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Evaluation of Autism Education Trust
Training Hubs Programme

First Data Capture Report: pilot of Level 1 training
[Data from sessions to 30.03.12]

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University of Warwick

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EXECUTIVE SUMMARY

The Autism Education Trust (AET) received a grant from the Department for Education (DfE) to deliver a programme of professional development and training to the school workforce (working with pupils aged 5 – 14) during 2011-2013.

The programme has four parts:

- The development of training materials for the school workforce at general, enhanced and specialist levels (Levels 1, 2 and 3, respectively)
- The delivery of this training through training hubs (seven appointed in 2011 but more may be added)
- The development of a competency framework
- The development of national standards.

Each part of the programme is being monitored and evaluated using a combination of quantitative and qualitative methods suited to each, and agreed by AET and the programme partners. This report is concerned only with the pilot phase of the development and delivery of the Level 1 training materials.

Headline findings:

- Over 700 delegates attended the pilot of the Level 1 (L1) AET training materials.
- The pilot L1 training has been successful in raising the knowledge, awareness and understanding of the majority of the participants, including those with previous experience of working with pupils on the autism spectrum.
- There was a highly significant rise in pre- and post-training mean total score on the Knowledge Quiz¹.
- Over 8 out of 10 thought the training was ‘worthwhile’.

¹ The probability (p) of the results happening by chance, as opposed to because of the training, was less than .01% (p < .001)
Detailed findings:

- During the two month piloting of the Level 1 training, all seven hubs have delivered sessions.
- In total, 35 training sessions took place across at least seven local authorities, mainly to mainstream school audiences working with pupils aged 5 – 11 years.
- In total, over 700 delegates have attended.
  - Most of these delegates had experience of working with/teaching one or more pupils on the autism spectrum but a third reported having had no previous training on autism.
  - Over three-quarters of trainees were TAs/HLTAs (42%) or teachers (36%) but the cohort as a whole covered a wide range of jobs linked to schools (e.g. attendance officer, school librarian).
  - Most of the participants were female and aged 20 – 40 years.
  - The largest group were educated to degree level but the cohort also included those with no qualifications.
  - The majority were White British, although across all participants a wide range of ethnicities was represented.
  - The evaluation team is very grateful to the hub trainers for the high level of cooperation with the monitoring and evaluation system: pre- and post-training questionnaires were received back from 33 of the 35 sessions by the cut-off date of 20 April.

Analysis of responses to the pre-and post-training questionnaires shows that:

- The L1 pilot training events have been successful in raising the knowledge, awareness and understanding of the majority of the participants, including those with previous experience of working with pupils on the autism spectrum.
- Over 8 out of 10 thought the training was ‘worthwhile’. There were no significant differences by training hub.
- Among those attending the L1 training who were also in the main target groups for L2 enhanced training (staff working regularly with children with autism) and L3 specialist training (staff who lead or train other staff in their setting), there was a high level of interest in undertaking this more advanced training.
- Open comments on the post-course questionnaires confirmed the positive picture gained from the quantitative data.

In sum, the pilot of the L1 AET training materials has been successful. This bodes well for the full roll-out of this training.
1 INTRODUCTION

1.1 About the Autism Education Trust

The Autism Education Trust (AET) was launched in November 2007, initially funded by the Department for Children, Schools and Families (now Department for Education: DfE). Acting as an umbrella organisation, by 2011, AET had over 25 voluntary, statutory and community groups from across the autism sector represented on its Steering Group and Advisory Council. It also hosts a Youth Council of children on the autism spectrum and their siblings. Its vision is:

- ‘that all children and young people with autism should receive an education which enables them to reach their individual potential to engage in society as active citizens (and that individuals, families and professionals are informed, supported and equipped to enable this to be achieved)’ AET presentation, Sarah-Jane Critchley, July 2011

1.2 About the AET training hubs programme

Part of the purpose of the AET is to ‘further raise awareness of autism education across the children’s workforce’ (AET presentation, July 2011). In this context, the AET received a grant from the DfE to deliver a programme of professional development and training to the school workforce (working with pupils aged 5 – 14) during 2011-2013.

