the training (pre 71%, n=50).

Table 10: Barriers to the effective use of assistive technology (pre-post)

Barrier	Barriers experienced Pre %	Barriers training will help to address Post %
Awareness and understanding of the assistive technology that is available	77%	66%
Teacher skills and confidence with utilising assistive technology	74%	67%
Knowledge about where to source assistive technology	71%	34%
Time to learn how to use assistive technology effectively	69%	66%
Cost of assistive technology	67%	39%
Budgetary constraints	61%	36%
Availability of assistive technology in school	60%	56%
Understanding of how assistive technology benefits pupils	44%	51%
Ability to identify and assess pupils' assistive technology needs	44%	41%
Technical support	40%	28%
Consistency in the support provided to pupils using assistive technology	36%	49%
Low levels of pupil need in the school so it is not cost effective to invest in	30%	15%
Profile of assistive technology across the school	29%	52%
Appetite for utilising assistive technology	24%	46%
Broadband / wireless connectivity in school	10%	11%
Senior leadership buy in / support	6%	20%

Base: All respondents pre-survey (70), post survey (61)

Source: AT pilot pre and post-training surveys

3.3 Early sharing and implementation of learning

The majority of the AT Champions interviewed stated that they had shared learning from the training pilot within their school. Most commonly this had involved the AT Champion or other staff trialling the use of assistive technology with individuals or a group of pupils, so they could test it before wholescale use. Examples of where AT Champions had done this included:

- Trialling a reader software with a year 5 pupil that had dyslexia, showing them the read aloud function with the aim of increasing their independence in learning, so they would be less reliant on a teaching assistant decoding work.
- Identifying year 6 pupils with SEND who can use accessibility software whilst using their individual laptops. The school wanted to create independence for those pupils going into secondary school.
- Asking the teaching assistants in the schools to trial reader software with one child and then come back with feedback on how it's worked.
- Using assistive technology software within an existing reading for pleasure project that was being run within the school. The AT Champion asked the teachers involved in this project to look at how assistive technology could be used within the project to support pupils with their reading.
- Using reader software with pupils in the AT Champion's class that need it, with the intention of then cascading this down to other classes over time.
- Trialling reader software with all year 7-9 pupils.

3.3.1 Cascading training down to other school staff

Several of the AT Champions interviewed had also started to cascade the information they had learned in the training to other teaching or support staff. Where AT Champions had started to share their learning with other staff members, the purpose of this appeared to be two-fold. AT Champions saw this as a useful approach to widening awareness about assistive technology (for example, why it would be useful to use with pupils), the types of pupils it could be used with (such as pupils with SEND, EAL pupils) and the type of assistive technology that the training had covered. In a few cases, AT Champions gave staff assistive technology to try out. It appeared that the schools had taken different approaches to cascading the training to other school staff, but methods mentioned included:

- Feeding back through whole-school staff meetings.
- Sharing with specific year group or curriculum staff teams.

- Sharing with specific members of staff (such as ICT leads, SENCO, or senior leaders).

> So it was me attending the sessions, but I could ping the information back to all staff so that we could all learn together in a way. So I've focused every week on key nuggets of information following each session. – *Assistant headteacher and SENCO, Primary school*

Across the schools involved in the qualitative research there was variation in whether the AT Champions were at the stage of just raising awareness about assistive technology within the wider staff, or whether they were being more proactive in beginning to implement certain tools. The rate at which AT Champions were introducing their learning to wider staff varied across those interviewed. A few reported being conscious about the speed at which they were doing this, wanting to take a phased approach to not overwhelm staff. Others (particularly those in non-senior roles, or in larger schools) were less sure about the influence they would be able to have in further encouraging staff to use assistive technology, or in discussing how the learning from the training could be best put into practice within the school. For example, an AT Champion who was an inclusion manager at a secondary school had fed back about the training to the SENCO and the vice-principal but felt that they were not able to further share or drive forward the learning from the training within the school, because of their position. They felt that it would have been more helpful to have a senior leader involved in the Assistive Technology Training Pilot as this would ensure that the role had more strategic influence.

The AT Champions interviewed had used staff meetings and more formal training sessions (including at a whole-school, departmental or individual staff level) to share their learning from the training pilot. The wider school staff involved in this varied, but generally included ICT staff, SENCOs (if the AT Champion was not also the SENCO), wider teaching staff (such as class teachers, department staff) and support staff (including teaching assistants).

Practice Example

The AT Champion at a secondary school was waiting to speak to the headteacher about rolling out their learning from the Assistive Technology Training Pilot with the whole staff. The AT Champion wanted to introduce the assistive technology at a department, rather than whole school, level as they felt this approach would allow time to support staff who may feel less confident in the use of technology.

3.3.2 Informing the senior leadership team (SLT)

A few AT Champions interviewed mentioned having taken steps to update their SLT on the training and begin to engage them in how to take learning from the training forward.

However, it should be noted that this was generally an area that AT Champions were still in the early stages of, potentially reflecting, to some extent, the timing of the interviews taking place shortly after the end of the pilot. Where AT Champions had already involved their SLT, examples included discussing the audit tool findings (for example, where their strengths or areas of weakness were in current AT provision) or discussing more widely the focus of the training and potential implications for the school. One school mentioned that SLT and the IT department were now looking into different technology focused readers for exams, which the AT Champion felt had come about through their attendance at the training.

3.3.3 Plans for further sharing of learning

The AT Champions interviewed were able to report other ways in which they wanted to share learning from the pilot. They discussed being keen to widen the implementation of assistive technology, purchase or trial new assistive technology, or further increase the profile of assistive technology within the school. This included:

- Widening the use of existing assistive technology for other pupil groups. For example, a primary school reported wanting to widen the use of reader software for gifted and talented pupils (to allow them to access higher level comprehension tasks) and lower needs pupils. Another primary school mentioned wanted to explore how they could use assistive technology for pupils that they knew had gaps in their English and maths learning.

  > I want even the gifted and talented pupils sitting on them doing some high-level comprehension as it would be much higher than they could access if they were reading and starting to record their own answers as opposed to writing it. I'm thinking for my high achievers, if they can access of high-level comprehension that's going to help them and extend them in a much greater way than you could do if they're just being asked to read and write. – *SENCO, Primary school*

Practice example

A secondary school which is part of a MAT is planning on undertaking a large trial of reader software at a MAT level through a trust-wide exam conditions test that is being delivered. The trust has agreed that pupils who would benefit from using the reader software can do so as part of the exam conditions test. The AT Champion saw this as being a significant piece of work as it would allow 300-400 pupils to access the exam condition test on a computer as an access arrangement.

- Exploring the use of other assistive technology tools that could be used (either free or products that could be purchased). For example, a school mentioned

exploring tools to change background on whiteboards, making it easier for some pupils to read text, whilst not disadvantaging peers. A small number of schools mentioned that they had plans to purchase assistive technology in the near future.

- Providing further training and support for staff on assistive technology to support it being embedded. A secondary school have plans to cascade training using part of a professional development day focusing on useful and easy assistive technology that can be used on a daily basis to support accessibility (for example, focusing on encouraging staff to realise the benefits of using coloured resources for pupils with SEND).
- The development of further systems, processes and resources to support assistive technology use.

> I'm trying to get a flow-chart or step-by-step guide on how use to [reader software] on our virtual learning environment so that parents and teachers can access it. – *Inclusion manager and assistant SENCO, Secondary school*

- Work with SLT to further discuss and agree how assistive technology can be promoted, used and embedded within the setting. This included discussing how to address gaps that have been identified through the audit tool, how assistive technology can be included within key policies (for example, inclusion policy, SEND policy, school development or improvement plan) and how potential barriers to implementation (for example staff reluctance or time to implement) can be addressed.

