

autism education trust

What is Good Practice in Autism Education?

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1.
Purpose of the research

The Autism Education Trust (AET) was established in November 2007 with funding from the then Department for Children, Schools and Families. It is dedicated to co-ordinating and improving education support for all children on the autism spectrum in England.

It is estimated that one in 100 children is on the autism spectrum. Their development and education are the primary concern for most parents and carers. The AET aims to create a platform for statutory, independent, and voluntary providers to plan and develop appropriate autism education provision across all education settings, including early years.

In April 2011 the AET was awarded a Government grant to develop a set of standards for the delivery of good practice in education provision for children and young people with autism. These standards could form the basis for nation-wide training in education provision for children and young people with autism to be delivered by local partners and accredited by the AET.

This research was commissioned to provide context to the development of this set of autism education standards in the following areas:

A. Identify and record existing practice in schools perceived as providing excellent care and education for children and young people with autism.

B. Identify areas of commonality and difference between these providers.

C. Document a set of good practice guidelines based on existing practice in these schools.

Note that the remit of the research specifically excluded the comparison of the effectiveness of specific interventions or programmes.



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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 . . .



2.1
Executive summary

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. These standards could form the basis for country-wide training in education provision for children and young people with autism to be delivered by local partners and accredited by the AET. The remit of the current research was to characterise aspects of 'good practice' in autism education through in-depth study of schools considered to demonstrate such practice by AET, Ofsted and external agencies. Sixteen schools were included in the research, ranging from early years provision to provision for 19–year–old pupils, educating pupils with autism across the ability range in special schools, specialist autism schools, and autism resource bases within mainstream schools. The primary data collection encompassed in-depth interviews with school staff and, in some schools, with pupils and parents and carers also.

Key findings

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 ambitions and aspirations** for pupils with autism; for them to reach their full potential and to be included in school and society. They recognised the importance of helping pupils with autism to develop problem-solving skills to promote their independence both at school and into adult life. Schools were interested in **hearing the pupil's own voice** about their learning and other school activities. They also took time to understand and establish **strong relationships with pupils** seeing this as the starting point for supporting their learning and well-being.

Schools went further than **individualising and adapting the curriculum** for each pupil. They saw the need for a unique **'autism curriculum'**, which captured not only children's learning needs but also sought to address the social, emotional and communication needs of children and young people with autism, and to nurture their independence and well-being. Schools used **multiple assessments** beyond those statutorily required in order to monitor progress in terms of attainments and also with respect to social and behavioural outcomes, again acknowledging that the education of children with autism must be broader than for children without autism.

Staff in the schools were both highly **trained** and highly **motivated** and the expectations placed on staff by school leaders were high. There was a considerable amount of **joint working with specialist health practitioners**, in particular speech and language therapists, occupational therapists and mental-health professionals, and with social care professionals and the voluntary sector. **Training** for *all staff*, including for support staff, was a priority for schools, and many schools were active in disseminating their expertise to other schools and practitioners.

Senior school staff provided **strong leadership and vision** that encompassed not only their own school but also the broader community where they took took on the role of 'ambassadors' for autism to **raise community awareness**. Schools strove towards inclusive education both within their own school and through joint activities with other local schools.

School staff had very high levels of **reciprocal communication with parents and carers**, both about approaches to learning and on strategies to promote positive social and behavioural outcomes and well-being. They recognised that families of children and young people with autism can often be vulnerable and **require additional support**, which they did their best to provide within the resources available – although they wished they could do more. Schools worked in **partnership with families**, aware that there is reciprocity in such relationships and that parents and carers have expertise and knowledge to share with schools, just as the schools do with parents and carers.

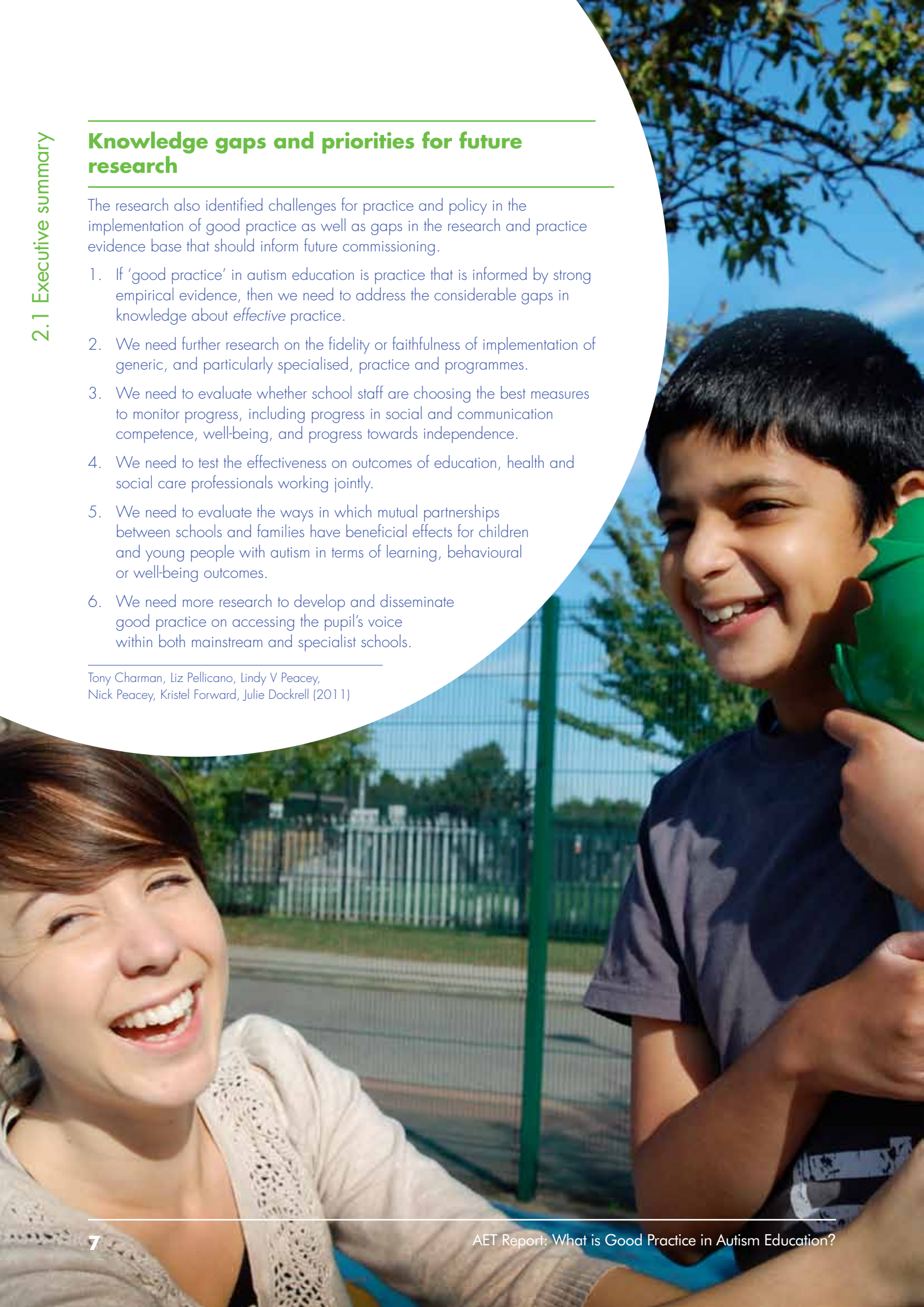
Many of the themes that emerged from the research are reflected strongly in the proposals outlined in the SEND Green Paper, including joint working between education, health, social care and voluntary organisations; the need for staff to have high expectations, to be well-trained, and to understand autism and for networks of schools to work together with specialist schools working as 'centres of excellence' in autism education practice.

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.
6. We need more research to develop and disseminate good practice on accessing the pupil's voice within both mainstream and specialist schools.

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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 behaving[1] (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 difficulties[2].

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 variability[3] 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 guidelines[4]. 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 children[5], 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 (non-inherited) forms. Non-genetic causation in some cases has not been ruled out, but such instances probably account for only a small minority of cases[6]. 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 years[7].

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

[1] ICD-10 (1992). WHO.
[2] Simonoff et al. (2008). JAACAP.
[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.

are unable to achieve independence, to attain full-time employment, or to enjoy friendships and social interactions[8,9]. It is increasingly recognised that there are very significant gaps in our knowledge of what affects adult outcomes. One largely unexplored possibility is that the very wide variability in outcomes for individuals with autism may, in part, be associated with variable support, ineffective interventions and lack of knowledge by professionals working with the children. This uncertainty regarding the life-long outcomes for children with autism is worrying – for parents and carers, and practitioners alike – and underscores the important role of education, especially since children spend most of their childhood in school. This report seeks to characterise what is 'good practice' in autism education, and identifies some ways that might improve such outcomes, ensuring that children and young people lead rewarding and fulfilling lives.

