

Education Options
for
CHILDREN AND STUDENTS
with
**AUTISM SPECTRUM
DISORDER**

South Australia

**Ministerial Advisory Committee:
Students with Disabilities
October 2010**



A report of the
Ministerial Advisory Committee:
Students with Disabilities (MAC: SWD)
South Australia
October 2010

Note: The term 'parents' is used in this report to include
parents, guardians and primary carers of children

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**To the Hon. Jay Weatherill, MP
Minister for Education and Minister for Early Childhood Development**

This report provides the Minister with information on children and students with Autism Spectrum Disorder in South Australia.

The report has been written in consultation with senior staff of the three education sectors (Government, Catholic and Independent) and experts in the field of Autism Spectrum Disorder. The committee has consulted relevant legislation and has also been informed by literature on the topic.

The report contains comments on education services' current provisions for children and students with Autism Spectrum Disorder and advice for consideration in future state-wide developments of autism specific educational services.

In recent years there has been a marked increase in the incidence of Autism Spectrum Disorder worldwide, the cause of which is debated. In South Australia, the number of new diagnoses registered by Autism SA has risen from 74 in 1994, to 720 in 2009. Current prevalence estimates suggest that approximately one in 120 to 167 South Australian children have Autism Spectrum Disorder, with one in 90 students suggested for children aged six to twelve years.

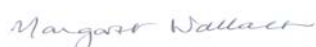
The Committee found it difficult to gather reliable state-wide data on children and students with Autism Spectrum Disorder because of discrepancies in the databases of Autism SA and the education sectors. However, Autism SA data had previously been proven reliable against Centrelink data. Autism SA informed the Committee that in 2010 approximately 3400 children and students with Autism Spectrum Disorder are attending South Australian schools. Almost 2000 of these students attend mainstream schools. The majority of students included in mainstream classes have a diagnosis of Asperger's disorder. Approximately 456 students attend special schools; the majority of whom have a diagnosis of Autistic disorder.

All states and territories of Australia provide some type of autism specific care or education setting in varying forms. Currently there is only one autism specific setting in South Australia, the Anglicare SA – Daphne Street Child Care and Specialist Early Learning Centre, which was established in 2009 through the Australian Government's *Helping Children with Autism* initiative. The South Australian Government plans to establish two autism specific disability units administered by the Department of Education and Children's Services (DECS).

The Committee has consulted the literature on best practices in education for children and students with Autism Spectrum Disorder and found that a continuum of provisions is required to accommodate the range of individual needs. Children and students with Autism Spectrum Disorder benefit from being able to transition in and out of specialist settings to develop their skills when needed, but also to have opportunities to generalise these skills in more inclusive environments. The literature also discusses aspects of quality educational provisions for this cohort in relation to teaching methods, environmental provisions, family partnerships and collaboration with other professionals. These aspects of quality educational services are discussed further in the report.

The report contains advice for future state-wide developments in education services for children and students with Autism Spectrum Disorder, and I would be pleased to discuss the Committee's findings and conclusions further, as required.

Yours sincerely,



Margaret Wallace
Chairperson
Ministerial Advisory Committee: Students with Disabilities

 **Contents**

	Page
BACKGROUND	1
FINDINGS	1
Autism Spectrum Disorder (ASD)	1
South Australian special education services for children and students with ASD	2
Number and distribution of children and students with ASD in South Australian schools	3
Legislation	5
Evidence based educational practice for children and students with ASD	7
Indicators of quality education for children and students with ASD	8
South Australian disability specific special schools	10
CONCLUSIONS	11
ADVICE TO THE MINISTER	14
REFERENCES	16
APPENDICES	20
1. Project group membership	20
2. List of other people consulted	21
3. Diagnostic criteria for ASD and proposed DSM 5	22
4. Prevalence of ASD	24
5. Extract from the United Nations Convention on the Rights of Persons with Disabilities, 2006	26
6. Evidence based educational practices for children and students with ASD	27
7. Regency Park School and South Australian School for Vision Impaired (SASVI)	30
8. Autism specific education services	31
9. Recent Government contributions towards services for families of children with ASD and planned future developments	32



Background

In December 2009, the then Minister for Education requested that the Ministerial Advisory Committee: Students with Disabilities provide information about education services available for children and students with Autism Spectrum Disorder (ASD), evidence based best practice and possible implications for South Australia. In September 2010, the South Australian Government committed to establish two autism specific disability units. This was, in part, a response to parents arguing that they believed there was a place for education services specific to autism in South Australia.