Practice example

An AT Champion at a secondary school had plans to lead training for teaching assistants in the summer term with the intention of, in the longer-term, training all learning support staff. The AT Champion plans on training the teaching assistants in reading and writing assistive technology software and mind maps, whilst being conscious of not overwhelming the teaching assistants with information. The intention is then for the teaching assistants to start to use the assistive technology software with a small number of pupils and for case-studies to be developed from these trials which can be used to present to governors. The hope is that this will encourage the governors to invest in further assistive technology for the school. The AT Champion also intends to reach out to faculty leads in each department to increase their awareness about assistive technology and encourage them to embrace its use within their department.

4. Impact of the AT Training Pilot

This section details the perceived impact of the AT training on participants with reference to the aims outlined in the Assistive Technology Theory of Change (Appendix 3). It explores changes in the awareness of different types of assistive technology amongst AT Champions, levels of confidence around identifying and utilising assistive technology, and the extent to which pupils' needs are being met compared to before participating in the AT Training Pilot. It also includes perceptions of the impact of the training on AT Champions, staff and pupils and whether participants felt the training and support has helped or will help them to tackle barriers to the effective use of assistive technology.

As mentioned in section 3, schools were at varying stages of sharing and implementing their learning from the Assistive Technology Training Pilot within their setting. Although some of the AT champions interviewed reported having already started to trial or roll-out assistive technology, others were still at the stage of considering how they might want to use the technology or had only started to share their learning with other staff members.

As such the available evidence on impact at this stage is somewhat limited. The AT Champions interviewed were able to provide some illustrative examples of where they had seen benefits and impact of what they had implemented so far; however, it was much more common for AT champions to offer their perceptions about what they felt the impact of the training would be at a staff, pupil and wider school level in the longer term. Therefore, care should be taken in the interpretation of these findings.

4.1 Impact on AT Champions

The majority of AT Champions perceived that the training they received had improved their own knowledge, confidence and skills around assistive technology (Table 11). These perceived impacts align well with the key aims of the programme (section 1.3). In particular, the majority felt the training had improved (to a great or moderate extent) their:

- Understanding of the benefits of assistive technology (80%, n=49).
- Awareness of the range of assistive technology that is available (72%, n=44).
- Knowledge and skills in utilising assistive technology to meet pupils' needs (69%, n=42).
- Confidence in utilising assistive technology to support pupils in their learning (67%, n=41).

Table 11: Perceived Impact on AT Champions (post)[15]

Improvements	Too early to say	Don't know	Not at all	To a small extent	To some extent	To a mod-erate extent	To a great extent
Understanding of the benefits of assistive technology	-	-	2%	3%	15%	28%	52%
Awareness of the range of assistive technology that is available	-	-	2%	8%	18%	36%	36%
Confidence in utilising assistive technology to support pupils in their learning	2%	-	2%	3%	26%	34%	33%
Knowledge and skills in relation to identifying and assessing assistive technology to meet pupils' needs	-	-	3%	10%	28%	28%	31%
Knowledge and skills in utilising assistive technology to meet pupils' needs	-	-	2%	3%	26%	38%	31%
If applicable, your knowledge of how assistive technology can help to support your own needs	2%	2%	-	10%	10%	21%	30%
Evaluating the impact of assistive technology	2%	-	-	11%	23%	38%	26%
Ability to make a case for allocating spend to assistive technology	-	-	5%	10%	20%	34%	25%
Confidence to train and support other staff with the use of assistive technology	2%	-	2%	15%	26%	33%	21%
Support from senior leadership	5%	-	-	11%	25%	36%	15%

Base: All respondents post survey (61)

Source: AT pilot post-training survey

[15] Data not shown = 'Not applicable'.

The area where AT Champions felt there had been the least impact was on support from senior leadership (to a moderate or great extent, 51%, n=31), however it should be noted that majority of AT Champions already felt supported by senior leadership from the outset. AT Champions also felt that there had been somewhat less improvement in their confidence to train and support other staff with the use of assistive technology (to a moderate or great extent, 54%, n=33). This could be an area of improvement for future training programmes on assistive technology.

AT champions involved in the interviews were also generally positive about the impact of their involvement in the training on their own knowledge and skills. The AT champions themselves reported positively on the benefits of attending the training on finding out more about assistive technology tools (particularly amongst those who had limited awareness of assistive technology going into the training), how they could be used and particularly where they had access to assistive technology through existing technology in school (software or hardware) that they had not previously been aware of. The training had also increased AT Champions' passion for assistive technology. For example, one AT Champion mentioned that being involved in the training had made them want to further develop their understanding of assistive technology and push for use to be embedded further within school.

Other impacts gained from their involvement, mentioned by individual AT Champions, included:

- More awareness of available assistive technology already in place in the school and being used.

  > It helped me think about my own school's use and that some things that we might not have considered to be assistive technology are… we're not as poor at it as I thought we were. – *SENCO, Primary school*

- Greater awareness of the importance of including assistive technology within Education, Health and Care Plan (EHCP)[16] targets for pupils.
- Equipping them with the tools (such as knowledge of assistive technology and the audit tool) and confidence, to be able to help facilitate conversations with SLT and other staff and to play a role in promoting assistive technology more widely within the school.

[16] Department for Education, Children with special educational needs and disabilities (SEND): Extra help - GOV.UK (www.gov.uk)

- A better baseline understanding (through the use of the audit tool) as to where the school was with their assistive technology use, and where they should focus on going forward.

4.1.1 Awareness and knowledge of types of assistive technology

One of the aims of the Assistive Technology Training Pilot was to increase awareness of the different types of assistive technology that are available. AT Champions were asked to indicate their awareness and familiarity with different types of assistive technology pre (before) they participated in the AT training and post (after) training (Table 12).

Positively, significant improvements in awareness and familiarity were seen across all the types of assistive technology included in the survey. The largest improvements were seen for text-to-speech and speech-to-text applications and page display tools, which saw significant improvements in the proportion of AT Champions who knew a lot about them after the training compared to before the training (pre 9%, n=6; post 57%, n=35 and pre 7%, n=5; post 54%, n=33 respectively). Examples of these tools were discussed in the training sessions by the trainers and many of the AT Champions interviewed were not aware prior to participating in the training that they either already had access to some of these tools or that they were freely accessible. The majority of interviewees felt that this was one of the most beneficial parts of the programme.

A significant increase in the proportion of AT Champions who knew a lot about the technology was also seen for electronic augmentative and alternative communication aids, cognitive / neurodiversity support applications, alternative keyboards and accessible or height adjustable desking / seating (Table 12). Significant improvements were also seen across the other assistive technologies included in the survey, apart from braille devices. These typically saw a significant decrease in the proportion of AT Champions who said they had not heard of the technologies and a significant increase in those who knew a bit about them.

