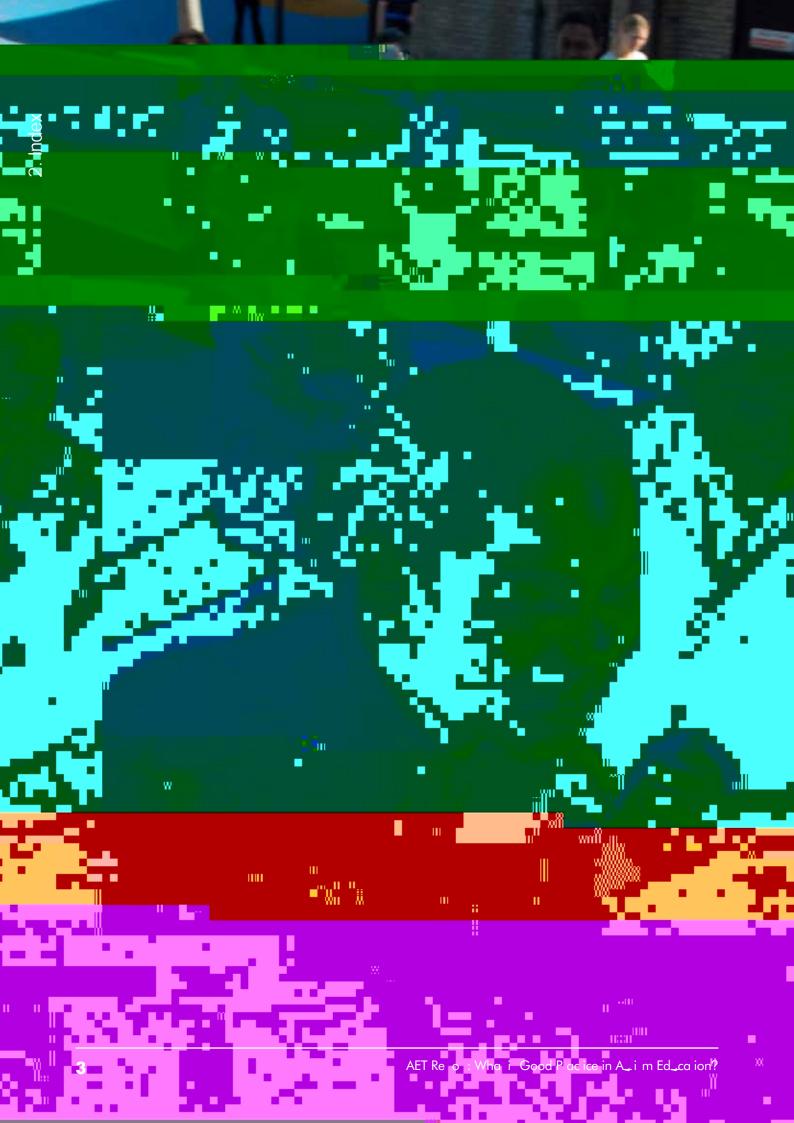


What is Good Practice in Autism Education?







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The AET has been asked by the Department for Education to develop a set of standards for the delivery of good practice in education provision for children and young people on the autism spectrum ...



Knowledge gaps and priorities for future research

The research also identified challenges for practice and policy in the implementation of good practice as well as gaps in the research and practice evidence base that should inform future commissioning.

- 1. If 'good practice' in autism education is practice that is informed by strong empirical evidence, then we need to address the considerable gaps in knowledge about *effective* practice.
- 2. We need further research on the fidelity or faithfulness of implementation of generic, and particularly specialised, practice and programmes.
- 3. We need to evaluate whether school staff are choosing the best measures to monitor progress, including progress in social and communication competence, well-being, and progress towards independence.
- 4. We need to test the effectiveness on outcomes of education, health and social care professionals working jointly.
- 5. We need to evaluate the ways in which mutual partnerships between schools and families have beneficial effects for children and young people with autism in terms of learning, behavioural or well-being outcomes.
- We need more research to develop and disseminate good practice on accessing the pupil's voice within both mainstream and specialist schools.

Tony Charman, Liz Pellicano, Lindy V Peacey, Nick Peacey, Kristel Forward, Julie Dockrell (2011)

2.2 Setting the scene

This section provides an overview of autism and the way that autism may affect the experiences of children and young people in school. It contextualises the current report against the background of previous AET commissioned work and other guidelines on autism 'good practice' from the UK and internationally.

What is autism?

'Autism spectrum disorders' (ASD) or 'autism spectrum conditions' (ASC) are the common terms used to describe the range of neurodevelopmental conditions that are characterised by qualitative difficulties in social interaction and communication and rigid and repetitive ways of thinking and behaving¹ (see Table 1). These core behaviours are thought to be underpinned by fundamental difficulties in both the flexible generation of ideas and the understanding of, and thinking about, other people and other situations. Sensory atypicalities, including either hyposensitivity or hyper¬sensitivity, and unusual interests in some sensations (e.g., the feel of clothes or the smell of hair) are common, as are childhood psychiatric or mental health disorders, especially anxiety and attentional difficulties².

There is, however, much variation in the way that children and young people with autism manifest these different behaviours. A large proportion of children with autism (around 50%) have an additional learning disability; while some children and young people may also have a severe intellectual disability, others will have average or advanced intellectual abilities. Difficulties with receptive and expressive language also vary enormously. For some children, spoken language is limited or absent altogether, while for other children speech can be fluent, but their use of language to communicate in social contexts (e.g., conversations) can be odd, awkward, and often one-sided. Stereotyped and inflexible behaviours range from hand-flapping and finger-twisting to idiosyncratic special interests (e.g., prime numbers, train timetables, drain pipes) and an 'insistence on sameness' (e.g., preferring environments and routines to stay the same). The full spectrum therefore includes children and young people with very different presentations - an observation that first prompted Lorna Wing to coin the term the 'autism spectrum' to capture this wide variability³ and which

is also reflected by the use of levels of symptoms (mild, moderate, severe), language and intelligence in the proposed revision to the American Psychiatric Association diagnostic guidelines⁴. Furthermore, autism is a developmental condition and the presentation in any individual will change with age, with some children experiencing periods of rapid improvement and others showing stasis or plateau-ing of development.