This report is provided to the Minister for Education and Minister for Early Childhood Development by the Ministerial Advisory Committee: Students with Disabilities in consultation with senior education personnel (see Appendix 1 for project group membership). The report has been informed by literature on the topic and discussions with experts in the field (see Appendix 2 for the list of other people consulted).



Findings

Autism Spectrum Disorder (ASD)

Autism Spectrum Disorder (ASD) is a life long neurological disorder of unknown aetiology. The criteria for diagnosis are based on a triad of impairments in social interaction, communication and flexible thinking, interests and behaviours. A diagnosis of ASD is made on the basis of observed behaviours. People with ASD present in variable ways and experience widely divergent life outcomes. Current prevalence data suggests there are approximately 6 people per 1000 (1:167) with ASD in Australia (Australian Advisory Board on Autism Spectrum Disorders, 2010) and approximately 11 per 1000 (1:90) children aged six to twelve years (Buckley, 2009; Buckley and Martin, 2009). South Australia's prevalence statistics on average appear to be slightly below the national average but fluctuate from year to year (Buckley, 2009).

The Diagnostic and Statistical Manual of Mental Disorders (DSM), published by the American Psychiatric Association, together with the International Classification of Diseases (ICD) published by the World Health Organisation set the standard criteria for the diagnosis of ASD. The DSM-IV-TR (2000) and the ICD-10 (1992) are the current diagnostic tools used by professionals¹.

ASD is most commonly understood to mean a diagnosis of Autistic disorder, Asperger's disorder or Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS [which is also known as Atypical Autism]). In South Australia the interpretation of ASD is taken to mean the collective of only two of these disorders—Autistic disorder and Asperger's disorder. The disability categories of the education sectors and the services of Autism SA do not extend to people with a diagnosis of PDD-NOS using State Government funding. The Australian Government funded

¹ The DSM and ICD have aligned since 2000 and discussions concerning future publications of these diagnostic manuals aim to ensure they remain aligned. The DSM 5 is due for publication in 2013 and the next edition of the ICD (ICD 11) is due for publication in 2014.

initiative *Helping Children with Autism* has allowed Autism SA to provide a limited service to children with PDD-NOS in their early childhood years (up to age six). Currently, there are no consistent national standards of service eligibility for people with PDD-NOS. Based on prevalence data, this may have resulted in an under diagnosis of PDD-NOS in South Australia and a gap in services for people with this disorder.

Since the introduction of the DSM-IV in 1994², the total number of new diagnoses of ASD in South Australia has risen from 74 per year to 720 in 2009 (J Martin [Autism SA] 2010, pers comm March). This has created additional demand for services including demand for quality early intervention and education services that are responsive to the needs of children and students diagnosed with ASD. The association between Autistic disorder and intellectual disability is present in about 75 per cent of cases. Asperger's disorder precludes a diagnosis of intellectual disability (Autism SA, 2010).

In 2013 the DSM 5 will be published and the separate categories of Autistic disorder, Asperger's disorder and PDD-NOS will no longer exist but will be merged into the one category of Autism Spectrum Disorder. This will potentially result in another increase in the incidence of people diagnosed with ASD in South Australia and the demand for services to people with ASD is also likely to increase. (See Appendix 3 for more information on the diagnostic criteria of ASD and Appendix 4 for more information on the prevalence of ASD.)

South Australian special education services for children and students with ASD

Education services for children and students with ASD are available from the three education sectors in South Australia (Government, Catholic and Independent) and a consultancy service is provided by Autism SA. Currently, autism specific education settings are not available but are being planned by the State Government through the Department of Education and Children's Services (DECS). The Government has committed to the establishment of two autism specific disability units co-located with mainstream schools in the metropolitan area (J Brigg [Department of Education and Children's Services] 2010, pers comm July).