[8] Howlin et al (2004). JCPP.
[9] Farley et al (2009). JADD.



Table 1 What does autism look like and how might it affect learning and behaviour in the classroom?

Behavioural characteristics of autism[1]	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 • limited social emotional reciprocity	• difficulties in forming reciprocal peer relationships and friendships • difficulties in picking up on non-verbal or emotional cues • taking what is said to them literally • difficulties in picking up on social cues, particularly in group activities • unpredictable emotional responses (e.g., anxiety, outbursts) for no apparent reason
Qualitative difficulties in social communication shown by:	
• delayed language development without non-verbal compensation • problems starting/sustaining conversations • repetitive and stereotyped language • limited imaginative and imitative play	• problems understanding spoken language/verbal instructions • not responding when spoken to • poor comprehension of written text even if reading decoding is good • solo or parallel play in place of group play
Restricted repertoire of interests, behaviours and activities shown by:	
• over-focus on particular topics • rigid adherence to routines/rituals • repetitive, stereotyped motor mannerisms • preoccupation with object parts rather than whole	• preference for only one or a few activities • difficulty with transitions, changes in routine and unexpected events • difficulties maintaining attention without external structure/support • difficulties moving from one activity to another • less likely to pick up on the 'gist' of a situation or activity
Hyper- or hypo-reactivity to sensory input or unusual interest in sensory aspects of the environment:	
• aversive responses to particular environmental stimuli (e.g., lights, colours, sounds, patterns, smells, touch) • sensory seeking behaviour	• shuts eyes or blocks ears • removes self from the source by leaving a room or people • needs one person/thing at a time • fascination with (looking, smelling, licking) objects or people

[1] ICD-10 (1992). WHO.

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 provision, available to children and young people with autism in England; to identify organisational challenges to ensuring equal access to the provision of good quality education for pupils with autism and their families; to identify the information and support given to families; and to highlight examples of innovative inter-agency working.

The current report has a different focus. It is intended to identify and highlight aspects of good practice in autism education; that is, to identify 'successes' and make positive practice recommendations that can be taken up by other schools, leaders, trainers and practitioners with the aim of improving educational experience and outcomes for children and young people with autism and their families in England. The AET has also commissioned a piece of research on 'meaningful outcomes for children and young people with autism'[11]. Where relevant to 'good practice' the current report will report on the outcomes used in the participating schools but it will not attempt systematically to review outcome measures used in autism education practice as this will be one of the foci of this companion piece of work.

Other relevant recent guidance on autism good practice includes the *'Autistic Spectrum Disorders: Good Practice Guidance'*[12] published jointly by the Department for Education and Skills (DfES) and the Department of Health (DH) in 2002; the *'Education for Pupils with Autism Spectrum Disorders'*[13] published by the Scottish Her Majesty's Inspectorate of Education (HMIe) in 2006; and the forthcoming National Institute of Clinical Excellence (NICE) guidelines on *'Autism Spectrum Disorders in Children and Young People: Recognition, Referral and Diagnosis'* (publication due September 2011; draft for public consultation accessed March 2011[14]). There are also a number of recent or ongoing initiatives on autism education and intervention practice internationally. Whilst these international reports contain important and useful information describing the evidence base for various programmes and approaches, the ease with which they can be translated into everyday practice recommendations for staff working with pupils with autism in schools in England presents significant challenges due to differences in service provision, workforce training and local and national policy. Nonetheless, these initiatives were consulted as relevant background literature for the current report to ensure that education practice in the UK is informed by international efforts where relevant and possible, notwithstanding variation across international boundaries in service organisation, funding, training and delivery.

Previous UK guidelines

The DfES/DH *'Autistic Spectrum Disorders: Good Practice Guidance'*[12] had two purposes. First, it was intended as an introduction to health and education practitioners to the nature of autism, in particular identifying principles underlying effective practice. Second, it provided a list of school, local authority and regional pointers to good practice which could be used as an audit tool for local authorities and districts to monitor their current and future practice and policy. The key principles highlighted were:

1. practitioner knowledge and understanding of autism
2. the need for early identification and intervention
3. policy and planning at all strategic levels
4. the importance of supporting families and working in partnership
5. the need to involve children and young people with autism in decisions affecting their education
6. multi-agency co-operation
7. clear short-term and long-term goals, in particular to develop the social skills of children and young people with autism
8. the need to monitor, evaluate and research the effectiveness of provision

[10]Jones et al. (2008). AET.
[11]Wittemeyer et al. (2011). AET.
[12]DfES/DH Good Practice Guidance (2002).
[13]Scottish HMIe (2006).
[14]NICE consultation draft public access (2011).

The overall aim of this report, now almost 10 years old, was similar to the current research in terms of identifying principles related to 'good practice' and these closely informed the content of the structured interviews that were undertaken (see below).

The Scottish HMIe report *'Education for Pupils with Autism Spectrum Disorders'*[13] was designed to identify and report on the range of educational provision available for pupils with autism in Scotland, to evaluate this provision and to identify good practice. Many of the report's conclusions concerned the challenges and gaps that needed to be overcome in order to ensure consistency in the quality of services provided in the Scottish education system. An accompanying literature review assessed the evidence base for particular programmes or approaches. Several 'best practice' recommendations emerged, including

1. the desirability of the integration of speech and language therapy (SALT) targets into the primary school curriculum
2. linking individualised educational programmes (IEPs) to the core characteristics of autism with which pupils may require additional support
3. modifying procedures and practices to accommodate the preferences of pupils with autism (e.g., sitting in the same seat for mocks and exams; building 'time out' periods for pupils with autism into their lesson plan)
4. effective transfer of information and knowledge about the pupil with autism in the transition from primary to secondary school
5. head teachers in good practice schools had clear knowledge and understanding of autism and ensured their knowledge was up-to-date

The forthcoming NICE guidelines on *'Autism Spectrum Disorders in Children and Young People: Recognition, Referral and Diagnosis'*[14] and the Scottish Intercollegiate Guidelines Network (SIGN) on *'Assessment, Diagnosis and Clinical Interventions for Children and Young People with an Autism Spectrum Disorder'*[15] do not make recommendations about education practice and policy, beyond the critical role of nurseries and schools in the identification of children and young people with autism and emphasising the need for autism awareness and training for all professionals working with children and young people.

International guidelines

In 2007 the US Department of Education, Office of Special Education Programs created the National Professional Development Center on Autism Spectrum Disorders (ASD). The NPDC has a remit to review and disseminate evidence-based practice on autism via training partnerships with State Departments of Education and 'open access' training materials on the interventions (Autism Internet Modules)[16]. Another recent report from the USA the *National Autism Center National Standards Project: Evidence-Based Practice and Autism in the Schools*[17] provided both a summary review of the effectiveness of various intervention programmes and expert guidance on the implementation of these approaches within education services in the USA. Broadly, both of these reports summarise the evidence base for a variety of interventions. Both emphasise the need for professional judgement regarding which interventions and approaches to implement as well as the need to use data (on an individual child's progress) to inform decision-making; the need for family values and preferences (including of pupils with autism) to be taken into account; and the capacity of the school and practitioner to reliably implement the intervention/programme.

Similar content was reviewed for the Irish National Council for Special Education report on *Evidence for Best-Practice Provision in the Education of Persons with an Autism Spectrum Disorder*[18]. The report concluded that the evidence base for the impact of specific educational settings and interventions was insufficient to make definitive, universal recommendations. However, expert consensus indicated that working with families, multi-agency working, an emphasis on transitions and including the voice of individuals with autism were consistent with 'best practice'.

Other relevant international guidelines make similar recommendations on education for learners with autism, including the *New Zealand Autism Spectrum Disorder Guideline*[19], which in addition emphasised that models adopted should fit the characteristic of the child and the learning situation, that social progress (e.g., spontaneous communication, socialisation and play) was a priority target, carefully planned individual instruction should be tailored to the individual needs and abilities of the learner with autism, and that positive behavioural support should focus on understanding the function of a child or young person's behaviour in order to develop an appropriate intervention plan.

[13]Scottish MHIe (2006).
[14]NICE consultation draft public access (2011).
[15]SIGN Guideline (2007).
[16]National Professional Development Center on Autism Spectrum Disorders (ASD)
[17]NAC Report (2009).
[18]Parsons et al (2009). NCSIE.
[19]NZ ASD (2008).

Recent policy and practice developments

In 2006, Jones[20] summarised the literature on what is known about good practice in the education of pupils with autism and identified the need for a dual focus – on the one hand helping the *individual child/young person* to develop skills and strategies to understand situations and communicate needs; while on the other hand adapting the *environment* to enable the child to function and learn within it. Jones described that a consensus was developing on the characteristics of approaches to intervention and education for pupils with autism, including involving parents and carers, teaching in a natural setting and in a natural sequence, the use of visual strategies and involvement of typically developing peers. In addition, Guldberg[21] emphasised the importance of practitioners first having a good understanding of autism before implementing evidence-informed approaches to learning or managing behaviour. Whilst these principles have good 'common sense' face validity, the research evidence base for each of these elements having a direct impact on improving education and life outcomes is only just beginning to be examined systematically.