Table 12: Awareness and knowledge of types of assistive technology (pre-post)

Survey stage	Type of assistive technology	I know a lot about it and how it is applied / used	I know a bit about it and how it is applied / used	I have heard of it but don't know much about it	I have never heard of it
Pre	Text-to-speech and speech-to-text applications	9%	49%	41%	1%
Post	Text-to-speech and speech-to-text applications	57%	41%	2%	-
Pre	Page display tools	7%	53%	36%	4%
Post	Page display tools	54%	44%	2%	-
Pre	Accessible or height adjustable desking / seating	9%	51%	36%	4%
Post	Accessible or height adjustable desking / seating	28%	54%	15%	3%
Pre	Electronic augmentative and alternative communication aids	1%	21%	61%	16%
Post	Electronic augmentative and alternative communication aids	21%	48%	28%	3%
Pre	Alternative keyboards such as large format, high contrast, keyguards etc	4%	40%	47%	9%
Post	Alternative keyboards such as large format, high contrast, keyguards etc	21%	51%	26%	2%
Pre	Cognitive / Neurodiversity support applications	1%	24%	56%	19%
Post	Cognitive / Neurodiversity support applications	18%	43%	38%	2%

Survey stage	Type of assistive technology	I know a lot about it and how it is applied / used	I know a bit about it and how it is applied / used	I have heard of it but don't know much about it	I have never heard of it
Pre	Switch access devices	6%	14%	46%	34%
Post	Switch access devices	8%	30%	51%	11%
Pre	Alternative pointing devices such as trackballs	4%	23%	46%	27%
Post	Alternative pointing devices such as trackballs	7%	44%	38%	11%
Pre	Eye-gaze or head-mouse input devices	4%	7%	53%	36%
Post	Eye-gaze or head-mouse input devices	2%	23%	61%	15%
Pre	Braille devices	1%	21%	59%	19%
Post	Braille devices	2%	30%	59%	10%

Base: All respondents pre-survey (70), post survey (61)

Source: AT pilot pre and post-training surveys

AT Champions that participated in the interviews were somewhat surprised at the ease of being able to access assistive technology tools (particularly free tools) and the ease of being able to implement them quickly within school.

> It's been quite refreshing and eye opening because I wasn't aware of it. The [reader software] is so accessible. It's so easy to use, you know, I've even made a PowerPoint that describes how to do it, which has been really useful. So I think the speed at which we are able to do that and move that forward, introduce it to our learners. It's been a really positive consequence. – *SENCO, Secondary school*

AT Champions valued the training for making them aware of the different assistive technologies that were available and equipping them with the tools to be able to help facilitate conversations with SLT and other staff and to play a role in promoting assistive technology more widely within the school.

4.1.2 Confidence of AT Champions

An important aim of the Assistive Technology Training Pilot was to increase the confidence of AT Champions in undertaking tasks around identifying, utilising and assessing assistive technology. AT Champions responding to the online surveys were asked to rate their confidence on these aspects on scale of 1 to 10, where 1 represents 'not at all confident' and 10 represents 'very confident'. Table 13 shows their responses pre and post-training, aggregated into net scores (1-3, 4-7, 8-10).

A significant increase in AT Champions' ratings of their confidence after participating in the training was seen across all areas. Confidence was highest after the training for using assistive technology to support pupils in their learning and the increase in the proportion of AT Champions who gave a rating of 8-10 on this measure between the pre and post stages was the greatest (pre 10%, n=7, post 48%, n=29). Large increases in those giving a rating of 8-10 were also seen for assessing the effectiveness and impact of assistive technology used to support pupils (pre 7%, n=5, post 43%, n=26) and identifying the relevant assistive technology to meet pupils' needs (pre 3%, n=2, post 36%, n=22).

Furthermore, large decreases in the proportion of AT Champions who felt they had low confidence (a rating of 1-3) was seen across all the measures. The largest decrease was seen for confidence in sourcing assistive technology relevant to pupils' needs. Almost three-fifths (57%, n=40) of AT Champions gave a rating of 1-3 before they had participated in the training, but none gave this rating after the training. Similarly, over half (54%, n=38) gave a rating of 1-3 for their confidence in deploying training on assistive technology to other school staff, whereas after the training this had fallen to 3% (n=2). Whilst this improvement is positive and significant, there is potential for further improvement as the majority of AT Champions felt moderately confident (gave a rating of 4-7) on these aspects after participating in the training.

Table 13: Confidence of AT Champions in undertaking tasks (pre-post)

Survey stage	Task	NET: 1-3 (least confident) %	NET 4-7 %	NET 8-10 (most confident) %
Pre	Using assistive technology to support pupils in their learning	39%	51%	10%
Post	Using assistive technology to support pupils in their learning	2%	51%	48%
Pre	Effectively removing barriers to pupils' learning	11%	69%	20%
Post	Effectively removing barriers to pupils' learning	-	56%	44%
Pre	Assessing the effectiveness and impact of assistive technology used to support pupils	41%	51%	7%
Post	Assessing the effectiveness and impact of assistive technology used to support pupils	-	57%	43%
Pre	Identifying the relevant assistive technology to meet pupils' needs	39%	59%	3%
Post	Identifying the relevant assistive technology to meet pupils' needs	-	64%	36%
Pre	Deploying training on assistive technology to other school staff	54%	34%	11%
Post	Deploying training on assistive technology to other school staff	3%	61%	36%
Pre	Sourcing assistive technology relevant to pupils' needs	57%	40%	3%
Post	Sourcing assistive technology relevant to pupils' needs	-	69%	31%

Base: All respondents pre-survey (70), post survey (61)

Source: AT pilot pre and post-training surveys

It has already been noted that there were differences in the sample between the pre and the post surveys (see section 1.5). To more accurately understand the impact of the training on AT Champion confidence, further analysis was conducted on the mean confidence ratings for each of the measures based on the 59 AT Champions who completed both the pre and post surveys (Table 14).

A significant increase in the mean confidence rating was seen across all measures. The largest increases in mean ratings were seen for AT Champions' confidence in sourcing assistive technology relevant to pupils' needs and deploying training on assistive technology to other school staff, which increased from 3.5 (pre) to 6.7 (post) and 4.0 (pre) to 6.9 (post) respectively. The smallest increase in the mean confidence rating was seen for effectively removing barriers to pupils' learning (pre 5.8, post 7.2), however this was the area that AT Champions felt most confident with before they had participated in the training.

Table 14: Mean confidence of AT Champions in undertaking tasks (pre-post)

Task	Pre mean confidence rating (1-10)	Post mean confidence rating (1-10)	Difference in mean confidence rating (1-10)
Using assistive technology to support pupils in their learning	4.5	7.3	2.7
Effectively removing barriers to pupils' learning	5.8	7.2	1.4
Assessing the effectiveness and impact of assistive technology used to support pupils	4.3	6.9	2.6
Identifying the relevant assistive technology to meet pupils' needs	4.2	6.9	2.7
Deploying training on assistive technology to other school staff	4.0	6.9	2.9
Sourcing assistive technology relevant to pupils' needs	3.5	6.7	3.2

Base: AT Champions that completed both the pre and post surveys (59)

Source: AT pilot pre and post-training surveys

4.2 Impact on pupils

AT Champions indicated the extent to which they felt that the needs of pupils with SEND in their school were being met by assistive technology before and after participating in the training (Table 15). It is positive to see an improvement in this measure already, with half (51%, n=31) of AT Champions stating that most or some pupils' needs were being met after the training compared to just under one-third (31%, n=22) before the training. However, it is clear that there is still much room for improvement, as no AT Champions felt that that all pupils' needs were being met and just 10% felt that most pupils' needs were being met at the time of completing the post-training survey.

Table 15: Impact on extent to which the needs of pupils with SEND in your school are being met by assistive technology (pre-post)

Extent to which needs of pupils with SEND are being met by assistive technology	Pre %	Post %
All pupils' needs are being met	-	-
Most pupils' needs are being met	7%	10%
Some pupils' needs are being met	24%	41%
A few pupils' needs are being met	46%	39%
No pupils' needs are being met	14%	3%
Don't know	9%	-
Too early to say	-	7%

Base: All respondents pre-survey (70), post survey (61)

Source: AT pilot pre and post-training surveys

The vast majority of AT Champions recognised that the use of assistive technology can have a positive impact on pupils with SEND in their school before they participated in the Assistive Technology Training Pilot and no significant changes were seen after participating in the training (Table 16).

