Autism and educational assessment: UK policy and practice

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Executive summary

Over the past two decades, UK government legislation has led to an increased focus on inclusive education. This is primarily through an emphasis on inclusive mainstream schools where all pupils with special needs and disabilities are welcomed and provided for.

This report considers the role of assessment in relation to inclusive education in mainstream settings, with a specific focus on the assessment of pupils diagnosed with an autistic spectrum disorder (ASD). Recognition of this disorder is rapidly increasing and educators are beginning to focus their attention on the educational needs of this growing population.

Research into policy and practice regarding schools’ responsibility for the selection of test accommodations for pupils in public examinations raises questions about the need for more focused guidance and teacher training to enable fair and confident decisions to be made. The advent of Assessment for Learning (AfL), whereby teachers carry out assessments of pupils within the classroom, should, in theory, enable greater variety and individuality of assessment, thus benefiting those with special educational needs (SEN). However, there is currently no specific guidance and little research investigating the impact and effect of AfL strategies on the inclusion and assessment of pupils on the autistic spectrum.

This report discusses current assessment and related education policy in relation to the inclusion of pupils on the autistic spectrum in mainstream schools. Research and reports of practice in the UK are also examined and discussed in the light of the changing assessment environment. The conclusion identifies gaps in the research literature and makes recommendations for future assessment policy and practice.
Introduction

The incidence of children and young people with autism in the UK has significantly increased over the past decade, and recent prevalence studies have estimated that approximately one per cent of the population are affected (for example, Baron-Cohen et al., 2009). In January 2009, the Department for Children, Schools and Families (DCSF) reported that almost three per cent of pupils in schools in England had a statement of SEN, with eight per cent of those diagnosed with ASD (DCSF, 2009). Well over half of these 51,000 pupils with ASD are now being taught in mainstream schools (47 per cent in mainstream classes and a further 11 per cent in resourced provisions within mainstream settings). The Department for Education and Skills (DfES) said: ‘Autism is no longer thought of as a rare disorder’ (DfES, 2006, p.2), and it is assumed that this is due to an increased recognition of the needs of individuals on the autistic spectrum. Further, Humphrey (2008) found that pupils on the autistic spectrum are twenty times more likely to be excluded from school than their typically-developing peers. This has led to increased attention surrounding the educational needs of children and young people with ASD.

Schools and education authorities in the UK are required to develop their cultures, policies and practices towards achieving an inclusive educational environment (DfES, 2001; UNESCO, 1994). The Disability Discrimination Act 1995 (GB. Statutes, 2005) (as amended by the Special Educational Needs and Disability Act 2001) (England and Wales. Statutes, 2001) also requires schools to make ‘reasonable adjustments’ to ensure that pupils with ASD and other special needs are not disadvantaged compared to their peers. School staff are expected to adopt attitudes and processes that ensure all pupils have equal access to the curriculum.
UK teaching and assessment policy

In February 2004, the government published *Removing Barriers to Achievement* (DfES, 2004), building on the proposals for the reform of children’s services in *Every Child Matters* (HM Government, 2004) and setting out the agenda for giving all children with special needs and disabilities the opportunity to succeed. The intention of the strategy was to ensure appropriate teacher training and funding for schools to improve their capabilities to provide for pupils with SEN and disabilities, and for parents to feel confident that their child’s needs were being met. Four key areas of improvement were outlined: early intervention, removing barriers to learning, raising expectations and achievement, and improving partnership approaches.

During 2008, the National Strategies introduced the Inclusion Development Programme (IDP) (DCSF, 2008), which included a four-year programme of continuing professional development (CPD) to increase the confidence and expertise of mainstream practitioners in meeting the needs of pupils with SEN in schools. In 2009, the focus of the IDP was on educating pupils on the autistic spectrum. The success of this programme is yet to be evaluated.

It follows that the focus on inclusive teaching should extend to a focus on inclusive assessment, but little research or policy relating to inclusive educational assessment is currently available. For formal examinations, the Joint Council for Qualifications publishes annual guidance on access arrangements (termed ‘accommodations’ in the US), comprising a wide range of optional adjustments including modified papers and extra time. Schools are responsible for assessing appropriate adjustments for their pupils based on individual needs.

In recent years, government policy has also promoted the development of Assessment for Learning (AfL) approaches within the personalised learning agenda (for example, *Pedagogy and Personalisation* (DfES, 2007) from the National Strategies). The intention is that collecting information about pupils’ ongoing performance will enable teachers to adjust teaching to meet pupils’ needs more effectively. However, there is no specific guidance about using this approach with pupils with autism.

