The Dyslexia/ Specific Learning Difficulties Support Project

Final Evaluation Report by

Dr Dominic Griffiths, Dr Kath Kelly & Dr Sarah McNicol

Education and Social Research Institute

Manchester Metropolitan University

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Contents   Page

Acknowledgements

Executive Summary

Introduction

This report is an evaluation of a Department for Education (DfE)-funded project helping to equip the school workforce to deliver quality first teaching and SEN support for pupils with dyslexia and other specific learning difficulties (SpLDs). The project was led and co-ordinated by the British Dyslexia Association (BDA), in conjunction with the charities Dyslexia Action DA), The Dyspraxia Foundation (DF), The Helen Arkell Dyslexia Centre (HADC) and The Professional Association of Teachers of Students with Specific Learning Difficulties (PATOSS), and was completed between May 2016 and March 2017.

The central aims of the project were to develop a one-day 'core skills level' training package on 'Teaching for Neurodiversity' to deliver to pairs of delegates sent by schools and colleges around England. These delegates would then cascade the training to colleagues back in their own institutions.

These training recordings would also be delivered in a series of webinars in the third quarter of the project. After this they would be available on the websites of the consortium members.

Additionally, the consortium was to develop a support, advice and resource web portal for teachers, parents and people with dyslexia and other specific learning difficulties.

Methodology

To evaluate the impact of the training the evaluation team developed three surveys. Survey 1 was to assess delegates' knowledge, skills and understanding about neurodiversity and SpLDs at the start of the training day, the second to assess their knowledge skills and understanding at the end of the day, and the third to be completed after three months by colleagues who had received the cascaded training.

From the impact data in Survey 3, three primary schools, three secondary schools, and two colleges were to be selected as showing high impact, to be researched in more depth as a series of case studies, through interviews with those who had cascaded the training, plus two other members of the teaching staff.

There was an initial plan to evaluate the impact of the webinars through tracking the numbers and geographical spread of attendees. After this the number of hits on the consortium's websites would be tracked.

For the web portal, impact would be measured through numbers of hits the advice routes chosen (teacher/parent / people with dyslexia) as well as user feedback.

Summary of Findings

48 one day training events were set up all over England and delivered between September 2016 and January 2017. Data from Surveys 1 and 2 found statistically significant gains in delegates' knowledge and understanding of SpLDs and neurodiversity; their understanding of support strategies for the diversity of learners in the classroom; their knowledge of multisensory approaches to learning and of metacognitive techniques. General feedback on the training was overwhelmingly positive, though some delegates did report already having the knowledge skills and practice in their institutions, and a minority seemed to have misunderstood the aims of the training and had expected more advanced level training for themselves, rather than being trained to cascade a core-level training pack to colleagues.

Results from Survey 3 showed a consistent majority of respondents (55-70%) reporting a positive impact upon their knowledge, skills and understanding of how to identify and support the diversity of learning needs within their classrooms. In the same way, between 60-75% reported positive impacts upon whole-school approaches to supporting the needs of the diversity of their learners: both those with and without identified SpLDs. 53.4% noted improvement in student engagement in learning already and 44.5% of improvements in pupil performance. Although these two last figures are more modest, it was noted by many respondents that the recency of the training within their institutions meant that there had not really been sufficient time for impacts upon student outcomes to be fairly measured.

Data from the case studies staff, perhaps unsurprisingly, revealed positive responses to the cascaded training which had translated into teachers and teaching assistants (TAs) developing more multisensory approaches to learning, including appropriate resources to support these. These approaches and resources were not just being used with students identified with SpLDs, but with the whole class. This was not only to avoid 'singling out' certain students, but also because staff believed that these approaches and resources were useful for the whole range of learners. The same applied to helping the students develop metacognitive strategies to support their independence as learners. Staff reported increases in their own confidence in their lesson planning and teaching skills. Perhaps most importantly, the adoption of the term 'neurodiversity' allowed teachers to 'look beyond labels' and consider the individual strengths and needs of each child. Many reported improvements in students' engagement, confidence and self-esteem, and some early signs of improved student performance were reported at some schools, though the general consensus among staff was that it was too early to measure the full impact upon student outcomes.

As far as the training webinars were concerned, it was reported that across the three parts of the series, 1,143 people had attended, joining from locations all over England, the rest of the UK and from countries as far away as Russia and New Zealand, whilst the training recordings had had 1,685 hits at the time of the draft of this report.

The web-based portal was only launched two weeks before the end of the project so is too late to measure impact.

Conclusions and Recommendations

It is fair to conclude that, overall, this project has been a notable success, despite the tight time scale within which it was enacted. However, it could be argued that, with more time, participation could have been greater, and opportunities to implement training and strategies in schools more extensive.

It is clear from responses to both the surveys and the case studies that this initiative has correctly responded to an identified training need in the schools and colleges teaching workforce for developing core knowledge skills and understanding of learners' neurodiversity and how to respond to this in the classroom.

There remains a challenge in developing secondary schools' uptake of such training and it is suggested that, having identified good practice in certain secondary schools, a set of videos is developed to enable secondary practitioners access to the training and analyse how and why this is effective. These could be accessed by secondary schools, as part of their continuing professional development strategies, within a time framework perhaps more convenient to them.

With the ongoing development of research knowledge about inclusive teaching and learning it would be important to develop a literature review of the latest studies to disseminate to schools, colleges and training providers, giving information about evidence-based practice.

Finally, given the differing levels of expertise in respect of knowledge, skills and understanding in the teaching workforce in inclusive teaching and learning, a large scale survey of teachers' and TAs' training needs could be undertaken with a view to developing training packages at different levels.

1. Introduction

1.1 The Research Context

The Rose Report, *Identifying and Teaching Young People with Dysle*xia *and Literacy Difficulties* (2009), identified a significant shortfall of skills in dyslexia-friendly teaching amongst the workforce at three levels, which the report mapped onto the model developed in the Department For Education and Skills in the policy document '*Removing Barriers to Achievement'* (2004). (See figure 1, below)

Figure 1: Developing the School Workforce

In response to the Rose findings, the government made available funding for places on specialist teacher training courses, which, in the event, were mostly focussed upon the 'Advanced' and 'Specialist' skills levels identified in the figure above. This initiative was rolled out at the same time as the development of the government's '*Inclusion Development Programme'*(DCSF, 2008-2009): a suite of materials aimed to support teachers, teaching assistants & trainee teachers to increase their knowledge and skills in working with children & young people with a range of special educational needs (SEN). These interactive DVDs (now online materials) were aimed at the 'Core' skills level described in Figure 1 (above) and were aimed at mainstream classroom teachers. They include a module covering support for learners with dyslexia. However, guidance on how to roll out these training DVDs (whose contents were often hard to navigate) was somewhat lacking and many local education authorities had to develop their own guidance for schools and teachers (e.g. Wiltshire.gov.uk, no date).

The message behind these initiatives was that all teachers are responsible for making reasonable adjustments to meet the needs of the diversity of learners in the classroom and this message was clearly restated in the 2014 Department for Education's '*Special educational needs and disability*

code of practice, 0-25 years'. However, research that is more recent paints a rather mixed picture of current practice in the English education system. Curran (2015), interviewing school special needs coordinators (SENCos), found that 63% reported a reduction in the numbers of children in their schools. Whether this is because of the previous misidentification of pupils as having SEN or whether schools are now admitting fewer pupils identified as having SEN remains unclear. At the same time research by the Driver Trust (2015) described a very 'fragmented' system of support for those with SEND, with vastly differing levels of local authority support to schools (in many cases as a result of cuts to funding) and concluded that, whilst some schools were developing better 'quality first' classroom teaching to meet the diverse needs of their learners, practice in this respect was far from consistent across the country. They recommended that 'Schools should target training that is focused on teaching practice at classroom teachers and heads of department as well as specialist staff.' (p.49). Confirmation of the continued need to develop confidence and competence in England's teaching force comes in data from the BDA's Early Intervention Project (2016). Their pre-training survey of over 800 primary teachers and teaching assistants found that only 21% rated their understanding of specific learning difficulties (SpLDs) as good or very good, only 15% in the case of dyslexia, only 20% as confident in supporting pupils with SpLDs and only 9% as understanding how to use a dyslexia checklist.

In summary, the decision of the DfE to fund the equipping of the schools' and colleges' workforce to develop their knowledge skills and understanding in supporting students with dyslexia and other SpLDs comes in response to a clearly identified continued need for improved practice in this area of education.

1.2 The Aims of the Dyslexia/ SpLD Support Project

The BDA-led consortium's successful bid to the DfE proposed to develop a package that offered

'….core training in awareness of dyslexia and other co-occurring difficulties. Key to the training will be equipping teachers with the knowledge and skills to identify signs of dyslexia and other SpLD through the use of an appropriate checklist, providing them with a range of strategies to support children in the classroom, ensuring that they know when and how to signpost for further advice or intervention, and making them aware of resources for further CPD (building on materials previously developed by members of the consortium and comprising awareness of dyslexia and other SpLD, early identification using a dyslexia checklist, the nature of co-occurring conditions, dyslexia friendly teaching practice, signposting for further assessment/intervention, and links to further CPD opportunities). (Original bid document, p3)

The core element of the training was to be delivered face-to-face as a Train the Trainer initiative, building on the model established by Patoss and Helen Arkell during 2015-16. These sessions would be offered to primary and secondary schools as well as 'post-16 institutions'. The proposal was to offer 40 face-to-face training events offered at venues around England to a maximum of 200 delegates per session (100 schools/ colleges with 2 delegates attending per institution). 'It is proposed that 25 events would be aimed at the primary workforce while 15 would be aimed at secondary teachers and support staff.

Through cascading, these events would have a potential reach of 27,000 primary teachers and teaching assistants, and 60,000 secondary teachers and support staff and 75,000 post-16 teaching staff'. (Contract bid, p. 3)

In addition to these face-to-face 'Train the Trainer' events, the consortium were to develop a series of online webinars, using the same training package direct to practitioners.

Finally, the consortium would develop an online web portal as a resource for advice and guidance to teachers, parents and people with dyslexia.

Our team from Manchester Metropolitan University's Education and Social Research Institute were tasked with the evaluation of the project.

1.3 The Project Objectives

The consortium developed a set of objectives for the different stages of the project.

For the first quarter of the project (April- June 2016) the aims were:

- Develop 'Train the Trainer' materials: Primary/Secondary and post-16 providers
- Develop strategic plan to maximise networks and recruit schools/post-16 providers to attend training
- Agree evaluation framework

For the second quarter (July- September 2016) the objectives were:

- Trainers receive instruction in delivery of materials
- Train the trainer events scheduled (primary & secondary and post-16 sectors)
- School / college leaders training days scheduled

For the third quarter (October-December 2016) the objectives were

- Evaluations from Train the Trainer sessions show increased confidence in recognising the signs of dyslexia/SpLDs, increased knowledge of a range of appropriate classroom support strategies, and confidence in cascading the training to colleagues.
- Evaluations from school staff receiving cascaded training show increased confidence in recognising the signs of dyslexia/SpLDs and increased knowledge of a range of appropriate classroom support strategies.
- Evaluations from senior managers in schools receiving cascaded training show greater confidence in the ability of staff to identify and support children at risk of dyslexia and other SpLD within the classroom

For the fourth quarter (January –March 2017) the objectives were

- Evaluations from webinars show increased confidence in recognising the signs of dyslexia/SpLDs and knowledge of a range of appropriate classroom support strategies
- Evaluation results compiled and final evaluation report completed
- Project report completed
- Dyslexia online advice and support portal designed and launched.

1.4 Methodology for the project evaluation

The evaluation by Manchester Metropolitan University is framed in terms of the project's own self-declared aims. In order to evaluate the impact of the Teaching for Neurodiversity training package and the 'train-the-trainer' cascaded approach, we used the Coldwell and Simkins (2011) framework (see Figure 2). As well as measuring participants' reactions to the training and the impact upon their attitudes, thinking and behaviour, its strengths lie, in particular, in aiming to tease out the nature of factors which might moderate the extent of training impact. The current authors' would aim to divide these into positive moderators ('enablers') and negative ones ('blockers'). The importance of this model, we believe is emphasising the possibility of *dynamic*, *multidirectional* interplay of individual and contextual factors *at different levels* of impact.
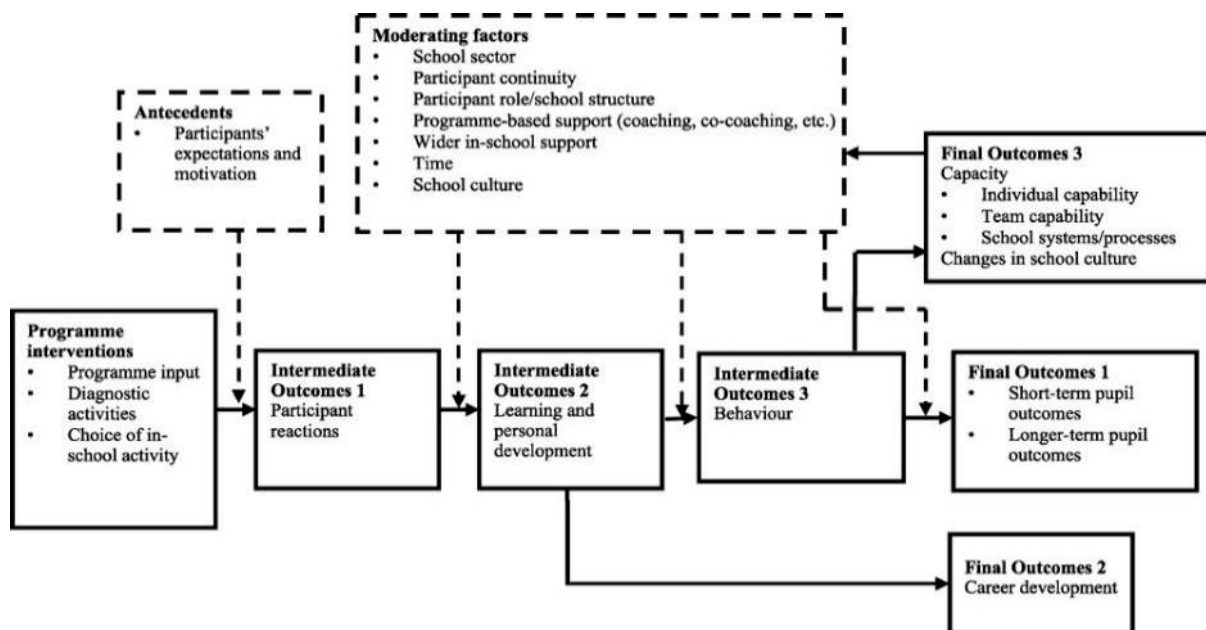
Figure 2. The Coldwell and Simkins (2011) Training Impact Framework (reproduced with the kind permission of the authors)

Using this framework we established the key elements of the project evaluation which report

- numbers and types of those staff receiving the cascaded training
- the impact of the initial training upon the designated schools and colleges delegates' learning and professional development
- the impact of the cascaded training upon colleagues' capacity for SpLD and implementation of dyslexia-friendly practice
- the impact of the cascaded training upon the schools' or post 16 institutions' culture, policies and processes
- the factors enhancing the level of impact of the cascaded training ('enablers')
- the factors moderating the level of impact of the cascaded training ('blockers').

Another element of the project evaluation was to assess

- The clarity of design of the proposed Dyslexia Support Project website
- The navigability of the website
- The range of resources and techniques featured
- The clarity of information on the featured resources and support methods
- Information about the actual costs of these resources and support methods
- Evidence of links to the relevant research underpinning the development of the resources and their impact.

In order to carry out these aims, the evaluation team designed two surveys to evaluate the immediate impact of the training. These were distributed electronically using Bristol Online Survey software. Tablet computers were provided to attendees at each of the training sessions to allow them to complete both surveys: one at the start of the day (Survey 1) and one at the end (Survey 2). In a few cases, there were technical issues at venues, so delegates completed paper-based versions of the surveys and these were later input manually.