The programme has four parts:

- The development of training materials for the school workforce at general, enhanced and specialist levels (Levels 1, 2 and 3, respectively)
- The delivery of this training through training hubs (seven appointed in 2011 but more may be added)
- The development of a competency framework
- The development of national standards.

Each part of the programme is being monitored and evaluated using a combination of quantitative and qualitative methods suited to each, and agreed by AET and the programme partners.
1.2 About this report

This report is concerned only with the pilot phase of the development and delivery of the Level 1 training materials. The purpose is to provide the Autism Education Trust with monitoring and evaluation data on the delivery and outcomes of that pilot, feeding in to the AET’s report to the Department of Education (DfE).

To preserve confidentiality, hubs have been allocated random numbers from 1 to 7 and quotes do not show hub or group codes. All percentages are rounded to the nearest integer and so may not sum to 100%. Statistical significance is reported at or below the $p < .05$ level (that is, where the probability ($p$) of the changes reported being by chance, rather than because of the training, is 5 in a hundred (5%) or less).

2 MONITORING INFORMATION ON THE PILOT LEVEL 1 TRAINING

2.1 The development of the pilot L1 materials

The Level 1 (L1) training was aimed at all staff working in English schools catering for pupils in the range, 5 – 16 years old. The target audience included non-teaching and support staff, and others likely to come in to contact with pupils on the autism spectrum, such as taxi drivers or pupil escorts. The L1 material contents were developed by a team from the University of Birmingham and Oxfordshire Local Authority, in consultation with all other partners in the AET programme, the AET Programme Board and Expert Reference Group. A small number of young people with autism and of parents of children/young people with autism also contributed feedback on the materials. The materials are structured as four short modules: the individual pupil; building relationships; curriculum and learning; enabling environments. The content is designed to be delivered in a 90 minute session.

The design and production of the materials was by Genium, again, in consultation with all other partners in the AET programme, the AET Programme Board and Expert Reference Group, some young people with autism, and parents of children/young people with autism.

On 26 January 2012, the material development team led a ‘train the trainers’ event for the L1 pilot materials at the University of Birmingham. Trainers from all seven hubs attended, as did representatives from AET and the other programme teams (competency framework, national standards, evaluation). Draft pre- and post-L1 training evaluation questionnaires were also trialled at this event and revised in the light of feedback.
2.2 The extent and reach of the pilot training

From 31 January to 30 March 2012, the L1 materials were piloted by the seven training hubs. The hubs are:

- Ambitious About Autism, London
- Birmingham City Council, West Midlands
- Leicestershire County Council, East Midlands
- Norsaca and Nottinghamshire County Council, East Midlands
- Oldham, North West
- The Bridge, London
- The National Autistic Society, South East

The monitoring system is that each hub uses an alert form to send details of planned training events to the evaluation team administrator at CEDAR. This triggers the dispatch of a pack of pre- and post-training questionnaires for participants. After the training, the trainer sends the completed questionnaires with a cover sheet back to CEDAR for analysis.

Based on data collected via this system, we know that 38 training sessions were organised during the L1 pilot period: of these, we know that 35 took place, that one was cancelled and two others may or may not have taken place/been cancelled (information not received to date). We therefore use 35 sessions as the total for reporting all data collected via the alert form.

2.2.1 Monitoring data collected via the alert form

The training session alert form provides hub name, date of training, participating local authority, school type, age range, and number expected.

Of the 35 training sessions, one was held in January 2012, 13 in February, and 21 in March. This rising distribution reflects the time needed for schools to plan in time for staff to attend a training event.

Geographically, the training reached schools in approximately seven local authorities (LAs) – ‘approximately’ because some were described as ‘East Midlands LAs’ and the information was missing for eight training sessions. The list of LAs is given in Figure 1, showing that, not surprisingly, the hubs trained on or near ‘home turf’ during the pilot phase.
Figure 1 Geographical reach of the pilot L1 training

- Birmingham
- Derby City
- ‘East Midlands LAs’
- Leicestershire
- Nottingham City
- Oldham
- Surrey

Source: training date alert form completed by hub representatives

Training booked in for April and May (beyond the pilot phase) covers a wider geographical spread – at least another eight LAs to date (April 2012).