The Assessment for All (AfA) pilot programme (DCSF, 2010a) is aiming to improve educational achievement, engagement and outcomes for all children and young people with SEN and disabilities in the UK. The main aims of this project are the introduction of Assessing Pupils’ Progress (APP) tracking and target-setting, improving communication with parents, and developing actions to improve attendance, reduce bullying and promote positive relationships and participation.

In view of the changing environment of UK educational assessment within mainstream schools and the increasing number of pupils diagnosed with SEN associated with autism, it is important to consider how well the proposed strategies meet the needs of these pupils and what considerations need to be made during strategy development and implementation.
UK teaching and assessment practice

This section explores evidence relating to the use and effectiveness of formal accommodations and the implementation of AfL strategies in UK mainstream schools with pupils diagnosed with ASD.

In February 2009, the Autism Education Trust published a review of practice, issues and challenges in educational provision for pupils with autism in England (Jones et al., 2009). Despite recognising an improvement in provision over the past decade, the report highlighted the need for greater efforts to develop more inclusive schools to accommodate for the growing number of pupils diagnosed with ASD.

Recent research involving multiple case studies in a small number of English schools reported that ‘the gap between “inclusion rhetoric” and “classroom reality” was very wide’ (Humphrey and Lewis, 2008, p.138). A report from the National Assembly for Wales (Withers, 2009) indicated a similar situation in Wales, where 75 per cent of schools involved in the research reported a lack of adequate local provision for pupils with ASD.

Research conducted by the National Autistic Society (NAS) sought the views of teachers across England, Wales and Scotland on current educational provisions for pupils on the autistic spectrum (Barnard et al., 2002). Across seven local authorities and 373 completed surveys, teachers in 44 per cent of schools who were teaching pupils with ASD agreed that significant numbers of them were not getting the specialist support that they need. Parsons et al. (2009b) conducted a systematic postal survey of parental satisfaction with educational provision for children with SEN or disabilities in Great Britain, and found that parents of children with psychosocial difficulties in mainstream schools were the least satisfied. Batten et al. (2006) also reported more appeals to the Special Educational Needs and Disability Tribunal in England about autism than any other type of SEN. These findings raise concerns about how well schools are meeting the educational needs of children and young people with autism in the UK.

Teaching practice and school accountability

Many methods of teaching rely on an understanding of language and social behaviours within the classroom, leaving autistic pupils at a significant disadvantage. Teachers and parents sometimes assume that when ASD pupils are academically able, they should be able to cope with mainstream schooling (Moore, 2007). For example, due to the uneven profile of strengths and weaknesses displayed by many pupils on the autistic spectrum, they are often labelled as lazy, difficult or defiant when they fail to complete a task. Further, because individuals with autism differ in terms of learning style and profile, no single intervention is appropriate for all (Jordan, 2006; Jones et al., 2009; Parsons et al., 2009a). An understanding and flexible teaching style is therefore necessary when formulating
and maintaining an individualised education plan for each pupil with ASD. Insufficient time and funding allocated to specialised teacher training in educating pupils on the autistic spectrum has been highlighted by some as a significant contributor towards the present shortcomings in educational provision (for example, Barnard et al., 2002). The NAS report on teachers’ views regarding ASD educational provision found that teachers in 72 per cent of schools were dissatisfied with the extent of their teacher training in autism (Barnard et al., 2002). They conclude that, whilst there is strong support for the policy of inclusion, ‘the need for training is a major concern in making it work in practice’ (p.3). Jones et al. (2009) argue that ‘simply placing a child on the autistic spectrum in a school is locational integration and not inclusion’ (p.17).

Teaching strategies often recommended for use with pupils on the autistic spectrum are those that are sensitive to the specific strengths and weaknesses of the disorder. Such strategies may include:

- a clearly defined teaching structure and daily routine with the use of visual cues where appropriate
- the use of unambiguous classroom language
- clear explanation of rules and regulations in class and in the playground (including social rules)
- sharing the purpose of activities and assessments as well as their intended outcomes.

Teachers’ limited understanding of the needs of children with ASD has been linked to pupil academic failure and increased school exclusion (for example, Emam and Farrell, 2009; Great Britain. Parliament. HoC. ESC, 2006). Research has shown that parents consider teacher knowledge essential in the correct identification of their children’s learning and assessment needs (Jindal-Snape et al., 2005). Without adequate support to enable successful learning experiences, ‘the praiseworthy philosophical and legislative underpinning of integration and participation are meaningless and empty’ (Simpson et al., 1999, p.219).