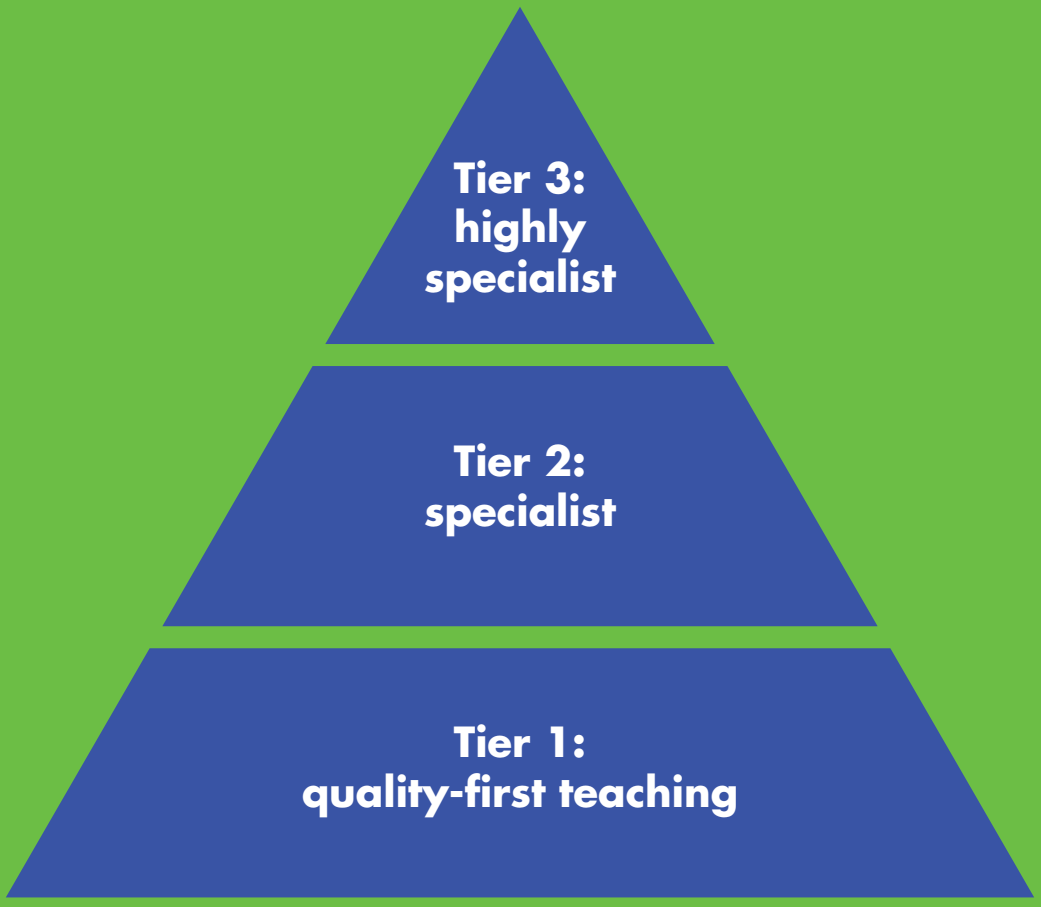
Jordan[22] covered similar ground to Jones and reached similar conclusions, reminding us that teachers' understanding of autism was fundamental to correctly identifying an individual pupil's learning needs and enabling him/her to meet them. In their overview of the specialisation of teaching for pupils with special educational needs (SEN), Norwich and Lewis[23] highlight that autism is one of the categories of SEN where understanding the nature of the SEN group is a particularly critical 'filter' through which teaching strategies for a particular learner should be developed. In their model, the practitioner's knowledge about the pupil's SEN is regarded as "valuable in its own right as underpinning the learner's development" (p.141). The subsequent layers of relevant knowledge required for the professional to adapt the curriculum to the pupil's learning style include self-knowledge and professional identity, the psychology of learning, and knowledge of curriculum areas and general pedagogic strategies. It is well-established that autism (even compared to other diagnostic categories of SEN) is characterised by a particular profile of cognitive strengths and weaknesses, as well as associated behavioural and other features (e.g., sensory atypicalities)[24,25,26]. Therefore, practitioner understanding of autism is an essential starting point for developing 'good practice' in the education of pupils with autism.

Another relevant piece of recent good practice guidance for all pupils with SEN, the Training and Development Agency for Schools (TDA) 'Pillars of Inclusion' for planning and teaching pupils with SEN and/or disability can also provide a framework for thinking about 'good practice' in autism education as well as the essential components of 'quality-first' teaching.[27] All of the above evidence was reviewed and drawn upon to develop a framework for the data collection and analysis of the current research.

Our framework for investigating 'good practice' in autism education is shown in Box 1. It shows the relation between (i) 'quality first' classroom and school practice[28];(ii) specialist approaches that are relevant for working with many pupils with SEN and their families; and (iii) highly specialist approaches that might be required specifically for pupils with autism. It is important to emphasise at the outset that all 'good practice' in autism education will rest on the foundation of 'quality first' teaching practice. The remit of this research was to conduct an in-depth study with a small group of schools to identify those approaches that characterise 'good practice in autism education'.

[20]Jones (2006). CCHD.
[21]Guldberg (2010). BJSE.
[22]Jordan (2005). PR.
[23]Norwich & Lewis (2007). JCS.
[24]Charman et al. (2011). Brain Research.
[25]Happé & Ronald (2008). Neuropsychological Review.
[26]Pellicano (2010). Developmental Psychology.
[27]TDA (2011).
[28]DfES (2004). Removing Barriers to Achievement.

Box 1 **Contextualising good practice in autism education**
(adapted from DfES[28])



Tier 1 reflects 'quality first' good practice for children generally, including school policies, staff, leadership, classroom practice, and approaches to learning, and represents the bulk of educational practice. Tier 2 reflects more specialist support for children with special educational needs generally (e.g., support for families, which is particularly critical because families of children with SEN are a vulnerable population). Tier 3 is highly specialist approaches to education (e.g., augmentative communication approaches).

[28]DfES (2004). Removing Barriers to Achievement.

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 face-to-face interviews with school staff, time/resource constraints meant that the largest number of schools were from London and the South of England. The latest Statistical First Release (SFR) from the Department for Education/Department for Business Innovation and Skills (2010) indicated that 70% of pupils identified with autism spectrum disorders in the School Census were in mainstream schools, with the remainder in maintained and non-maintained special schools[29]. Our sample of schools is thus weighted towards special schools with significant number of pupils with autism and autism specialist schools. This sampling bias reflected the selection process outlined above and the time constraints for completion of the research.

In all, 16 schools participated in the research. They included maintained and non-maintained schools, special schools for pupils with SEN with a high ratio of pupils with autism, specialist schools for pupils with autism, mainstream schools with an autism resource base, City Academies and an early years setting. The characteristics of the participating schools are shown in Table 2. The participating schools are listed in the Acknowledgments in alphabetical order. Due to the limited number of schools involved, quotations are not attributed, even by the type of school, to minimise the possibility of individual respondents being identified. Unless otherwise indicated (for quotations by parents and pupils) quotations are from unattributed school staff.

[29]DfE/BIS (2010). Schools, Pupils and their Characteristics.

Table 2 **Characteristics of the participating schools**

	Age range	Type	Sector	Ofsted Report
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	Special school	LA	Good with outstanding features
School 6	3 to 19 years	Special school	LA	Outstanding
School 7	3 to 19 years	ASD school	Non-maintained	Outstanding
School 8	4 to 19 years	ASD school	LA	Outstanding
School 9	3 to 19 years	ASD school	LA	Outstanding
School 10	2 to 19 years	Special school	LA	Outstanding
School 11	3 to 11 years	MS with ARB	LA	Good with outstanding features
School 12	3 to 11 years	MS with ARB	LA	Good with outstanding features
School 13	11 to 18 years	MS with ARB	LA	Outstanding
School 14	3 to 12 years	MS with ARB	LA	Outstanding
School 15	11 to 19 years	Special school	LA	Outstanding
School 16	3 to 11 years	MS with ARB	LA	Good with outstanding features

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 Research Ethics Committee (FCL 273). School staff and parents and carers who were interviewed gave written consent for the interview to be audio-recorded. Participants were told that no quotations would be attributed to any individual in the report, but that for reasons of transparency the participating schools would be identified in the report and therefore participants understood that complete anonymity was not assured. Parents and carers of pupils who were interviewed gave written consent and verbal assent was given by pupils at the time of pupil interviews.

2.3.5 Methods of data gathering

Given the nature of the practices that the research was attempting to capture it was decided to use interviews as the sole means of data collection. After initial consideration it was felt that survey or questionnaire methods would be unlikely to capture complex aspects of school organisation and practice. In-depth qualitative interviews provided the opportunity to explore the range of practices in place for this diverse population. All interviews were audio-recorded and subsequently transcribed verbatim and analysis was conducted from the transcripts.