Survey 1 was intended to establish attendees' pre-existing knowledge and understanding of topics covered during the training session. This was measured using a 5-point Likert scale ('strongly disagree; disagree; neutral; agree; strongly agree'). The questions were based around an outline of the planned sessions provided by delivery partners. Both surveys included questions about knowledge of SpLDs; neurodiversity; and practical tools and strategies. Survey 2 repeated the same questions as Survey 1, but also asked for attendees' opinions on the delivery of the training in general, for example, the organisation and presentation. Wilcoxon signed rank tests were used in analysing Surveys 1 and 2 Likert-scaled questions to compare responses to each of the questions comparing knowledge and understanding pre- and post-training.

Survey 3 was designed using the same format, (though with some different questions) to be used by staff who had received the cascaded training to measure its impact upon their thinking and practice, as well as the perceived wider impact upon their schools or colleges. It was made available electronically on the university's project evaluation web page.

In addition to the qualitative data from the Likert-scaled question responses, some questions were more open ended and called for comments from participants and these were analysed using a thematic coding approach. Copies of the survey schedules can be found in Appendices 1, 2 and 3.

The results of Survey 3 were used to identify 8 schools and colleges (3 x primary schools, 3 x secondary schools, and two x colleges reporting high levels of impact. These would be followed up with visits from a research assistant from the university evaluation team to conduct semi-structured interviews with those that had cascaded the training as well as two other members of the teaching staff selected by the cascade trainer ('snowball sampling', Cohen, Manion and Morrison, 2013). The case study interview schedules can be found in Appendices 4 and 5.

The university evaluation team would also gather data on the reach and impact of the project webinars as reported by the project coordination team.

Finally, there would be a focus group interview carried out with members of the project evaluation team. A copy of the schedule for the focus group discussion can be found in Appendix 6.

1.5 The Structure of the Evaluation

Section 2 of this evaluation reports the results of Surveys 1 and 2. Section 3 reports the results of Survey 3. Section 4 reports the case studies. Section 5 reports the webinars. Section 6 reports the web portal. Section 7 summarises the key points in the focus group discussion. Section 8 brings together all the findings in a general discussion and, finally, Section 9 reports conclusions, including implications for future practice and research.

2. Results of Surveys 1 and 2

2.1 Attendance at the Teaching for Neurodiversity Training Events

Across all the events 1,175 primary school delegates attended, representing 865 schools, 394 secondary school delegates attended, representing 293 secondary schools, and 498 college delegates attended, representing 308 colleges. The overall total attendance was therefore, 2,067 delegates, representing 1,466 schools and colleges.

1,901 responses were received to Survey 1 and 1,723 to Survey 2. These figures represent response rates of 92.0% for Survey 1 and 83.3% for Survey 2. Responses from both surveys were downloaded into Excel and the data cleaned to remove incomplete or duplicate responses. This left 1,632 responses to Survey 1 and 1,719 to Survey 2. Analysis of responses from individual surveys is based on these totals.

To compare responses to the pre- and post- training questions, responses from the two surveys were compared and individuals who had only completed one of the surveys were removed[1]. This left a total of 1,606.

More than half of respondents worked in the primary sector (63.6% pre-training; 62.3% post-training). Around one-fifth worked in secondary schools (21.8% pre-training; 21.3% post-training) and slightly fewer worked in post-16 settings (18.6% pre-training; 19.1% post-training). Percentages

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[1] Note: In a number of cases there were errors or spelling mistakes in names on the two surveys. Where it appeared to be a reasonable assumption that it was the same person (e.g. very similar name and same school), the two surveys were matched; otherwise, they were removed.

are a little skewed by the fact that some institutions were cross-age-phase. There were also a small number of delegates from other settings such as local authorities, the NHS, early years.

2.2 Analysis of Data

Knowledge of Specific Learning Difficulties

As shown in Graph 1, prior to the training, attendees were most confident in identifying individuals with ASD (71.5% in agreement), dyslexia (67.6%) and ADHD (58.5%). They were least confident in identifying individuals with dyscalculia (27.9%), SLI (33.4%) and dyspraxia/DCD (39.7%).
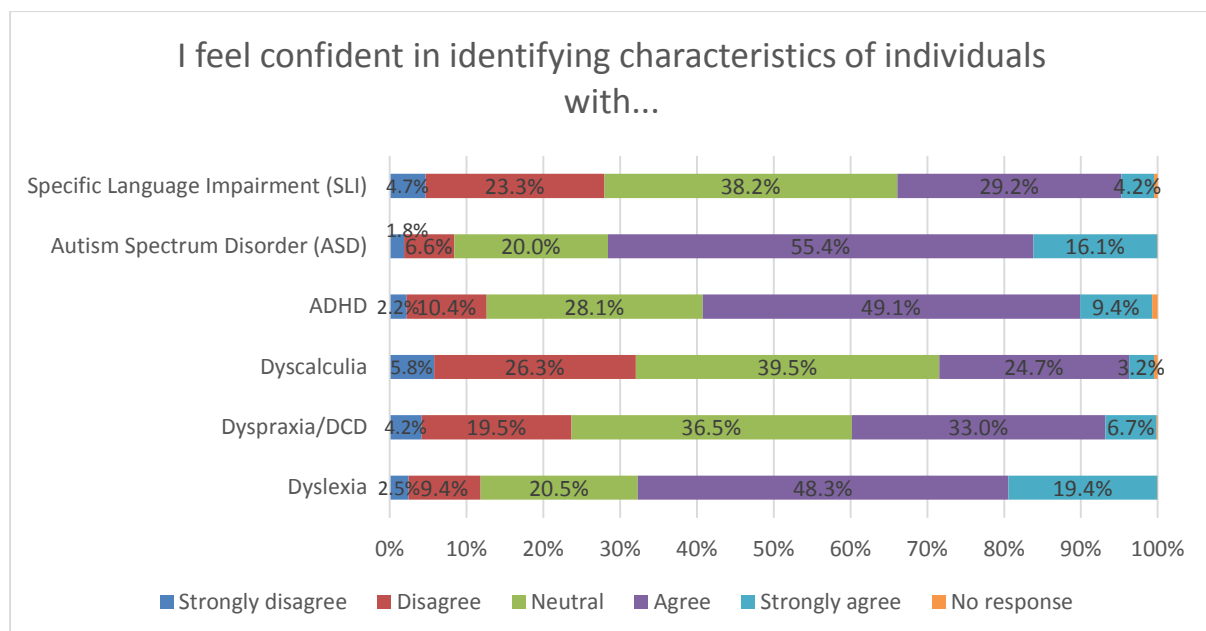
Graph 1: Pre-training confidence identifying individuals with SpLDs   n= 1606

For all SpLDs, there was a significant post-training increase in confidence identifying individuals (p<0.001)[2]. It is worth noting that for 'individuals with dyslexia' and 'individuals with ASD' more than 50% of respondents gave the same responses pre- and post- training. However, this is perhaps not surprising given the high pre-existing levels of confidence around these topics. On the other hand,

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[2] See Appendices 1 &2 for a breakdown of the results for each question.

even after the training, more than almost one-third of trainees did *not* feel confident identifying characteristics of individuals with SLI (31.4%) and dyscalculia (30.0%). (See Graph 2)

I feel confident identifying characteristics of individuals with...

	Strongly disagree/Disagree	Neutral	Agree	Strongly agree	No response
Specific Language Impairment (SLI)	6.5%	24.8%	53.2%	15.2%	
Autism Spectrum Disorder (ASD)	2.6%	12.2%	58.3%	26.6%	
ADHD	2.7%	15.8%	59.2%	21.9%	
Dyscalculia	5.1%	24.8%	53.0%	16.9%	
Dyspraxia/DCD	2.7%	16.2%	59.3%	21.4%	
Dyslexia	1.6%	7.0%	56.7%	34.6%	
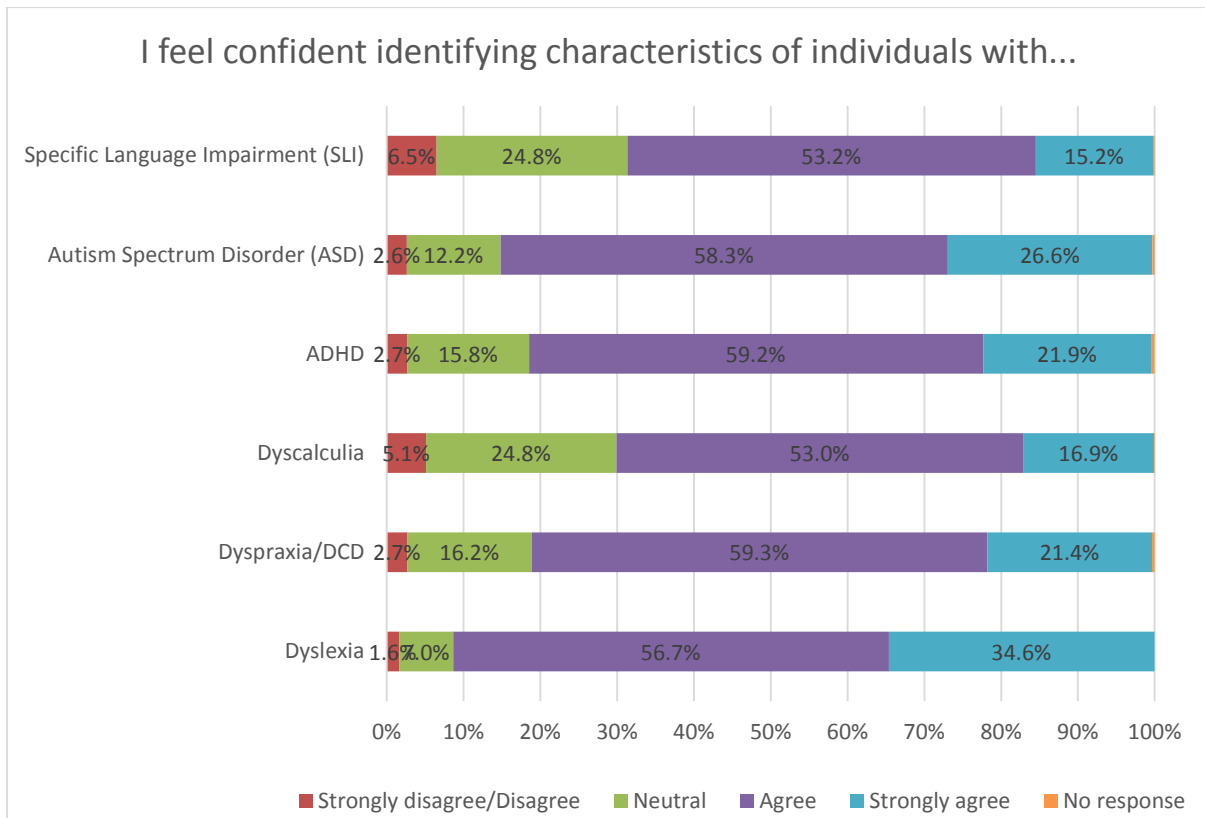
Graph 2: Post-training confidence identifying individuals with SpLDs[3]   n = 1606

For attendees for whom both pre- and post- ratings were available, the difference between post-training and pre-training was statistically significant for both knowledge of referral routes (65.4% in agreement pre-training; 84.6% in agreement post; p<0.001) and knowledge of non-SpLD factors likely to influence student performance (64.0% pre; 90.8% post; p=<0.001). (See Graphs 3 and 4)

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[3] Note: because numbers strongly disagreeing were so small, the disagree and strongly disagree categories have been combined on this chart.

General SpLD knowledge pre-training

If I identify a potential specific learning difficulty, I know the route for further referral. — 2.3% 9.4% 22.9% 40.0% 25.4%

I am aware of other factors that may cause inconsistencies in performance that are not the result of a specific learning difficulty. — 1.3% 6.0% 28.7% 44.4% 19.7%

Strongly disagree · Disagree · Neutral · Agree · Strongly agree
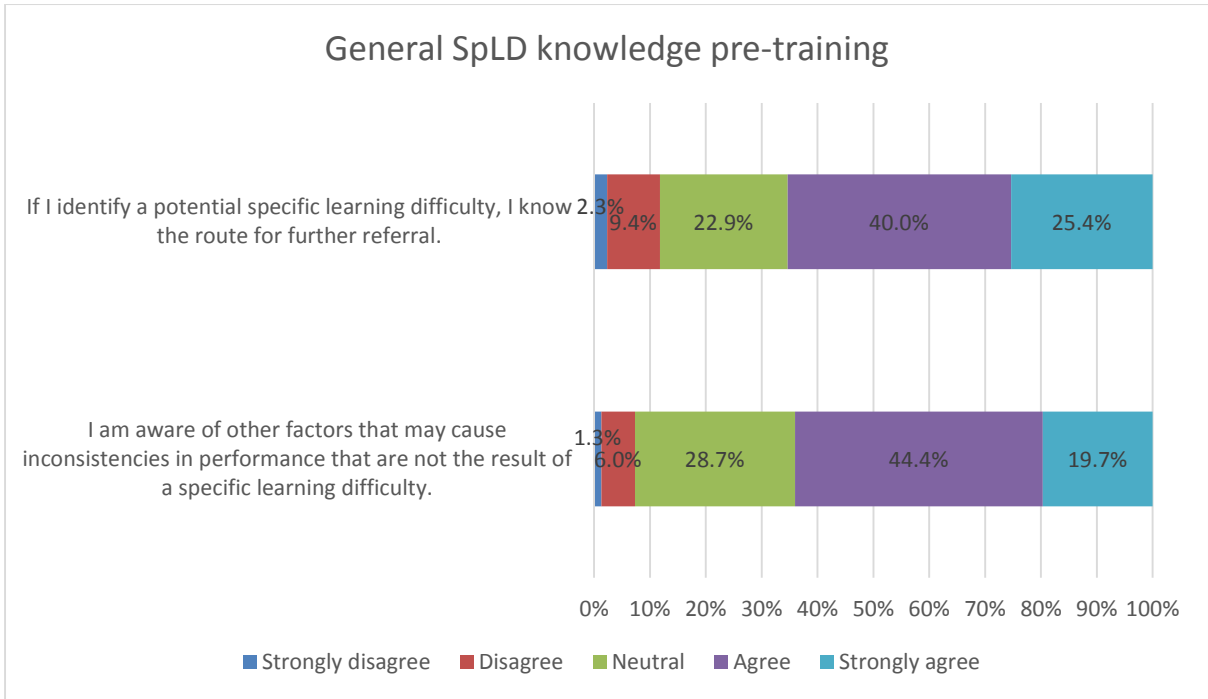
Graph 3: Pre-training SpLD knowledge   n =1606

General SpLD knowledge post-training

If I identify a potential specific learning difficulty, I know the route for further referral. — 3.0% 12.4% 46.0% 38.6%

I am aware of other factors that may cause inconsistencies in performance that are not the result of a specific learning difficulty. — 1.6% 7.6% 49.5% 41.3%

Disagree/Strongly disagree · Neutral · Agree · Strongly agree
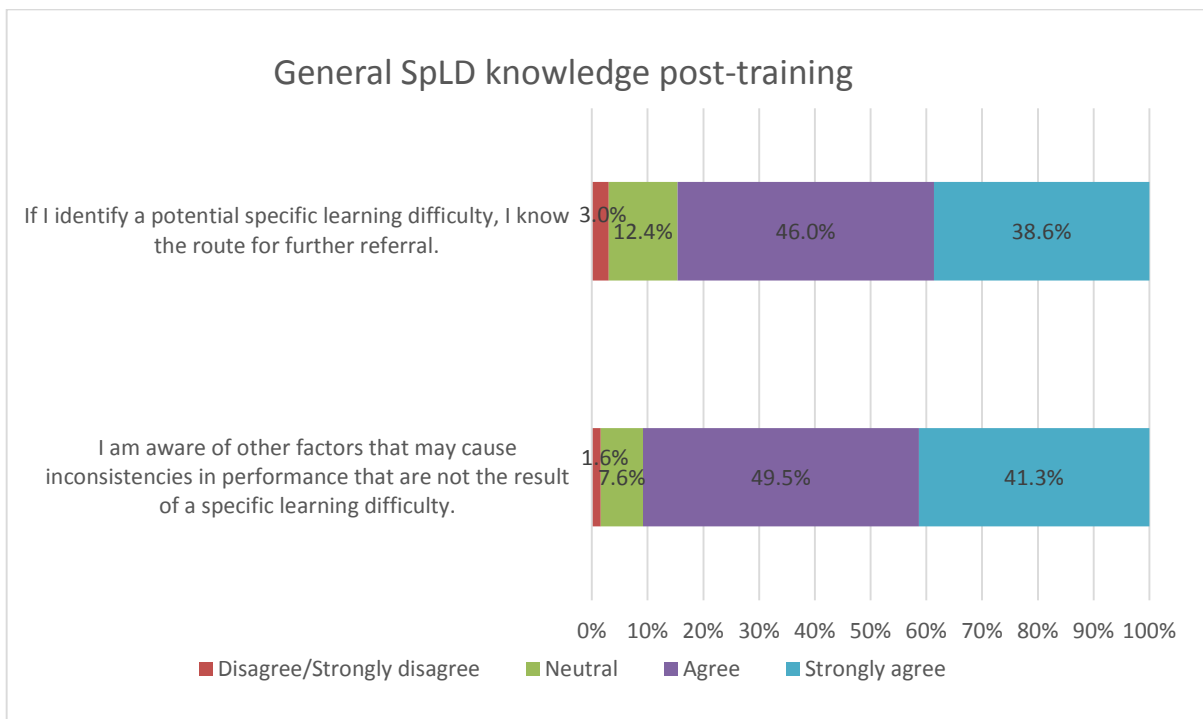
Graph 4: Post-training SpLD knowledge   n =1606

Knowledge of neurodiversity

Prior to the training, only 25% of attendees agreed they felt, "confident that I could explain to a colleague what neurodiversity is". After the session, 93.8% agreed. The difference between the two was found to be statistically significant (p<0.001). In fact, 87.3% of attendees indicated that their confidence explaining neurodiversity had improved after the training.