It is important to also consider the role of school accountability in the implementation and efficiency of inclusive educational practice. Dyson and Millward (2000) have suggested that some schools are concerned about becoming too inclusive and achieving a lower level of performance (either in reality or through public reports of outcomes). There has been debate in the literature regarding the effect of inclusive practice on other pupils in a class. Some researchers have found no effects of inclusion on the academic achievement of other pupils (Kalambouka et al., 2007), whilst others have demonstrated specific positive effects of inclusive practice on all pupils in a class (for example, Dyson et al., 2004). However, it is important to remember that such effects are contextually dependent and must be evaluated as such.
Summative assessment

Assessment is crucial for supporting the learning of all pupils and can contribute to the process of inclusion, but it can also present a barrier. A recent report published by DCSF (2010b) identified that more needs to be done to narrow the gaps in attainment and progress between pupils with SEN and their same-age peers. Waltz (2008) reported on a survey of English local authority websites relating to autism, and concluded that many websites are still not complying with law and national policies regarding the provision of information about special needs assessment policies and provision. The lack of relevant and accessible information will inevitably impact on teachers’ ability to make appropriate classroom and assessment accommodations for pupils on the autistic spectrum.

Schools are required to select appropriate accommodations for pupils in their school for formal examinations. To adequately determine these needs, a comprehensive understanding of a pupil’s difficulties, coupled with a collaborative approach involving parental involvement and multi-disciplinary assessment, is required (DfES, 2002).

In the United States, it has been reported that a number of schools often select the most common or easy to implement accommodations for all pupils with special needs, irrelevant of any specific individual needs (De Stefano et al., 2001). Although there is no research evidence to confirm that a similar situation is also present within the UK, it seems likely that parallel problems exist.

Simpson et al. (1999) have commented that ‘students with sensory and motor disabilities appear to have needs that are more amenable to modifications of standardised testing than those with significant psychological impairments’ (p.212), thus presenting challenges for teachers working with ASD pupils. A study involving over 80 teachers conducted in the United States demonstrated the beneficial effects of teacher training for improving teachers’ knowledge and confidence about participation and accommodation decisions relating to large-scale assessments. Following seven training sessions, assessment participation and accommodation patterns were more closely linked to pupils’ teaching accommodations and access to the curriculum than before training began (De Stefano et al., 2001).

From a legal perspective, the concept of inclusive assessment raises some questions relating to the degree to which modifications to a standard form of assessment can provide adequate and fair assessments of pupils with SEN, including those with autism. At present it is not always clear where the line should be drawn between adapting assessments and providing alternative assessments for pupils with severe special needs (Cumming, 2008).
Formative assessment

With the advent of the National Curriculum in 1988, it was recommended that assessment should be integral to the education process, providing continuous feedback and ‘feed-forward’ information to pupils as part of classroom teaching practices. Despite a general acceptance that formative assessment leads to higher-quality learning, some argue that the pressure placed on schools to improve results in external examinations has precluded its use (Wiliam et al., 2004). Across the general school population, research has demonstrated that formative assessment can lead to significant learning gains (for example, Wiliam et al., 2004). However, a small study conducted by Smith and Gorard (2005) found negative effects of a formative assessment intervention when progress was compared to control-group peers. This raises concerns about how formative assessment is approached and delivered, and suggests the need for further investigation into its effects on the progress of pupils with a diverse range of educational needs, including those with autism.

Recent government policy has been to promote formative assessment and the development of approaches of AfL within the personalised learning agenda. The Assessment Reform Group (2002) defines AfL as ‘the process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how best to get there’ (p.2). They emphasise a pupil–teacher ‘feedback loop’ within AfL to promote pupils’ meta-cognition and reflection of their own learning. The Teaching and Learning in 2020 Review Group (2006) identified five AfL core strategies in their vision of personalised teaching and learning:

- using a range of activities to elicit evidence of learning
- providing pupils with evaluative feedback
- sharing learning intentions with pupils
- encouraging pupils to conduct self-assessments
- promoting participation in group work and peer reviews.

It is this aspect of self- and peer-assessment which Buhagir (2007) argues separates classroom assessment from independent teacher-based assessment. However, there is no specific guidance on how to modify this approach for pupils on the autistic spectrum, and some of the AfL strategies may present potential challenges for ASD pupils who often struggle with social interaction and self-evaluation.