A topic guide for the interviews was developed by the research team and piloted with one of the schools. The primary respondents were school staff. The majority of the schools were visited in person and interviews conducted by one or two members of the research team. In 4 cases interviews were conducted by telephone. In some schools 2 interviews were conducted whilst in others two members of staff were interviewed at the same time. The target respondents were identified on a school-by-school basis following a telephone call between the school staff and the research team – the focus of which was to determine who would be best to comment on practice. The research team was therefore guided by the school as to the most appropriate staff to interview. The selection of interviewees reflected the demands of the schools and the time line for the project. Across the 16 schools, 20 interviews were conducted with a total of 29 members of staff. In some cases, the head teacher or deputy head was interviewed; in others class teachers, the head of inclusion or the head of the autism resource base. Some interviewees also included outreach support workers, head of children's services, head of further education, teaching assistants/learning support assistants, SENCos, and speech and language therapists (SALTs). See Table 2 for a full list of staff interviewed. In one school a focus group was run with 6 parents and carers, and in another school 1 parent was interviewed. In five schools a total of 11 pupils were interviewed.

Table 2 List of staff interviewed

Role	Number of staff interviewed
Head of Service	2
Head Teacher/Principal	8
Deputy Head	2
Head of Inclusion	2
Head of Autism Resource Base	3
Head of Further Education	1
Outreach Team Member	2
Class Teacher	3
Teaching Assistant	2
SENCo	2
Speech and Language Therapist	2
Total	**29**

2.3.6 Methods of data analysis

A qualitative thematic analysis was undertaken on transcripts of the interviews conducted using the principles outlined by Ritchie and Lewis[30] and Braun and Clarke[31]. Following completion of the interviews the research team identified a series of themes based on their experience of conducting the interviews and notes made immediately following the interviews. Themes and sub-themes were agreed by the research team, following initial independent theme identification by each of the researchers who conducted the interviews. The 20 interviews were shared out amongst three members of the research team with 5 interviews coded independently by two members of the team.

[30]Ritchie & Lewis (2003). Sage. [31]Braun & Clarke (2006). QRP.

Eight themes were identified:

1. Ambitions and aspirations

2. Monitoring progress

3. Adapting the curriculum

4. Involvement of other professionals/services

5. Staff knowledge and training

6. Effective communication

7. Broader participation

8. Strong relationships with families

These themes are listed as per the order of progression of the interviews rather than with regards to how frequently they were raised by participants.

2.4
Elements of good practice in autism education

2.4.1 Theme 1: Ambitions and Aspirations

One consistent theme that characterised the schools was the high levels of ambition and aspiration that staff had for their pupils (see Figure 1).

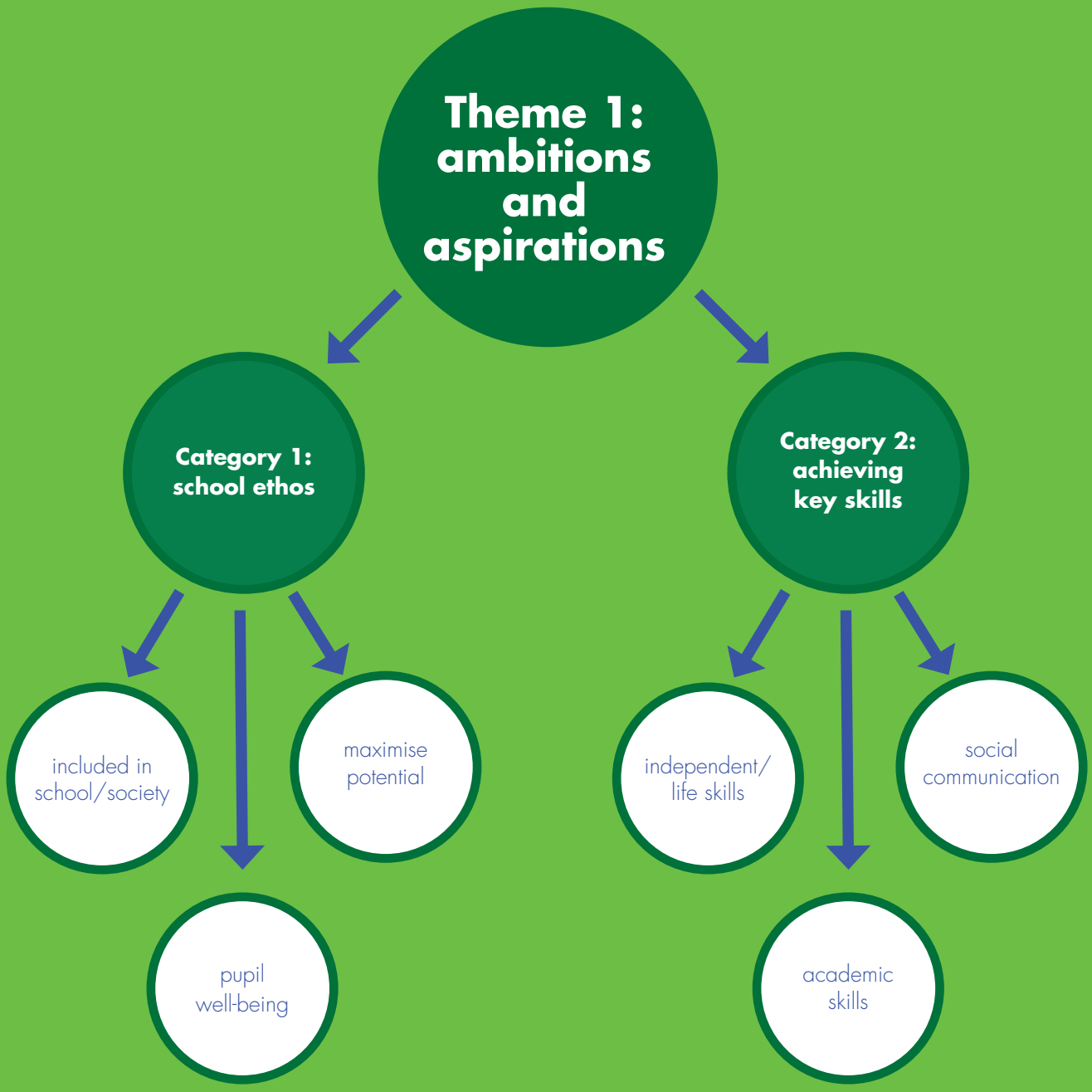


Figure 1: Ambitions and Aspirations

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"

School ethos also included a broader sense of ensuring and being proud of the fact that the pupils enjoyed being in the school and wanted to be there. There was a satisfaction that pupils found the school a safe environment to be in and an emphasis on promoting their well-being.

"... in walking round the school, the majority – pretty well all – of the young people who attend here enjoy attending here and enjoy learning here. And that they can see a purpose to it."

Achieving key skills

Schools strove for pupils to be as independent as possible in their future adult life, to discover what they enjoyed doing and to pursue this not only at school but also beyond, and to be able to cope and have meaningful life choices. Schools had a strong emphasis on promoting independence skills, recognising that children and young people with autism, including those with average or above average intelligence, often struggle to cope in everyday situations.

"I'd hope that they'd be as independent as possible by the time that they leave this school, as independent as it's possible for them to be."

One pupil at a specialist school that allows local pupils to spend occasional weeks staying overnight at the boarding facility commented:

"It definitely has merits. It definitely helps with independence and also learning skills later on in life that you are going to need." [pupil aged 19 years]

Schools emphasised the need for pupils to be supported to develop communication skills and the highest level of social understanding that they can. Sometimes this was explicitly couched in terms of wanting to help pupils to learn strategies to 'cope with their autism'; whilst at other times the emphasis was on functional communication and social skills.

"... learning to manage your condition. It's not about reducing autism; it's about managing what you've got."

"So that's the key thing for these children is that they have poor communication skills; we are focused on getting them to communicate and to interact."

Some schools explicitly talked about their aims and aspirations for their pupils achieving academically, at whatever level they were able to, although this theme did not emerge in all the interviews.

"We're here to teach them how to read, write ... it's all about academic terms – and that's for every child. I think we've got to go with that."

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).



Figure 2: Monitoring progress

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)[32] ; Assessment of Basic Language and Learning Skills (ABLLS)[33]] whilst others used assessments that measure progress against a social curriculum [e.g., Social Communication, Emotional Regulation and Transactional Support (SCERTS)[34]], including emotional development and self regulation targets.

School staff described how they had developed 'bespoke' measures of pupil progress in areas where they felt that standard assessments did not capture the behaviours they saw themselves as targeting, in particular for sensory behaviours and mental health/ well-being difficulties.

"So we're actually involved [in] doing some particular work at the moment trying to look at this whole issue of how you measure, reflect and report on outcomes on emotional wellbeing. And part of our funding through specialist schools status has been to enable us to develop that work ... We're trying to develop our own measures."