Table 1 describes the core behavioural features of autism, and suggests how these might affect learning and behaviour in the classroom. Note that within education, health and social care practice the use of the terms 'autism spectrum disorders', 'autism spectrum conditions' and 'autism' is highly variable for a range of reasons. Throughout the report for simplicity we will refer to 'autism' taken to include all children and young people who fall on the autism spectrum, including those meeting diagnostic criteria for childhood autism, Asperger syndrome, atypical autism and pervasive developmental disorder.

The population prevalence of broadly defined autism spectrum disorders is now known to be around one in a hundred children⁵, meaning that all schools are likely to include pupils who lie somewhere on the autism spectrum. The prevalence of autism is 4 times higher in boys than girls, although the reasons for this sex difference have not yet been determined. Autism is a strongly genetic condition although it is now recognized that this consists of both heritable and sporadic (noninherited) forms. Non-genetic causation in some cases has not been ruled out, but such instances probably account for only a small minority of cases⁶. Until recently, many children with autism were not diagnosed until 4 or 5 years of age, and for some children with Asperger syndrome or autism with good language skills and of average or above average ability (sometimes called 'high functioning autism') even later. However, progress has been made in the earlier identification of autism, and many children, especially those with a more classic presentation of autism in combination with language delay, are now first identified well before the age of 5 years7.

Researchers investigating the adult outcomes for children with autism often report striking variability, even for individuals at the more intellectually able end of the autism spectrum. While some individuals go on to live independently and obtain qualifications, many

² Simonoff et al. (2008). JAACAP.

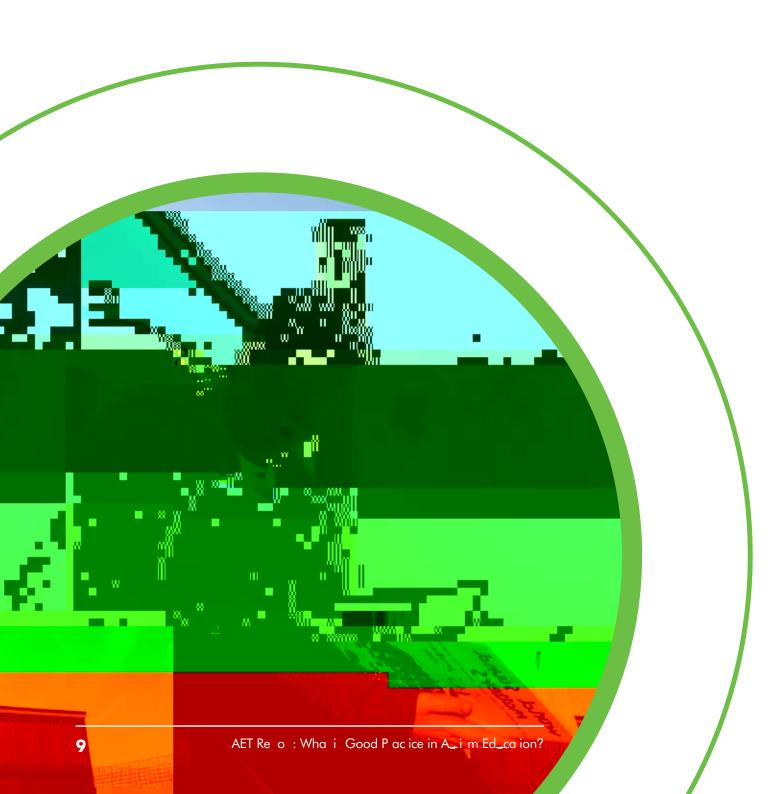
¹ ICD-10 (1992). WHO.

³ Wing (1996). Robinson.

⁴ Proposed DSM-5 ASD diagnostic criteria. APA.

⁵ Baird et al. (2006). Lancet. ⁶ Levy et al (2009). Lancet.

⁷ Charman & Baird (2002). JCPP.



Behavioural characteristics of autism¹

Possible impacts upon learning and behaviour

Qualitative difficulties in social interaction shown by:

- the limited use of non-verbal behaviours such as eye gaze and body posture to regulate social interaction
- problems developing peer relationships
- limited spontaneous showing and sharing of interests
- •

How this report relates to other AET reports and practice guidance

This research is intended to provide a snapshot of 'good practice' in autism education, as exemplified by a number of schools perceived to provide excellent education and support for independence. In this sense it builds on the previous report published by the AET, 'Education provision for children and young people on the autism spectrum living in England: A review of current practice, issues and challenges'¹⁰. Jones and colleagues used mixed methods including a literature review, survey questionnaires and interviews with school staff and other relevant professionals, and interviews with parents and carers, and children and young people with autism. That report's aim was to describe the wide variety of provision, and experiences of this

Recent policy and practice



Tier 2: spe<u>cialist</u>

Tier 1: quality-first teaching

Tier 1 reflects 'quality first' good practice for children generally, including school policies, staff, leadership, classroom practice, and approaches to learning, and

2.3 Research methods

2.3.1 Timetable

Following the award of the research in January 2011, the review of the literature was completed in March 2011, the interviews with school staff, pupils and parents and carers completed in April 2011 and the analysis in May 2011.

2.3.2 Review of existing literature

We have identified the key features identified to date in recent reviews of good practice that are relevant to the current research remit. The current policy and practice guidelines served as an infrastructure to guide our topics for interview and the ways in which we developed the thematic analysis.

2.3.3 Selection of schools

A list of schools was developed between the research team and the AET from suggestions made in the AET research tender. Broadly, the criteria were to identify schools with known good practice in educating pupils with autism. For autism specialist schools and special schools for pupils with SEN that included pupils with autism this was largely on the basis of recent 'Outstanding' or 'Good with Outstanding features' Ofsted reports. Since autism resource bases within mainstream schools are not currently assessed by Ofsted, those bases included in the current report were derived from mainstream schools who had received an 'Outstanding' or 'Good with Outstanding features' Ofsted report with positive mention of provision such as a resource base for pupils with autism. The sample was therefore purposive and not comprehensive of such schools. It was intended to capture the breadth

of current educational provision for pupils with autism in England from the early years to provision for 19 year old pupils, as well as provision for pupils with autism across the ability range from severe intellectual disability to above average intelligence. The schools covered a number of geographical areas of England but since the primary means of data collection were

Table 2 Characteristics of the participating schools

		<u> </u>		
	Agerangere	TypentainedO	utstar Sierctor choolAge	rarQfsteeRepoedOu
School 1	2 to 5 years	ASD school	Non-maintained	Outstanding
School 2	11 to 18 years	MS with ARB	LA	Outstanding
School 3	4 to 16 years	ASD school	Non-maintained	Outstanding
School 4	3 to 19 years	ASD school	Non-maintained	Good with outstanding features
School 5	11 to 19 years			
			School 5	
			School 2.638 0 Td(A	SD school)Tj9.638 0 Td(I

Key: ASD school = School for pupils on the autism spectrum. MS with ARB = Mainstream School with Autism Resource Base or Centre; LA = Local Authority; NAS = National Autistic Society.