After the training, all of the AT Champions that responded to the survey strongly or slightly agreed that using assistive technology can have a positive impact on SEND pupils' independence, engagement and confidence (100%, n=61 respectively). Furthermore, the vast majority of AT Champions agreed that the use of assistive

technology can have a positive impact on SEND pupils' progress or outcomes (98%[17], n=60) and pupil behaviour (85%, n=52).

Table 16: Perceptions of positive impact of assistive technology use on pupils with SEND (pre-post)

Stage	Statement	Don't know	Disagree strongly	Disagree slightly	Neither agree nor disagree	Agree slightly	Agree strongly
Pre	Confidence of pupils with SEND	1%	-	-	4%	30%	64%
Post	Confidence of pupils with SEND	-	-	-	-	31%	69%
Pre	Behaviour of pupils with SEND	4%	-	-	13%	37%	46%
Post	Behaviour of pupils with SEND	-	-	2%	13%	46%	39%
Pre	Engagement of pupils with SEND	1%	-	-	1%	30%	67%
Post	Engagement of pupils with SEND	-	-	-	-	34%	66%
Pre	Independence of pupils with SEND	1%	-	-	4%	20%	74%
Post	Independence of pupils with SEND	-	-	-	-	26%	74%

[17] The sum of the percentages in Table 15 may not be equal to the combined percentage due to data rounding.

Stage	Statement	Don't know	Disagree strongly	Disagree slightly	Neither agree nor disagree	Agree slightly	Agree strongly
Pre	Pupil progress / outcomes of pupils with SEND	1%	-	-	4%	34%	60%
Post	Pupil progress / outcomes of pupils with SEND	-	-	-	2%	38%	61%

Base: All respondents pre-survey (70), post survey (61)

Source: AT pilot pre and post-training surveys

Nearly all the AT Champions interviewed thought that the training and increasing use of assistive technology had the potential to impact on pupils' independence in learning which, in turn, would impact on their engagement, self-confidence and self-esteem. They thought that giving pupils access to assistive technology tools that they could learn to use, and then apply in their learning, helped pupils to access a wider range of learning (for example, being able to answer more questions than they would be able to usually), with less reliance on staff in the classroom. AT Champions thought that it helped break down barriers to learning and helped pupils to think differently about what they were able to achieve.

> Their confidence in their ability that they can learn, as we're aiming to break down some of the barriers and bringing that acceptance that you learn that way and that's great. I think that would just transform some of their outlook and what they can achieve. –*Teacher, primary school*

For a few AT Champions interviewed, the use of assistive technology had the potential for pupils with SEND to feel more engaged and inclusive with the wider class. For example, an AT Champion mentioned that *'pupils with SEND will love the class discussion but lose that buzz when it gets to the written task'*. Being able to use assistive technology can allow them to use techniques (such as using voice recordings rather than written work) to contribute to classroom discussions. It also has the potential to reduce the stigma for pupils that have one-to-one teaching assistant support. A secondary school participant mentioned that some pupils do not want to have a teaching assistant support in the classroom and would rather have input from the teacher.

> So if we can empower the teachers to know where it is and how to use it, then they can utilise it in their lessons then it becomes a natural way of working and then others won't feel embarrassed about using it, so that's what I'm hoping. - *Inclusion manager, Secondary school*

AT Champions that had started to trial certain assistive technology with pupils were able to provide examples of where they had already observed benefits for pupils including:

- A pupil who struggles with writing had been introduced to assistive technology to access research online. Using the assistive technology, the pupil was able to independently research the topic, and was then able to tell the AT Champion all the information they had learned, whereas previously the pupil would not have been able to do that.
- A primary school have trialled some speech-to-text software with a pupil who had not recognised that they were not sounding out their words correctly until using the software. Using the software has made the pupil pronounce their words more clearly to ensure that the software was able to translate it.
- A primary school gave examples of seeing pupils' independence in their learning increase through the use of assistive technology. For example, they reported that from trialling speech-to-text software they had seen improvements in pupils feeling empowered to lead their own work. For another pupil who was using reader software, it had allowed them to write a poem in full sentences, and the pupil had been able to correct their own spelling, which the school felt showed independence and self-esteem gains.

Other potential impacts of the training for pupils cited by individual AT Champions included:

- An improved relationship between teacher and pupil because pupils feel more supported in their learning.
- Improved pupil progress and outcomes through providing assistive technology tools for pupils who then want to achieve more.
- Helping to address mental health and anxiety issues by giving school refusers the option to come into school and work in smaller groups and to be able to access learning through assistive technology.
- Improved classroom behaviour due to pupils having more control over their learning.

> If they can control what they're learning a little bit more that always helps. Therefore, being engaged will mean there will be fewer behaviour incidents. – *Assistant headteacher, Primary school*

Only one interviewee was not sure at this stage what impact the training would have on pupils. This was due to being unsure about the feasibility of using assistive technology in a classroom environment with other pupils present.

> In an ideal world it would be great. All of the highlighting pens and things like that are really useful. But in a classroom, you'd need that child sat with headphones or you'd need that child away from other children if they're doing speech-to-text. – *Teacher, Primary school*

Several AT Champion interviewees reported on the potential for impact on parental involvement and engagement, which opened up communication with parents about assistive technology and how it was being used to support pupils. Interviewees specifically mentioned:

- Advising parents on how assistive technology could be used to help pupils with the completion or recording of homework.
- The potential for assistive technology to help parents who had literacy difficulties themselves.
- Drop-in sessions for parents and providing information on the school website about assistive technology.

4.3 Impact on staff

Where the AT champions interviewed had already cascaded learning down to other staff (particularly when introducing them to free assistive technology software they could use), they reported positively on the reactions from staff, particularly around it generating discussions about the potential benefits of using assistive technology with pupils. For example, a SENCO at a primary school discussed the speech-to-text software that had been introduced through the training "drawing a gasp in the staffroom" when it had been introduced to staff, and to how quickly it could be used with pupils who would benefit from it.

Two of the AT Champions interviewed gave examples of where the training and finding out about the assistive technology had helped existing staff members themselves:

- In one school finding out about reader software that the school already had, had resulted in two staff members with dyslexia using it regularly themselves.

- In another school, being introduced to speech-to-text software by the AT Champion had helped a staff member with some learning difficulties to be able to use it in her practice (for example, to write reports and emails).

4.3.1 Staff awareness and understanding of assistive technology

A few interviewees suggested that teachers and other staff were more aware of assistive technology, examples included:

- Teachers reviewing pupils' individual education plans (IEP) and including assistive technology within those.
- A teacher asking the AT Champion about what assistive technology they could recommend for a pupil with processing difficulties.

Where the AT champions interviewed felt there had been less impact on their colleagues' awareness and understanding of assistive technology this was mainly due to them still being at an early stage of implementing what they had learned. These interviewees felt there was more work to do to fully explore the types of assistive technology that were available, how it could be used to help pupils and to undertake some groundwork to engage teachers and other staff (including ensuring that SLT were on board with it).

AT Champions that were at an early stage of implementing learning from the training were, however, confident that the training would raise teachers' awareness of pupils needs and how they could be addressed within a learning environment.

> It will raise teachers' awareness of needs and how these can be addressed, for example, pupils being able to access a picture dictionary using [reader software]. Teachers don't know what technology is out there to support students and so the training will open their eyes to what is there to aid students. – *Teaching assistant, Secondary school*

Other feedback from AT champions suggested that there needed to be wider consideration of the impact of using assistive technology within a teaching and learning environment and how that aligned with Ofsted requirements (for example pupils using technology for their work and therefore this not being captured in their books), as this was potentially a barrier to getting staff on board.