Very little research relating to AfL approaches to assessment and pupils on the autistic spectrum was uncovered during the research for this report. The majority of the SEN research that was found was carried out by the European Agency for Development in Special Needs Education (EADSNE) (Watkins, 2007). The agency conducted a two-phase, three-year project investigating assessment in inclusive settings involving experts from 25 European countries.

more needs to be done to narrow the gaps in attainment between pupils with SEN and their peers

some of the AfL strategies may present potential challenges for ASD pupils who often struggle with social interaction and self-evaluation
The first phase of the research involved creating and defining the term ‘inclusive assessment’ as ‘an approach to assessment in mainstream settings where policy and practice are designed to promote the learning of all pupils as far as possible’ (EADSNE, 2009a, p.1). It was agreed that the goal of inclusive assessment is for policies and procedures to support and improve the participation and inclusion of all pupils.

The second phase of research involved conducting five case studies within varying assessment contexts to explore EU inclusive assessment in practice. Assessment systems in the case-study schools ranged from those directed by national summative testing and with high accountability, to systems mainly led by teacher assessment with little or no accountability.

Despite these differences, the research identified some crucial elements for the development of inclusive assessment policy. These elements included:

• decision-making involving all stakeholders in assessment
• flexible systems encouraging innovation and the implementation of assessment policy and practice
• the involvement of policy makers to ensure resources enable such innovation.

Further research in relation to the application of the concept of AfL to pupils with SEN was conducted by the agency following the discovery that much of the available research only marginally dealt with issues surrounding SEN (for example, Black and Wiliam, 2002).

A number of project experts involved in the EADSNE (2009b) study agreed that the critical question was not whether AfL can be applied to SEN pupils, but how it can be applied: ‘Students with profound difficulties do not need different assessment systems, but only different methods/tools of assessment’ (p.4). Some AfL approaches, such as individualised observations and portfolios, were considered particularly relevant for SEN pupils (including some individuals with autism) who use non- or pre-verbal forms of communication. Indeed, individual differentiation of assessment methods by providing flexibility in the mode of communication required during an assessment may be beneficial for pupils who are either more able or more confident communicating in a particular way.

The questioning element of the teacher-pupil interaction was also thought applicable, providing questions are framed to allow pupils time, support and multiple ways of responding. With regards to pupils with ASD, one-to-one interactions are preferable to group discussions because of their common difficulties with social interaction and because they provide pupils with opportunities to express their views in ways suitable to their individual learning styles. Pupil involvement in the learning and assessment process has been highlighted by some as ‘good practice’ in inclusive education (for example, Porter et al., 2000).
Approaches and tools used to allow pupils’ reflection on their own work was reported by experts as ‘the only area of concern’ within AfL (EADSNE, 2009b, p.6). This may present particular problems for pupils on the autistic spectrum, many of whom find it difficult to conduct self-evaluations. Application of the AfL approach will therefore require careful exploration, adaptation and modification to meet the needs of individual ASD pupils. Once again, this research emphasises the need for clearer guidance and focused teacher training to ensure all pupils are assessed in ways that are appropriate to and supportive of their individual learning needs. The agency’s findings maintain the idea that the principles of inclusive assessment should support the teaching and learning of all pupils, and claim that ‘innovative practice in inclusive assessment demonstrates good assessment practice for all pupils’ (Watkins, 2007, p.62).

Despite the positive conclusions drawn from this research, practical evidence is still needed to demonstrate the realistic effects of AfL strategies for pupils with ASD in UK mainstream classrooms.

A note on international policy and practice

Within the international literature and policy documentation located during the search, it was difficult to separate information and guidance on the assessment of pupils for ASD diagnosis, and that relating to the educational assessment and provision for pupils already diagnosed with autism. This resulted in a very limited selection of publications, most often involving vague recommendations for provision. The lack of available resources may suggest a lack of research, or rather a lack of focused research into the area of educational assessment provision for pupils on the autistic spectrum.
Looking ahead

Based on the research identified within this report, it is evident that whilst there have been a number of government initiatives to improve educational provisions for pupils with ASD, and SEN more generally, there is little practical evidence that teaching and assessment have become more inclusive as a result. Parents and schools still report dissatisfaction with educational provision for pupils on the autistic spectrum (Parsons et al., 2009b), and exclusion rates and gaps in progress and achievement remain greater for these pupils when compared to their typically-developing peers.

For decisions regarding summative assessment accommodations for pupils with ASD, it is recommended that appropriate, up-to-date guidance is published by the relevant authorities and made easily accessible to schools. Specific guidance relating to when pupils should be given appropriate accommodations and when they should not be entered for external examinations also needs to be more explicit. In addition, more research into the effective use of accommodations for pupils with ASD requires focused attention. CPD opportunities need to include teacher training programmes to raise awareness and confidence in making assessment decisions for pupils on the autistic spectrum and to ensure that schools and teachers are better equipped to make these decisions fairly. Evaluation of the outcomes of the 2009 teacher training programme implemented as part of the IDP will help to inform future training and staff development within schools.