Sharing information on progress

Schools placed a great emphasis on sharing information on progress – via the use of written materials and shared access to computerised data – both between school staff and with parents and carers. Schools gave examples using videotape and photographs to capture pupils' achievements and being able to share this with parents and carers and with school staff. This reflected a number of different concerns: that Key Stages and P levels do not capture all the progress relevant for pupils with autism; that pupils with autism, especially those with limited communication, may not share with parents what they have done at school that day; and that video and photographic evidence is very tangible and concrete evidence of achievement for parents, school staff and the pupils themselves.

"And email as well – sometimes I email photos of things to the parents; like when they did the work experience and stuff. Because I think some of the children don't go home and communicate to the parents what they've done, so it's quite nice for them to have an email or something."

One resounding consensus from school staff was the importance of capturing and celebrating the achievements of pupils, however minor.

"We actually tried something called the magic moments thing, where every class had little mini whiteboards where they wrote the achievements of the children – so that those children who do utter a single word ... the first time they tie up their shoelace."

[32]VABS (2005). AGS.
[33]ABLLS (2006). WPS.
[34]Prizant et al. (2006). Paul H. Brookes Publishing.

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).

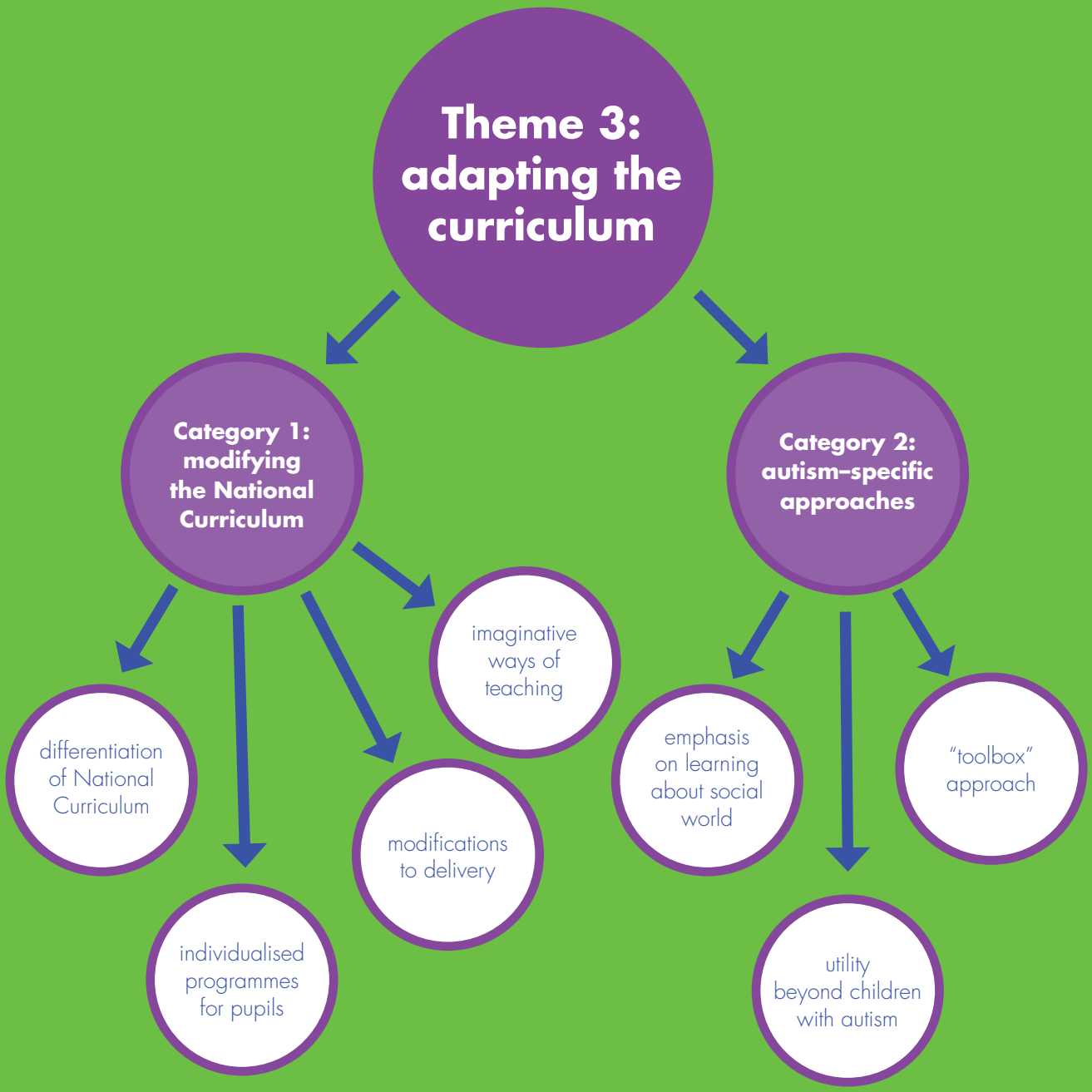


Figure 3: Adapting the curriculum

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 autism–specific 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."

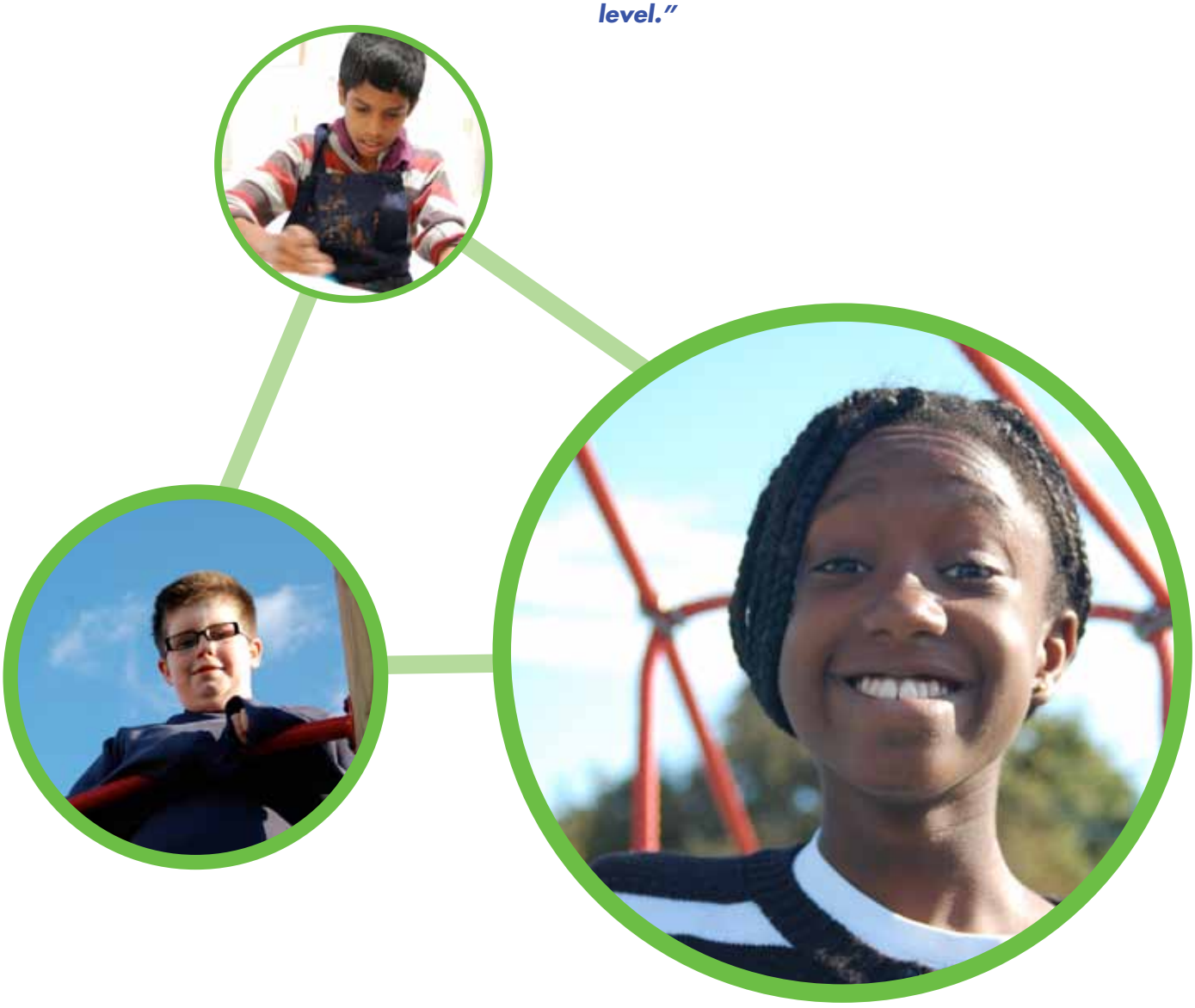
Mainstream schools had taken care to adapt the delivery of lessons and expectations about the implementation of school rules and standards so that they were applied in an equitable manner for pupils with autism. They made the necessary adjustments for pupils with autism, who might, for example, require 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.