The pilot training mainly reached a mainstream audience (23 sessions), but also included special schools (2 sessions), and mixed audiences (2 sessions). (School type was missing for 8 sessions).

The age range of pupils catered for by staff attending the pilot training ranged from age 3 to age 19 but was predominantly 5-11 years i.e. primary school age (Table 1).

Table 1  Age range of pupils catered for by trainees

<table>
<thead>
<tr>
<th>Age range</th>
<th>Number of sessions (N = 35)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary/5-11 years</td>
<td>15</td>
</tr>
<tr>
<td>Secondary/11-16/18</td>
<td>9</td>
</tr>
<tr>
<td>3-19 years/5-16 years</td>
<td>4</td>
</tr>
<tr>
<td>Missing information</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: training date alert forms completed by trainers

Numbers expected to attend any given training session ranged from 10 to 60.

2.2.2 Monitoring data collected via the questionnaire return cover sheet

The cover sheet returned with completed evaluation questionnaires gives the name of the trainer, number of people that attended on the day, and any comments the trainer wishes to make about the session. We also record the number of questionnaires returned. By 20 April (the latest cut-off date we could manage to allow for analysis and report writing), we had
received back evaluation questionnaires from 33 of the 35 training events we know took place. (Since that date, one more has been returned and the final one promised.) This is an excellent level of compliance with the monitoring and evaluation. The evaluation team is very grateful to the hub trainers for their co-operation.

Fourteen different trainers delivered training sessions using the L1 pilot materials. Most frequently, numbers attending on the day were smaller than expected (17 sessions), but on five occasions were more than expected. Table 2 shows the number of training sessions held and participants by hub.

Table 2  Pilot of Level1 material: number of events and participants by hub

<table>
<thead>
<tr>
<th>Hub code</th>
<th>Number of training events held</th>
<th>Number of participants</th>
<th>Target number of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>58</td>
<td>130</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>54</td>
<td>130</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>60</td>
<td>130</td>
</tr>
<tr>
<td>4</td>
<td>7</td>
<td>144</td>
<td>130</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>33</td>
<td>130</td>
</tr>
<tr>
<td>6</td>
<td>8</td>
<td>217</td>
<td>130</td>
</tr>
<tr>
<td>7</td>
<td>10</td>
<td>185</td>
<td>130</td>
</tr>
<tr>
<td>Totals</td>
<td>33</td>
<td>731</td>
<td>910</td>
</tr>
</tbody>
</table>

Source: Cover sheets completed by hub trainer per event (or number of questionnaires returned if no cover sheet received).

Table 2 shows that, by the end of the L1 pilot period, 33 training sessions had been held across the seven hubs, reaching a total of 731 participants. This is fewer than the target number given to the hub leads of 130 participants each (910 in total) by end March 2012. It is important to note here two points: first, that Table 2 excludes the two sessions we know took place for which questionnaires were not received by the cut off date; and, second, that these monthly targets are indicative steps towards the ‘real’, overall, target of 5000 by March 2013. The AET team were aware that some of the training hubs would have a slower start than others, because some hubs had to appoint additional trainers whereas others had trainers available from the beginning.

By April 20th (the latest possible cut-off date), the evaluation team had received 710 pre-training questionnaires and 727 post-training questionnaires from 33 training sessions.

Comparing the number that attended each session with the number of questionnaires returned per session shows that, at 20 training sessions not everyone attending completed a questionnaire, compared to 14 training sessions where all attendees did so. Usually, the
discrepancy between attendees and completed questionnaires was one or two people but, at a small number of sessions, larger numbers (e.g. 9 or 10 people) did not fill in the questionnaires. From those that were completed, we obtained 683 matching pre/post-training pairs.

The discrepancies between pre- and post-training questionnaires (710 versus 727) and between these figures and the matched pairs (683) may be explained in part by trainers’ noting that some people had arrived late and others left early. Also, of course, completion of the questionnaires is voluntary and some people may have chosen not to do so.