Confidence in explaining various aspects of neurodiversity to a colleague was also significantly higher post-training (p<0.001 in all cases). For all aspects of neurodiversity listed, more than 85% were confident they could explain these to a colleague after the training compared to less than 50% before. Furthermore, for all statements *except* confidence explaining the difficulties that neurodiverse people may have with literacy, more than two thirds indicated that their knowledge had improved post-training (see Graphs 5 and 6).
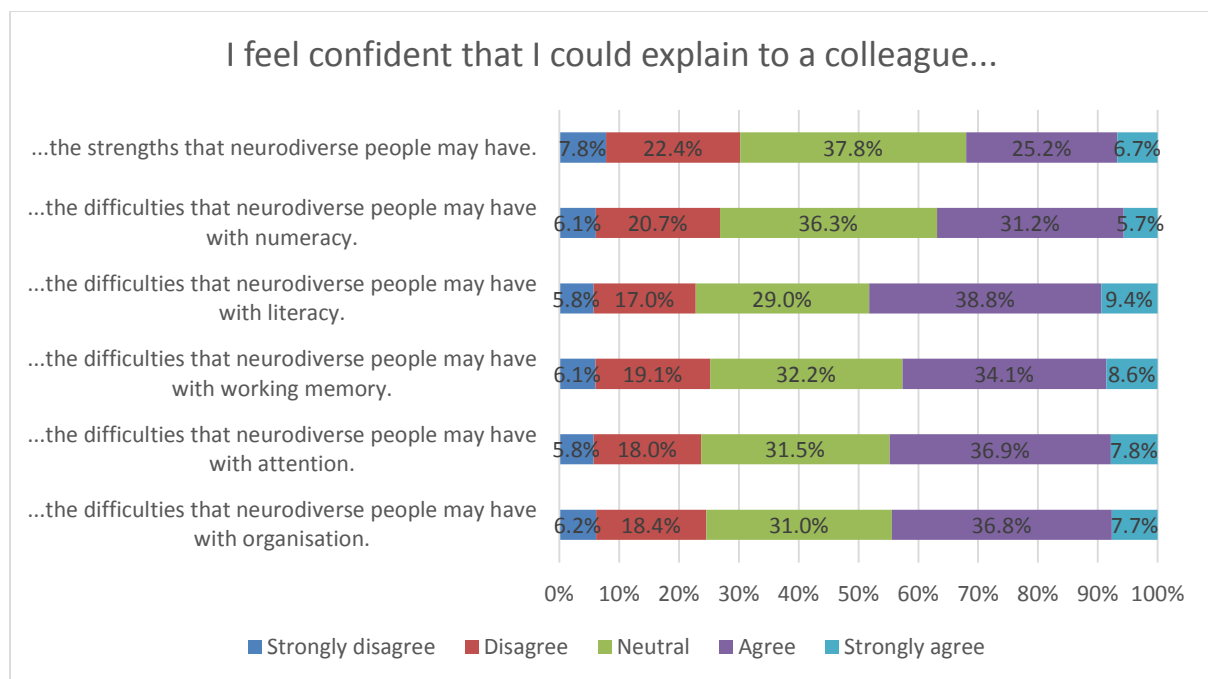
Graph 5: Pre-training confidence in neurodiversity n = 1606
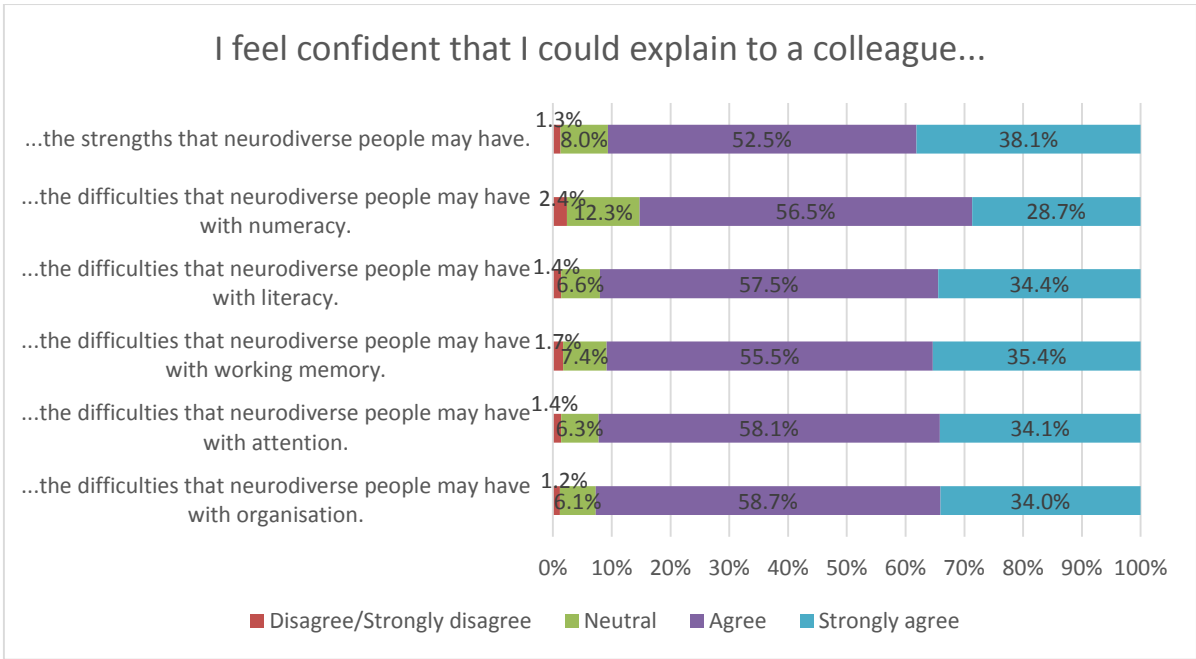
Graph 6: Post-training confidence in neurodiversity   n =1606

Knowledge of practical tools and strategies

The differences between pre-training and post-training knowledge of practical strategies were statistically significant for all types of difficulties (p<0.001 in all cases). After the training, more than 80% of attendees knew how to support individuals with specific difficulties. In particular, the percentage agreeing they knew how to support individuals with visual/visual stress difficulties rose from 50.6% to 89.2% and the percentage agreeing they knew how to support individuals with working memory difficulties rose from 49.2% to 88.0%.
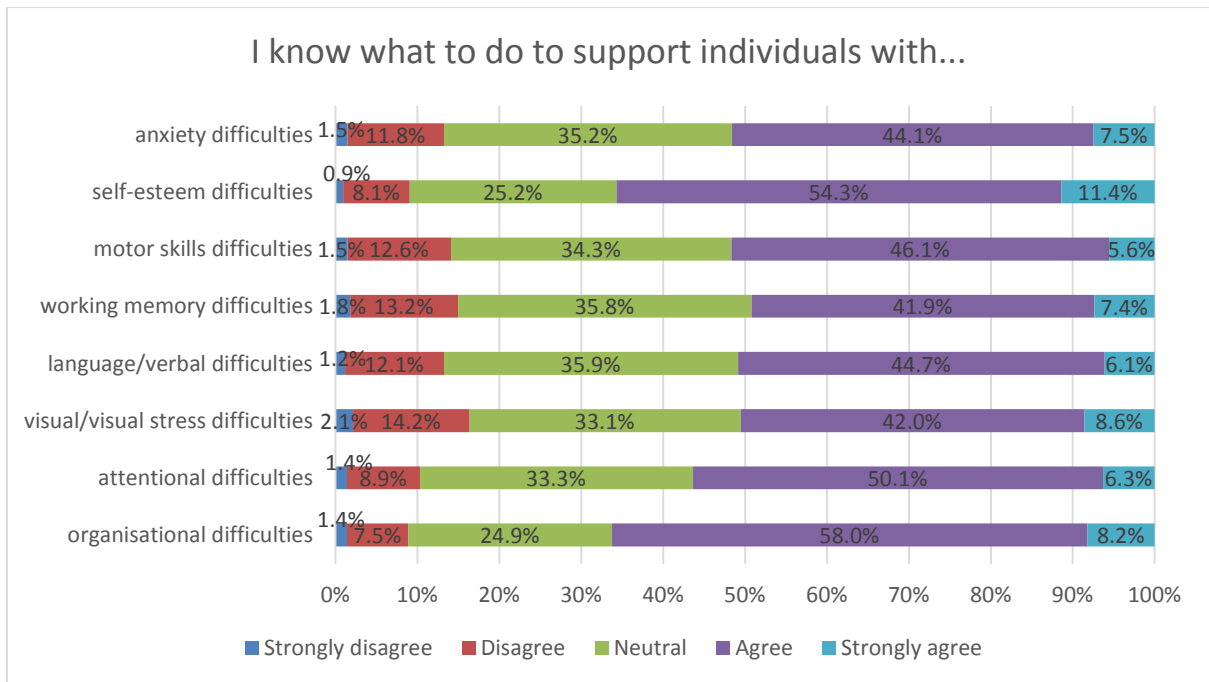
Graph 7: Pre-training knowledge of practical strategies   n =1606
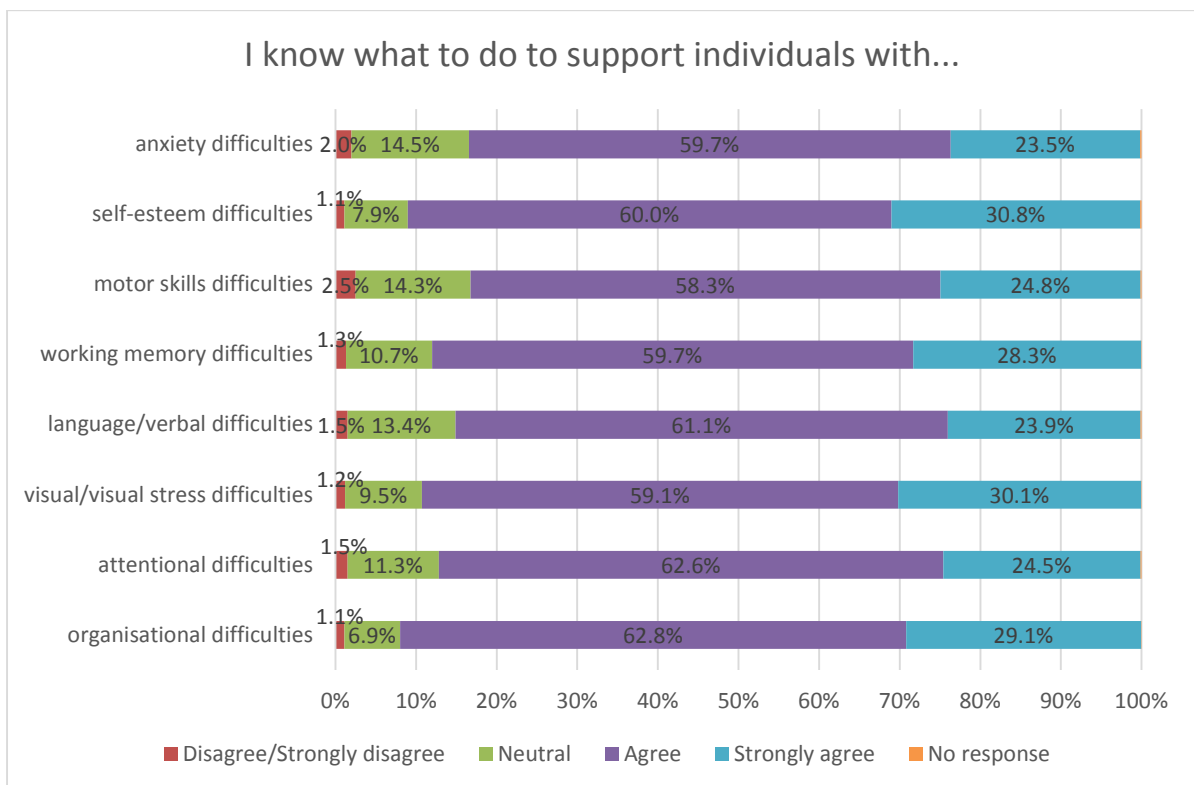
Graph 8: Post-training knowledge of practical strategies   n = 1606