2.3.4 Ethical considerations

The research protocol was approved by the Institute of Education's Faculty of Children and Learning

2.4 Elements of good practice in autism education

2.4.1 Theme 1: Ambitions and Aspirations

School ethos

A consistent message across the interviews was the importance of enabling pupils to 'reach their potential' and this was seen as an over-arching goal for the schools. 'Reaching potential' included gaining academic qualifications, going on to college or as adults and holding down a job. Helping pupils to identify activities that they enjoyed and to build on their strengths and talents was also a priority.

"... the same that you'd have for any children or young people actually ... they have the opportunities to fulfil to their highest potential, that we recognise their individual talents and abilities and encourage them to develop their strengths; support them to overcome some of their challenges."

Another ambition was for pupils to be included, both in mainstream school and broader society. In mainstream schools this meant taking part fully in all school activities and developing strategies to promote the skills the children and young people needed in order to achieve this.

"To be fully inclusive, as much as possible for every child. That's it. I think it's the right of every child to be included into every activity and take part in the school

2.4.2 Theme 2: Monitoring progress

There was an emphasis on using multiple systems for monitoring and recording progress. Schools had developed internal systems for communicating amongst staff about pupil progress, as well as innovative ways of sharing information on progress with parents and carers (see Figure 2).

Recording systems and practices

The schools saw measuring progress against behavioural and social outcomes, which extended beyond National Curriculum targets, as a part of their role. This was reflected in the fact that alongside the National Curriculum Key Stages and P level assessments that schools are required to complete, schools had developed over time formal and informal recording procedures to capture a broader range of pupils' progress. In part, this reflected the fact that practitioners found that Key Stages and P level assessments only fulfilled a partial role in monitoring relevant progress. This was particularly true for schools with pupils with the most severe and complex needs (i.e., special schools for pupils with SEN and autism specialist schools), but this was also true for mainstream schools with more able pupils.

"... it looks at communication, adapted behaviours ... and obviously social progress as being with others, working in a group, and maintaining themselves to be able to cope with unstructured time."

Monitoring progress was not just about capturing targets achieved; assessment played an important role in determining whether particular approaches were working with the child. That is, monitoring progress was seen as part of an ongoing evaluation of the success of the approaches they were using with an individual pupil.

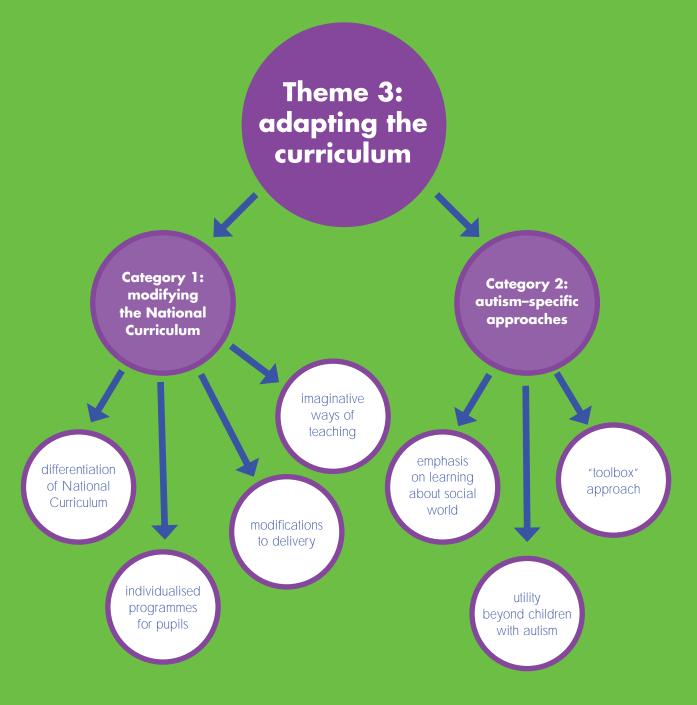
"... and that is about us knowing our children very, very well here; assessing them in a lot of detail; and kind of constantly reassessing how something is going and reflecting."

Some schools used standardised measures/tools that assess adaptive skills and developmental ability [e.g., Vineland Adaptive Behavior Scales (VABS)^{32Spmentaapproache OLL 5.8I: 7.7839 247.73785.53cn22110 0 0 10 235.01315.0uil2192.7615 218lot of det]}

thTj/CS0[(Supe)]TJTTJSCERtiveT 5.83 257.7839 247.737129hem0.08210 0 0 10 245.01315.0uii2l1jE24441179lot of det],aiicluoc

2.4.3 Theme 3: Adapting the curriculum

Schools took the view that alongside following National Curriculum guidance there was a need for purposive differentiation of the curriculum for pupils with autism. A number of autism specific approaches were used to learning and behaviour – principally to promote social and communication competency and independence – with several respondents using the term 'autism curriculum' (see Figure 3).





Modifying the National Curriculum

Curriculum differentiation was implemented on an individualised basis aligning targets with individual pupil needs and profiles. This individualisation was informed by a thorough understanding of the characteristics of children and young people with autism and how these need to inform the setting of individual education plan (IEP) targets and the delivery of the curriculum. In addition, in special schools and autism-specific schools in particular, staff spoke of their development of an 'autism–specific' curriculum to guide their practice alongside the National Curriculum.

"We're supporting children in a mainstream school; they're following the mainstream curriculum. We're looking at the differentiated needs that need to be offered for their development."