2.2.2.1 Trainers’ comments on the cover sheets

The cover sheets invite trainers to comment about ‘anything you think that [the evaluation team] need to know about this training session’. Comments from the trainers who delivered the first four pilot L1 sessions have been reported in detail previously. These are excluded from the summary account given here.

During the pilot of L1, another 20 cover sheets contained comments by trainers. The main issues of note touched on IT systems, content, evaluation, and group engagement:

- in a minority of cases (five) some IT problems were reported, but these were largely identified as problems relating to venue systems, not to the materials themselves
- regarding content, the issue of whether autism should be conceptualised for heuristic purposes as being four areas of difficulty, or the more traditional triad plus one, is still being raised (as it was amongst comments from the first four training sessions) – in addition, one trainer made detailed notes about the content:
  - ‘on p.1 of the handout the four key areas don’t mention “sensory” as it does on the PDF training screens
  - the black writing on the green blocks are not clear (myth busters)
  - page 3 of the handouts – myth buster 2 – “autism is more common in boys than girls”, the “in” is missing
  - when using slide 0 [sic] the tabs at the top are showing ‘learning and curriculum’ but it is under ‘enabling environment’.
- in three cases, the trainer reported confusion among respondents about the post-training evaluation form scale (this will be addressed in a revised version that names each point on the scale rather than the end points only – for scale, see Table 4, section 3.2)
- groups were reported as being engaged, interested, well-informed and keen that others received the training – illustrating the level of discussion, one trainer made an important point about emotional detachment versus autism spectrum:
  - “Many of the participants were foster carers, who may care for not only children with autism but also children with emotional detachment, so there was a lot of debate about how do you know which is which […] they were concerned about at what stage you alert someone about your concerns (if
you feel it really is autism), and whether other professionals will take concerns seriously if a child also has a history of emotional neglect.”

2.2.3 Monitoring information from the pre-course questionnaires

2.2.3.1 Who attended?

Responses to demographic questions on the pre-training questionnaire (N = 710) provide a profile of those who attended. The questions covered experience of working with/teaching one or more pupils on the autism spectrum, amount of previous training on the autism spectrum, job, gender, level of education, ethnicity, and age.

- **Experience:** The majority (83%) had experience of working with/teaching one or more pupils on the autism spectrum.
- **Previous training:** The largest group (33%) reported having no previous training on the autism spectrum, followed by those who had had ‘some’ (30%). Others reported having had ‘very little’ (24%), with 9% indicating that they had previously had ‘quite a lot’, and 3% ‘a lot’ of such training. (See Figure 2 for more details.)
- **Job:** The largest group by far were TAs/HLTAs (42%), followed by teachers (36%). The next largest group were lunchtime/midday supervisors (8%). Small numbers of adults each from a wide range of roles, also attended: 3% were SENCOs, 2% were office staff/admin., 1% were governors. Less than one per cent each were taxi/bus drivers, pupil escorts, headteacher/senior managers. ‘Other’ jobs were very varied, including, for example, an attendance officer, behaviour/learning support worker, home school liaison officer, learning adviser (x3), nursery nurse (NNEB), school librarian (x2), teacher trainees (x4), a First Aider, a foster carer, ICT technicians, an occupational therapist, a personal care assistant, a Year manager and others. (Respondents could tick more than one option although few did so.)
- **Gender:** The majority were female (87%), with 13% male.
- **Level of education:** The largest group by far, but under a half of those attending, had university degrees (47%). GCSE or equivalent qualifications were held by 16%; A/AS level or equivalent by 12%; HE below degree level by 14%. Three per cent indicated having no qualifications. The remaining 8% held a variety of qualifications but the details given were hard to categorise by equivalence with these levels, for example, ‘City & Guilds’.
- **Ethnicity:** The majority (85%) ticked ‘White-British’. Other ethnicities represented by at least 1% of participants were: ‘White-Other group’ (4%), Pakistani (4%), Black – Caribbean (1%). A range of other ethnic groups were each represented by less than 1% of trainees.
- **Age:** The largest groups were in their 20s (28%) or 40s (28%), with over a fifth (22%) in their 30s, 17% in their 50s and 4% aged ‘60 or over’.
The demographic spread reported here is almost identical to that of the participants in the first four training events reported on previously. The main differences are that the range of ethnicities represented across all the sessions is much wider, as is the range of roles of participants.

