

Institution: UNIVERSITY OF BIRMINGHAM

**Unit of Assessment: C25 Education** 

Title of case study: Delivering Enhanced Educational Practice in Autism

# 1. Summary of the impact

The Autism Centre for Education and Research (ACER) champions the development and implementation of enhanced autism provision for children, young people and adults across England through influencing professional standards and practice. Key examples of the Centre's application of its research to enhance professional practice include:

- ACER led the development of the Early Years, Primary and Secondary resource content for the *Inclusion Development Programmes* (IDP)
- In collaboration with the Department for Education (DfE), the Autism Education Trust (AET) and local authority practitioners, ACER produced a set of National Autism Standards and Professional Competency Framework. As part of this programme, ACER also developed and delivered 3 tiers of related training to over 13,000 school staff by July 2013
- Contributing to raised awareness of the importance of autism training in Schools at a national level (contribution publically acknowledged by Sarah Teather MP and Birmingham Local Authority).

## 2. Underpinning research

The research underpinning the development of the Inclusion Development Programmes, the National Autism Standards, the Professional Competency Framework and the three levels of training was undertaken by academic staff at the Autism Centre for Education and Research (ACER), University of Birmingham, between 2008 and 2011. It included: i) a wide ranging comparative review of current practice, issues and challenges of autism provision in England (see R1 below); ii) an analysis of the international literature on best practice provision in the education of people with autistic spectrum disorders (R2 and R3) carried out for the National Council for Special Education (NCSE) in Ireland; and iii) an investigation of how current educational provision in England is preparing children and young people with autism for good adult outcomes (R4).

The Jones et al. (R1) study was a critical analysis of current autism provision in England. It examined patterns of provision across the country, investigating the challenges people with autism face in accessing necessary education and support, with a key recommendation being the importance of developing knowledge and understanding through training. The report highlighted that, for successful allocation of provision, knowledge of the individual child or young person is vital; effective engagement and support for the family is crucial; appropriate and timely support for the individual is essential. The report highlighted the importance of transition for pupils with autism. This study also identified gaps for investigation by further AET projects, including the Better Commissioning for Autism project (www.autismeducationtruast.org.uk).

The systematic analysis undertaken for the NCSE (R2) drew on both empirical and expert strands of evidence i.e. articles, reports, reviews and guidance based on expert opinion and professional experience. After applying clear inclusion/exclusion criteria, 100 empirical papers published between 2002 and 2008 were retained for review. The analysis found that there was little clear evidence of specific interventions consistently demonstrating "best outcomes" for the person. Key findings highlighted the importance of early intervention as a priority, with a focus on early communicative behaviours showing particular promise. The study highlighted the necessity of taking into account the voices of individuals with autism; the significance of specialist knowledge; and the role and views of parents. Consequently, the researchers concluded that a range of provision should be maintained in order to meet the diversity of need.

Key implications for practitioners highlighted the need to focus on the developmental areas of functional spontaneous communication and language, social understanding and joint attention, peer interaction and appropriate toy play. The researchers stressed that ongoing parent and teacher collaboration is essential as is a need to develop good collaboration between different professionals, both within and outside settings. Training is an important priority as practitioners and parents need specialist knowledge and understanding of the specific needs of children and young people on the autism spectrum. The paper summarising this research was included in the Routledge Class of 12- a collection of the top downloaded articles from all Routledge Education

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journals published that year. Parsons and Guldberg attended the National Council for Special Education steering group to discuss this research.

This research was followed by a scoping exercise commissioned by the Autism Education Trust to ascertain how current educational provision in England is preparing children and young people with autism for good adult outcomes (R4). The report comprised over 1,000 contributions from stakeholders including adults and children with autism, their parents / carers and education practitioners e.g. teachers, head teachers and SENCOs. Research was conducted using a literature review and a series of surveys, interviews and focus groups with stakeholders. The study found that good outcomes necessitated the consideration of individual needs and aspirations. It highlighted the importance of consultation with individuals with autism and of conducting annual reviews of long-term targets. It provided recommendations on use and review of assessment measures and highlighted the need for greater flexibility of curriculum content. It recommended that the Department for Education provide guidance regarding the balance between academic skills and social/life skills; and that local authorities support the training of school staff to work as 'autism experts' across a network of autism schools. The findings directly informed the creation of the three levels of training, the National Standards and the Competency Framework (see section 4 below).