"But we would be setting an IEP and individual targets that contain both elements of the National Curriculum and what we would see more as the autismspecific curriculum. And the autism-specific curriculum is much more about, in a sense, focusing on areas related to the triad and sensory differences I suppose in simple terms."

"The only modification should be what a good teacher would do normally for the range of ability. We leave it to the Autism Outreach Team to say these are the bits of the curriculum that we think would be appropriate as a strategy for meeting this child's needs."

One consistent theme from the parents and carers interviewed was that the school excelled because it went beyond the remit of the National Curriculum, and prepared their children for what they saw as critical life skills (e.g., toilet training, eating independently, being calm).

"This school has everything; it is a 24hr package." [parent]

Autism specific approaches

Schools reported using a number of autism-specific approaches, including the Picture Exchange Communication System (PECS), SCERTS, Treatment and Education of Autistic and related Communication Handicapped Children (TEACCH), Applied Behavioural Analysis (ABA), visual timetables/schedules, Social Stories, Intensive Interaction and sensory integration (see Glossary, section 2.7). School staff outlined the different ways in which these approaches can be applicable to teaching and learning for pupils with autism, from communication and language understanding, to helping with attention and minimising distraction, to the acquisition of new skills, promoting social understanding and social interaction, and minimising behaviour difficulties and anxiety. Autism-specific approaches were used flexibly depending on the Key Stage level the pupils were working at and on an individualised basis.

"Well we use PECS where appropriate ... We have visual schedules always; we have TEACCH style work stations which get used sometimes; more so when the children are transitioning from Key Stage 1, because they're often using it a lot more there. But ... we do a lot more group work in Key Stage 2 because I'm thinking very much about the different demands of integration at Key Stage 2. They need to be able to work within a group and alongside other children – they can't be in completely distraction free areas all the time. But when they need to we use that."

Staff in mainstream schools commented that these approaches can be useful when working with other pupils who do not have autism.

"Social stories, cartooning ... and I think, by sharing in our meetings and so on the benefits, you then get people thinking, well I've got a situation with so-and-so here; I could use that with them."

Mainstream schools had taken care to adapt the delivery of lessons and expectations about the implementation of school rules and standards so that they were applied in an equitable manner for pupils with autism. They made the necessary adjustments for pupils with autism, who might, for example, require a break between lessons or time to prepare for the change from break time to lessons. "They will have perhaps an individual programme that recognises that they follow the National Curriculum, but there may be a differentiated approach such as they may need rest breaks ... or they may need slightly different approaches ... or homework support and study support, help with doing exams, college applications, getting to school on time."

Schools catering for pupils with a very wide range of ability showed imaginative approaches to adapting the curriculum for pupils with autism and ensuring that the materials and activities were fun, motivating and relevant to pupils. Staff had found that modern foreign languages can be highly successful subjects for some pupils with autism because of their explicit teaching of behaviour in social situations. " [Staff member A] We did Macbeth and Romeo and Juliet and basically it's reducing that text down and down and down ... it's a teeny bit of tokenism to Shakespeare, but I think the enjoyment – as long as your student is enjoying" ... [Staff member B] ... "Especially Macbeth" ...[A] ... "Yes, they were running round the cauldron – lots of drama, lots of role-play."

"They have a tailored curriculum for something like modern foreign languages – we call it European Studies – and they learn about the culture of the country. And they learn each language to a basic level where they can communicate and understand how that sort of culture works; and they learn to cook the food as well as speak at a basic level."

2.4.4 Theme 4: Involvement of other professionals

There was broad recognition that meeting the many core and associated cognitive and behavioural needs of children and young people with autism required external expertise, in particular from a range of health, as well as education, professionals (see Figure 4). Joint working between school staff and other professionals on learning and behaviour was widespread.



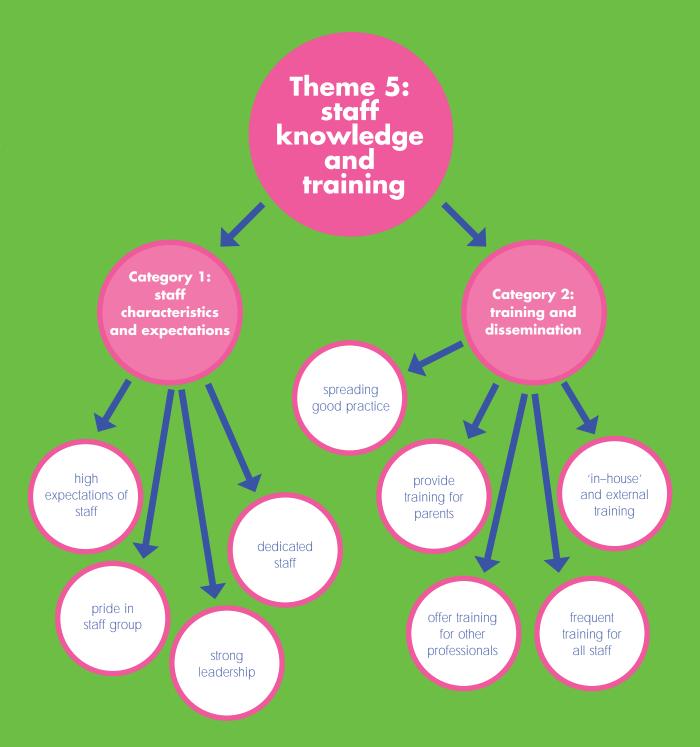
Figure 4: Involvement of other professionals



"We could definitely have our own

2.4.5 Theme 5: staff knowledge and training

Great emphasis was placed on well-trained and expert staff, on high expectations and of delivery by staff, and on strong leadership (see Figure 5). Many schools were also involved in training other schools and parents and carers.





Staff characteristics and expectations

A strong aspect of practice and school culture was high expectations of and pride in the expertise of the school staff and having a highly motivated and dedicated staff group. Senior staff commented that their staff teams were highly dedicated, empathic and caring towards

"[autism resource base] teacher comes down and does regular training for the staff, teaching assistants and teachers."

Parents and carers recognised that staff were knowledgeable about autism and that they continued to learn more about autism in an effort to inform their practice.