Regarding previous training, participants who had received any (indicated by their response to the closed question on this topic being ‘very little’, ‘some’, ‘quite a lot’ or ‘a lot’) were asked to give details. Figure 2 presents some examples of responses to give a flavour of what participants considered to be ‘very little’, ‘some’ and so on.

**Figure 2  Illustrative details of prior levels of training on autism**

<table>
<thead>
<tr>
<th>Examples of details given describing ‘<strong>very little</strong>’ prior training ( n = 71 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>• ‘one day course at [local authority] CPD [continuing professional development]’</td>
</tr>
<tr>
<td>• ‘a short talk as part of PGCE course’</td>
</tr>
<tr>
<td>• ‘a staff meeting’</td>
</tr>
<tr>
<td>• IDP Autism’</td>
</tr>
<tr>
<td>• ‘lecture at uni’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Examples of details given describing ‘<strong>some</strong>’ prior training ( n = 135 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>• ‘autism outreach supported me when I had an autistic child in my class’</td>
</tr>
<tr>
<td>• [local authority] one day course’</td>
</tr>
<tr>
<td>• ‘as part of university course’</td>
</tr>
<tr>
<td>• ‘CPD sessions, visit to special school’</td>
</tr>
<tr>
<td>• ‘IDP Intro to Autism’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Examples of details given describing ‘<strong>quite a lot</strong>’ of prior training ( n = 45 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>• ‘ASD lead practitioner course’</td>
</tr>
<tr>
<td>• ‘Birmingham Web Autism Programme’</td>
</tr>
<tr>
<td>• ‘PECS, Lovaas, TEACCH’</td>
</tr>
<tr>
<td>• ‘social stories’</td>
</tr>
<tr>
<td>• ‘special needs degree’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Examples of details given describing ‘<strong>a lot</strong>’ of prior training ( n = 20 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>• ‘ASD course accredited by Worcester Uni’</td>
</tr>
<tr>
<td>• ‘CABAS training’</td>
</tr>
<tr>
<td>• ‘I work at school for children with autism’</td>
</tr>
<tr>
<td>• ‘Masters course in autism’</td>
</tr>
<tr>
<td>• ‘PEACH ABA’</td>
</tr>
</tbody>
</table>

Source: Pre-training questionnaire, illustrative examples from all open answers

Figure 2 shows that adjacent tick box categories overlapped to some extent – for example, the Inclusion Development Programme (IDP) Autism Spectrum module is mentioned in the ‘very little’ category, as well as in the ‘some’ category. (This probably indicates a difference in the depth and/or length of training received based on that module.)
2.2.4 Monitoring information from Quality Assurance Forms

A quality assurance form was devised by the evaluation team, agreed by all programme partners, to create a consistent format for senior staff from AET to use in reporting their assessment of the quality of training being delivered as part of the programme. AET representatives choose to attend particular training sessions, largely governed by the ability to fit this in to their other work commitments. The form covers six domains: punctuality, evaluation questionnaires, facilities, content, differentiation, and interaction. Each area is linked to two to seven quality statements. The AET representative uses his or her judgement to decide if the quality statement was achieved or not, and then adds open comments on the back of the form.

During the pilot, only one of these quality assurance forms was completed, so no data are reported here. From April, the number of forms received has increased, indicating that this could be a useful source of monitoring data to report on at a later stage, should the AET wish this to be done.

3 EVALUATION DATA FROM THE PRE/POST-L1 TRAINING QUESTIONNAIRES

3.1 Knowledge about autism

Those attending the training were asked to complete a short quiz made up of 8 questions both before and after the training. Answer options were ‘not sure’, ‘false’, ‘true’. Participants were asked to put ‘true’ or ‘false’ only if they were sure this was the correct answer. The statements were designed to link in to the most basic level of the key learning content of the four modules in the course (two statements per module). The statements related only to the learning content of the core slides in the materials as this is the one aspect that should be a constant in every session. (Trainers are expected to use the core content slides but use of all other L1 materials is flexible and sessions will also include content from the trainer’s own experience and knowledge and bank of resources.) The quiz had two purposes: a) to assess the level of basic knowledge and awareness of autism before the training and b) to check whether or not the training had succeeded in raising this level. The first purpose monitors whether or not the audience includes the target audience of those with limited awareness and/or incorrect understandings of autism; the second contributes to the evaluation of the training. The quiz was not designed as a test of all, or even the main learning participants would gain from the training; rather it focused on a ‘bottom line’ of knowledge and awareness.
Table 3 shows the frequency of correct answers given before and after the training (questionnaires matched pre- and post-training).