The key researchers in the Autism Centre for Education and Research (University of Birmingham) in the period 2008 – 2013 were Dr Karen Guldberg (senior lecturer); Dr Sarah Parsons (senior research fellow, left January 2011); Dr Kerstin Wittemeyer (lecturer); Dr Glenys Jones (lecturer); Dr Mitzi Waltz (lecturer, left July 2012) and Andrea MacLeod (lecturer).

#### 3. References to the research -

All outputs appeared in peer reviewed journals or refereed by funders:

- R1) Jones, G., English, A., Guldberg, K., Jordan, R., Richardson, P. and Waltz, M. (2008) Educational Provision for children and young people with Autism Spectrum Disorders living in England: a review of current practice, issues and challenges. London: Autism Education Trust. [available:
  - http://www.autismeducationtrust.org.uk/sitecore/content/AET2/Home/Resources/Resear ch.aspx]
- R2) Parson, S., Guldberg, K., MacLeod, G. and Prunty, A., Balfe, T. (2009) International Review Of The Literature Of Evidence Of Best Practice Provision In The Education Of Persons With Autistic Spectrum Disorders. Co.Meath, Ireland: National Council for Special Education [available: <a href="http://www.ncse.ie/uploads/1/2">http://www.ncse.ie/uploads/1/2</a> NCSE Autism.pdf]
- R3) Guldberg, K., Parsons, S., MacLeod, A., Jones, G., Prunty, A. & Balfe, T. (2011) 'Implications for practice from 'international review of the evidence on best practice in educational provision for children on the autism spectrum", *European Journal of Special Needs Education*, vol. 26, no. 1, pp. 64-70 [doi: 10.1080/08856257.2011.543534]
- R4) Wittemeyer, K., Charman, T., Cusack, J., Guldberg, K., Hastings, R., Howlin, P., Macnab, N., Parson, S., Pellicano, L. and Slonims, V. (2011) *Educational provision and outcomes for people on the autism spectrum.* London: Autism Education Trust [available: <a href="http://www.autismeducationtrust.org.uk/sitecore/content/AET2/Home/Resources/Outcomes.aspx">http://www.autismeducationtrust.org.uk/sitecore/content/AET2/Home/Resources/Outcomes.aspx</a>]

#### Grants:

- Parsons, S (PI) with Jones, G (CI); Guldberg, K (CI) and MacLeod, A. (CI), International review
  of the literature of evidence of best practice provision in the education of persons with autistic
  spectrum disorders, Sponsor: National Council for Special Education in Ireland. July 2008 –
  November 2008. £23,742.
- Wittemeyer, K (PI) with Jones, G, (CI); Guldberg, K (CI); Pavey, S (CI) and MacNab, N. (CI), AET Outcomes Research, Sponsor: Autism Education Trust. January 2011 – July 2011. £80,000.
- Jones, G (PI) with Lacey, P (CI) and Robertson, C. (CI), Research to develop National Standards for Autism Education, Sponsor: Autism Education Trust. November 2011 – April 2012, £30,000.
- Guldberg, K (PI) with Wittemeyer, K (CI); Jones, G (CI) and Waltz, M. (CI) *Training Materials Development*, Sponsor: Autism Education Trust. October 2011 November 2012, £104,000.

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- Wittemeyer, K (PI) with Jones, G. (CI), AET *Competency Framework*, Sponsor: Autism Education Trust. January 2012 July 2012. £25,000.
- Wittemeyer, K (PI) Development of Nationally Recognised Accreditation on Completion of the AET Level 2 and 3 Training, January 2012 August 2012, Sponsor: Autism Education Trust. £12.650.