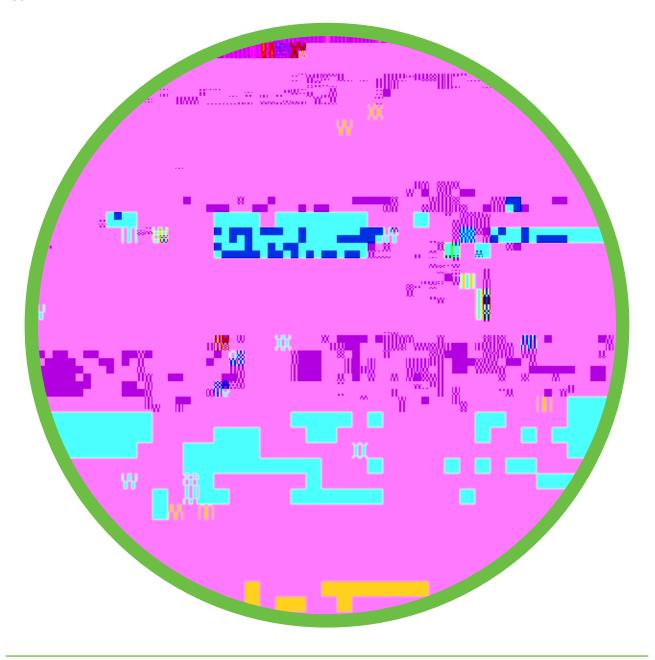
"We don't have to keep thinking what will be good for them. The teachers are always researching what will make their lives better." [parent]

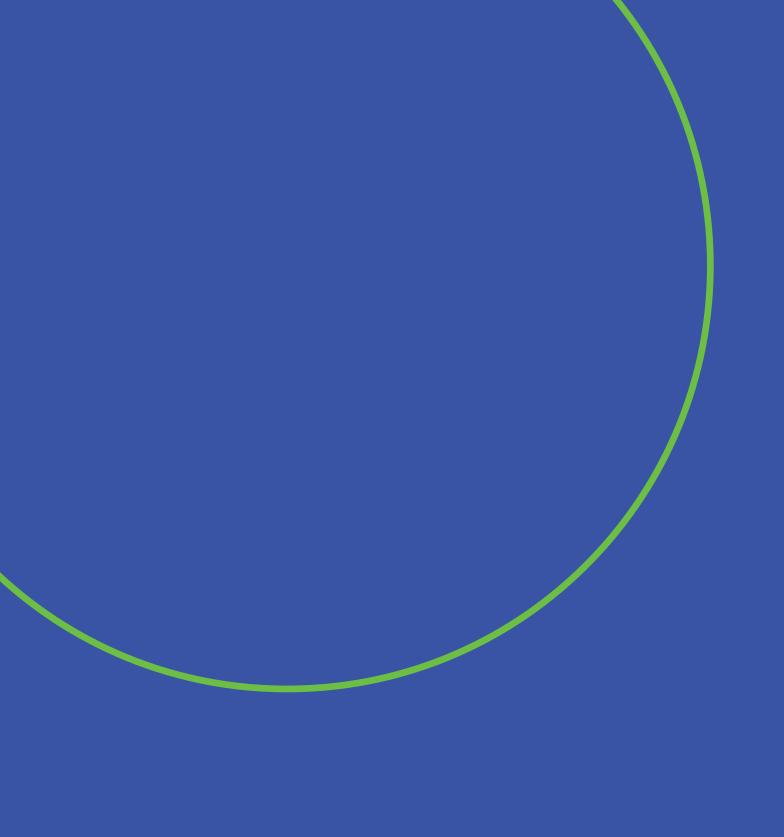
Another notable feature was that a number of schools also provided some training for parents and carers. This was motivated by recognition both that consistency of approach at school and at home would be beneficial for the pupils with autism, and that there is a lack of easily accessible and affordable training opportunities for parents and carers in many communities.

"... we run specific training courses on things like physical intervention, communication etc. etc."

"[transition liason officer]... and they've had a kind of rolling programme of workshops for them including things like wills and trusts and disability living allowances ..."

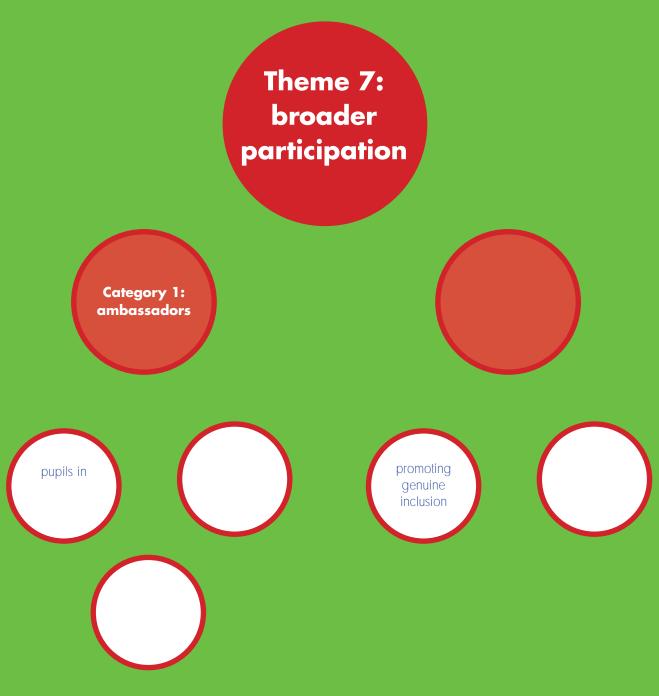
"We provide training for parents. In fact, I'm just running the Triple P positive parenting programme here at the moment."





2.4.7 Theme 7: Broader participation

Schools saw a broader role for themselves as community ambassadors, spreading understanding and acceptance of autism in the wider community (see Figure 7). Many schools also had developed imaginative practices for joint activities with mainstream schools.





Ambassadors

Schools saw themselves as community autism ambassadors – with a role to raise awareness about autism in the local community more broadly. This was achieved by a number of activities such as holding annual public events (e.g., picnics, Autism Awareness Day events), visiting local schools to hold assemblies, and making parents and carers and other schools aware of the autism provision within the school. Many of these activities involved outreach into the community but also involved inviting local school staff and pupils into their schools.

"... on an annual basis we've run an event called Picnic in the Park ... and it is really about autism awareness for [town] and around, with parents having an opportunity to get together."