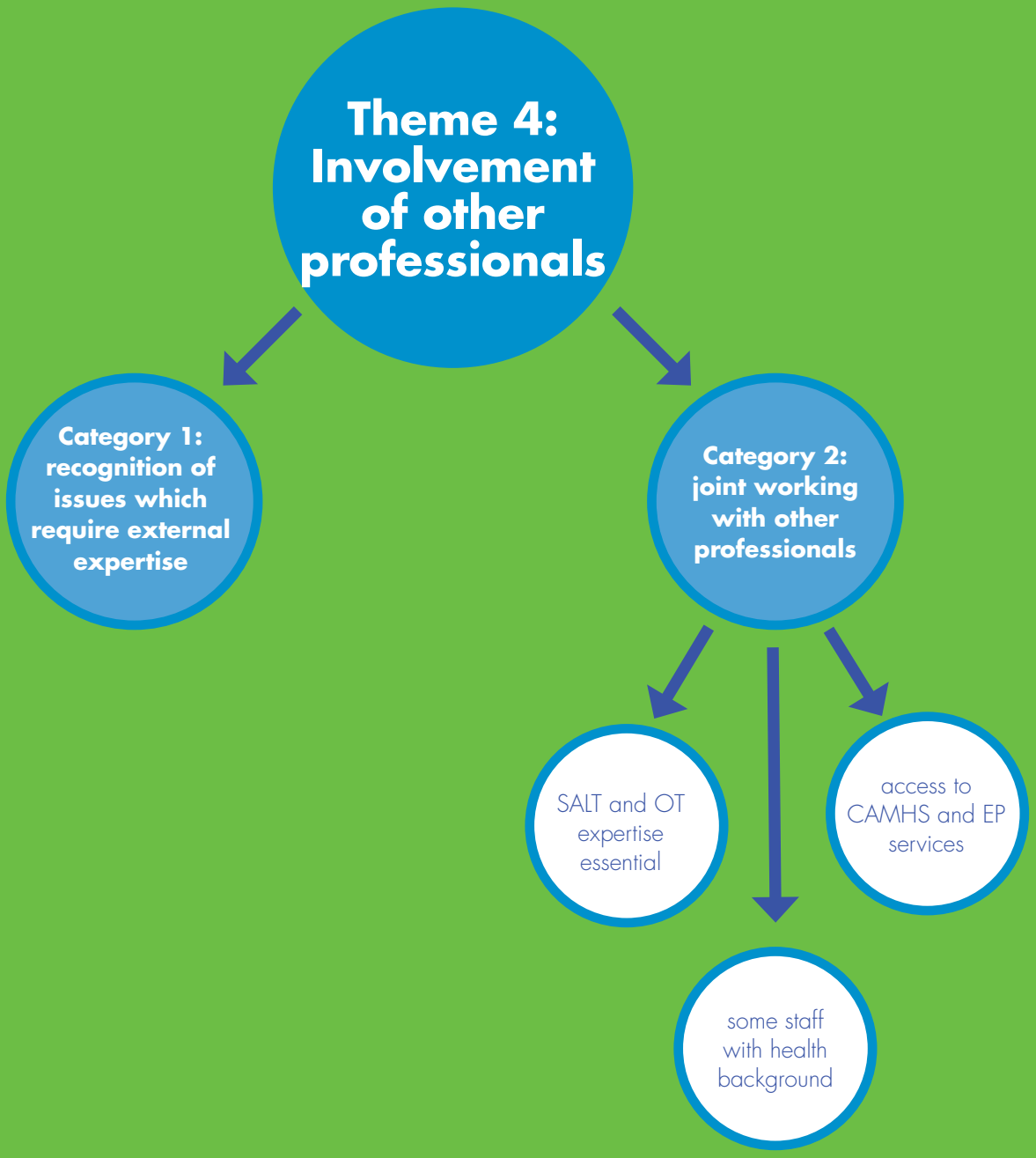


Figure 4: Involvement of other professionals

Recognition of issues which require external expertise

There was high recognition of both the core, defining difficulties that pupils with autism have, in particular their social and communication difficulties, as well as common associated features, including emotional, behavioural and sensory difficulties. For example, there was recognition that when pupils are over-aroused or highly anxious they are not in a good position to engage with the curriculum and to learn. Schools engaged specific professional expertise to address these issues.

"We spend the whole time balancing – we're trying to keep the child in his comfort zone, at the top end of his comfort zone so he can learn. Our occupational therapists call it a calm, alert state ... we've employed our own occupational therapists for the past four years now and they've changed our practice radically."



Joint working with other professionals

Linked to this, in many schools there was involvement with a wide variety of health practitioners and services, in particular Speech and Language Therapists (SALTs), Occupational Therapists (OTs), Educational Psychologists (EPs), and professionals from Child and Adolescent Mental Health Services (CAMHS) and social services. The level and structure of involvement varied widely between schools, reflecting different types of provision.

Several of the more specialist autism specific schools and some mainstream schools employed SALTs and OTs, seeing them as central to the way in which classroom practice and IEPs were developed and monitored. This joint working was seen by school staff as a key to educating pupils with autism in order to promote their learning, behaviour and development.

"I think one of the things that's very important about [school] ***in the whole when it was set up and going forward, is the way in which the specialist teacher and SALT work hand in glove."***

"Academic progress is done initially, when they come in on key levels and using IEPs and setting targets. That's done often in conjunction with the SALT and of course the OT as well."

SALTs and OTs worked on developing programmes for classroom staff to implement, as opposed to working with individual children, although direct classroom working, including modelling approaches for classroom staff, also existed. The focus of this joint working was on promoting communication (SALTs) and addressing sensory issues (OTs). The input of health professionals was highly valued and some settings felt that they required more input than was available locally and that if their own budget or community health budgets allowed they would increase their access to this expertise.

"If the child's not moving on, how then do we adapt the strategies that we're using? And that should be very much based in the class. So the SALT has regular communication meetings with the class staff."



"We could definitely have our own specialists – speech and language therapists I'd like, occupational therapists; if we had those in situ in the building and enough of them ..."

EPs were primarily involved in reviewing progress and annual statements, but other schools had arrangements for regular visits to review progress of pupils with autism. However, schools commented that they would value more input from EPs but that currently this was not possible as access to EP services for any individual school was limited.

"... we have an EP who has six 3–hour visits for the children with autism ... so some of the EP time is set up so that people can just turn up and talk about a child that they're concerned about ... so it's quite useful to have that EP to reflect."

"We tend to only see EPs – we don't have our own and we don't tend to see them except when they're coming to review a child's needs for a statement or something like that."

Some schools have contact with a range of professionals including social workers, in several schools a child psychotherapist (to advise on behaviour), counsellors and community nurses (for eating or toileting issues). Schools, in particular secondary schools, had well developed relationships with CAMHS services with some having regular meetings to be able to discuss pupils about whom they have concerns or wanted advice. There was a high level of recognition of the mental health and well-being needs of pupils with autism right across the spectrum. Many of the senior staff interviewed linked this to inclusion and access to the curriculum.

"So I go to a meeting at CAMHS on a fortnightly basis ... where we can discuss cases."

"And also the children's well–being, which will include their anxieties and social understanding, so that they can be included and have access to the breadth of the curriculum."

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.



Figure 5: Staff knowledge and training

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 the children and young people with autism.

"Because of that high level of empathy, then there is listening on an almost minute-by-minute basis to what the young person is saying."

"That's what I'm most proud of actually – the staff's ability to work with such terribly demanding, challenging young people and absolutely really loving it and seeing the response that you get from children."

Parents and carers also recognised the commitment and attitudes that school staff brought to their work with children and young people with autism.

"It's their absolute commitment to the children – and it's their, children first, attitude – and it's their flexibility." [parent]

Schools were characterised by strong and visionary leadership that aimed high for their pupils with autism but also recognised the key role of the staff team in achieving these aims. Head teachers and other senior staff had a deep and wide understanding of autism and set the expectations high for all their staff in terms of knowledge, training and commitment to working with pupils with autism.

"And I think that's probably key to making a successful provision – is you really do have to have someone who is actually able to speak with authority."

Training and dissemination

Senior staff placed great emphasis on training – with many emphasising how all school staff received regular training – including administrative and support staff, school bus drivers and catering staff. Schools emphasised the regularity and ongoing nature of training required, in part because of staff turnover but also so that, where possible, knowledge and understanding of autism and approaches to support the learning and behaviour of pupils with autism went beyond an introductory level. Some of the training was on autism in general, from in-school use of Inclusion Development Programme materials in mainstream school to (more commonly in specialist schools and Resource Bases/Centres) Diploma and Masters-level courses. Other training was on approaches commonly used in schools for children with autism, including TEACCH, PECS, sensory integration and behavioural management techniques (see Glossary, section 2.7).