> I think there's probably still a lot that needs to change until then. Because obviously there's always the fear of Ofsted coming in and saying there's nothing in their book because it's all done on a [tablet]. It's changing the whole attitude, not just within our school but across everyone. – *Inclusion lead, Primary school*

4.3.2 Staff confidence, knowledge and skills

Around half of AT Champions interviewed felt that there was the potential for the training to have had an impact on the skills and confidence of other staff to use assistive technology. However, it is important to note that, at the time of the interviews, many felt unable to provide examples of where the training had impacted in this way. Others were less sure at this stage on what the impact of the training would be on staff skills and understanding, feeling that this may come over time, and recognising that staff confidence and willingness to use assistive technology in their practice may vary.

AT Champions felt that there was the potential for the training to help with:

- Building teachers' understanding about how to support pupils with SEND and maximise their engagement and access to learning. For example, how to incorporate assistive technology within their lessons to accommodate pupils with SEND.
- Teachers' understanding of how assistive technology could be used beyond SEND and EAL provision.

For example, a primary school mentioned already seeing a benefit of attending the training on upskilling the staff in free reader software that all staff already had access to in school.

> I think it will definitely have an impact on their skills to help the pupils. For example, with [reader software].. as every one of us uses [software] all the time and none of us knew it was there, so it's already upskilled a lot of them. - *Assistant headteacher, Primary school*

4.3.3 Staff workload and efficiencies

Perceptions of the potential impact of assistive technology on staff workload from the survey responses were mixed and although some increases in agreement were seen at the post stage these were not significant (Table 17). After participating in the training, two-thirds (67%, n=41) of AT Champions agreed strongly or slightly that assistive technology could have a positive impact on teacher workload and almost three-fifths (59%, n=36) that it could have a positive impact on the use of staff time.

AT Champions involved in the interviews felt there was the potential for the training to increase pupils' independence in their learning through using assistive technology more often (see impact on pupils, section 4.2), which would then have an impact on staff workload. Many AT Champions thought there was the opportunity for assistive technology to reduce the reliance of pupils on teaching and support staff in the classroom

when supporting them in specific tasks (for example, decoding worksheets, or supporting them with internet research), which would then allow the staff to have more time, for example, a teaching assistant having more time to work with other children.

There was, however, the recognition amongst a few AT Champions that the workload for staff may increase initially as they adapted to using the technology within their practice, particularly around familiarising themselves with the technology, knowing how best to incorporate it into the pupils' learning and including it in relevant pupil plans (for example individual education plans and Education, Health and Care plans). It was felt that this workload would alleviate over time as staff adapted to using assistive technology.

Table 17: Perceptions of positive impact of assistive technology use on staff (pre-post)

Stage	Statement	Don't know	Disagree strongly	Disagree slightly	Neither agree nor disagree	Agree slightly	Agree strongly
Pre	Teacher workload	13%	1%	4%	37%	30%	14%
Post	Teacher workload	2%	2%	10%	28%	41%	18%
Pre	Use of staff time (to assess need, source, implement assistive technology)	10%	1%	1%	34%	34%	19%
Post	Use of staff time (to assess need, source, implement assistive technology)	3%	2%	2%	26%	48%	20%

Base: All respondents pre-survey (70), post survey (61)

Source: AT pilot pre and post-training surveys

Other ways in which AT Champions thought that the training had the potential to increase staff efficiency included on:

- Resource preparation, for example pre-recording instructions for lesson tasks, or using translation software to allow pupils with EAL to have live translation of resources within a lesson (rather than staff having to translate resources in advance).
- Reducing the need for teachers having to differentiate lessons for pupils with SEND as assistive technology can help with this differentiation which reduces workload.
- Using a combined online collaborative platform (including assistive technology tools) would be time-saving for staff as there would be greater ease in accessing different software on one system.

4.4 Wider school impacts

Overall, the AT Champions surveyed believed that the training had or would contribute to improvements in the support for pupils with SEND in their school, primarily to a great or moderate extent:

- To a great extent 44% (n=27).
- To a moderate extent 31% (n=19).
- To some extent 21% (n=13).
- To a small extent 3% (n=2).

The AT Champions surveyed were asked about their perceptions of their school's approach to assistive technology and some differences were already noted by the end of the pilot (Table 18).

A significant increase was seen in the extent to which AT Champions felt that the assistive technology available in their school was being used to its maximum effect, with over half (52%, n=32) of AT Champions stating that this was the case to at least some extent after the pilot, compared to one-fifth (20%, n=14) before the pilot.

Table 18: Impact on schools' approaches to assistive technology (pre-post)

Survey stage	Approach	Don't know	Not at all	To a small extent	To some extent	To a moderate extent	To a great extent
Pre	The assistive technology available in your school is being used to its maximum effect	17%	31%	31%	16%	4%	-
Post	The assistive technology available in your school is being used to its maximum effect	2%	13%	33%	38%	15%	-
Pre	Assistive technology is embedded within your school's strategy / improvement plans	21%	33%	27%	11%	7%	-
Post	Assistive technology is embedded within your school's strategy / improvement plans	5%	21%	34%	31%	8%	-
Pre	Assistive technology is embedded within a whole school approach	9%	37%	34%	16%	4%	-
Post	Assistive technology is embedded within a whole school approach	5%	21%	39%	21%	13%	-
Pre	You feel supported as the assistive technology champion by senior leadership in your school	11%	1%	10%	23%	24%	30%
Post	You feel supported as the assistive technology champion by senior leadership in your school	2%	2%	8%	16%	39%	33%

Base: All respondents pre-survey (70), post survey (61)

Source: AT pilot pre and post-training surveys

A significant increase was also seen for the extent to which assistive technology was being embedded within the school's strategy or improvement plans (pre 19%, n=13, post 39%, n=24) (Table 18). Although the shift seen for the extent to which assistive technology was embedded in a whole school approach was not significant, it was noted by some AT Champions during the interviews that this aspect had helped to reset and refocus thinking about assistive technology use.

AT Champions interviewed spoke positively about the training helping to increase discussions at a SLT and wider staff level, about the use of assistive technology and increasing its profile. There were mentions of SLT being made more aware of assistive technology and where the school was currently in terms of its assistive technology use. The audit tool (provided through the training) was reported by a few schools as being a useful tool in helping the AT Champions to facilitate discussions with SLT about where the school was currently in terms of its use of assistive technology. A number of AT Champions also mentioned being involved in discussions about how assistive technology could be embedded within self-evaluation processes, performance management, SEND and digital policies. However, there was no evidence from the AT Champions interviewed that schools had done this yet.

> By doing this training it has become more of a priority. During SLT meetings there's been discussion about what we're doing with it, where we're going with it and in terms of costing and how we approach it. – *Assistant headteacher and SENCO, Primary school*

A small number of AT Champions interviewed mentioned that their school had plans to invest in further assistive technology (for example, one primary school had ordered reader pens and another was planning on investing in further speech-to-text software).

Practice example

A secondary school had already started on their journey to using assistive technology prior to being involved in the training. They had already rolled out a headset for pupils with SEND and EAL that allowed them to better access learning (for example, through lessons being automatically translated). The AT Champion however mentioned that although they had rolled out the headsets across the school, they were less clear on how to monitor and test the effectiveness of the headsets and how they incorporated assistive technology within wider policies including the SEF.

The training, and particularly the audit tool had improved the school's ability to identify pupils that they could use the headsets with and to find out where the gaps were and how they could improve. The AT Champion was positive about the potential for the training to help with identifying pupils who may benefit from having access to assistive technology. The school have also sent out a survey recently about the headset to obtain some feedback on engagement of pupils (behaviour, confidence, independence, resilience) and the feedback from staff so far has been that all these have improved through the use of the headsets.