Knowledge of metacognitive strategies and multisensory techniques

Level of agreement with the statements: "I can explain metacognitive strategies to a colleague" and "I can use a range of multisensory techniques to support individuals with specific learning difficulties" were also significantly higher post training (p<0.001 in both cases). The change in ability to explain metacognitive strategies was particularly dramatic; the percentage of attendees in agreement increased from 22.5% pre-training to 78.8% post-training. (Graphs 9 and 10).
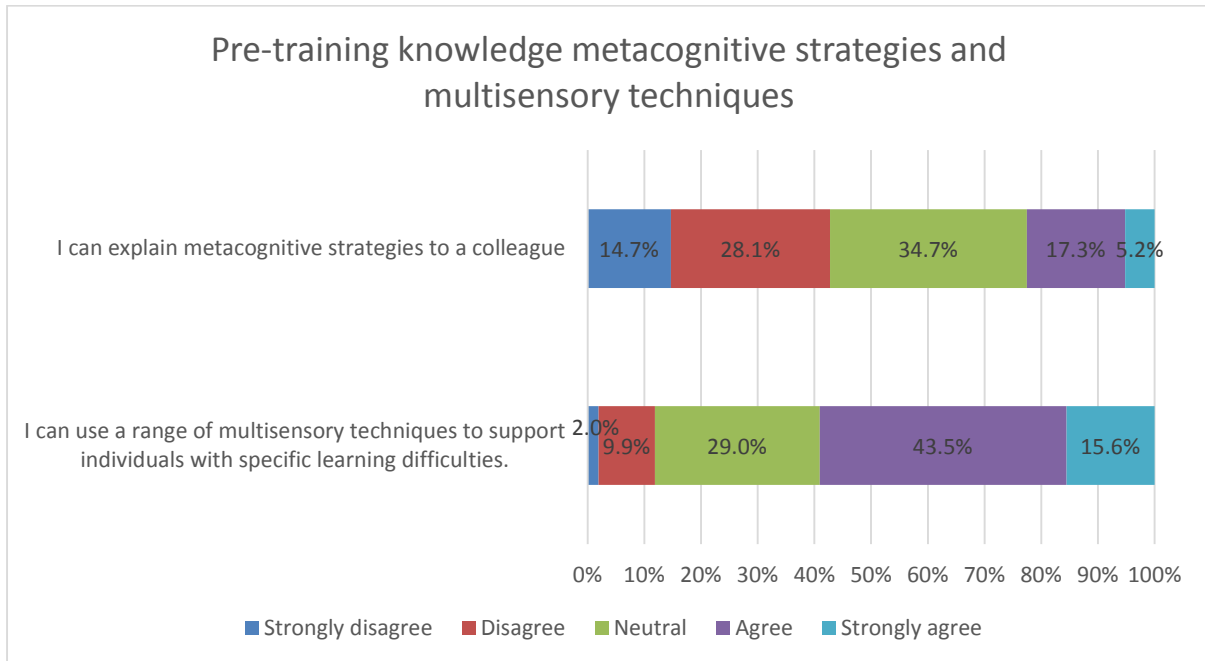
Graph 9: Pre-training knowledge of metacognitive strategies and multisensory techniques n =1606
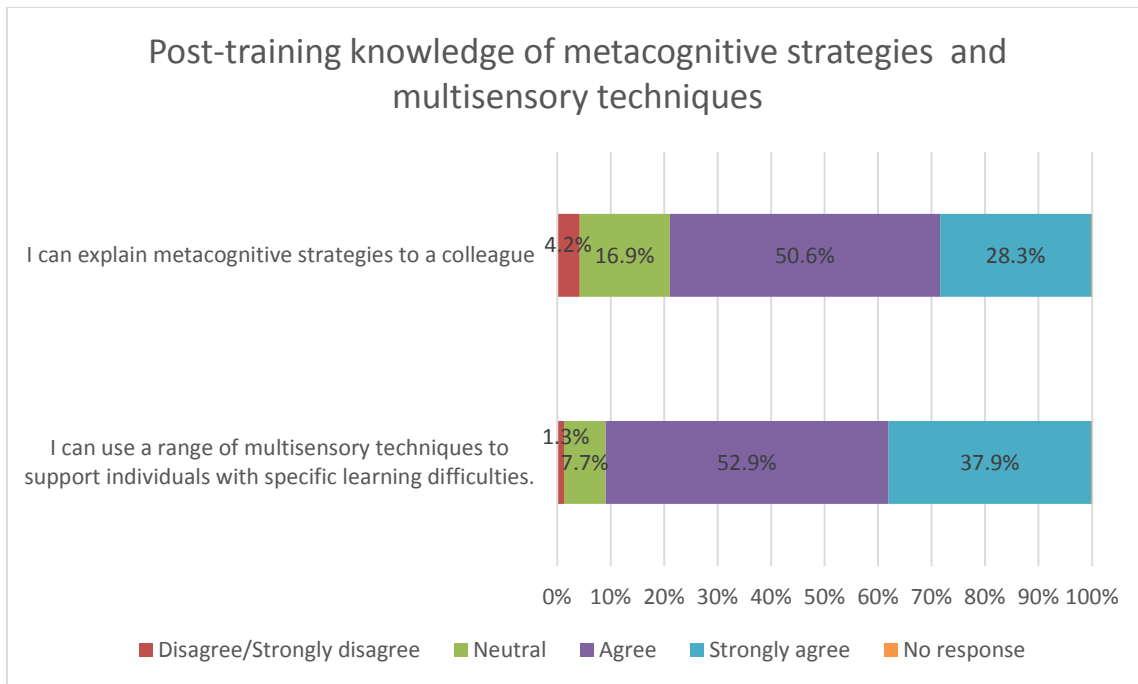
Graph 10: Post-training knowledge of metacognitive strategies and multisensory techniques

Furthermore, two-thirds of respondents agreed that they knew more about multisensory techniques after the session than they had done before the training.
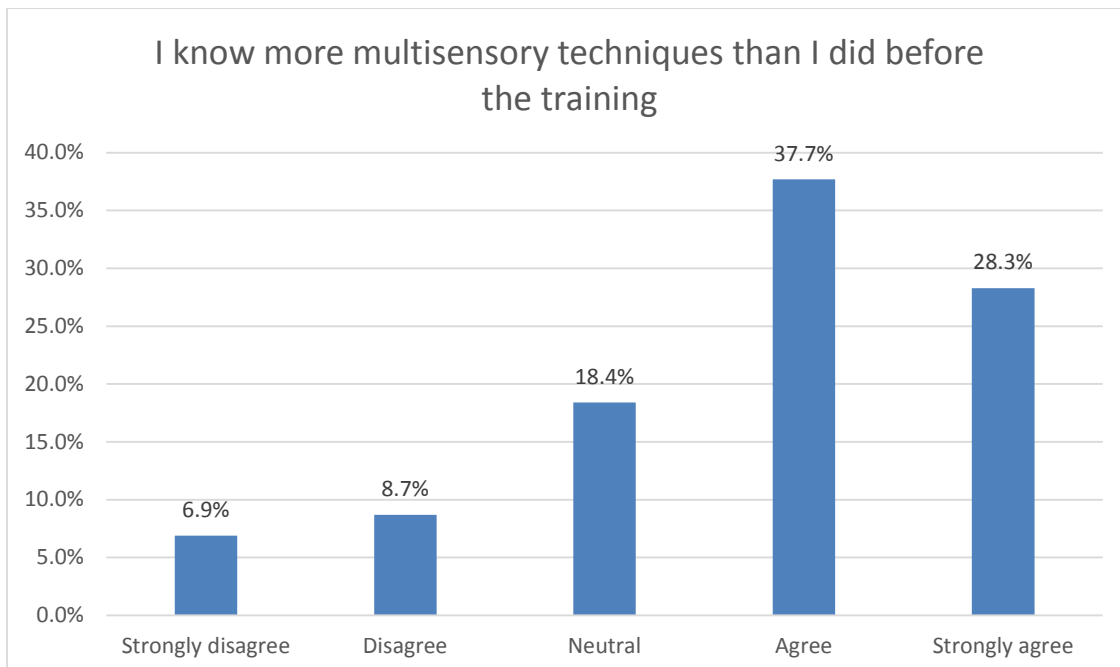
Graph 11: Post-training knowledge of multisensory techniques   n = 1719

General feedback on training

Overall, feedback on the training was positive. In particular, the presenters were praised for being knowledgeable (83.7%) and communicating well (81.5%), and a similar proportion felt the day had offered opportunities for interaction with colleagues (80.4%). Where there was less satisfaction was in response to the statement, "The content of the training met my expectations"; only 63.6% agreed with this. (See Graph 12, below). Gains in knowledge of and confidence is supporting the diversity of learners was consistently statistically significant. (See Graphs 1-11, above)

At the end of the questionnaire, respondents were invited to make any comments they may have. As usual in this type of survey, many comments related to practical aspects of the event organisation (e.g. heating, timing, venue). However, others help to explain some of the responses to the scale questions reported above.

> *Really informative day. I was looking forward to the training but it exceeded my expectations. It was made great by the presenters but also the contribution of all delegates.*

> *The day was informative and I feel confident to be able to cascade information but do not feel further equipped with strategies but this is not what I had expected from the training…*

One of the main specific positives in the comments recorded were about the information technology section of the day and the potentials of iPad apps. Many delegates expressed interest in further information and training on their uses in supporting curriculum access. A few did note that the ICT section might have covered more than just apps.

Many delegates also appreciated the SpLDs checklist and said that their colleagues would find it useful. However, a few expressed concern that these checklists could be misused:

I think the checklist should be available with the labels of diagnosis removed. It looks like a diagnostic tool

Checklist should include strengths and should NOT include SpLD categories - danger of students latching on to labels.

Many expressed a wish to see strengths as well as weaknesses included in the checklist. Many others also suggested that the checklist items could be linked directly to strategies.

Some respondents also critiqued the approach advocated in the training:

I was hoping the message was that SEN needs a holistic approach away from labels, but that labels are sometime helpful. That's not the message most delegates seem to be taking away.

Concept of the checklist flawed……….. Tension between not labelling and labelling/diagnosis message not clear

Although comments upon training delivery were 70% positive, it is, perhaps, also worth noting that the comments about the presenters and mode of delivery were more mixed than might have been

expected from the Likert scale questions. While there were many who praised the presenters for being knowledge and delivering the content well, others were more critical:

> *The presenters were severely limited/ inhibited by being expected to read out the notes. I am sure they are knowledgeable but did not have the opportunity to show it.*

> *Excellent delivery by knowledgeable and warm presenters who made the task of cascading this training seem very doable*

> *One presenter merely read the notes. The other offered her own experiences & seemed experienced. It was not multi-sensory & quite boring. I could have just read the notes in truth. People left early. I was disappointed overall*

Whilst some delegates expressed appreciation of the chance to network with colleagues at a 'face-to-face' training day, others felt there might have been more opportunities for discussion sessions within the day's structure.

There is, of course, a tension between the need to keep a consistency in the delivery of a pre-set training package across different events, on the one hand, and allowing for personal input on the other. However, the comments also suggest that there may have been a difference in quality between sessions and between presenters (See also section 7 of this report, below).

Of the minority that did offer negative feedback, one of the most frequent criticisms was that the training had not covered any new material; it simply repeated what attendees were already aware of and was, perhaps, not at the right level for an audience already well-informed about SPLDs, for example:

> *Far too basic. We are already utilising the strategies which were presented.*

> *I am not sure that the course delivered what it said would in the flyer. In my school we are doing everything and more in terms of the strategies for children with SpLD and I am not sure this has added anything new for us.*

> *Not quite sure if I have anything new to cascade. Already done a lot of training and hoped to learn new things and have gained nothing.*

It appears that many attendees were not clear about the aims of the training. It is, however, interesting to contrast these comments with the results from the closed questions that show a statistically significant increase between pre- and post-training knowledge for all aspects. These suggest that most people did learn something new, although they were perhaps not clear that the primary purpose of the session was to enable them to cascade to colleagues rather than add to their own knowledge.

Feedback on training

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I feel confident about cascading this training to my colleagues	2.1%	4.0%	15.3%	48.5%	30.2%
The day offered opportunities for interaction between participants.	0.6%	4.0%	15.0%	43.1%	37.3%
The presenters communicated well.	1.2%	3.3%	14.0%	41.8%	39.8%
The presenters were knowledgeable	0.6%	3.3%	12.4%	40.7%	43.0%
The content of the training met my expectations	5.1%	11.6%	19.7%	39.0%	24.6%
The catering and refreshments were of good quality	3.5%	7.4%	17.2%	38.2%	33.8%
The day was well-organised	1.4%	7.0%	18.0%	40.9%	32.7%
The venue was appropriate for the training	3.4%	7.2%	16.1%	38.6%	34.7%
The pre-session information was comprehensive	2.4%	3.7%	15.3%	44.0%	34.6%
The pre-session information was timely.	4.3%	6.6%	17.2%	40.8%	31.1%

Graph 12: General feedback on training　　　　　　　　n = 171

3. Survey 3 Results

Survey 3 was designed to evaluate the impact of the cascaded training in schools (or other educational institutions). Schools were asked to complete the survey approximately three months after they had delivered the in-school training. A short video[4] was created to inform schools about how they should complete the survey and reminders were sent directly to schools by project partners.

Survey 3 was intended to identify the impact of the cascaded training on staff (including teachers, teaching assistants and others). In particular, changes in attitudes; new skills or knowledge; changes in practice; confidence in supporting students with learning difficulties and specific SLDs; the impact on students; and the impact on the organisation as a whole. A copy of the survey can be found in Appendix 3.

This survey was available from November 2016 and closed on 6th March 2017. It is important to note that, due to time constraints of the project, this was less than three months after many schools had

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[4] https://www2.mmu.ac.uk/pdei/working-together/projects/details/dfe-dyslexia-support-project-.php

been able to cascade training. This meant they would not have been able to participate in the training impact survey. Furthermore, although it was intended that each person attending the training would fill in a survey individually, it appears that some schools had not understood this and only the lead contact completed the survey.

3.1 Analysis of Data

In total, 530 complete responses were received to Survey 3. Almost two-thirds of respondents (64.9%) were from primary schools; 16.0% were from secondary schools; 9.8% from post-16 institutions; and 9.2% from other settings such as work-based learning, nursery schools or local government. The responses came from 212 institutions and the number of responses per institution ranged between 1 and 38[5]. The average number of respondents per institution was 2.5.

Teachers accounted for 43.6% of respondents; 17.5% were teaching assistants; 12.5% were SENCOs; 7.2% were in senior leadership roles; 3.2% were inclusions managers or co-ordinators; and 2.6% were assessors or advisors. The remaining 13.6% occupied a variety of roles including technicians and wellbeing officers. (See Table 1.)

Role	Number	Percentage
SENCO	66	12.5%
Teacher/tutor	231	43.6%
Teaching assistant	93	17.5%
SLT	38	7.2%
Inclusion manager/co-ordinator	16	3.0%
Assessor or advisor	14	2.6%
Other	72	13.6 %
TOTAL	530	

Table 1: Job titles of respondents

Impact upon professional attitudes and behaviours

More than half of respondents agreed with each of the statements about the impact of the training on their professional attitudes and behaviours. The highest level of agreement was in response to the statement, 'The training has given me new knowledge and skills'; 70.8% agreed or strongly agreed with this. Overall, there was slightly higher agreement with statements asking about impacts on professional attitudes and knowledge compared to statements about impacts on professional behaviours. This is not unexpected, however, as the survey took place a relatively short time after the training and concrete changes to practice are likely to take longer to be realised. (See Graph 1).

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[5] It appeared that some institutions submitted a single response, either collectively or representing the views of the person who had cascaded the training. A reminder was sent to schools in January to remind them that *all* those who attended the cascaded training should complete the survey individually.

Impacts on professional attitudes and behaviours

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
As a result of the training I now use a wider range of metacognitive strategies in my teaching.	3.0%	9.4%	33.4%	44.7%	9.4%
As a result of the training I now use a wider range of multisensory teaching techniques	4.5%	8.5%	31.3%	44.0%	11.7%
The training has changed my professional behaviour	4.5%	9.1%	31.3%	45.1%	10.0%
The training has given me new knowledge and skills.	4.0%	4.2%	21.1%	50.0%	20.8%
The training has changed my attitudes to, and perceptions of, specific learning difficulties	4.3%	8.5%	26.4%	48.1%	12.6%
The training has changed my attitudes to, and perceptions of, neurodiversity	3.4%	8.5%	23.0%	51.1%	14.0%

Graph 13: Impacts of the training on professional attitudes and behaviours   n=530

In the comments section of the survey, a number of respondents said the training had not had a significant impact on them because they already had a good level of understanding of the issues:

> *I had a lot of knowledge already hence my neutral scores for many questions. (SEN teacher)*

However, for others, neurodiversity was new to them and it was an idea they had found useful and felt was likely to impact on their interactions with students:

> *I have long-standing experience of working with people with specific learning needs and various ways of thinking, however this is the first time I have heard the term neurodiversity, so it was interesting to bring all the previous knowledge and experience together. It was a useful reminder to gain specific information about someone, rather than make a general statement at the beginning of the session. (School Trainer)*

Impact on support for individuals with learning difficulties

As a result of the cascaded training, more than two-thirds of respondents felt more confident supporting individuals with all the learning difficulties listed, except for motor skills (where 59.5% felt more confident). The highest levels of agreement were for statements about confidence supporting individuals with organisational difficulties (70.0%); language/verbal difficulties (68.9%); and attention difficulties (68.7%). (See Graph 14).
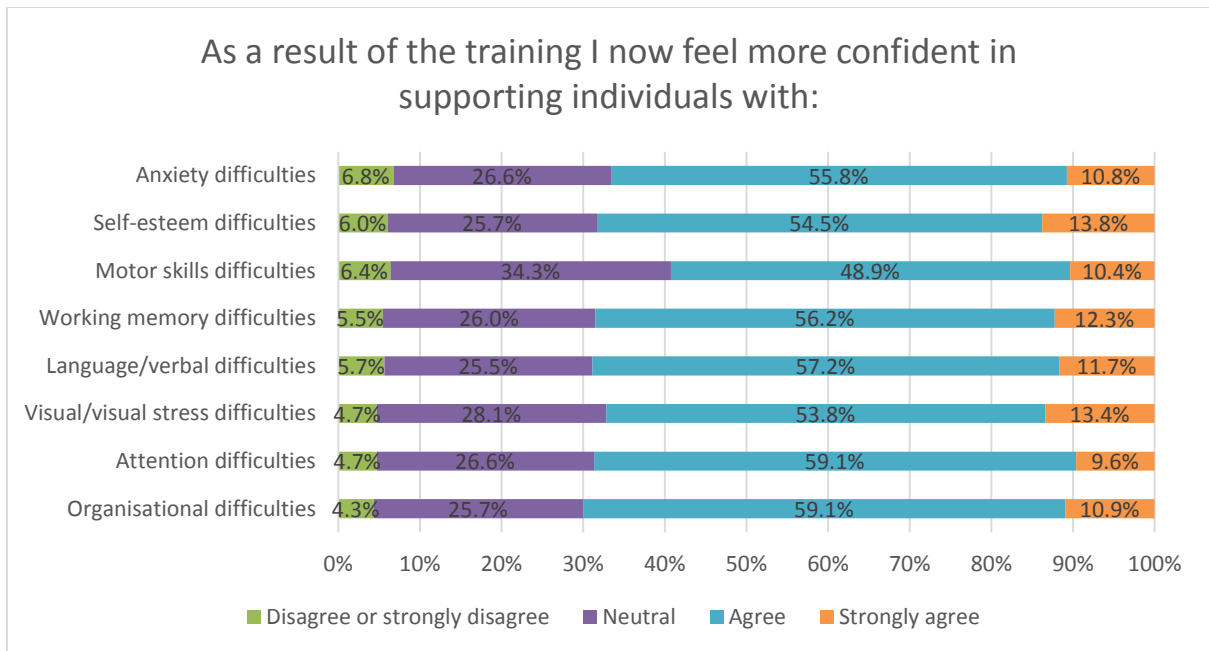
Graph 14: Confidence in supporting individuals with learning difficulties   n=530

Impact upon identifying individuals with SpLDs

More than half of respondents felt more confident identifying individuals with each of the SpLDs listed as a result of the training. The highest levels of agreement were found for confidence identifying dyslexia (66.0%) and ASD (63.4%). There were lower levels of agreement for SLI (56.2%) and dyscalculia (57.2%). (See Graph 15).