"Most of our teachers have got some accredited training for autism ... One of our admin officers keeps a data base of all the training we've been on."

"We have a whole tranche of training, right from autism awareness, which is sort of two hours with the bus drivers ... right through to Masters."

"We do autism awareness training; and we train people like transport escorts and our catering staff ... because they couldn't understand why our youngsters would only eat custard and nothing else."

In some mainstream schools with specialist bases the autism specialist staff provide training for the staff and pupils in the mainstream school or to other local schools. Schools and units were involved in training and dissemination of knowledge around good practice to other schools in their local area, allowing a broader community of practitioners and schools to benefit from their autism expertise and experience.

"We engage strongly with mainstream schools ... the local network of schools – that's 23 of them – meet here once a month; so they can all come on site and change their views ... We also lead the SEN network and put on professional development opportunities."

"[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."



"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]



2.4.6 **Theme 6: Effective communication**

Communication – amongst staff, between staff and parents and carers, and between staff and pupils – was a high priority for all schools. Levels of communication were remarkably high: staff spent a lot of time communicating with each other about pupils' progress; staff were readily available for parents and carers and pupils; and schools adopted a variety of methods of communicating with parents and carers. Schools had mechanisms for involving pupils in decision making. Figure 6 shows the themes and sub-themes.



Figure 6: Effective communication

Communication between staff

Staff-to-staff communication was organised differently in different schools but most had several mechanisms to ensure that information about pupils was regularly shared. These mechanisms required a significant amount of time for school staff but were prioritised and considered essential by the schools.

"So we always have [a group meeting of all staff] one or two a month after school just as a time to discuss anything that we wanted to."

"They also have time to plan the curriculum together ... We have meetings on a regular, weekly, basis actually."

"And then every Friday we have a departmental meeting and one of the items on the agenda is always sort of ASD issues."

Communication between staff and parents and carers

School staff described the efforts they made to be available to parents and carers to share information and concerns and provide feedback. This went far beyond the usual home-school daily or weekly (for boarding pupils) communication book. Many staff had regular telephone and email contact with parents and carers and there were opportunities in some schools for parents and carers to meet with each other in groups to discuss experiences.

"I tend to phone the parents quite a lot; if there's something that comes up I normally just phone and talk to them because I find it's usually the most effective way of communicating and resolving something."

"... and I do think our parents of autistic children do tend to come in if they have any problems at all – they are in, and we're very open to that. I think that's important, isn't it?"

Parents and carers also valued the opportunity to use a variety of methods of communication to bridge the home-school divide, for example by updating school if their child had a particular issue on any given day so that the school staff might anticipate how best to support the pupil and look out for warning signs of any possible 'meltdown'.

"That was the key thing. Could email and say [child] ***was particularly upset about something today. Warning of triggers."*** [parent]

Moreover, there was a strong emphasis on ensuring that schools worked in partnership with parents and carers, especially when planning IEP targets.

"And I think an awful lot of schools that talk about parental liaison, actually what they do is they send the parents a copy of the programme. But that's not the same as actually involving the parents in planning the programme in the first place, is it?"

"And with parents, because they always have input into the IEPs and anything they want to add or focus on we can always do that."

Listening to pupils

Perhaps reflecting the range of pupils across the spectrum in the schools, there was some variability in practice in including pupils in decision-making both about their IEPs and about choices of activity. Nevertheless, across the range of provisions, there were some notable examples of ensuring that pupils' voices were heard, and these were reflected in work with individual pupils, and inclusion in school decision making.

Many schools had put in place a formal mechanism for listening to students' views and for ensuring that learning and/or extra-curricular activities in the school were informed by these views. This mechanism was not only empowering for the pupils but it also informed the management team about the main issues for these young people. It represented a thorough commitment to meaningful involvement of pupils on the autism spectrum in their education.

"On a formal level we have a student council and they have regular meetings ... And we then, as a management team, receive the outcomes of those meetings and we will respond to any of the issues raised."

"So looking at specific things that would mean things to children and getting them to choose and recognise that they can choose things ... [organisation] ***were kind enough to donate a playground to us; so all the children – every single child had some sort of input at their level, whether it was using objects, or whether it was using photos, on what things they wanted to do.***

"Those sorts of sessions [individual personal tutorials] encourage pupils to advocate for themselves, express their choices, preferences, and all that sort of stuff. Which enables them to participate in things like pupil surveys, student council and, as part of our school development planning programme, we interview students in that respect. Students have been to talk to the governing body at the governing body away day about some of the things that they think are important in school."







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.

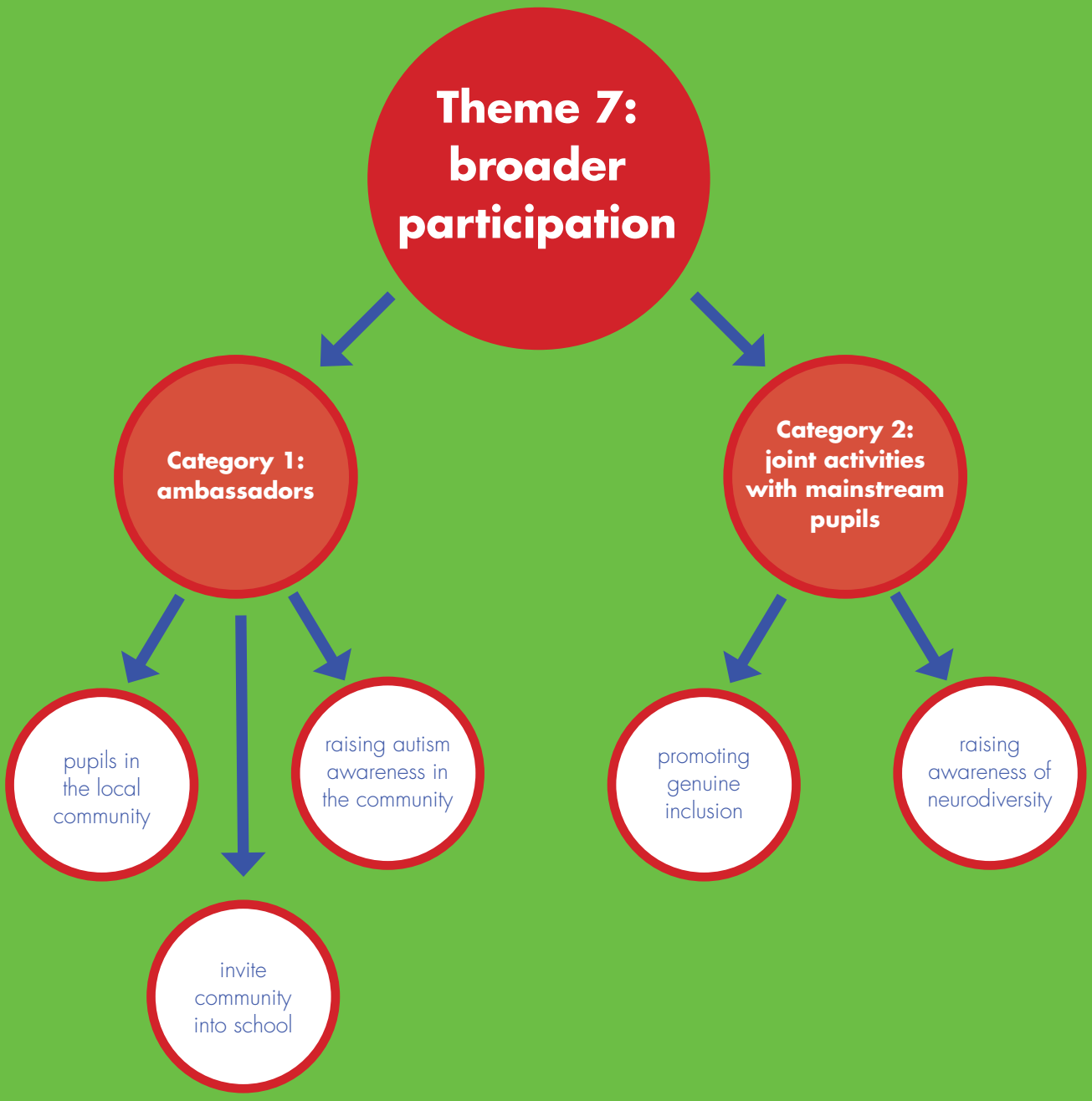


Figure 7: Broader participation

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**

One topic that came up in every interview was the school's perception that they would like to do more to support parents and carers, in terms of working jointly with them to enhance their understanding of approaches that might be useful in managing their child or young person's behaviour outside of school (see Figure 8).