### Table 3  Knowledge about autism before and after the training

<table>
<thead>
<tr>
<th>Statement</th>
<th>Percentage giving correct answer before the training</th>
<th>Percentage giving correct answer after the training</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Children grow out of autism.</td>
<td>92</td>
<td>99</td>
</tr>
<tr>
<td>b) Autism involves four main areas of difference.</td>
<td>27</td>
<td>97</td>
</tr>
<tr>
<td>c) Pupils with autism may have difficulties with social skills.</td>
<td>98</td>
<td>99</td>
</tr>
<tr>
<td>d) Knowing a pupil is on the autism spectrum is enough to tell exactly what that pupil can or cannot do.</td>
<td>90</td>
<td>93</td>
</tr>
<tr>
<td>e) Finding out as much as possible about an individual pupil with autism helps staff to work well with him/her.</td>
<td>98</td>
<td>99</td>
</tr>
<tr>
<td>f) Pupils with autism can never be independent learners.</td>
<td>87</td>
<td>92</td>
</tr>
<tr>
<td>g) Pupils with autism may be sensitive to everyday sounds.</td>
<td>89</td>
<td>99</td>
</tr>
<tr>
<td>h) Most pupils with autism enjoy unexpected changes.</td>
<td>91</td>
<td>97</td>
</tr>
</tbody>
</table>

\( N = 683 \) matched pre- and post-training questionnaires.

Table 3 shows that almost all participants (from 87\% to 98\%) already knew, or could correctly guess, the answer as to whether the statement was true or false, apart from the statement about autism involving four different areas of difference. The table also shows that, for each statement, the percentage giving the correct answer rose from pre- to post-training. To analyse whether or not the post-course responses indicated a statistically significant difference from pre-course responses, the answers were re-coded with only a correct answer scoring 1. Pre- and post-course Knowledge Total Scores were calculated and the means compared using a paired \( t \)-test.

- This showed a **statistically significant rise in the mean Knowledge Total Score after the training** (Pre-course: \( M = 6.73, SD = 1.18 \). Post-course: \( M = 7.76, SD = .56 \). \( t = 23.07, df = 677, p < .001 \))
3.2 Views of the training

3.2.1 Closed responses

After the training, participants were asked to indicate, on a five-point Likert-type scale running from 'strongly disagree' to 'strongly agree', how much they agreed or disagreed with six statements about the training. The statements and results are shown in Table 4.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Scale (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) I found this training worthwhile.</td>
<td>2 2 12 32 51</td>
</tr>
<tr>
<td>b) This training has increased my knowledge about autism.</td>
<td>3 6 15 33 44</td>
</tr>
<tr>
<td>c) This training has increased my awareness of the differences that pupils on the autism spectrum may experience.</td>
<td>2 6 14 32 46</td>
</tr>
<tr>
<td>d) I think this training will help me to be more understanding of pupils with autism.</td>
<td>2 4 12 32 49</td>
</tr>
<tr>
<td>e) I know where to find out more about autism.</td>
<td>2 4 14 36 44</td>
</tr>
<tr>
<td>f) I am interested in further training about autism.</td>
<td>3 3 12 26 56</td>
</tr>
</tbody>
</table>

Source: post-training questionnaire. N varied from 705 to 715.

Table 4 shows that:

- the majority of participants ‘agreed’ or ‘strongly agreed’ with each positive statement. This indicates that, for most, the training increased their knowledge, awareness, and understanding;
- the majority also knew where to find out more about autism and were interested in further training.