As a result of the training I feel more confident in identifying individuals with the following SpLDs:

SpLD	Disagree or strongly disagree	Neutral	Agree	Strongly agree
SLI	6.6%	37.2%	47.7%	8.5%
ASD	5.5%	31.1%	52.5%	10.9%
ADHD	5.7%	33.0%	51.7%	9.6%
Dyscalculia	7.5%	35.3%	48.5%	8.7%
Dyspraxia/DCD	5.8%	34.7%	49.8%	9.6%
Dyslexia	5.1%	28.9%	52.1%	14.0%
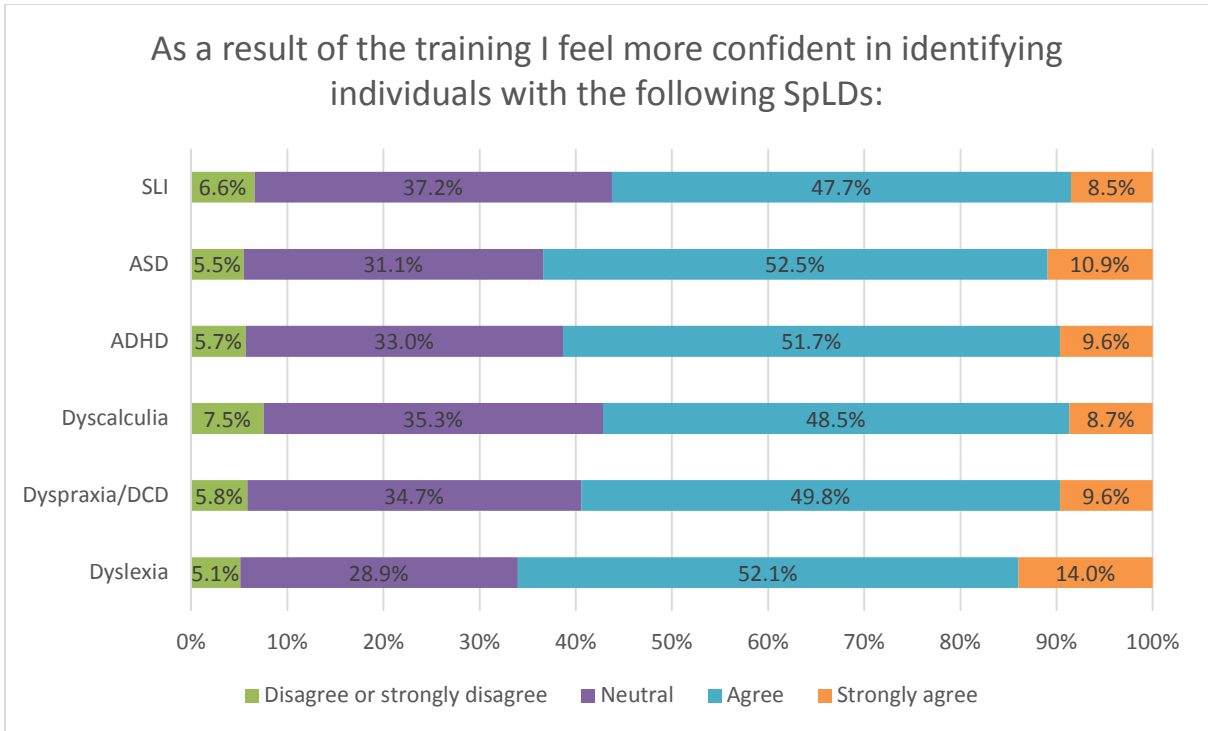
Graph 15: Confidence identifying individuals with SpLDs   n=530

Impact upon supporting individuals with SpLDs

More than half of respondents also felt more confident supporting individuals with each of the SpLDs listed as a result of the training. The highest levels of agreement were found for supporting individuals with dyslexia (69.2%) and ASD (65.8%). There were lower levels of agreement for supporting individuals with SLI (58.5%) and dyscalculia (59.2%). (See Graph 16).

As a result of the training I feel more confident in supporting individuals with the following SpLDs

	Disagree or strongly disagree	Neutral	Agree	Strongly agree
SLI	6.6%	34.9%	50.0%	8.5%
ASD	5.5%	28.7%	55.8%	10.0%
ADHD	5.5%	31.1%	54.7%	8.7%
Dyscalculia	6.4%	34.3%	50.0%	9.2%
Dyspraxia/DCD	5.5%	32.1%	51.3%	11.1%
Dyslexia	4.3%	26.4%	55.7%	13.6%
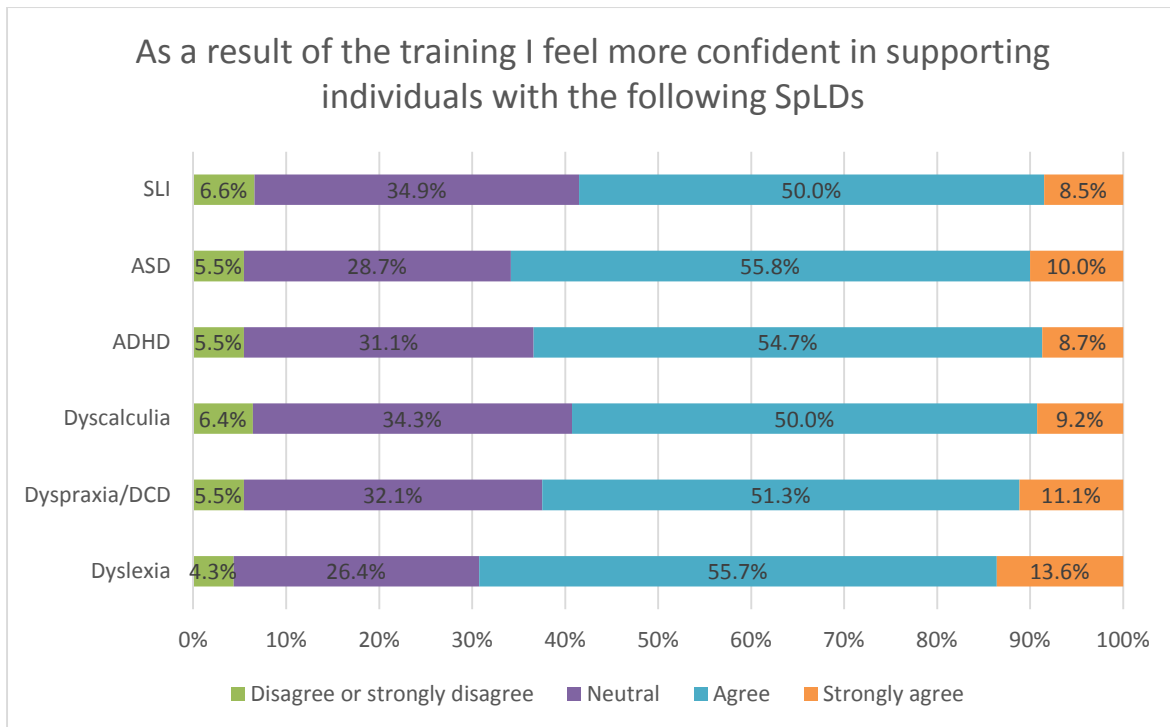
Graph 16: Confidence in supporting individuals with SpLDs   n =530

Perceived impact on students

More than half of respondents of respondents (53.4%) agreed or strongly agreed that they had noticed improvements in engagement with learning in individuals who have SpLDs, while 44.5% agreed or strongly agreed they had noticed improvements in performance in learning in individuals who have SpLDs. These results indicating a positive impact on students with SpLDs are encouraging given there was just three months between the training and survey completion. (See Graph 17).

As a result of the training, I have noticed improvements in...

performance in learning in individuals I teach who have SpLDs.: 7.5% Disagree or strongly disagree, 47.9% Neutral, 40.0% Agree, 4.5% Strongly agree

engagement with learning in individuals I teach who have SpLDs.: 7.0% Disagree or strongly disagree, 39.6% Neutral, 46.2% Agree, 7.2% Strongly agree

Legend: ■ Disagree or strongly disagree ■ Neutral ■ Agree ■ Strongly agree

Graph 17: *Perceived impact of the training on students*   n=530

Impact on institutions

More than half of respondents (57.9%) said that had noticed improvements to their institution's organisational practice as a result of the training. At least 70% agreed their institution was more responsive to neurodiversity (72.5%) and to the needs of individuals with SpLDs (70.0%).

Three-quarters of respondents (75.3%) believed that what they had learnt during the training would not only be helpful when supporting students with SpLDs, but would also help learners without diagnoses of SpLDs. Furthermore, 73.6% felt that what they had learnt during the training would help influence whole-school approaches to supporting learning for all learners. (See Graph 18).

When asked for comments about the training and its impact, several respondents commented that the full impact of the training would take longer to become evident:

> *I don't think the impact of the course has fully been realised yet - I think it will come more evident into the new academic year when things can be planned from the start instead of being slotted into what has already been established. (SENCo)*

Institutional impact

Statement	Disagree or strongly disagree	Neutral	Agree	Strongly agree
What I have learned in the training will help influence whole-school approaches to supporting learning for all learners	4.7%	21.7%	52.3%	21.3%
What I have learned in the training will help learners without diagnoses of SpLDs	4.3%	20.4%	52.3%	23.0%
As a result of the training I feel that my institution is more responsive to the needs of individuals with SpLDs.	5.5%	24.5%	55.1%	14.9%
As a result of the training I feel that my institution is more responsive to neurodiversity	5.8%	21.7%	57.2%	15.3%
As a result of the training I have noticed improvements to my institution's organisational practice.	7.0%	35.1%	49.2%	8.7%

Graph 18: Impact of the training on institutional practices   n=530

3.2 Conclusions of Survey 3

The timescale of this project means that identifying the impact of the training on schools is difficult. Not all schools were able to participate as the survey had to be closed for analysis and reporting less than three months after they had cascaded the training. In addition, as a number of respondents pointed out, it is impossible to gauge the full impact of training on a school after such a short period of time.

Nevertheless, the results of Survey 3 do point to many positive results of the cascaded training in schools and colleges. The majority agreed that the training had impacted on their professional attitudes and knowledge and had already begun to have an impact on their teaching practices. This, in turn, was starting to have a positive impact on students. It was not just students with diagnoses of SpLDs who are likely to benefit from this training. Around three-quarters of respondents felt that what they had learnt during the training would be beneficial for all learners.

It is particularly encouraging that at least 70% felt their organisation was now more responsive to neurodiversity and to the needs of individuals with SpLDs.

4. The Case Studies

The original evaluation plan was to identify eight schools and colleges that had registered a high level of impact of the cascaded Teaching for Neurodiversity training in the Survey 3 data: Three primary schools, three secondary schools, and two colleges. These were identified by the research team and contact was made with them. Initially all eight institutions agree to participate in the case study research, but at the last minute one secondary school and one college withdrew, leaving three primary schools, two secondary schools, and one college, as it was too late in the project to recruit replacements.

The case studies are summarised briefly for the purposes of this evaluation report but full versions of each will be made available on the consortium members' websites.

Primary School Case Study 1: Cleveland

Background

- Primary School in the urban North East of England with 369 pupils on the school roll, 47 of whom (13%) are on the school's SEN Register
- Social deprivation: 23 claiming free schools meals (6.2%) (29 eligible)
- Interviews conducted with the Trainer (who is Deputy Head and SENCo), as well as a Year 2 Teacher and a Year 3 Teacher.

Issues of cascading

- Training delivered over a Professional Development Day to all teachers and teaching assistants (TAs), as well as the Head Teacher
- Some elements of the training given to lunchtime supervision staff in a separate session
- Trainer reported the excellent quality of the training materials and the information given at the 'train-the-trainer' event made cascading it very easy
- Teachers are aware that the initiative is fully backed by the school Senior Management team and the School Governors
- Time allowed for developing new resources instead of some staff meetings.

Response to the training

- All staff have 'bought into' the initiative. *'The staff are buzzing with it'! (Trainer)*
- The 3 newly-qualified teachers on the staff are reported as feeling much more confident now
- The staff reported being very grateful for increasing their knowledge of dyslexia
- Staff very interested to find out about the concept of neurodiversity
- Staff feel that the whole notion of how to support pupils with specific learning difficulties is 'less mysterious'
- The Trainer has been able to organise some extra follow-up sessions for staff who needed extra support

- The local authority advisor for SEN was invited to the school to see the impact upon the school and staff were volunteering to be observed to be able to show their good practice.

Changes in attitude and practice

- The Trainer reported that the staff are 'thinking differently about their practice'; are 'more self-aware'
- Staff are using the checklists to help them profile individual pupils and tailor work to their strengths and weaknesses
- The Y2 teacher reported that there is an awareness that the checklists are not there for 'diagnosis' and actually help the consider the child as an individual rather than seeking a label for them
- Teachers are embedding the strategies in their practice as they feel that they are 'simple and easy to implement'
- Staff working more collaboratively. The Year 2 and 3 teachers reported sharing new ideas with each other
- There is a 'consistency of approach to practice, according to the teachers and the Trainer
- Multisensory teaching is 'the norm' now, according to the teachers and is used with all the children, so as to avoid 'singling out' individuals
- iPads and apps being used more in teaching and staff would like to extend this approach.

Pupil outcomes

- The children have adopted many element of good practice. They are engaging in peer tutoring and teaching the rest of the class!
- Children's individual strengths are celebrated with the award of 'mini expert' badges. This is helping them grow in self-esteem.
- Children showing more confidence now in writing tasks that would have seemed too challenging before.
- Children are using metacognitive approaches to help them understand themselves as learners and this is leading to them developing more independence.
- Children have adopted memorisation strategies, such as visualisation, which is helping them score better in tests.
- The children are more comfortable in making mistakes as they understand that this is part of the learning process now.
- With more understanding of pupils by staff, the emotional climate of the classroom and the playground is calmer and children's behaviour is improving.