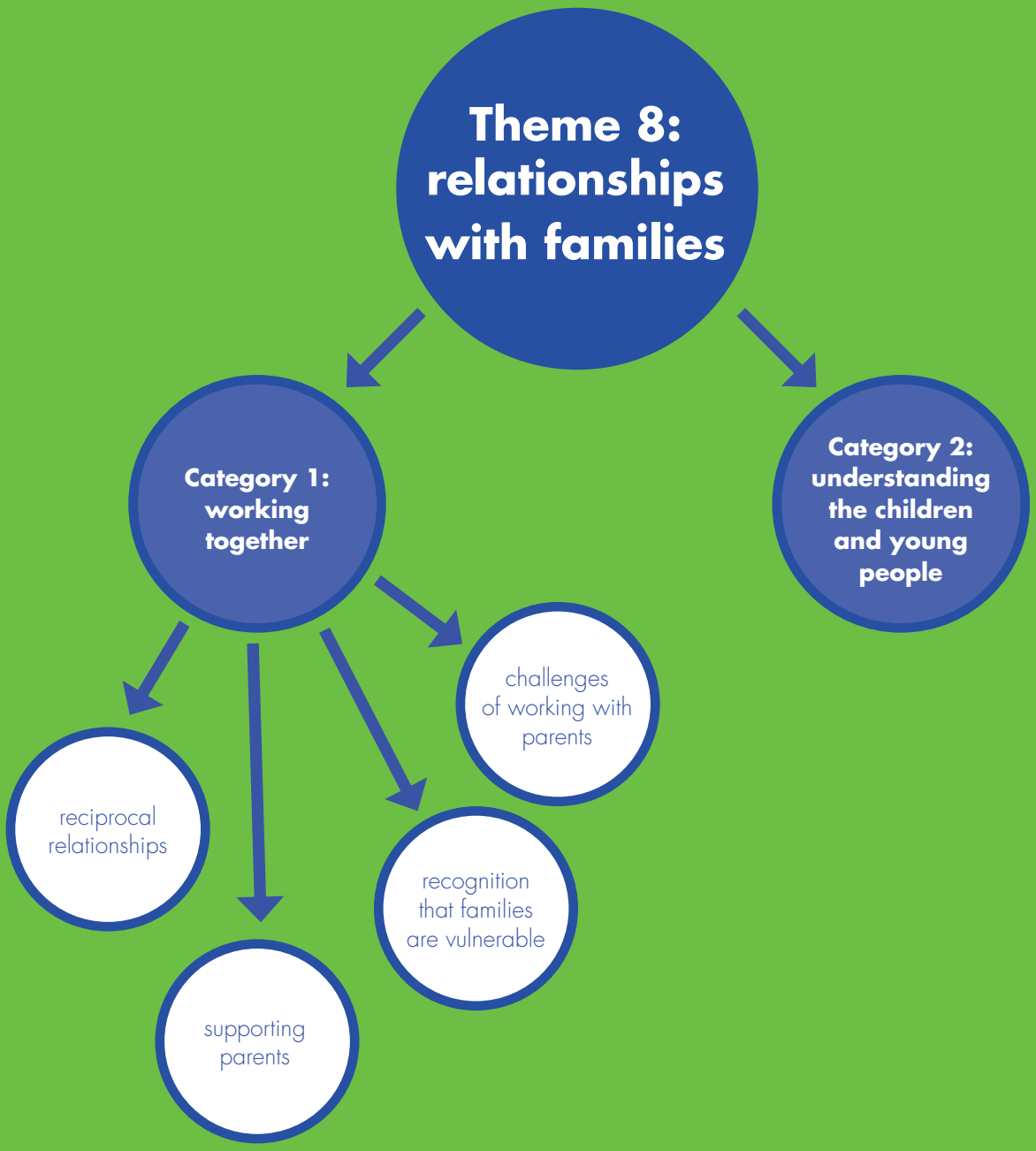


Figure 8: Strong relationships with families

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 good relationships with pupils. They emphasised 'knowing' the child was fundamental to ensuring that their learning and well-being were prioritised.

"I would argue that unless you had a strong empathy you would find it difficult to work in a school like this. Because of that high level of empathy, then there is listening on an almost minute by minute basis to what the young person is saying ... that's a reflection really of that relationship our staff have with the kids."

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 needs[35]. 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.

Notably, the schools had high aspirations and ambitions for their pupils with autism, as has previously been described for 'outstanding special schools'.[36] They also reinforce many aspects of generic education 'good practice' such as 'quality-first' teaching[27] and the Pillars of Inclusion for inclusive education practice for pupils with SEN and/or disabilities[26]. Of the emerging themes, several suggest that specific knowledge and expertise is required to provide the very best education for pupils with autism. These are the 'specialist' and 'highly specialist' Tiers shown in Box 1 (p.14). This reflects the social and communication difficulties, and the difficulties with flexibly adapting to change, experienced by children and young people with autism that, in part, define the autism spectrum. It also reflects the increasing knowledge and awareness of common associated features such as mental health and emotional difficulties and unusual sensory responses, as was highlighted in the recent NAS campaign 'You Need to Know'[37] .

Policy implications

Many of the themes that emerged from the research are reflected strongly in the SEND Green Paper[38]. The Green Paper emphasises that it is crucial to families of children with SEN and/or disability that education, health, social care and voluntary services work well together, echoing the draft NICE guidance[14]. It also stresses the need for staff working with children with SEN to have "high expectations of them and the skills to help them to learn" (p.13), and "to be educated by people who understand their impairments" (p. 8–9). The Green Paper also sees a role for special schools to "share their expertise and services to support the education, progress and development of pupils in other special and mainstream schools" (p. 8–9). Our research suggests that good practice in autism education can occur successfully via local partnerships between experts within these provisions, teachers and professionals within local schools (particularly mainstream schools), and with parents and carers. One suggestion would be for autism specialist schools and units to become 'centres of excellence' for autism

[35]Ofsted (2010).
[36]Osted (2009).
[37]NAS (2010).
[38]DfE (2011). SEND Green Paper.

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 well-being 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.**

2.6
Knowledge gaps and priorities for future research

The research also identified gaps in the research and practice evidence base that should inform future commissioning.

Going beyond 'good practice'

The research remit asked us to review previous literature on 'good practice' and to characterise practice in a range of schools considered to have good practice in autism education. The selection of schools was not systematic; it relied in part on information from Ofsted reports, and was informed by personal and experiential views of the AET and the research team. Future work will need to ensure that a broader representation of schools are selected, particularly outstanding mainstream provision, and access the views and perspectives of a wide range of individuals, especially pupils, parents and carers, and other practitioners.

However, looking forward on the completion of the research we want to address a broader question that arises when one considers 'good practice' in autism education and what more we need to do to disseminate such practice widely in schools. In this regard, we note that the current report is one of several reports on 'good practice' funded by different UK government agencies over the past decade. This contrasts to the relative paucity of government-funded research into effective practice for children and young people with autism over the same period.

At one level 'good' practice can be taken to refer to effective practice – practice that promotes learning, well-being and independence all of which can be challenging for many pupils with autism. It is widely recognised in the field of early intervention that there are some promising signs of an emergence of a better evidence base[39,40]. However, the evidence base for education practice in the autism field remains weak – in part this is a reflection of the difficulty of evaluating education practice but also due to a hesitancy of researchers to tackle the hard questions. There are an increasing number of examples, including from the UK, in other areas of specialised education practice where more rigorous research designs have been used to test whether practice is effective, for example the Reading Recovery programme implemented as part of the Every Child a Reader (ECaR) initiative[41]. If 'good practice' in autism education is practice that is informed and supported by strong empirical evidence then there are considerable gaps in knowledge, notwithstanding many decades of the development of education practices and programmes in this country and internationally. Researchers, educators and research funders alike must work to improve this situation.

Testing implementation

Many of the practices identified seemed based on a good understanding of children and young people with autism, their strengths and weaknesses, and approaches to help support and overcome these within school. Some of the practices focused on individualisation of the curriculum, whilst others concentrated on the use of particular approaches or elements of programmes. A review of the evidence base of particular programmes and approaches was beyond the remit of the current research but a series of inter-related questions arose following data collection. Did staff implement the practices they described in the way that they said? Were these practices successful in achieving their aims? Research is needed to study the fidelity of implementation of programmes within schools and to determine whether they are effective in achieving their aims. There is some evidence that school practitioners are variable in the extent to which they actually implement the programmes they say that they are following[42]. Further, there is also evidence that fidelity to specialist autism programmes 'falls off' leading to attenuation of progress when expert monitoring is not continued[43]. Despite the strengths of the current research, in particular in accessing in-depth the views of experienced autism education practitioners, systematic research on the fidelity of implementation of generic and specialised practice is required.

[39]Rogers & Vismara (2008). JCCAP.
[40]Charman (2010). FPL.
[41]DfE (2011). ECaR.
[42]Stahmer et al. (2010). IMFAR.
[43]Howlin et al. (2007). JCPP.

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 well-being, 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].



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.

[44]ASDAN (2011).
[45]HTA (2011).

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
OT	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

2.8
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2.9
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