With regards to formative assessment, widespread practical research is necessary in order to monitor the implementation of AfL strategies for pupils with ASD. To date, there is little research evidence of how this form of assessment works specifically with ASD pupils in practice, or how it impacts on inclusive education more generally. Expert and teacher opinions need to be collected and compiled, as well as those of the pupils themselves, in order to develop specific advice and guidance on the assessment of pupils with autism in mainstream classrooms. Published teacher guidance is necessary in order to provide pupils with the opportunity to succeed in school in a fair and equitable way. Tailored training programmes for teachers, to educate them about how best to assess pupils on the autistic spectrum, are also necessary to develop knowledge and expertise amongst professionals in mainstream schools.
Conclusion

Despite best endeavours, it appears that efforts towards achieving mainstream educational inclusion of pupils identified with ASD still have some way to go. In practice, higher school exclusion rates and greater gaps in attainment for ASD pupils compared with their typically-developing peers demonstrate a need for improvements in educational provisions for these pupils.

Formal accommodations for summative assessments do not relate specifically to the needs of pupils on the autistic spectrum. There is an obvious need for clearer evidence-based guidance and increased teacher training to enable confident and consistent assessment accommodation judgements.

In terms of formative assessment, there is currently no research linking the assessment of pupils with ASD and the implementation of AfL strategies. Whilst, in theory, the underlying principles of AfL may enable a more comprehensive assessment of ASD pupils’ skills and abilities, in practice teachers need to know how best to implement the strategies with these pupils.

In order to promote equal opportunities and achieve a truly inclusive educational environment, teachers, therefore, require a level of knowledge about the specific educational and assessment needs of ASD pupils. In conclusion, this report underlines the importance of further investigation into the potential of the AfL approach for use with ASD pupils who are educated in mainstream classrooms.
Definitions

Autism: A pervasive developmental disorder affecting an individual’s ability to socially communicate and interact with others and to exercise social imagination (Wing and Gould’s (1979) ‘triad of impairments’). Most prevalent amongst males, many individuals also demonstrate a narrow and repetitive range of interests and behaviours. There are four main subtypes of autistic spectrum disorder (ASD): classical autism, Asperger syndrome, childhood degenerative disorder and pervasive developmental disorder (not otherwise specified) (Research Autism, 2010). Classic autism and Asperger syndrome are the most commonly diagnosed, but are differentially classified in the IDC-10 (WHO, 2007) and DSM-IV (APA, 2004) publications. The triad of impairments associated with ASD has been useful for teachers when identifying the educational support needs of individual pupils with autism (Jones et al., 2009). The terms autism and ASD are used interchangeably within the report.

Formative assessment: ‘Evaluation of student learning that aids understanding and development of knowledge, skills and abilities without passing any final judgement (via recorded grade) on the level of learning’ (www.qualityresearchinternational.com/glossary) (Accessed 16 April, 2010).

Inclusion: The adaptation of school attitudes, practices and policies to allow all pupils equal access to the curriculum and educational opportunities.

Inclusive assessment: ‘An approach to assessment in mainstream settings where policy and practice are designed to promote the learning of all pupils as far as possible’ (EADSNE, 2009b, p.1).

Summative assessment: ‘The process of evaluating (and grading) the learning of students at a point in time’ (www.qualityresearchinternational.com/glossary) (Accessed 16 April, 2010).
References


1 The impact of 14–16 year olds on further education colleges
The central aim of this research was to examine the strategies that FE colleges and their staff used to integrate 14–16 year olds successfully into their institutions and to explore the impact that 14–16 year olds have on FE colleges, their staff and older learners.
www.nfer.ac.uk/publications/ICL01/

2 Widening 14–19 choices: support for young people making informed decisions
This is a summary of key findings from NFER’s recent work relating to 14–19 education in order to understand better how young people of this age group are navigating their way through complex choices of qualifications and locations of study.
www.nfer.ac.uk/publications/SMD01/

3 Attitudes to reading at ages nine and eleven: full report
In June 2007 NFER ran a reading survey questionnaire to determine current attitudes to reading. The questions dealt with enjoyment of reading and confidence in reading. This report looks at the results of the questionnaire.
www.nfer.ac.uk/publications/RAQ01/

4 The value of social care professionals working in extended schools
As the collaboration between social care and education professionals develops, the question of what role social care professionals can take in school, as well as what should be expected of them, is becoming increasingly pertinent. This report looks at levels of integration and the role of social care professionals.
www.nfer.ac.uk/publications/SCX01/