Primary School Case Study 2: Cheshire

<u>Background</u>

- Primary special school in a large market town in Cheshire. 45 pupils on the school roll. All have local authority Statements of SEN of Education Health and Care plans for Autistic Spectrum Conditions. Social deprivation: 15 children (33%) on free school meals
- 8 Teachers and 24 TAs organised into 'Class teams'
- Interviews conducted with the Trainer (Assessment coordinator and Dyslexia Specialist Teacher and also a Year 1-2 Class Teacher and a Year 3-6 class teacher.

<u>Issues of cascading the training</u>

- Training cascaded to all teaching staff over a training day
- Trainer reported that the train-the-trainer day had offered really clear guidance of how to cascade the training on to staff in schools
- Trainer will be carrying out classroom observations to see how staff are developing their 'neurodiverse-friendly practice'
- Trainer is going to offer to cascade the training to the neighbouring mainstream primary school.

<u>Responses to the training</u>

- Staff response to the training was very positive. The Trainer had had concerns that the staff might feel that they knew a lot already but they reported that the training had made them think about the children differently now
- The training also confirmed for the interviewed teachers that they could evaluate their own practice in a positive way: that they were 'doing the right things' for the pupils. However, they also reported gaining many new ideas for their practice.
- The training drove home the message that 'self-esteem is not inherited but learned'.
- Staff reported that the checklist of behaviours and characteristics was going to be really useful
- Staff were grateful to have continued access to the training materials on the shared staff drive of the schools computer system and reference has been made back to these by teachers and TAs.

<u>Changes in attitude and practice</u>

- Teachers reported that the training had helped them look beyond a focus just upon autism when dealing with the pupils. They were more aware of co-occurring difficulties and strengths and that many children had more complex individual profiles
- Teachers reported developing more individualised approaches to children
- Teachers using coloured overlays and coloured paper in the classroom

- Staff have adopted an 'easy read' font for documentation across the school.
- Teachers helping children to develop some metacognitive strategies, especially in Mathematics
- Staff are sharing new ideas, especially within Class Teams
- *'Using neurodiversity will have an ongoing effect upon our practice'* (Y3-6 Teacher)
- Teachers are now keen to develop their expertise in the different specific learning difficulties, especially dyslexia and dyscalculia.

<u>Pupil outcomes</u>

- Both Trainer and Class Teachers suggested that it was a little too early to really tell the extent to which the training was improving pupil engagement and progress as the training had been delivered fairly recently before the interviews. However, pupil behaviour is improving as staff are learning to read bad behaviour as a message about unmet needs (for example dyslexic-type difficulties) and are responding to the child as a whole, rather than just reacting to presenting behaviour.

Primary School Case Study 3: Kent

<u>Background</u>

- Outer city primary school in the South East of England with 466 pupils on role, 54 (11.6%) on the SEN register.
- Ofsted May 2016 described overall effectiveness as 'good' but not all teachers have high expectations; pupils need further opportunity to master concepts in Mathematics and occasionally there were some technical inaccuracies in teaching phonics.
- School has a touch-typing reading and spelling program but no structured multisensory language programmes other than Toe by Toe.
- They use a variety of visual strategies as well as coloured overlays and coloured paper.

<u>Issues of cascading training</u>

- No issues were reported with cascading. Training has been delivered to all class teachers from nursery to Year 6. It will be delivered to support staff in April. They are also considering delivering it every year to new staff and those who were on maternity leave at the time.
- SENCO felt it was too early though to measure impact - would have been useful to have more time – and that the changes made had been limited by time constraints and by the changing curriculum which has been difficult for children with additional needs.
- Staff would like the 'next stage up' in training on dyslexia.

Response to training

- Response to training was positive. PowerPoint provided was useful for cascading training and as a reference for staff.
- The strategies taught were effective as was the combined checklist.
- Some staff came back to ask for further strategies on spelling.

Changes in attitudes and practice

- Training has raised awareness that there is an overlap between different needs.
- Checklists have enabled staff to respond to needs better and provide appropriate support more quickly e.g. from outside services. They have developed their skills in identifying characteristics and completing checklists.
- SENCO has revised the provision mapping to accommodate needs of children identified via the checklists.
- Parents have been directed to the local dyslexia association for support.
- Training has made staff look at a child's strengths not just difficulties.
- Staff are now more aware of the need to develop organisational skills.
- More resources have been provided for the handwriting group.
- Staff starting to think about every child and the way each one of them learns.
- Staff have a better understanding of the impact of their teaching.
- Recording is not always in writing now, sometimes it is pictorial.

Pupil Outcomes

Children on the SEN register have made slightly greater progress than those not on the register on the February assessment.

Secondary School Case Study 1: Lancashire

Background

- Coeducational secondary free school in the urban North West of England. 755 pupils on roll, 71 of whom (9.4%) are on the school's SEN Register.
- Interviews conducted with the two trainers: The SENCo and the Head of Science. Teacher interviews with and Economic teachers and with a Design Technology teacher.

<u>Issues of cascading</u>

- Cascading was done at two levels: firstly from the trainers to subject department 'SEN Link' teachers. Secondly, training to departmental staff by SEN Link teachers. This gave the opportunity to discuss how the initiative might translate into teaching and learning in that subject area.
- The training was also delivered in two stages to offer some element of 'follow-up'.

<u>Responses to the training</u>

- Staff generally positive and grateful for this training as what had been a selective school is welcoming an increasingly diverse range of learners.
- The training offered staff a challenge to traditional 'medical model' concepts of 'normal' and 'deviating' from the norm.
- The use of the case study in the training helped crystalise and contextualise this for staff
- The trainers said that it has helped staff to recognise children's different ways of learning, so as not to write a child off as 'stupid' when s/he may simply have a different way of learning.
- Staff are thinking differently about individual children's potential in learning.
- It has helped staff to focus more on the children who are not in the 'A to C bracket' and to enhance their learning.
- To see training in neurodiversity as a government-backed initiative lent it authority and credibility for staff.
- *'The challenge is to keep it going! We want the management team to be reminding staff in briefings' (Economics teacher)*

<u>Changes in attitude and practice</u>

- Both trainers and teachers reported increased levels of confidence for most staff in meeting more diverse needs in the classroom
- There is a sense of developing a 'critical community' amongst staff who are beginning to share ideas more about children's needs and strategies to meet them.
- With the understanding of the term 'neurodiversity' teachers are better able to identify and support pupils who have not got an 'official' diagnosis of an SEN.
- Teachers are adapting to different pace of learning from different pupils.
- Linked to this teachers are breaking down tasks into stages.
- Teachers are using more multisensory approaches, for example, different colour coding of information and instructions on worksheets; using colour coding for tables of different groups of metals.
- Teachers using 'silent conversations' to help pupil group planning so the build planning pictures, writing and sign language.
- Teachers and encouraging more use of peer tutoring and pupils sharing their work with each other.

Pupil outcomes

- Enhanced pupil engagement from the whole ability range in History through developing presentations, role-plays , 'newsreels', powerpoint presentations and poems and songs.
- Pupils showing more confidence in presentation skills, including oral skills
- Reluctant writers developing confidence and engagement through bullet-pointing and use of alternative recording strategies
- Pupils developing confidence and self-esteem when given tasks in group work that draw on their individual strengths.
- Pupils demonstrating better recall of learning through multisensory teaching and reinforcement of key vocabulary through overlearning

Secondary School Case Study 2: Isle of Wight

Background

- Coeducational comprehensive secondary school in the rural south of England with 1,300 pupils aged 11-19 years.
- Ofsted March 2015 identified a number of areas for improvement including inconsistency in teaching and learning, students struggling to concentrate and pupil progress.
- Cascaded training targeted these particular aspects of the report. However, cuts in funding mean reduced support staff - trainer only one left next year.
- Interviews were conducted with the Trainer (the school's SENCo), a Geography teacher, an English teacher and a pupil

Issues of cascading training

- Meant to be part of school development day but changed to two briefing sessions and four CPD sessions only two of which have been delivered so far.
- Ongoing CPD has facilitated cascaded training but attendance is voluntary.
- Only a quarter of the staff has received the training to date.
- If it had been part of a staff development day then all staff would have received the training.
- It was 'first level' training: further training opportunities with focus on cross-curricular teaching and raising attainment in literacy welcomed.

Response to training

- Response to initial training very positive, particularly as PowerPoint given to cascade training.
- Trainer felt that 3 months was not sufficient time to cascade training and measure impact.

- Response to cascaded training also positive. One strategy – the use of 'Neurodiversity Contract Cards' – was mentioned by all those interviewed as very successful. The laminated cards have strategies for improving curriculum access on one side, a list of pupil difficulties with learner strategies on the other.
- Trainer felt that the use of cards has brought about a change in culture in the school.
- ND Contract Cards welcomed by all staff including supply teachers.

Changes in attitude and practice

- Checklists introduced helped teachers identify need and respond to need more quickly.
- Paired observation helped identify why a student behaved differently in colleague's class.
- More emphasis on discussion and teaching subject specific vocabulary in English lessons.
- Students able to choose different way of recording work and demonstrating knowledge in English.
- Better cross-curricular working noted by Geography teacher.
- Already using multisensory and interactive approaches in Geography but concerned that examinations did not assess students using same methods.

Pupil Outcomes

Student A observed that teachers now receive emails to inform them that he has dyslexia and that they know how to support him because of the Neurodiversity Contract Card that he puts on their desk at the start of the lesson. As a result of using the card he feels more confident that he can ask for help and is building better relationships with staff, the number of detentions he receives has reduced. Some teachers change the background colour of their PowerPoints to accommodate him, others give him handouts of the PowerPoint making it easier to read and make notes. He is producing more work now and making the decision to move away from distractions to a quiet space. His parents were pleased with his progress and recently received a postcard from the school when he completed a full page of mathematics in a lesson.

Post 16 Institution Case Study 1: Central London

Background

- 6th form college with 855 students aged 16-19 and 150 staff.
- Contains wards in the top 10% most deprived in the country.
- Ofsted October 2015 rated overall effectiveness as 'good' but teachers do not always use initial assessment of students' prior learning well enough to plan, promote and develop students' literacy and numeracy skills in lessons.

- Some support staff already using computer software and structured language programmes in 1:1 sessions.

Issues of cascading the training

- Trainers felt adequately prepared to cascade training.
- Training has been cascaded to 14 learning support staff with another session planned.
- Targeted primarily at the learning support staff but tutors from other faculties sometimes attend their staff development training if they feel it is an issue for them. Humanities and PE were represented at the training on ADHD.
- Training possibly limited by a reluctance to change. Education always seen as a 'system in flux' …..'Victims of whatever political party is in power'.
- Not enough time to measure impact as some only had the training two weeks ago.
- Main monitoring strategy is discussing progress at annual reviews, so may take some time to fully evaluate pupil outcomes.

Response to training

- Trainer 1 reported that tutors were grateful for the ideas cascaded and have asked for further information.
- SENCO found the packs provided helpful as it was a lot for staff to take in at once.
- Staff found the checklist particularly useful to identify characteristics of ADHD.
- Understanding of ADHD has led to better behaviour management.
- Training has led some tutors to do further research on the internet.

Changes in attitudes and practice

- SENCO reported that the training had challenged some set ideas that were quite negative.
- Improvements were noted in communicating with feeder schools and in induction.
- Now have a dedicated SEN area and students are more willing to acknowledge they have a learning support plan.
- SENCO more comfortable using the combined checklist as it 'helps you see the overlaps'.
- Staff more comfortable talking to carers. Training has changed the language used which is more positive.
- A lot more visual strategies being used, particularly with students with ADHD. Mind-mapping is used with a lot of the students. Video footage used across the curriculum.
- A literacy and language group is being set up to promote reading for pleasure for students with reading ages below 9 years.

SENCO reported that students are more engaged in lessons and that more of them are making progress against targets set. Mathematics teacher noted grades on assignments improving from 'E to D' and 'C to B'.

5. The Teaching for Neurodiversity Webinars

Attendance at the Webinars

The Teaching for Neurodiversity training was offered as a series of three online webinars broadcast over the month of January 2107. The first webinar was training for all age phases and was delivered by the BDA. The second webinar was divided into a Primary/ Secondary school webinar, delivered by the BDA and a post-16 webinar delivered by DA. The third webinar was divided into 3 separate presentations: primary, secondary and post-16, all delivered by DA. Attendees could access the webinar of their choice.

386 people attended the cross-phase webinar, 259 people attended the primary/ secondary webinar 2 and 101 attended the post-16 webinar 2 totalling 360 for Part 2. Finally, 161 attended the primary webinar 3; 113 attended the secondary webinar 3 and 123 attended the post-16 webinar 3 totalling 397 attendees for Part 3.

In addition to the 'live'webinars' the training materials have been made available on the BDA and DA websites and their own Youtube channels. They have also made avialable via the Patoss, Dyslexia-SpLD Trust and HADC websites who also have links to webinar videos. At the time of this report the data for hits for each of the parts of the training are shown in Graph 19, below.
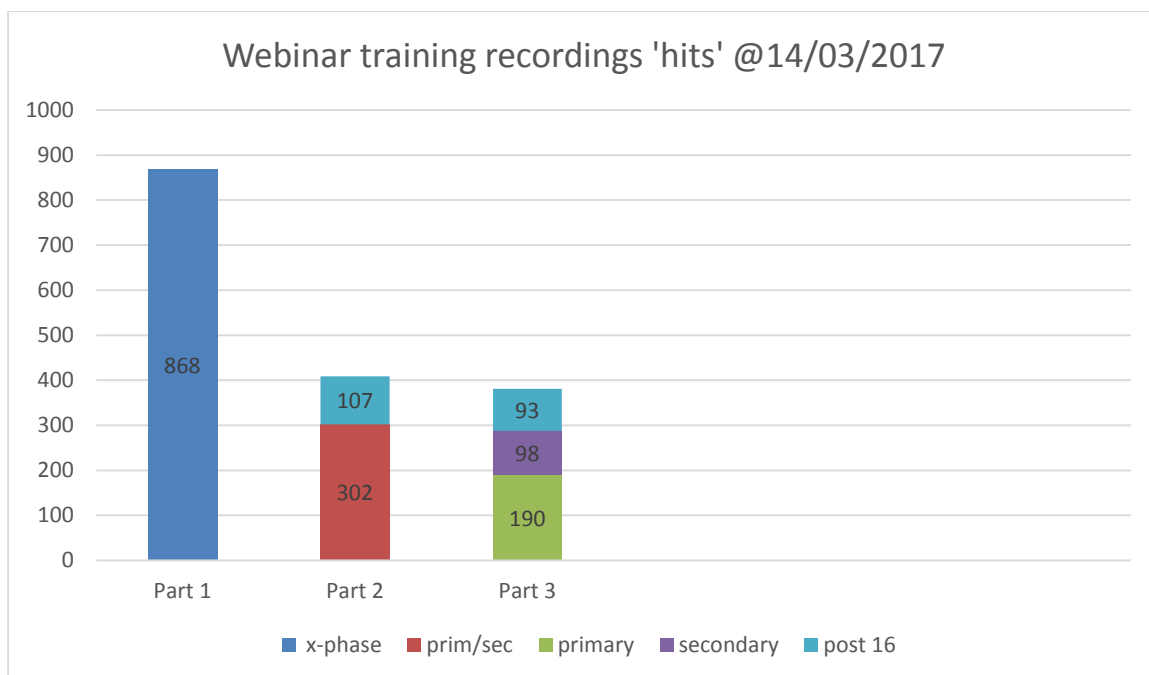
Graph 19: Webinar training recordings 'hits'

The were 868 hits on the Part 1 recordings, 409 on the Part 2 recordings, and 381 on the Part 3 recordings. Overall, the hit rate for the training recordings was 1,658.

6. The Web Portal

Working alongside a small independent web-design company the project has developed an easy-to-navigate web portal 'Dyslex.io'. This offers a tailored route to advice and support to teachers, parents and people with dyslexia and can be also tailored to under 16s and over 16s. As it was only publicly launched on March 15th in London it is too early to evaluate its success but early scrutiny by one of the university evaluation team suggests that it is dyslexia-friendly in its uncluttered layout, its use of screen colour filtering to avoid visual stress and its use of multimedia and multisensory resources.