"... the other parallel ambition is to work with the wider community as much as possible to teach them as much as possible about autism."

"... we are looking at opportunities to bring the community on to the school site. I want people who wouldn't normally come into contact with the young people here to come onto the school site and recognize who these young people are."

"And I've done ... talks for their 6th formers on autism. Particularly the 6th formers who are going on to either medicine or psychology or teaching or something like that. And we get work experience students from there coming here too."

Schools described a wide range of ways in which their pupils made use of community facilities that served a dual purpose of helping pupils to develop 'life skills' but also gave the pupils a visible presence within the local community. For older pupils this included work experience placements with local businesses.

"... we make sure our youngsters go out into the local community ... in terms of local supermarkets, the local leisure centre, cafes – go and order something. End of term as well we use what we call our class fun and youngsters make a choice about where they want to go; and it's usually and bowling and Pizza Hut." "We're very successful with work experience ... with different providers for work experience that are working really well, such as local supermarkets and a nursery."

Joint activities with mainstream pupils

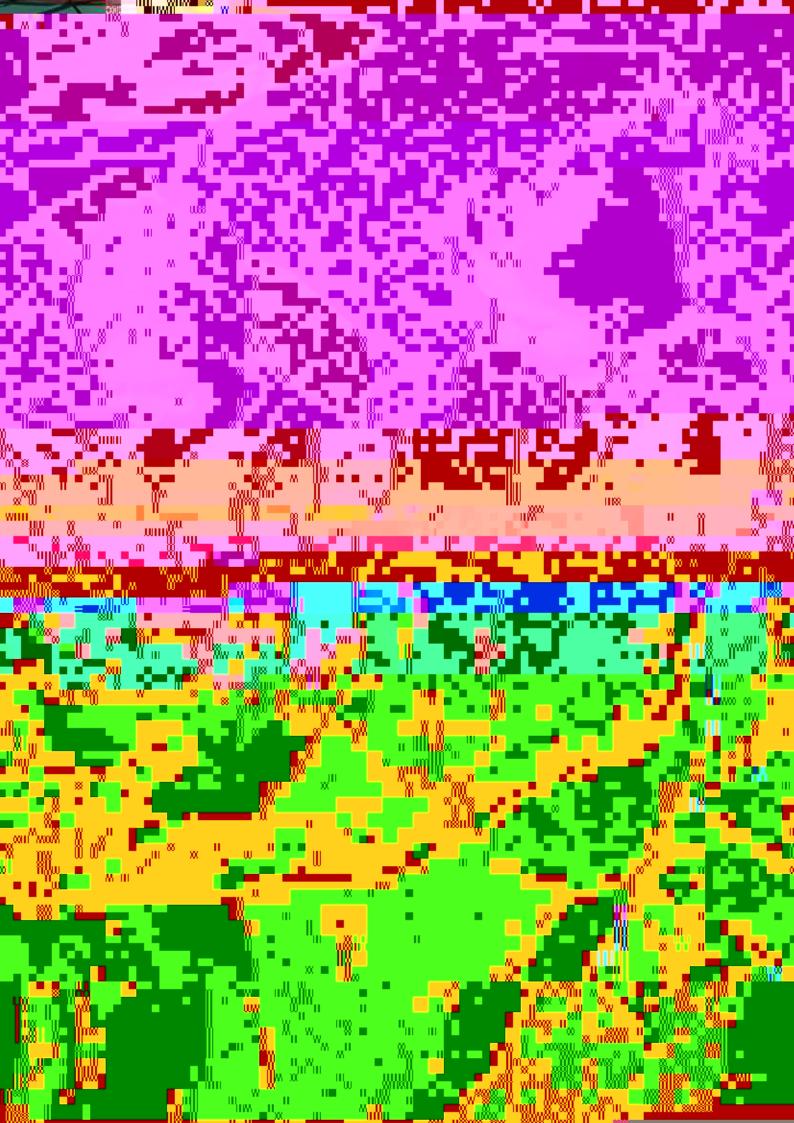
Schools had a variety of schemes that enabled their pupils to interact and spend time with pupils from other local schools – both special schools and mainstream schools and for autism resource bases, joint activities with mainstream pupils, including in some cases taking on roles with responsibility for younger pupils. Schools saw these joint activities as beneficial for their own pupils but also as part of their 'mission' to raise awareness about autism in the local community.

"We use a lot of mainstream or other schools for experience for youngsters, whether that's a local pre-school setting for an early years child or whether it's college links for our oldest students ... we might be providing them with training around issues to do with autism, and in return for that they're giving some of our youngsters opportunities to experience particular curriculum activities."

"So when we had the first intake it was Year 9 ... and we had all of Year 9 do a project using 'The Curious Incident of the Dog in the Night-time' and they did some cross-curricular work with drama, art, music and English staff ... because one of the things we had to do was to prepare the boys and girls here to be accepting."

"... he runs inductions for new parents are brought round and told about the Centre and the expectation is that their children will sometimes be coming to work with us. And on the whole it's really, really positive. The children love coming to us."

"... in Year 10 and 11 they do the junior sports leaders, so they're working with the local primary school children and teaching them, so that they can get their reward."



2.4.8 Theme 8: Strong relationships with families

Working together

Schools described how they aimed to work in partnership with parents and carers, seeing the education of pupils with autism as a joint, shared activity where consistency of approaches between school and home might be especially important for children and young people to make progress. Schools recognised the need to learn from parents and carers about their children, as well as to develop a joint planning approach to their education.

"And I think right from the start that [joint planning meeting] makes the parents feel that the school sees their child as important, that they see their views as important and that you set off on the road of engaging them as partners."

"As an institution, we set out our beliefs that we want to develop a lifelong relationship with young people and their families."

"Because if you don't have a good relationship with the parents it's so difficult because there are such conflicting messages for the children if they're not supporting what you're doing and vice versa. It becomes tricky."

School staff recognised that many parents and carers faced considerable challenges at home and that more on hand expert guidance and support would benefit them, their child with autism and the whole family. This attitude was true across the range of provisions – from highly specialised autism special school settings to mainstream schools. Despite the high levels of communication with parents and carers and considerable lengths that schools went to provide support, there was a clear recognition by schools that they were not able to offer adequate support to families and often this support was not available from other agencies.