# 4. Details of the impact

The impact of ACER's research since 2008 has been realised via its established relationship with the Autism Education Trust (AET), which was launched in November 2007 with support and funding from the government. The findings from ACER's research programme guided the development of resources and training material: all AET materials referred to below have been led by, produced and delivered by members of ACER in collaboration with local authority hubs and other stakeholders, and with schools and practitioners involved in autism education. As evidenced below the impact has been to improve teachers' understanding of autism, their knowledge and confidence in working with autistic pupils and consequent changes in their practice.

#### Development of resources and training for teachers

ACER's research on 'Educational provision and outcomes for people on the autism spectrum' (R4) was described by the AET as the most comprehensive study to date in considering what "good outcomes" for individuals with autism might look like' (source 1 below). ACER was then commissioned by the Department of Education in 2008 to translate its research into the development of the autism component of the national Inclusion Development Programmes (IDP). The aim was to improve teacher workforce skills in order to enhance autism practice. ACER academics not only produced the content of these but were also closely involved in the national dissemination strategy in partnership with National Strategies and Local Education Authorities.

The national IDP programme was rolled out successfully to all Early Years providers, child-minders and schools in England in phases across the country, with the autism IDP delivered in 2009-2010. The Early Years Autism IDP alone was sent to 140,000 locations. The DfE later provided funding for the Early Years, Primary and Secondary IDPs in autism to be placed on the Autism Education Trust website for ease of accessibility. The programme was launched through 20 conferences in 2009-2010 across England (at which Guldberg and Jones presented) which were attended by 2,500 people. This involved a number of local authority hubs, including LEA leads, head teachers of schools, school staff and early years practitioners.

An independent evaluation of the Inclusion Development Programme was undertaken by the Centre for Educational Development, Appraisal and Research, University of Warwick (CEDAR) (source 1). The CEDAR team consulted over 12,000 practitioners who had implemented the IDP in 2009 and 2010 and found it was highly effective in raising knowledge, understanding and confidence in teaching pupils with Special Educational Needs and Disability (SEND). The autism materials in particular, were consistently rated (73%) as having a greater impact on teachers' understanding, knowledge and confidence in teaching pupils with autism than the other IDP materials (source 2, p 64). The feedback described them as accessible, manageable in terms of content size and user friendly, with teachers being engaged by them. The Government commissioned Teacher's Voice survey of the IDP (November 2010) also highlighted that 79% of respondents stated that the autism IDP had improved their ability to provide support for pupils and 84% of teachers undertaking IDP autism training rated it as effective (pp. 61-64). The report states that "the autism spectrum materials were particularly well regarded" (p.10). Significantly, teachers were reported to have changed their practice as a result of the autism IDP. Examples of this include reviewing classroom organisation to create autism friendly environments; making quiet areas more prominent and staff using more visual aids (p.71) as recommended by the ACER research and outlined in the autism IDP.

Building on this, the DfE funded the Autism Education Trust to use its research to produce and implement: (i) a set of National Standards in autism education; (ii) a Competency Framework; (iii) three tiers of training materials. The Autism Education Trust commissioned ACER to lead all three elements of this programme, with the training component being delivered by a network of hubs across the country:

(i) The development of National Autism Standards was commissioned in December 2012. It

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provides educational settings with a framework to evaluate their practice in addressing the needs of pupils on the autism spectrum. The framework is downloadable as a self evaluation tool that settings can use to evaluate their practice (source 3). Evaluation of the materials by CEDAR is currently ongoing and downloads data are not available, but page views are high (16645 page views and 9552 unique page views), suggesting engagement with the materials is also good.

(ii) The development of a Professional Competency Framework was commissioned in January 2012. It sets out knowledge, skills and personal qualities that are required for professionals in educational settings working with pupils on the autism spectrum (source 4). The framework was available from 31<sup>st</sup> August 2012 as a downloadable self-evaluation tool that practitioners can use to rate their current practice and understanding against a set of descriptors. As with the Standards, evaluation of the materials by CEDAR is currently ongoing and downloads data are not available, but page views are high (8102 page views and 6158 unique page views), suggesting engagement with the materials is also good.