7. The Project Managers' Focus Group

On March 15th a focus group of managers of the project met in London for just under two hours to discuss how the year of the project had gone. The discussion was guided by a set of unstructured focus group topics (see Appendix 6).

In discussing delegates' reactions to the train the trainers days, the managers felt that feedback had been generally very positive but that some delegates, who had not been clear that this was 'core' level training, designed for cascading had been very vocal in their grumbles about this not being what was expected but were, perhaps, an unrepresentative group. (This was borne out by the data from Survey 2: see Section 2, above). One manager said that she had changed her introduction to the training sessions to remind delegates of the purpose of the day. It was felt that there may have not been enough clarity in the project publicity. In contrast, the purposes of the webinars had been clearer.

In a linked theme, it was suggested that teaching staff be made more aware of what core training meant in relation to the 'advanced' and 'specialist' levels of training (see Figure 1: Removing Barriers to Learning' in Section 1, above). It was suggested that guided observation opportunities to watch advanced skills level teachers in action might be a way forward. It was also emphasised that Level 7 specialist training cannot be completed for free in one day!! Project managers agreed that it was important that teachers knew the range of training levels on offer from the project charities and from universities.

The overall impression of the project was that it had been a success, but there needed to be some discussion of why, despite the wide reach of the training days, that there had been so large a difference between uptake from so few secondary schools compared to primary schools. Suggestions as to why varies. It was suggested that, for secondary schools, subject teachers did not feel so directly concerned with children's neurodiversity, as they might perceive issues of learning difficulties as being the concern of the SENCo, and so were not as committed to attend training days on the matter, whereas primary teachers were trained to be more child-centred rather than subject-centred and were therefore more personally engaged with such matters. An alternative suggestion was that secondary schools and colleges might not have been so clear as to how to go about cascading the training. Another suggestion was that, because the training was free, that schools would be less likely to honour their commitment to staff attendance if they were suddenly needed back at school, compared to feeling the need to ensure staff attended training that had come out of the school's budget. Finally, it was pointed out that secondary teachers are under intense pressure in a culture of 'performativity' in an exam-driven system and were just too busy or too exhausted to attend.

The reach of the webinars was discussed and it was agreed that these had been a success, not only drawing in participants from all over England, but from the rest of the UK and countries as far away as Australia and New Zealand! Numbers of participants were more evenly spread between age phases, reflecting, perhaps, the need for convenience in attending training and taking the training package in smaller 'doses'.

The main challenge of the year of the project was agreed by all panel members to be the fact that it was just a year in duration. In reality, even less so as they were not able to begin until June due to late funding decisions and 'purdah' imposed around the Brexit vote. Panel members felt that if the project had been agreed to for two or more years then they would have designed it differently, with greater opportunities for embedding and observing impact. There was a strong feeling that this

short timescale had meant rushing the preparation of the training materials and inadequate time to thoroughly prepare those delivering the 'train-the-trainer' days. There was also a questioning of the whole methodology of a 'cascading training' model as, despite the wide reach that it fosters, there will inevitably be questions over the confidence and specialist knowledge level of some of those tasked with cascading the training back their own schools and colleges.

The managers discussed what they might have done differently. It was agreed that more thorough training for the training day deliverers would have been useful. One manager explained that she had set up a series of meetings for her presenters to get together to share feedback from early events and other lessons that they had learned and that this had been crucial in developing their confidence.

It was also suggested that the pressure to maximise the project's 'reach' had meant very large training venues had been booked and that these had not always been conducive to interactive learning (for example, large traditional university lecture theatres). It was suggested that more, smaller events might have been more conducive.

In the same way, it was suggested that the amount of strategies covered in the afternoon sessions might have been reduced, but more time given to try these strategies out (this certainly echoes some of the feedback from Survey 2).

Finally, the managers were asked what the main positives of the year-long project had been.

Managers noted the useful resources that had been developed for the project, which were now a permanent free online training package. Linked to this was the success of actually conquering the sheer logistical challenge of organising 48 training events around the country, aimed at three different age phases. In addition, the early data on uptake of the webinars and webinar materials was looking promising.

Another positive was the development of the discourse of 'neurodiversity' amongst the teaching workforce, which some panel members felt would steer teachers away from a narrow focus upon SEN categories and labels and more towards seeing a child or young person holistically and as having a unique profile of strengths and weaknesses. It was also important that these training days were visibly supported by the DfE, which it was felt would remind schools and their staff of the obligation to make reasonable adjustments to their teaching to meet the diversity of learners in their classrooms.

Finally, the managers agreed that the project had been a wonderful opportunity for the consortium organisations to collaborate and to continue developing professional relationships with each other.

8. General Discussion of the Project's Findings

In discussing success and impact of the Dyslexia/ SpLD Support Project it is useful to be reminded of the project consortium's own stated intentions.

The first was the development of the training package, which was successfully developed to be pitched at staff in three different age phases: primary; secondary and post -16 institutions. These were successfully developed and well-pitched, though perhaps there should have been more clarity that the post-16 materials were more aimed at further education institutions than higher education institutions. A training package specifically aimed at higher education institutions might be a worthwhile future development. There was some discussion in the focus group that more time for the duration of the project might have allowed for more fine-tuning of the training materials.

The second aim was the development of a strategic plan for rolling out the training package to schools and colleges across England. The reach of this training has been impressive. The 48 training sessions were delivered to 1,175 delegates representing 865 primary schools, 308 delegates representing 293 secondary schools and 498 delegates representing 308 colleges. This means that the training was delivered to trainers from 1,466 institutions. If one were to make a conservative estimate of 30 teaching staff for a primary school, 75 teaching staff for a secondary school and 100 teaching staff for a college then the possible audience of teachers for the cascaded training would be 25,950 primary school staff, 21,975 secondary school staff and 30,800 college staff. Though these figures for potential reach are not as high as those stated in the bid reach they are still considerable. Not only that, but the live events covered all corners of the country and delegates came from institutions from Cornwall to Northumberland; from Kent to the Lake District. When one adds the school and college recipient numbers to those of people accessing the webinars and the online materials, the overall (and continuing) reach of the training package has been substantial.

There were some concerns expressed about the relatively low uptake of training from secondary schools compared to primary schools for reasons that remain unclear, though suggestions from the focus group included the rather more subject than child-centred culture and practice in secondary schools, the perhaps undervaluing of free training courses or possibly the sheer lack of time for secondary staff with the competing pressures of such a target-driven environment.

The focus group did note, however, that there is always a tension between organising large-scale live training events and the flexibility with which they can be delivered. In many cases the large venues hired were often, by necessity to plan for large numbers, set up for a more didactic than interactive form of teaching. The project managers discussed the possibilities of having a larger number of training events with fewer delegates at each and thus having more flexibility in choices of smaller venues that might have offered more possibilities for more interactive teaching. The problem with this approach, however, was that it would mean more weeks would be needed to cover the same amount of delegates and this would then 'squeeze' even further the time where cascaded training could be evaluated for impact within the project's duration. Additionally, there are optimum times in the academic year for staff to be able to access such training. Once again, a longer project duration seems to have been a possible solution.

The next target was to agree an evaluation framework. This was achieved through discussion with the university evaluation team and the well-tested methodology of surveys followed up by selected case studies was agreed and in general was successful. The only real issue was that, collecting the survey data for Surveys 1 and 2 on iPads 'live' in the venue led, on many occasions, to the failure of online connections, resulting in the need for delegates to fill in hard copies 'by hand', which, in turn obliged the university evaluation team to employ extra staff to re-upload the data electronically. There was also some feedback from Survey 2 that some delegates felt that filling in Survey 1 had cut into their training time on the day. In retrospect, there might have been a case for filling in Survey 1 at least by delegates prior to attending and having to do so to gain admission to the training events. However, this would not have solved the issue of the online connection problems for those filling in Survey 2 at the end of the day, and there would have been challenges to 'chasing up' delegates if they had been allowed to fill in Survey 2 back at home.

The fourth aim was to train those leading the train-the-trainers days in delivery of the materials. Comments in the focus group meeting indicate clearly that the one day training session organised for this may well not have been enough for some trainers. The project managers felt that more time for preparing the trainers and for familiarisation with the materials might have been better. Some organisations arranged additional opportunities for their trainers to liaise and this worked well in passing on lessons learned. Some follow up support and space for feedback from those leading the events had been useful but not entirely consistently applied.

That said, some of the feedback was acted upon and the use of materials and reorganisation of the afternoon sessions of the training days seem to have led to improvements in the levels of interaction with event delegates and between delegates, as reported in data from later events and discussed in the focus group.

The fifth aim was to organise school/ college leader training days. Although this was not achieved because of the constraints of running so many events for teachers, many of the delegates attending the train the trainer days were members of their institutions management teams. Furthermore, data from Survey 3 and from the Case Studies indicate that members of senior management teams had attended the cascaded training. In the evaluation team's own experience, it is notoriously difficult to organise days for large numbers of school leaders, as they are phenomenally busy people whose diaries seldom, if ever match up together. This goal was also achieved through developing videos aimed at school leadership staff.

The sixth aim of the training was to find, through evaluations of the train-the-trainer days, that delegates showed increased confidence in recognising the signs of specific learning difficulties, showed increased knowledge of a range of appropriate classroom strategies and now had confidence in cascading the training to colleagues. The data from Surveys 1 and 2 consistently show statistically significant gains in all these areas, despite a minority of delegates feeling that they had not learned something new.

In the same way, the seventh aim of the project was for teachers receiving the cascaded training to demonstrate the same improvements. In addition to the percentage improvements for the majority

of staff derived from Survey 3, an analysis of the answers to Question 22, and from the Case Studies, both of which called for examples of changes experienced in schools and colleges, offers some emerging themes.

Theme 1: Changes in staff attitudes and awareness

Teaching staff noted higher levels of awareness of individual needs, looking beyond labels at individual learners. Staff also noted increased awareness of children's strengths as well as their difficulties. They had also learned to 'think before acting' when children were presenting with poor behaviour: to consider unmet pupil needs before assuming that this was just 'naughtiness'.

Theme 2: Changes in practice

Teaching staff noted much more use of multisensory approaches to teaching and learning and this, in turn, had given them the confidence to start using and developing more multisensory resources, as well as visual supports for learning. Staff reported wanting to incorporate more assistive technology into their teaching, especially iPad apps.

Staff reported modifying their language of instruction and giving children 'thinking time'. They also reported encouraging the children to develop metacognitive strategies to help them consolidate learning, facilitate recall and to become more independent learners. Importantly, staff reported that they were making these changes in practice not just for students with specific learning difficulties, but for all students.

Alongside this, teachers regularly reported working more collaboratively with colleagues sharing ideas, strategies and resources to improve their support for the diversity of learners in the classroom.

Theme 3: Student outcomes

Although it was consistently reported that the follow-up surveys and interviews were too soon after training to really assess full impact, staff did note real improvements in student engagement, their improved attention, receptiveness, enjoyment of multisensory learning, improved ability to work independently, improved confidence to 'have a go', improved self-esteem and, as a consequence of all this, improved behaviour.

All these data offer early encouraging signs of real impact of the Teaching for Neurodiversity training. The enabling factors for the embedding of changes to the schools' and colleges' cultures, policies and practices remain the active support of senior management teams, (for example, through lesson observations that focus of neurodiverse approaches), the presence of go-to members of staff where necessary (usually, but not always, the SENCo), and whole follow-up reviews of practice.

The potential blocking factors remain lack of time, especially for individual and collaborative planning, lack of funding for more assistive technology and school budgets are squeezed and finally

the concern, clearly expressed by one SENCo, that more new initiative being thrown at the school would take the focus way from really embedding teaching for neurodiversity in teachers' practice.

The eighth aim of the project was to develop and host the Training for Neurodiversity webinars. This was achieved successfully. The training webinars reached participants from all parts of the country, from other parts of the UK and from abroad. A total of 1,143 people took part in the three parts of training webinars (though clearly there would be some of the same people attending all three parts). The little evaluation data that was gained was in the form of anecdotal written comments in the webinar chat areas. These were all positive.

The training session recordings are now available as a free online resource and had already attracted 1,658 'hits'.

The last aim of the project was the design and launch of an online advice portal for teachers, parents of people with dyslexia and people with dyslexia themselves. The portal was only launched on March 15th and so it is too early to evaluate numbers of hits and feedback, though members of the university evaluation team with some expertise in dyslexia would like to note that the design and navigation of the portal does look very 'dyslexia-friendly' and its potential looks promising.

9. Conclusions and Recommendations

Considering the aims discussed above, is seems fair to say that this project has, overall, been a great success. Apart from the useful training work done directly with school and college staff over the course of the past year, the project has left a more permanent legacy of a free online package of training, as well as a new web portal offering dyslexia support and advice. The limitations of the project are in many instances a function of the very short timescale within which the project needed to be carried out and the award of a longer-term contract might have helped avoid some of the challenges and difficulties that arose, though these are very minor compared to the project's palpable positive impact. It is clear from the response to the training that this initiative was really needed in many schools to develop their staff's core skills in meeting the diverse learning needs of their pupils. Importantly within this has been the development of the understanding of 'neurodiversity' by teachers which seem to be helping them consider children's individual learning profiles, and to understand that, even if a learner has not got an official 'diagnosis' of one or other SpLD that does not mean that he has no issues in learning and that he may not be learning through the way that he is currently being taught. The reassuring message to teachers from this training is not that they have to completely overhaul their practice, but that they can add some easy-to-adopt strategies and resources to help their practice to become more responsive to learner diversity.

There do remain some challenges. The low uptake of this training opportunity by secondary schools is an issue that needs to be addressed and it may be that a useful future initiative might be, through identifying beacons of neurodiverse-friendly practice in secondary schools, to develop a series of

short videos to show what good practice looks like and to be a vehicle for analysis using a 'Lesson Study' approach (Ylonen and Norwich, 2012).

Another key issue for schools (and indeed, training providers) is to keep up to date in knowledge of the research developments into what works in inclusive teaching and learning and importantly *why* it works. The work of scholars such as Lani Florian (e.g. Florian, 2016) researching alongside teachers in schools provides powerful evidence of how inclusive teaching can be embedded into practice. In the same way, recent research on the use of morphology to develop literacy shows great promise for supporting the diversity of learners in the classroom (e.g. Law et al, 2015).

For this reason, it would be timely to undertake a literature scoping review to gather together the latest research on good practice in inclusive teaching.

Finally, given the clear variation in levels of knowledge skills and understanding of neurodiverse-friendly teaching in the schools' workforce, a future survey might gain an understanding of teachers' and TAs current training needs for this to be used to help develop further training packages pitched at different levels.

To conclude, there was a quote from one delegate's response to Survey 2, question 26 that we feel works at a number of levels to summarise this initiative.

'You can tell this was the early stages of delivery, I see this becoming better as time goes on. I am taking a great deal away from this'.

Bibliography

British Dyslexia Association (2016) *Progress Report CSDSD 82/2014 (NP2 – 419): Early intervention and intervention model for Dyslexia/SpLD* http://www.bdadyslexia.org.uk/common/ckeditor/filemanager/userfiles/NP2-419_final_report_March_2016_ed200416.pdf accessed March 18th 2017

Cohen, L., Manion, L. & Morrison, K. (2013) *Research Methods in Education* 7th Edition. Abingdon, Routledge.