"... it would be nice to be more of a training centre ... we do try to work with parents, bring them in for PECS training and that kind of thing ... often our parents don't understand autism any better than anybody else. And we simply don't have the time or the resources to do that."

"... it would be good to be able to support the parents more. We do have a parent liaison officer who works very hard to do

that, but that is a very difficult task."

"Do more for home support - more home outreach ... You know a family support worker, social worker type role as well. I would like us to do more about that and make more of our parent training."

Parents and carers also recognised that schools went out of their way to provide support and to work jointly with them around supporting their child's development.

"There wasn't anybody else there for me to work out where I was going with [child]. Because schooling isn't in isolation from home is it? So that I feel the school did much more than they needed to." [parent]

Parents and carers mentioned examples in which the school had organised for teachers to visit the family home and show parents and carers how to implement autism-specific approaches, like TEACCH and PECS, so that children's learning at school could transfer also to home. They also valued the way in which the school was instrumental in arranging for other professionals (e.g., physiotherapists) to go into the child's home and work with parents and carers.

However, schools also acknowledged that it can be challenging to engage with parents and carers who have many competing demands and that this required effort.

"Like always, there are certain parents it is hard to engage."

Understanding the children and young people

Across all the provisions, school practitioners consistently stressed the importance of establishing and maintaining

Strong connections with teachers were also a prominent feature of the interviews with pupils. The pupils valued the relationships with their teachers, and could 'trust' them. They emphasised the fact that they felt that their teachers understood them, and understood their autism.

"It's nice because they understand you here and they deal with all of the problems you have. They help out and are very supportive." [pupil aged 14 years]

"The best things [about school] are the teachers. They are supportive, they take care of you." [pupil aged 14 years]

"What do you think makes them such good teachers?" [interviewer]"Well, because they understand me."

[pupil aged 15 years]

Schools also acknowledged the need to ensure that children were empowered both to understand themselves and to be able to be responsible for their own learning.

"There's also the age-old risk in a mainstream school is that the person assisting ends up not assisting but doing, so you disempower the youngster. So we've got to be careful about that as well."

Schools recognised that some children and young people with autism can have difficulties with organising their work and behaviour and were able to provide structure and adapt school policies to support pupils who had difficulties with this. One pupil who preferred to complete homework at school during the week and often did not complete homework over the weekend commented:

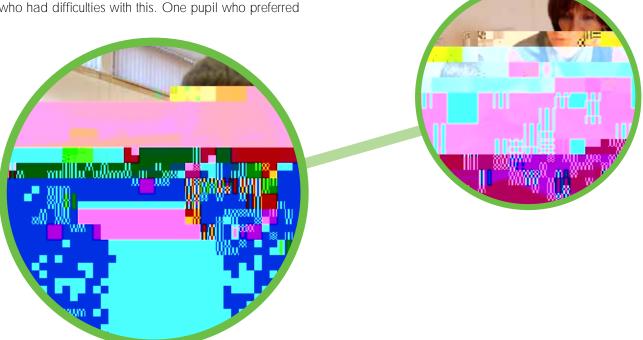
"So while an ordinary student might be put on a contract which is basically what they do before they kick you out here they did put on a sort of contract, but it was a cooperative one that wouldn't result in me being kicked out, it was just to help me with it. So they are good with that." [pupil aged 18 years]

Another pupil mentioned how the "teachers were understanding of me":

"When I am about to get my things the teachers appreciate that every time that I am taking too long because I lost my something" [pupil aged 15 years]

Schools recognised that sometimes children and young people with autism will need 'time out' in order to manage their own emotional state and mood. One pupil said:

"They are friendly and very supportive and they are very calm about everything. Like if you have a problem ... if you wanted time out on your own they would wait until you calm down and give you time to yourself." [pupil aged 14 years]



2.5 Conclusions

Despite the very diverse range of schools included in this research, which educate pupils from right across the autism spectrum, several consistent themes emerged.

Schools had high expectations for their pupils with autism (Theme 1); used multiple assessments to monitor progress beyond those statutorily required in order to monitor children's progress in terms of academic skills but also social and behavioural outcomes (Theme 2); were well versed in individualising and adapting the curriculum for each pupil acknowledging that pupils with autism have additional and unique needs and unique approaches to learning and the broad 'autism curriculum' reflected these needs (Theme 3); encouraged effective and sustainable relationships with specialist health and social care practitioners, in particular SALTs, OTs and CAMHS (Theme 4); nurtured expert, highly motivated staff for whom training was a priority both inside and outside the school gates (Theme 5); had very high levels of communication with parents and carers, both about approaches to learning and on strategies to promoting positive social and behavioural outcomes and well-being (Theme 6); were characterised by strong leadership and vision, which saw their school as fully inclusive and deeply embedded within the local community, taking on an ambassadorial role to raise awareness about autism (Theme 7); and worked hard at developing fully reciprocal relationships with families - parents and carers and children and young people (Theme 8).

What does this study add?

These findings build on and extend previous research and practice recommendations concerning autism education^{11,12} and education for pupils with special educational needs³⁵. We also uncovered some aspects of good practice that had not been recognised fully in previous work. We found that school staff (1) had consistently high ambitions and aspirations for pupils with autism; (2) were modifying the curriculum to include not just academic skills but also social communication and independent living skills; (3) had developed 'hubs of expertise', where staff would share knowledge about autism with schools and professionals in the local community, and with parents; (4) were 'ambassadors' for autism, raising awareness about autism in the broader community; and (5) worked hard at developing strong reciprocal relationships between teachers and parents, and teachers and pupils.

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education practice within the community. These local partnerships ensure that there is a continuous dialogue about educating children with autism between the various professionals who are dedicated to supporting pupils with SEN, with the parents and carers, and with members of the broader community. This is a potentially very powerful, and cost-effective model of service delivery, which enhances the expertise about autism in local communities. The very process of training others is instructive for those who deliver it.