To explore views of the training further, we created dichotomous categories: those who had ticked 4 or 5 on the scale (equivalent to ‘agree’ and ‘strongly disagree’) and those who had not. We then explored these dichotomised views of the training by selected groups of participants. Selecting only those participants who had experience of teaching or working with at least one pupil with autism, and looking at their views of the training, showed that a majority agreed or strongly agreed with each of the statements in Table 3. This pattern
changed when we selected only the small group who had received ‘a lot’ of prior training on autism: a majority of this group did not agree that the training had raised their knowledge or awareness of autism. This is to be expected as the L1 training was pitched at introductory, general level, and it indicates that responses to the views of the training are credible. What is very positive in terms of views of the training is that even some of this small group with ‘a lot’ of prior training found that the L1 training increased their knowledge of autism (8/21; 38%) and increased their awareness of the differences pupils on the autism spectrum may experience (9/13; 41%).

We used analysis of variance (ANOVA) to explore whether or not views of how ‘worthwhile’ the training was (Statement a), Table 4) varied by training hub. There were no significant differences by hub suggesting that the training was experienced as ‘worthwhile’ irrespective of which hub was delivering it.

3.2.2 Open responses: What else people would have liked in the training session

Under a fifth (124; 17%) of participants gave an open response suggesting what else they would have liked in the training session they attended.

Of those that related to the content, the most frequent suggestion was for information on and/or access to strategies and resources to support practice (n = 35) with a minority of people adding that they recognised that this was the focus of Level 2 training:

‘strategies – although this session was an overview session’

‘strategies but appreciate you said this was next step’.

The second most frequent request was for ‘more’ of what was there:

- more time (to learn and discuss and take in the information) (n = 21)
- more from the perspectives of children/young people/adults with autism (10)
- more on the differences across the autism spectrum and ability range (8)
- more focus on younger/primary age children (6)
- more on how autism is identified and diagnosed (3)

Other suggestions were made by small numbers (one or two only) for example two people would have liked to learn about current legislation, changes to diagnosis, and one wanted to know about relevant campaigns to become involved with. One person noted that for him/her, the level 2 or 3 training would have been more appropriate.
Twenty five comments were suggestions for improvements in **how the training was delivered**. These included requests for a copy of the PowerPoint so that notes could be taken during the session; comments on poor quality sound or videos not working; and a desire for a more active learning style, especially activities that would enhance empathy. For example:

- ‘possibly more activities to be able to understand their perspectives’
- ‘possibly more activities which demonstrate on a practical level the sensory difficulties for autistic children’
- ‘more activities that give you the empathy of what it’s like to have autism’.

It is important to bear in mind that all these open comments relate to particular training sessions and so are not applicable to every session. For example, one trainer may deliver the materials with a strong emphasis on primary aged pupils where that is appropriate to a particular audience, whereas another trainer may not.

### 3.2.3 Open responses: Additional thoughts or comments about the training session

Over a fifth (23%) of the trainees wrote an open comment about the training session they attended. These comments were coded **post hoc** into five main themes: about content, delivery, level/pitch, length, and technical issues. A small number made other sorts of comments.

Eighty-one people wrote a positive comment about the **content** of the L1 training, as it was delivered during his or her training session.

- Typically, the training content was described in words/phrases such as ‘very useful’, ‘valuable’, ‘incredibly helpful’, with references to the training having increased the participant’s knowledge, or understanding, or awareness.
- A sub-theme was the especial usefulness of the firsthand accounts of autism from the video clips and from invited speakers, for example, ‘It was excellent to hear the views and experiences of those with autism.’
- Three less positive comments were made about the content – these reflected variations at specific events, rather than the standard content. For example one comment was about a lack of case studies but many other comments valued the examples and case studies included as part of the training content.
Comments about the presentation and delivery styles of the specific training session made up the second largest group (70 comments).

- Of these just under a third (21) praised the ‘inspirational’, ‘wonderful’, ‘easy to listen to’ contributions of one young man on the autism spectrum who is co-delivering with trainers in one hub.
- Another 40 were appreciating the ‘interesting’, ‘enjoyable’, ‘clear’, ‘well-presented’ sessions. The use of mixed presentation modes (for example, PowerPoint, trainer input, invited guests, interaction with the group) was much appreciated and repeatedly commented upon.
- A minority (9) made less positive comments about delivery or presentational issues, such as quibbles over the design of the handouts, the pace of delivery being not quite right for the individual concerned, or Friday afternoon being a less than ideal time to run a training session.