> I think for the pupils in our school, it's going to help us identify those students that normally of escape. They don't get noticed enough to go onto the SEND register, but they still struggle a little bit. And I think it's going to help us identify those students a little bit more and think about how we can help them. So they don't necessarily have an IEP or an EHCP or something like that. But they still need the help. – *Computing lead, Secondary school*

No significant shifts were seen between the pre and post surveys for senior leadership support (Table 18), however, it is important to note the majority of AT Champions already felt supported by senior leadership before they participated in the training pilot (77%, n=54).

At the time of completing the online survey, no AT Champions responding to the online survey felt that the training had impacted schools' approaches to assistive technology (embedding in strategy, whole school approach, used to maximum effect) to a great extent (Table18). However, as, the timescales for the pilot were relatively short (5 weekly training sessions), it is unsurprising that schools had yet to make significant changes to the way that assistive technology was used and embedded. This was noted by the AT Champions interviewed, who found it more challenging to comment on the potential impact of the training at a wider school level. Schools were still at the early stages of thinking about embedding assistive technology within the school and particularly thinking about how it sat within teaching and learning approaches and wider structures. Budgetary constraints, and ensuring it was seen as a focus and priority within school

were cited as reasons for being unsure about the impact of the training at a wider school level at this stage.

> In the training they advocated for us to make it a normal thing, but I think it's going to be a long process for us. I think we really need to convince those more reluctant staff members, but I do think it has the potential to have a positive impact. – *Head of computing, Primary school*

4.4.1 Potential for future impact

Perceptions of the potential for future impact of the training was confirmed by responses to the post-training online survey. AT Champions were asked whether the training they had received had or would contribute to a range of improvements across their school (Table 19).

Positively, the vast majority of AT Champions believed that the training had or would contribute to improvements across each of the measures to at least some extent and only a very small minority thought that there would be no impact at all. A minority felt unsure or said it was too early for them to make a judgement.

The improvements that AT Champions thought the training was most likely to contribute towards, to a great or moderate extent, were:

- Increasing the use of assistive technology (84%, n=51).
- Use of assistive technology in school to best effect (77%, n=47).
- Effectively removing barriers to learning for pupils with SEND (75%, n=46).
- Raising the profile and awareness of assistive technology across the school (74%, n=45).

Furthermore, around two-thirds of AT Champions felt that the training would contribute to a moderate or great extent towards improvements in the use of assistive technology for pupils without SEND (66%, n=40) and pupils with EAL (67%, n=41). A similar proportion thought it would help them to overcome barriers to using assistive technology (66%, n=40) and help them to use it more consistently (66%, n=40).

Table 19: Extent to which the assistive technology training has or will contribute to improvements in school (post)[18]

Improvements	Too early to say	Don't know	Not at all	To a small extent	To some extent	To a moderate extent	To a great extent
Increase the use of assistive technology in your school	2%	2%	-	3%	10%	46%	38%
Use assistive technology to meet the needs of pupils without SEND	2%	-	2%	5%	26%	33%	33%
Effectively remove barriers to learning for pupils with SEND	3%	-	-	3%	18%	44%	31%
Use assistive technology to meet the needs of pupils with English as an addition language (EAL)	3%	5%	3%	5%	16%	36%	31%
Use the assistive technology you have in the school to best effect	2%	-	2%	3%	16%	48%	30%
Raise the profile and awareness of assistive technology across the school	2%	2%	-	3%	20%	46%	28%
Effectively overcome barriers to the use of assistive technology for teachers	3%	2%	-	3%	26%	39%	26%
Use assistive technology to meet the needs of all pupils with SEND	3%	2%	-	7%	30%	34%	25%
Educate parents / carers about the assistive	3%	2%	-	10%	26%	34%	25%

[18] The sum of the percentages may not be equal to the combined percentage due to data rounding.

Improvements	Too early to say	Don't know	Not at all	To a small extent	To some extent	To a moderate extent	To a great extent
technology used to support their child							
Use assistive technology consistently	2%	2%	-	3%	28%	43%	23%
Utilise a whole school approach to the use of assistive technology	3%	2%	-	2%	30%	43%	21%
Include assistive technology within school strategy and improvement plans	3%	2%	-	-	36%	39%	20%
Increase efficiency of spending on assistive technology	7%	2%	3%	11%	21%	44%	11%
Use staff time more efficiently (e.g. teaching assistants / support staff)	7%	2%	-	7%	33%	41%	11%

Base: All respondents post survey (61)

Source: AT pilot post-training survey

The training was perceived to be least likely to contribute towards increasing efficiency on spending (56% moderate / great extent, n=34) or more efficient use of staff time (52%, n=32). These could be potential areas for improvement in the programme content for future delivery. There may also be the potential to provide greater support and training within the programme around assistive technology strategy and whole-school approaches as AT Champions felt that the training was somewhat less likely to contribute towards these aspects to a great extent.

5. Challenges and improvements

This section describes the challenges experienced by AT Champions when participating in the Assistive Technology Training Pilot and how they were or could be overcome in the future. It includes suggestions on how the Assistive Technology Training Pilot could be improved for future delivery.

5.1 Challenges

Positively, three-fifths (61%, n=37) of AT Champions that responded to the post-training online survey said they experienced no challenges with participating in the Assistive Technology Training Pilot and the challenges mentioned by the AT Champions during the interviews regarding participating in the Assistive Technology Training Pilot were minimal.

The main challenges reported in the survey related to the timescales of the programme (21%, n=13), primarily difficulties around completing intersession tasks and not having enough time to digest the content and implement any learnings between sessions. This was exacerbated in some cases by conflict with other commitments or issues in school (10%, n=6). A small number of the AT Champions interviewed also mentioned the increased workload (through being the AT Champion) and unexpected level of work that the training generated (such as the whole-school audit or the intersession tasks), which were perceived as a challenge.

> The timing of the training did not work for me and as such, it made it hard to complete the tasks and then make a meaningful contribution to each week's session. – *SENCO, Primary school*

A few of the AT Champions interviewed also thought that there may be challenges in being able to further use and embed assistive technology within their schools, mentioning specifically:

- Being able to influence the use of assistive technology strategically within the school dependent on the AT Champions job role.
- Being able to highlight assistive technology as a priority with SLT.
- Differences in staff engagement, and particularly that those staff who were more confident with technology were more likely to engage with or be willing to trial assistive technology than those staff who were less confident.
- Concerns about being able to use assistive technology for certain year groups because of other accountability pressures (for example, Standards and Testing

Agency tests) and the implications of using assistive technology on external judgements of pupils' performance.

Other challenges mentioned by the online survey respondents included:

- Difficulties in implementing the training in school (n=7) due to a range of factors including lack of access to assistive technology, inability to collaborate with other staff in the school as only one person attended the training, and lack of SLT support.
- Technical challenges (n=4), such as accessing the live online sessions or resources.
- Lack confidence of AT Champions in using assistive technology (n=2).
- Lack of relevance (n=1), because the content was felt to be aimed more at senior or middle leadership.
- Challenges around participating in the AT pilot evaluation (n=1).

The key challenges from the perspective of the delivery partners were the short timescales for development and sign off of the pilot materials before launch and the impact of staff absence due to COVID-19, although they noted that offering multiple live online sessions meant that AT Champions had the flexibility to attend from home if they were isolating.

5.2 Improvements

The main improvement suggested by AT Champions responding to the online survey was for more information on the different types of assistive technology and how it can help to support pupils' learning needs, which was mentioned by one-third (34%, n=21) of survey respondents (see section 2.2.3 and section 3). Guidance on sourcing and costs of assistive technology and what represents value for money was also requested.