Joint working with health professionals as being critical to providing a good education for many pupils with autism also emerged as a strong theme. Many schools work closely with or employ speech and language therapists (SALTs) and occupational therapists (OTs), although many schools also expressed a wish for greater access to this expertise. The proposal for a joint Education, Health and Care Plan (EHCP) in the Green Paper holds promise, which in future could benefit pupils with autism. Yet, at least under the current system, schools saw their access to this expertise as inadequate. In terms of joint working with other education professionals, schools expressed a wish for more contact than was currently available from educational psychologists (EPs). EP input was sometimes restricted to formal assessment of need as part of the statementing process, rather than on providing expertise on planning for learning and managing behaviour. One potentially effective way of harnessing the expertise of EPs would be to ensure that they support, and are supported by, specialist teachers within 'centres of excellence', as described above.

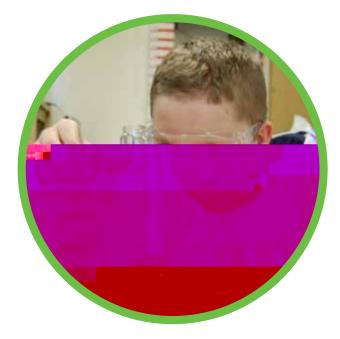
In Box 1 we summarise the 15 core principles of 'good practice' in autism education, which emerged from the current data:

Box 1 Core principles of good practice in autism education

- 1. Have high ambitions for pupils with autism to reach their full potential.
- 2. Embed specialist, evidence-informed approaches in quality-first teaching practice to remove barriers for pupils on the autism spectrum.
- 3. Increase the range of learning opportunities for developing independent living skills.
- 4. Celebrate and value achievements of pupils and staff.
- 5. Use multiple systems for recording progress of academic attainments in addition to behavioural ('life skills') and social outcomes.
- 6. Use innovative and individualised methods of adapting the curriculum, utilising pupils' strengths and interests, to make it accessible and rewarding for pupils with autism.
- 7. Encourage joint planning and working with health and education professionals to support language and communication, emotional wellbeing and an environment conducive to learning.
- 8. Select and value motivated, enthusiastic and empathetic staff.
- 9. Build and consolidate autism expertise at a consistently high level by maintaining an ongoing programme of training and CPD on autism for all staff.
- 10. Disseminate practice and share expertise with schools and professionals in the local community, and with parents.
- 11. Develop a close working relationship with parents, which recognises their key role, expertise and joint decision making.
- 12. Seek to build and maintain strong connections with pupils, and ensure that they are active participants in choices about curricular and extra-curricular activities and how the school is run.
- 13. Recognise parents' need for support so that learning continues outside the school.
- 14. Act as a focal point for raising awareness about autism in the broader community, ensuring that pupils with autism have meaningful, visible participation in the local community.
- 15. Strong leadership and a clear vision to implement all of the above.

Monitoring progress

School staff spent a great deal of time monitoring the progress of the pupils with autism. They also used multiple measures and systems, which went far beyond the statutory NC Key Stages and P levels assessments, and included many formal and informal measures of progress in a number of domains. The particular domains most commonly studied were language and communication, social progress and mental wellbeing, including sensory experiences. The emphasis on 'life skills' and progress towards independence has parallels with the approach taken for learners by ASDAN.⁴⁴ Alongside the findings of the AET report on 'outcomes'11, it will be important to study the knowledge and training of school staff working with pupils with autism to select between the very wide range of available measures and also to interpret the data from such measures to inform modification of the curriculum and to assess progress. Since school staff are using assessments in order to test the effectiveness of their approaches to learning and supporting behavioural outcomes, it is important to evaluate whether school staff are choosing the best measures to do the job. A similar exercise has recently been launched by the NIHR Health Technology Assessment Programme for measuring outcomes for young children with autism in the Health Service 45.



⁴⁴ASDAN (2011). ⁴⁵HTA (2011).

Communication and joint working

Staff spent much time and used many, and frequently ingenious, methods to communicate with parents and carers, and most schools had established mechanisms to listen to the views and perspectives of their pupils. Staff also spent a great deal of time communicating with each other and also with other professionals, including many health and other professionals (SALTs, OTs, and CAMHS) with whom much joint working was reported. This raises several issues that have implications for policy, training and for research. What do we know about the effectiveness on outcomes from education, health and social care professionals working jointly? To take one example, is there any evidence of the effectiveness of programmes aimed at improving communication in school that are jointly devised by teachers and SALTs but are implemented by school staff?

School staff recognised that families of children and young people with autism are potentially vulnerable but despite their best efforts they felt that they were often unable to provide sufficient support for families outside of school. We need to know which forms of joint school-family working have beneficial effects for children and young people with autism in terms of learning, behavioural or emotional well-being outcomes, and how these might best be supported and implemented.

Finally, school staff had developed very good understanding of their pupils with autism, their strengths and weakness, and their contributions and their needs. Many acknowledged that building strong relationships with the pupils and their families was critical to achieve their goals - to ensure that children were happy and could reach their full potential. Schools varied in the amount to which they had developed strategies and mechanisms to elicit the views of their pupils with autism, perhaps in part due to the difficulties accessing the views of pupils with little or no communication. Even in those schools that had developed innovative approaches to this issue, examples of pupil input on target setting for goals for learning and behaviour were less common than input into other school activities. Research is required to develop and disseminate good practice on accessing and incorporating the voice of pupils with autism within both mainstream and specialist schools.

2.7 Abbreviations

ABA	Applied Behavioural Analysis
ABLLS	Assessment of Basic Language and Learning Skills
AET	Autism Education Trust
ASC	Autism Spectrum Conditions
ASD	Autism Spectrum Disorders
CAMHS	Child and Adolescent Mental Health Service
DfE	Department for Education
DfES	Department for Education and Skills
DH	Department of Health
EP	Educational Psychologist
IDP	Inclusion Development Programme
IEP	Individual Education Plan
NC	National Curriculum
NICE	National Institute of Clinical Excellence
HMIe	Scottish Her Majesty's Inspectorate of Education
NPDC	National Professional Development Center
от	Occupational Therapist
PECS	Picture Exchange Communication System
SALT	Speech and Language Therapist
SCERTS	Social Communication, Emotional Regulation and Transactional Support
SEN	Special Educational Needs
SIGN	Scottish Intercollegiate Guidelines Network
TDA	Training and Development Agency for Schools
TEACCH	Treatment and Education of Autistic and related Communication Handicapped Children
VABS	Vineland Adaptive Behaviour Scales

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