(iii) On 31<sup>st</sup> May 2012 the Autism Education Trust announced the largest ever face-to-face autism training scheme for schools across England. The three tiers of training materials, developed by ACER were delivered through the hubs to over 13,000 school staff from the start of the programme in February 2012 to July 2013. Steve Huggett (AET Director) is clear about the impact of the training: 'this programme is transforming autism education and is making a real impact because all elements of the programme have been developed and delivered collaboratively; involving the Autism Centre for Education and Research, University of Birmingham, voluntary organisations, schools, local authorities and, crucially people with autism themselves. This has contributed to the very positive feedback and has led to over 11,000 people being trained in just a year" (source 5) In their interim evaluation report, Cullen et al. (2013) reported a "statistically highly significant rise" in the knowledge and understanding of participants after the training (p.15); and that the training provided staff with activities and ideas for classroom practice in working with pupils on the autism spectrum (source 5).

## Contributing to raised awareness of the importance of autism training

Sarah Teather MP, Minister of State for Children and Families, with responsibility for SEN, said (press release dated 15<sup>th</sup> May 2012); "It is really important to get support for children with autism right... Awareness and the skills to address autistic children's needs are crucial and this is why I am so pleased with the take up of the AET's training" (source 6). At a conference on the national programme held at the University of Birmingham in March 2013, hosted jointly by ACER and the AET, opened by Stephen Kingdom, head of Special Educational Needs and Disability, Department of Education and attended by 350 delegates, Lesley Baker, from Birmingham Local Authority Communication and Autism team stated: "For Birmingham Communication/Autism team, the training programme along with the national autism standards and competencies framework, have provided a structured framework for the development of autism provision and a vehicle for quality assurance across the local authority" (source 7).

#### 5. Sources to corroborate the impact

- [1] http://www.autismeducationtrust.org.uk/Resources/Outcomes.aspx.
- [2] Lindsey, G., Cullen, et al (2011) Evaluation of impact of DfE investment in initiatives designed to improve teacher workforce skills in relation to SEN and disabilities. Research Report DFE-RR115. <a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/182642/DFE-RR115.pdf">www.gov.uk/government/uploads/system/uploads/attachment\_data/file/182642/DFE-RR115.pdf</a>
- [3] <a href="http://www.aettraininghubs.org.uk/wp-content/uploads/2012/06/AET-National-Autism-Standards">http://www.aettraininghubs.org.uk/wp-content/uploads/2012/06/AET-National-Autism-Standards</a> distributed.pdf
- [4] <a href="http://www.aettraininghubs.org.uk/wp-content/uploads/2012/08/AET-Professional-Competency-Framework distributed.pdf">http://www.aettraininghubs.org.uk/wp-content/uploads/2012/08/AET-Professional-Competency-Framework distributed.pdf</a>
- [5] Cullen, M-A et al (2013) Evaluation of Autism Education Trust Training Hubs Programme, 2011-13: Final Report.
  - http://www2.warwick.ac.uk/fac/soc/cedar/projects/current/autismeducationtrust/aet\_-final\_report1\_pdf.pdf
- [6] <a href="http://www.autismeducationtrust.org.uk/Global/News/AET%20Training%20Programme%20launch%20of%20Levels%202%20and%203%20News.aspx">http://www.autismeducationtrust.org.uk/Global/News/AET%20Training%20Programme%20launch%20of%20Levels%202%20and%203%20News.aspx</a>
- [7] <a href="http://www.birmingham.ac.uk/schools/education/news/2013/03/11000-teachers-trained-to-improve-education-for-children-with-autism.aspx">http://www.birmingham.ac.uk/schools/education/news/2013/03/11000-teachers-trained-to-improve-education-for-children-with-autism.aspx</a>