> Focus on a different AT each session, where to find it, how much it costs, who it can help, evidence for this. – *Teacher, Secondary school*

Given the main challenge was the timing of the training, it is unsurprising that AT Champions also suggested that the training would be improved by providing the sessions over a longer time period (16%, n=10), or for the training to be extended further (10%, n=6), to allow more time for learnings to be digested and implemented in the school, and for intersession tasks to be completed.

> More time needed between the sessions so that we have time to embed strategies and more idea on what AT technology is out there.

> I felt like we only scratched the surface but this is something as a school we can develop further. – *SENCO, Primary school*

The AT Champions interviewed gave few suggestions for improvement to the content and resources:

- Video narrations accompanying pdfs.
- A list of all available assistive technology software.
- Access to the closing session video montage.
- More non-primary oriented resources.

Other improvements suggested by the AT Champions responding to the online survey included:

- Longer training sessions (n=3).
- More support with accessing the resources (n=3).
- More school staff being able to participate in the training (n=2).
- Exchanging of contact details with other peers in the training group (n=2).
- Provision of case studies of how schools have used assistive technology to improve pupil outcomes (n=1).

For future delivery of the programme the delivery partners expressed a desire to conduct a follow up session with participants, to see how schools have progressed and to encourage them to maintain their focus on using and embedding assistive technology. The delivery partners also felt that the programme could be rolled out more widely to more schools and that there is potential for further training with a cohort of schools to delve more deeply into how teaching and learning can be enhanced by assistive technology. Roll out to colleges was considered possible as the fundamentals of the programme are applicable, although the materials would require some small adaptations.

6. Conclusions

Overall, the Assistive Technology Training Pilot has been well received. Whilst there had only been a short time for AT Champions to make changes to their approach or implement assistive technology, the majority believed that the training will support them to make improvements in their school.

The overarching aims of the Assistive Technology Training Programme have broadly been met:

- Aim: Upskill staff in mainstream schools in the use of, assessment for and anticipated outcomes of assistive technology.
    - AT Champions felt more confident and knowledgeable about assistive technology and some have already begun to share their learning with other staff. Some early benefits were noted, particularly on AT Champions, but also on colleagues and pupils. An even greater focus on practical training on how to use specific assistive technology to meet pupils' needs was the main improvement request.
- Aim: Give schools what they need to embed effective assistive technology use in a long-term digital strategy.
    - Broadly speaking, schools' needs and expectations of the training were met and the content was well received. However, some AT Champions were less confident about their ability to effect strategic change. SLT being involved in the opening / closing sessions helped to support engagement, although some questioned the value of the time used.
- Aim: Provide training for schools in a way that limits the impact of budgetary pressures and staff workload.
    - The delivery approach worked well and built-in flexibility helped to facilitate participation. However, some AT Champions found the timescale of the programme challenging and they struggled to balance the demands of the training with in-school workload.
    - Whilst AT Champions could see the potential for assistive technology to create efficiencies and reduce workload, little perceived impact had been seen by the end of the programme. AT Champions were less confident about the impact of the programme on spending efficiency, which could be an area for future focus.
- Aim: Offer schools the opportunity to build peer support networks which continue beyond the programme.

- AT Champions valued networking and sharing experiences and learning during sessions, but networking outside of the sessions was limited, potentially due to the short timeframe of the programme. Some sharing of contact details happened towards the end of the training, but given the appetite for further networking this could be better facilitated.

6.1 Areas for future development

Overall, the Assistive Technology Training Pilot was positively received by schools and these early findings suggest that the programme has the potential to improve schools' use of assistive technology.

A number of areas for further improvement were identified:

- Ensure there is clarity from the start about the aims of the training, what it will deliver and the commitment required to complete activities between sessions so that schools fully understand what to expect from the programme.
- An increased focus on building awareness and knowledge about assistive technology tools is important to meet schools' needs, including practical training on how to use assistive technology. This would also support AT Champions in deploying training to other staff.
- There is also an opportunity to include more content and support on assistive technology strategy and whole-school approaches, efficient spending on assistive technology and how the technology can increase staff efficiency. These are areas where AT Champions felt less confident of the impact. Adapting the content on these aspects to the job role of the AT Champion would increase effectiveness.
- Building in time to look through the supporting resources during the sessions would help schools to capitalise on their value.
- A review of the intersession tasks to ensure they are not too burdensome and their relevance and benefit to participants is maximised would help to support engagement and completion.
- Extending delivery of the programme, for example, to deliver training sessions monthly or fortnightly rather than weekly, would allow more time for intersession tasks to be completed, and for learnings to be digested, shared and implemented.
- Consideration should also be given to the content of the opening and closing sessions and whether this information could be better delivered in an alternative format, such as by email or a pre-recorded video.
- Greater focus on facilitating peer networks is required if the programme is to meet this aim.

- Conducting further research with participants after allowing some time for changes to be made in the schools, would provide a better understanding of the longer-term impact of the training on AT Champions, pupils and wider staff.

Appendix 1: Data tables

Table 20: Profile of schools participating in the Assistive Technology Training Pilot

Type	Total Counts	Total %	Primary Counts	Primary %	Secondary[19] Counts	Secondary %
Academies / free schools	36	46%	18	32%	18	78%
Local authority maintained	43	54%	38	68%	5	22%
Size by phase						
Small	17	22%	16	29%	1	4%
Medium	22	28%	16	29%	6	26%
Large	40	51%	24	43%	16	70%
Ofsted						
Outstanding	11	14%	7	13%	4	17%
Good	45	57%	32	57%	13	57%
Requires improvement	10	13%	9	16%	1	4%
No data	13	16%	8	14%	5	22%
% SEND versus mean						
Above mean	31	39%	23	41%	8	35%
Below mean	48	61%	33	59%	15	65%
% FSM						
Low	23	29%	16	29%	7	30%
Medium	27	34%	19	34%	8	35%
High	28	35%	21	38%	7	30%
No data	1	1%	-	-	1	4%

Base: Primary (56), Secondary (23)

Source: AT Training Pilot participating schools

[19] Due to the low base size (n=23), data for secondary schools should be treated with caution.

Table 21: Profile of schools (continued) participating in the Assistive Technology Training Pilot

Geography	Total Counts	Total %	Primary Counts	Primary %	Secondary[20] Counts	Secondary %
Urban	61	77%	42	75%	19	83%
Rural	18	23%	14	25%	4	17%
Region						
North East	5	6%	4	7%	1	4%
North West	10	13%	7	13%	3	13%
East Midlands	6	8%	1	1%	5	22%
West Midlands	10	13%	5	9%	5	22%
East of England	9	11%	8	14%	1	4%
Yorkshire and the Humber	11	14%	11	20%	-	-
London	6	8%	3	5%	3	13%
South East	8	10%	6	11%	2	9%
South West	14	18%	11	20%	3	13%

Base: Primary (56), Secondary (23)

Source: AT Training Pilot participating schools

[20] Ibid.

Table 22: Pre (before) training survey respondent school profile

Type	Total Counts	Total %	Primary Counts	Primary %	Secondary [21] Counts	Secondary %
Academies / free schools	33	47%	17	34%	16	80%
Local authority maintained	37	53%	33	66%	4	20%
Size by phase						
Small	15	21%	14	28%	1	5%
Medium	20	29%	14	28%	6	30%
Large	35	50%	22	44%	13	65%
Ofsted						
Outstanding	9	15%	5	12%	4	24%
Good	42	71%	30	71%	12	71%
Requires improvement	8	14%	7	17%	1	6%
No data	11	16%	8	16%	3	15%
% SEND versus mean						
Above mean	27	39%	20	40%	7	35%
Below mean	43	61%	30	60%	13	65%
% FSM						
Low	26	37%	18	36%	8	40%
Medium	25	36%	18	36%	7	35%
High	19	27%	14	28%	5	25%

Base: Primary (50), Secondary (20)

Source: AT pilot pre-training survey

[21] Ibid.