Coldwell, M. & Simkins, T. (2011) 'Level models of continuing professional development: a grounded review and critique', *Professional Development in Education* **37** (1) 143-153

Curran, H. (2015) *SEND reforms 2014 and the narrative of the SENCo: early impact on children and young people with SEND, the SENCO and the School.* Bath Spa University

DCSF (2008) *The inclusion development programme* Department for Children Schools and Families http://webarchive.nationalarchives.gov.uk/20110202093118/http:/nationalstrategies.standards.dcsf.gov.uk/search/inclusion/results/nav:46335 accessed March 17th 2017

DCSF (2009) *'Identifying and Teaching Young People with Dyslexia and Literacy Difficulties: an independents report from Sir Jim Rose for the Secretary of State for Children, Schools and Families, June 2009.* Nottingham, DCFS Publications

Driver Youth Trust (2015) *Joining the Dots: have recent reforms worked for those with SEND?* http://eurekamarketing.co.uk/dyt/wpcontent/uploads/2015/10/DYT_JoinTheDotsReportOctober2015.pdf accessed March 18th 2017

Florian, L. (2016) Inclusive pedagogy: Moray House School of Education Election Briefing 7: Education from early years to 18: Research and Practice Contributing to Policy http://www.research.ed.ac.uk/portal/en/publications/inclusive-pedagogy(b611da7b-29b4-4fa2-95dc-87ef57d04e74).html accessed March 24th 2017

Law, J., Wouters, J. and Ghesquiere, P (2015) Morphological Awareness and Its Role in Compensation in Adults with Dyslexia *Dyslexia* **21** (3) 254-272

Wiltshire.gov.uk (no date) Inclusion Development Programme Guidance Document http://www.wiltshire.gov.uk/sen-inclusion-development-programme-guidance.pdf accessed March 18th 2017

Appendix 1

Teaching for Neurodiversity: Train the Trainer participant survey

Survey 1: Pre-training survey

Name   **School/ Organisation**

Venue   **Date**

Primary / Secondary / Post 16 (FE/HE)

Training organisation

Section 1: Neurodiversity

1. I feel confident that I could explain to a colleague what neurodiversity is.

1	2	3	4	5
Strongly disagree				Strongly agree

2. I feel that confident that I could explain to a colleague the difficulties that neurodiverse people may have with
   (1= strongly disagree -- 5= strongly agree)

a)	Organisation	1	2	3	4	5
b)	Attention	1	2	3	4	5
c)	Working Memory	1	2	3	4	5
d)	Literacy	1	2	3	4	5
e)	Numeracy	1	2	3	4	5

3. I feel confident that I could I could explain to a colleague the strengths that neurodiverse people may have

1	2	3	4	5
Strongly disagree				Strongly agree

   Section 2: Specific Learning Difficulties
4. I feel confident in identifying characteristics of individuals with:
   (1= strongly disagree--5 = strongly agree)

a)	Dyslexia	1	2	3	4	5
b)	Dyspraxia	1	2	3	4	5
c)	ADD/ADHD	1	2	3	4	5
d)	Autism/Asperger's	1	2	3	4	5
e)	Speech and Language					

Difficulties	1	2	3	4	5

5. I am aware of other factors that may cause inconsistencies in performance that are not the result of a specific learning difficulty

1	2	3	4	5
Strongly disagree				Strongly agree

6. If I identify a potential specific learning difficulty, I know the route for further referral

1	2	3	4	5
Strongly disagree				Strongly agree

Section 3: Practical tools and strategies

7. I know what to do to support individuals with
   (1= Strongly disagree-- 5 = Strongly agree)

Organisational difficulties	1	2	3	4	5
Attentional difficulties	1	2	3	4	5
Visual/ Visual stress difficulties	1	2	3	4	5
Language/verbal difficulties	1	2	3	4	5
Working memory difficulties	1	2	3	4	5
Motor skills difficulties	1	2	3	4	5
Self-esteem difficulties	1	2	3	4	5
Anxiety difficulties	1	2	3	4	5

8. I can use a range of multisensory techniques to support individuals with specific learning difficulties

1	2	3	4	5
Strongly disagree				Strongly agree

9. I can explain metacognitive strategies to a colleague

1	2	3	4	5
Strongly disagree				Strongly agree

Appendix 2

Survey 2:Post-training survey

Section 1: Neurodiversity

1. I feel confident that I could explain to a colleague what neurodiversity is.

    1   2   3   4   5

    Strongly disagree   Strongly agree

2. I feel that confident that I could explain to a colleague the difficulties that neurodiverse people may have with

    (1= strongly disagree --- 5= strongly agree)

    f) Organisation   1   2   3   4   5
    g) Attention   1   2   3   4   5
    h) Working Memory 1   2   3   4   5
    i) Literacy   1   2   3   4   5
    j) Numeracy   1   2   3   4   5

1. I feel confident that I could I could explain to a colleague the strengths that neurodiverse people may have

    1   2   3   4   5

    Strongly disagree   Strongly agree

    Section 2: Specific Learning Difficulties

2. I feel confident in identifying characteristics of individuals with:

    (1= strongly disagree---5 = strongly agree)

    a) Dyslexia   1   2   3   4   5
    b) Dyspraxia   1   2   3   4   5
    c) ADD/ADHD   1   2   3   4   5
    d) Autism/Asperger's   1   2   3   4   5
    e) Speech and Language
        Difficulties   1   2   3   4   5

3. I am aware of other factors that may cause inconsistencies in performance that are not the result of a specific learning difficulty

    1   2   3   4   5

    Strongly disagree   Strongly agree

6. If I identify a potential specific learning difficulty, I know the route for further referral

1	2	3	4	5
Strongly disagree				Strongly agree

Section 3: Practical tools and strategies

7. I know what to do to support individuals with

(1= Strongly disagree-- 5 = Strongly agree)

Organisational difficulties	1	2	3	4	5
Attentional difficulties	1	2	3	4	5
Visual/ Visual stress difficulties	1	2	3	4	5
Language/verbal difficulties	1	2	3	4	5
Working memory difficulties	1	2	3	4	5
Motor skills difficulties	1	2	3	4	5
Self-esteem difficulties	1	2	3	4	5
Anxiety difficulties	1	2	3	4	5

8. I can use a range of multisensory techniques to support individuals with specific learning difficulties

1	2	3	4	5
Strongly disagree				Strongly agree

9. I now know more multisensory strategies than I did before the training day

1	2	3	4	5
Strongly disagree				Strongly agree

10. I can explain metacognitive strategies to a colleague

1	2	3	4	5
Strongly disagree				Strongly agree

11. What I have learned in the training will help support learners without diagnoses of SpLDs

1	2	3	4	5

Strongly disagree   Strongly agree

12. What I have learned in the training will help influence **whole-school** approaches to supporting learning for **all** learners.

| 1 | 2 | 3 | 4 | 5 |

Strongly disagree   Strongly agree

Training Event evaluation

13. The pre-session information was timely

| 1 | 2 | 3 | 4 | 5 |

Strongly disagree   Strongly agree

14. The pre-session information was comprehensive

| 1 | 2 | 3 | 4 | 5 |

Strongly disagree   Strongly agree

15. The venue was appropriate for the training

| 1 | 2 | 3 | 4 | 5 |

Strongly disagree   Strongly agree

16. The day was well-organised

| 1 | 2 | 3 | 4 | 5 |

Strongly disagree   Strongly agree

17. The catering and refreshments were of good quality

| 1 | 2 | 3 | 4 | 5 |

Strongly disagree   Strongly agree

18. The content of the training met my expectations

(1 = Strongly disagree--- 5 = Strongly agree)

a) for Session 1 (Neurodiversity)   1   2   3   4   5
b) for Session 2 (SpLDs)   1   2   3   4   5
c) for Session 3 (Tools & strategies) 1   2   3   4   5

19. The presenters were knowledgeable
(1= Strongly disagree---5 = Strongly agree)

a) for Session 1 (Neurodiversity)   1   2   3   4   5

b) for Session 2 (SpLDs)   1   2   3   4   5

c) for Session 3 (Tools & strategies) 1   2   3   4   5

20. . The presenters communicated well

(1 = Strongly disagree---5 = Strongly agree)

a) for Session 1(Neurodiversity)   1   2   3   4   5

b) for Session 2 (SpLDs)   1   2   3   4   5

c) for Session3 (Tools & strategies) 1   2   3   4   5

21. The day offered opportunities for interaction between participants

1   2   3   4   5

Strongly disagree   Strongly agree

22. I feel confident about cascading this training to my colleagues

1   2   3   4   5

Strongly disagree   Strongly agree

23. Are there any other comments that you wish to make about the day?

Thank you for completing this survey

Appendix 3: Survey 3

Teaching for Neurodiversity Training Project   Survey 3   Evaluating Impact of Training for staff who participated in the cascaded training in their school / post-16 institution

Please take a little time to complete this training impact survey. Your feedback forms a <u>vital</u> part of the evaluation of this project by Manchester Metropolitan University and we hope that it will help you reflect upon the impact of this training on your own and your institution's professional practice.

We are also pleased to announce that completion of this short survey will automatically enter you into our Prize Draw, with a chance to win £100-worth of Amazon Vouchers!

Please also note that your personal and school details will be converted into code numbers for the purposes of data analysis and reporting in order to guarantee anonymity.

1. **Name:**   **2a School/ Institution**

    2b Postcode   **3. Primary/ Secondary/ Post 16**

4. Job Title   **5. email**

6.The training has changed my attitudes to and perceptions of neurodiversity

1   2   3   4   5

Strongly   disagree   Strongly agree

7.   The training has changed my attitudes to and perceptions of specific learning
     difficulties.

1   2   3   4   5
Strongly disagree   Strongly agree

8.   The training has given me new knowledge and skills
1   2   3   4   5
Strongly disagree   Strongly agree

9.   The training has changed my professional behaviour
1   2   3   4   5
Strongly disagree   Strongly agree

10.   As a result of the training I now use a wider range of multisensory teaching techniques
1   2   3   4   5
Strongly disagree   Strongly agree

11. As a result of the training I now use a wider range of metacognitive strategies in my
     teaching
1   2   3   4   5
Strongly disagree   Strongly agree

12. As a result of the training I now feel more confident in supporting individuals with:
(1 = Strongly disagree---5 = Strongly agree)

Organisational difficulties	1	2	3	4	5
Attentional difficulties	1	2	3	4	5
Visual/ Visual stress difficulties	1	2	3	4	5
Language/verbal					

difficulties	1	2	3	4	5
Working memory difficulties	1	2	3	4	5
Motor skills difficulties	1	2	3	4	5
Self-esteem difficulties	1	2	3	4	5
Anxiety difficulties	1	2	3	4	

13. As a result of the training I feel more confident in identifying individuals with the following Specific Learning Difficulties (SpLDs):

(1= Strongly disagree---5 = Strongly agree)

a) Dyslexia	1	2	3	4	5
b) Dyspraxia	1	2	3	4	5
c) ADHD	1	2	3	4	5
d) Autism/Asperger's	1	2	3	4	5
e) Specific Language Impairment	1	2	3	4	5

14. As a result of the training I feel more confident in supporting individuals with

(1= Strongly disagree---5 = Strongly agree)

a) Dyslexia	1	2	3	4	5
b) Dyspraxia	1	2	3	4	5
c) ADHD	1	2	3	4	5
d) Autism/Asperger's	1	2	3	4	5
e) Specific Language Impairment	1	2	3	4	5

15. As a result of the training, I have noticed improvements in engagement with learning in individuals that I teach who have SpLDs

1	2	3	4	5
Strongly disagree				Strongly agree

16. As a result of the training, I have noticed improvements in performance in learning in individuals that I teach who have SpLDs

1	2	3	4	5
Strongly disagree				Strongly agree

17. As a result of the training I have noticed improvements to my institution's organisational practice.

1	2	3	4	5

Strongly disagree   Strongly agree

18. As a result of the training I feel that my institution is more responsive to neurodiversity

1   2   3   4   5
Strongly disagree   Strongly agree

19. As a result of the training I feel that my institution is more responsive to the needs of individuals with SpLDs

1   2   3   4   5
Strongly disagree   Strongly agree

20. What I have learned in the training will help learners without diagnoses of SpLDs

1   2   3   4   5
Strongly disagree   Strongly agree

21. What I have learned in the training will help influence **whole-school** approaches to supporting learning for **all** learners

1   2   3   4   5
Strongly disagree   Strongly agree

22. Could you give some examples of improvements that you have noticed to practice as a result of the training? (please list below

23. Have you any other comments that you would like to make about this training and its impact: for example in a secondary or post-16 institution, how *widely* the impact was felt? (If 'Yes', please comment below)

Appendix 4: Case Study Trainer Interview Schedule

Cascade Trainers' Interviews

1 What were your expectations of the training before receiving it?

2. Did the training that you received make you feel adequately prepared to cascade the training?

3. Were there any issues in setting up and delivering the training?

4. Who attended the cascaded training which you delivered?

5. What was the initial staff response to the training?

6.aThe training package was called 'Teaching for Neurodiversity'. What is your understanding of the term 'neurodiversity'?

6b. Does your understanding of the term 'neurodiversity' make you think differently about the learning needs of your students?

6. How has the training changed your staff's attitudes and perceptions?

7. How are the range of specific learning difficulties identified in the school?

8. To what extent has the training influenced this process?

9. What new knowledge and skills have your staff gained from your training?

10. How has the cascaded training changed their professional behaviour ?

11, Which multisensory teaching techniques are your staff using?

12. How many children do they use these with (individuals? Groups? Whole class?)?

13. How regularly do they use these techniques?

14. To what extent are your staff using metacognitive strategies with your learners?

15. How are they implementing it (what techniques)?

16. What other approaches and techniques are they using with learners with the range of SpLDs?

17.Do you feel that your staff have adequate resources to implement these techniques?

18. What changes have you noticed in terms of learner engagement?

19. What improvements in learning performance amongst your students have you noticed?

20. What changes to your institution's culture, policies and practice have you noticed as a result of the training?

21. What factors have helped support these changes?

22. What factors might have limited these changes?

23. How have you monitored the impact of the cascaded training?

 24. Whom might your staff consult for on-going support in developing your practice?

25. What might be your and their future professional development needs might you have in this area of practice?

26. Are there any other comment that you would like to make about the Teaching for Neurodiversity Training ?

Appendix 5: Case Study Teacher Interview Schedule

Semi-Structured Interview for Teachers

1 What were your expectations of the training before receiving it?

2. To what extent did the training match your expectations?

3a The training was package was called 'Teaching for Neurodiversity'. What is your understanding of this term Neurodiversity?

3b Does your understanding of the term 'neurodiversity' make you think differently about the learning needs of your pupils?

4. How has the training changed your attitudes and understandings of specific learning difficulties and of whole-school approaches to supporting learning?

5. How are the range of specific learning difficulties identified in your school?

6. To what extent has the training influenced this process?

7. What new knowledge and skills have you gained from your training?

8. Which multisensory teaching approaches do you use, with children with identified SpLDs?

Prompts: How regularly do you use these? How many children do you use these with?

9. Do you use these multisensory approaches with the rest of the class? How? Prompts: (Individuals? Groups? Whole class?? Can you give me an example?)

10. Which metacognitive teaching approaches do you use, with children with identified SpLDs?

 Prompts: How regularly do you use these? How many children do you use these with?

11. Do you use these metacognitive approaches with the rest of the class? How?

Prompts: (Individuals? Groups? Whole class? Can you give me an example?)

12. What other approaches and strategies are you using with children with the range of SpLDs?

Prompts: How regularly do you use these? How many children do you use these with?

13. Are you using any of these strategies with children WITHOUT identified specific learning difficulties? If, so how? Can you give me any examples?

14. Do you feel the children in your class are more engaged in their learning as a result of developing your teaching from this training?

Prompts: What about children with identified SpLDs? How about the rest of the class? Can you think of any examples?

15. What improvements in learning and achievement amongst children in your class have you noticed? Prompt: Can you think of any examples?

16. What changes to whole-school approaches to supporting learning have you noticed, as a result of your training?

Prompt: Can you think of any examples? (What about in relation to Culture? Policies? Practices?)

17. What factors have helped support these changes?

18. What factors might have limited these changes?

19. Do you feel that you have adequate resources to implement the approaches recommended in the training?

20. Whom might you consult for on-going support in developing your practice?

21. What might be your future professional development needs in this area of practice?

22. Are there any other comments that you would like to make about the Teaching for Neurodiversity Training ?

Appendix 6: Project Managers' Focus Group Discussion Topics

1. How do you feel that the project has gone, generally?

2. What are your impressions of how the training content was received?

3. What are your impressions of how the raining format was received?

4. How did you choose the training presenters ?

5. What have been the main positives of Year 1 of the project?

6. With hindsight, what might you have done differently?

7. How might you develop the training in the future?

8. Might the consortium consider different levels of training for staff?