Taken together, the comments about the level/pitch of the training (18) confirmed that:

- the training was viewed as a basic introduction to the autism spectrum that was most useful for those with no or little prior knowledge and also useful as a refresher course for others. For example, ‘Already aware of most things but was useful recap’; ‘very interesting – more beneficial to someone with little knowledge of ASD’.

Technical glitches were commented upon by 13 people most of whom had attended the same session. Despite these issues, 8/13 also said that the trainer coped well and delivered a useful session: for example, ‘Instructor coped well with dodgy AV aids’; ‘IT issues made session flow less well but was interesting and informative.’

All six people who wrote about the length of the session wanted it to be longer to allow for more discussion, reflection and time to take in new information.

In addition to the five main themes discussed above:

- nine people made short positive comments such as, ‘Excellent, thank you.’ Or simply ‘Thank you’;
- eleven people made ‘other’ comments, such as that they would like further training, that teachers ought to be given this training [as well as NQTs], that students should have the training [as well as teachers], and that other children in school need to know more about autism.

The open comments confirmed and elaborated on the positive picture gained from the quantitative data.
INTEREST IN ADDITIONAL AET TRAINING ON AUTISM

The post-course questionnaire asked respondents about their current role to gain a sense of whether or not they would fall in to the main target groups for further AET training (L2 and L3). If they did, they were asked to indicate whether or not they would be interested in this training. At both levels, more people indicated an interest in the training than fell in to the main target groups.

- Just over **seven out of ten** (479; 71%) of trainees who responded to this question \((N = 671)\) ticked that they regularly worked with pupils with autism. They therefore **belong to the main target group for L2 training**.
  - Over 500 (505) trainees indicated an interest in the L2 training: **69% of them said ‘Yes’ and 31% said ‘possibly’**.

- Fewer than **a fifth** (108; 17%) of the participants who responded to this question \((N = 629)\) ticked that they trained or led other staff in their setting. They **represent the main target group for L3 training**.
  - However, more than 108 trainees indicated an interest in L3 training: ninety-four participants **said ‘Yes’ to interest in L3 training. A further 75 said ‘possibly’**.

**Note:** In the post-pilot revision of the evaluation questionnaire, the evaluation team will adjust the wording of the questions so as not to imply that L2 training is exclusively for those who work regularly with pupils with autism or that L3 training is only for those who train or lead other staff.

SUMMARY

During the two month piloting of the Level 1 training, all seven hubs have delivered sessions. In total, 35 training sessions took place across at least seven local authorities, mainly to mainstream school audiences working with pupils aged 5 – 11 years. In total, over 700 delegates have attended. Most of these delegates had experience of working with/teaching one or more pupils on the autism spectrum but a third reported having had no previous training on autism. The majority of trainees were TAs/HLTAs or teachers but the cohort as a whole covered a wide range of jobs linked to schools in one way or another (e.g. attendance officer, school librarian). Most of the participants were female and aged 20 – 40 years. The largest group had a university degree but the cohort also included those with no qualifications. The majority were White British, although across all participants a wide range of ethnicities were represented.
The evaluation team is very grateful to the hub trainers for the high level of co-operation with the monitoring and evaluation system: pre- and post-training questionnaires were received back from 33 of the 35 sessions by the cut-off date of 20 April.

Analysis of responses to the questionnaires shows that the L1 pilot training events have been successful in raising the knowledge, awareness and understanding of the majority of the participants, including those with previous experience of working with pupils on the autism spectrum. Over 8 out of 10 thought the training was ‘worthwhile’. There were no significant differences in this by training hub. Among those in the main target groups for L2 and L3 training, there was a high level of interest in undertaking this. Open comments on the post-course questionnaires confirmed the positive picture gained from the quantitative data.

In sum, the pilot of the L1 AET training materials has been successful. This bodes well for the full roll-out of this training.