Table 23: Pre (before) training survey respondent school profile (continued)

Geography	Total Counts	Total %	Primary Counts	Primary %	Secondary [22] Counts	Secondary %
Urban	54	77%	37	74%	17	85%
Rural	16	23%	13	26%	3	15%
Region						
North East	4	6%	3	6%	1	5%
North West	9	13%	7	14%	2	10%
East Midlands	6	9%	1	2%	5	25%
West Midlands	8	11%	4	8%	4	20%
East of England	9	13%	8	16%	1	5%
Yorkshire and the Humber	9	13%	9	18%	-	-
London	5	7%	2	4%	3	15%
South East	7	10%	5	10%	2	10%
South West	13	6%	11	22%	2	10%

Base: Primary (50), Secondary (20)

Source: AT pilot pre-training survey

[22] Ibid.

Table 24: Post (after) training survey respondent school profile

Type	Total Counts	Total %	Primary Counts	Primary %	Secondary[23] Counts	Secondary %
Academies / free schools	27	44%	12	27%	15	88%
Local authority maintained	34	56%	32	73%	2	12%
Size by phase						
Small	12	20%	11	25%	1	6%
Medium	18	30%	14	32%	4	24%
Large	31	51%	19	43%	12	71%
Ofsted						
Outstanding	9	15%	5	11%	4	24%
Good	35	57%	26	59%	9	53%
Requires improvement	8	13%	7	16%	1	6%
No data	9	15%	6	14%	3	18%
% SEND versus mean						
Above mean	23	38%	18	41%	5	29%
Below mean	38	62%	26	59%	12	71%
% FSM						
Low	23	38%	15	34%	8	47%
Medium	26	43%	19	43%	7	41%
High	12	20%	10	23%	2	12%

Base: Primary (44), Secondary (17)

Source: AT pilot post-training survey

[23] Ibid.

Table 25: Post (after) training survey respondent school profile (continued)

Geography	Total Counts	Total %	Primary Counts	Primary %	Secondary [24] Counts	Secondary %
Urban	48	79%	34	77%	14	82%
Rural	13	21%	10	23%	3	18%
Region						
North East	3	5%	3	7%	-	-
North West	7	11%	6	14%	1	6%
East Midlands	5	8%	-	-	5	29%
West Midlands	7	11%	3	7%	4	24%
East of England	8	13%	7	16%	1	6%
Yorkshire and the Humber	9	15%	9	20%	-	-
London	5	8%	2	5%	3	18%
South East	7	11%	5	11%	2	12%
South West	10	16%	9	20%	1	6%

Base: Primary (44), Secondary (17)

Source: AT pilot post-training survey

[24] Ibid.

Table 26: Confidence of AT Champion in undertaking tasks (pre training)

Confidence rating	1	2	3	4	5	6	7	8	9	10
Effectively removing barriers to pupils' learning	4%	1%	6%	16%	19%	17%	17%	17%	3%	-
Deploying training on assistive technology to other school staff	23%	16%	16%	11%	9%	4%	10%	7%	3%	1%
Using assistive technology to support pupils in their learning	9%	13%	17%	11%	19%	10%	11%	7%	3%	-
Assessing the effectiveness and impact of assistive technology used to support pupils	11%	13%	17%	13%	14%	16%	9%	4%	3%	-
Identifying the relevant assistive technology to meet pupils' needs	10%	13%	16%	20%	17%	7%	14%	3%	-	-
Sourcing assistive technology relevant to pupils' needs	14%	20%	23%	16%	10%	9%	6%	-	3%	-

Base: All respondents (70)

Source: AT pilot post-training survey

Table 27: Confidence of AT Champion in undertaking tasks (post training)

Confidence rating	1	2	3	4	5	6	7	8	9	10
Effectively removing barriers to pupils' learning	-	-	-	-	11%	18%	26%	26%	15%	3%
Deploying training on assistive technology to other school staff	-	2%	2%	2%	16%	18%	25%	16%	13%	7%
Using assistive technology to support pupils in their learning	-	-	2%	5%	10%	10%	26%	25%	16%	7%
Assessing the effectiveness and impact of assistive technology used to support pupils	-	-	-	8%	11%	18%	20%	31%	10%	2%
Identifying the relevant assistive technology to meet pupils' needs	-	-	-	5%	11%	15%	33%	26%	8%	2%
Sourcing assistive technology relevant to pupils' needs	-	-	-	7%	15%	20%	28%	20%	8%	3%

Base: All respondents (61)

Source: AT pilot post-training survey

Equality and diversity monitoring

The following question was included in the post-training online survey to monitor equality of access to the Assistive Technology Training Pilot:

Your answer to the following question will help the DfE to ensure equality and diversity in their programmes. The information provided will be held securely by CooperGibson Research and aggregated results will be reported in an anonymised way.

Under the Public Sector Equality Duty, training should not disadvantage or discriminate anyone on the basis of their age, disability, marital or civil partnership status, sex, gender reassignment status, sexual orientation, pregnancy and maternity status, race, religion or belief.

Do you feel that the content of the training sessions and related materials supported diversity and inclusion?

1. Yes
2. No
3. Don’t know

If No, please explain why not.

Almost all who responded to the post-training survey gave a response of ‘yes’ to this question (97%, n=59). The remaining 2 respondents gave an answer of ‘don’t know’.

Appendix 2: In-depth interviews sample profile

Table 28: In-depth interviews sample

Confidence	Target number of interviews
High	7
Medium	6
Low	5
Survey non-responders	2
Role	
Senior leader	2
Teacher	4
SENCO	4
Inclusion manager / lead	3
Other	5
Survey non-responders	2
Phase	
Primary	12
Secondary	8
% SEND	
Above mean	9
Below mean	11

Appendix 3: Assistive Technology Training Pilot Theory of Change

Context

- Increasing numbers of SEND pupils.
- Children with SEND often struggled more than their peers with remote learning.
- Get Help with Tech put more devices in the classroom.
- Increasing amount of AT in standard models of tech.
- This means schools have unprecedented access to AT.

Problem

- Staff unaware of the AT already available to them.
- Staff workload so high that CPD can be hard to fit in.
- Not much time currently dedicated to SEND learners in initial teacher training (ITT).
- Staff lack expertise in the use of and assessment for AT to support SEND pupils.

Audience

- SENCOs.
- School and College Leaders.
- Teachers.
- Higher Level Teaching Assistants.
- Teaching Assistants.

Entry points

- National Professional Qualifications.
- ITT.
- Early Careers Framework.
- Demonstrator Programme.
- AT specific training.
- Recovery programme.

Activities

- Events aimed specifically at school and college leaders gain high level buy-in for AT training programme.
- AT training programme creates ‘AT Champions’.
- Schools and colleges put in peer support networks to share good practice.

Results

- Schools and colleges have an AT lead.
- AT lead will deploy training to their staff.
- Staff are more confident in the use and assessment for AT.
- Staff know more about AT use in exams.
- AT is used more effectively by staff.
- Schools and colleges build AT into their SEND and digital strategies.

Benefits

- Improved outcomes, behaviour, engagement and independence for SEND students.
- More efficient AT spending and use of staff time.
- Awareness raised in the wider sector about the benefits of AT and EdTech more generally.

Outcome

- SEND learners have the tools and support they need to secure an equal education.
- Quality of life and long term outcomes improve for SEND students.
- School and college staff are better equipped to educate SEND pupils.

Assumptions

- Should work with the technology already available in schools.
- Should focus on schools where need is greatest – mainstream, further targeting?
- Should not increase the burden on staff.

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