Previously, in 1974, a small government funded clinic school for children with autism was established and operated by the Autistic Children's Association (now known as Autism SA). This school was considered a non-government special school. In 1991, the Autism School was closed, partly due to the trend of more inclusive school options being favoured at the time and the difficulties in securing ongoing funding for the service.³

A range of special education options has been retained in South Australia including special schools, disability units and special classes co-located with mainstream schools. A specific class for students with Asperger's disorder was established at Kensington Centre in 2000, initially as a pilot class, and continued until 2009 when the number of students with Asperger's disorder enrolled at the school decreased. This specialist class is now disbanded and no other specialist classes have been established in South Australia. The Committee has been informed that students with Asperger's disorder still enrolled at the school continue to meet together as a home

² The DSM IV was the first DSM to provide diagnostic criteria for Asperger's disorder. For more information on the development of diagnostic criteria for ASD see Appendix 3.

³ Similar arrangements were made available in New South Wales through the state autism specialist service now known as Autism Spectrum Australia (ASPECT). ASPECT special schools for students with ASD still operate as non-government schools in New South Wales.

group, but the number of these students is no longer enough to form a specific class. (K Wicks [Kensington Centre], 2010, pers comm. April).

It has been argued that a continuum of education options for children and students with a disability is preferred in order to accommodate the wide range of abilities and individual needs, and further, that specialist special education based on diagnosis may be required to meet the unique needs of particular groups. (Warnock, 2005; Ministerial Advisory Committee: Students with Disabilities, 2001). It has also been argued that co-location of special education centres with mainstream schools advances inclusion by increasing possibilities for children and students' integration and facilitating the sharing of professionals' specialist knowledge and expertise (Forbes, 2007).

In 2009, the first autism specific childcare service for South Australia was established at the Anglicare SA - Daphne Street Childcare Centre, Prospect, Adelaide, as part of the Australian Government's *Helping Children with Autism* package. The program offers 20 childcare places and is co-located with the mainstream childcare centre. This centre is now known as the Anglicare SA – Daphne Street Child Care and Specialist Early Learning Centre. An Australia wide evaluation of the outcomes for children and families of autism specific childcare centres is to begin in 2011 (S Renshaw [Anglicare SA – Daphne Street Childcare and Specialist Early Learning Centre] 2010, pers comm May).

Autism project group members also noted the limited amount of ASD specific services available to education providers and children and students with ASD and their families in country regions. Most ASD specific services are provided in the metropolitan area.

Number and distribution of children and students with ASD in South Australian schools

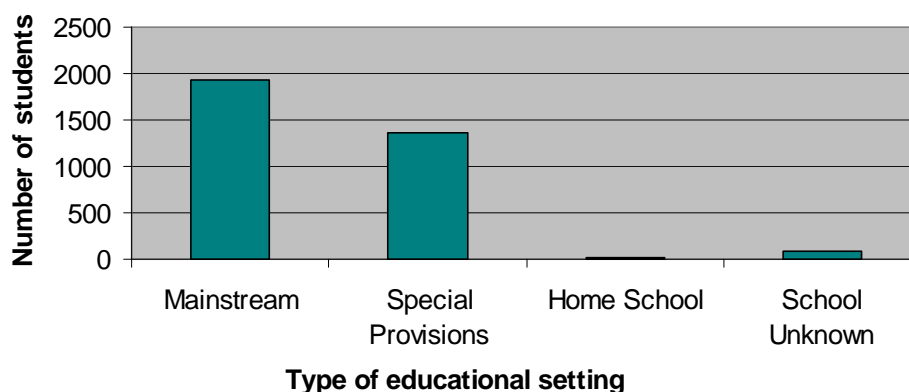
Autism SA provided the Ministerial Advisory Committee: Students with Disabilities with data on the number of children and students registered with Autism SA and their distribution across South Australian schools⁴. These data were cross referenced (as a measure of reliability) with the education sectors' data and discrepancies were found. These discrepancies are due to multiple factors including data entry error, changes in the education sectors' verification and recording processes and families' voluntary disclosure of their children and students' ASD diagnosis (i.e. some families of children with ASD choose not to register with Autism SA and some choose not to disclose a diagnosis of ASD to schools).

Autism SA data had previously been shown reliable against Centrelink data (Buckely and Martin, 2009). After discussion among project group members, it was agreed to use the data provided by Autism SA (which was inclusive of all three education sectors) to present an indicative snapshot in time of children and students with ASD and their school placement. The issue of discrepancies between databases of the education sectors and Autism SA should be noted by the Minister, as currently there appears to be no reliable source of information to accurately map the total number of children and students with ASD in South Australia and their distribution across schools. The Australian Bureau of Statistics conducted their most recent survey on disability, carers and ageing across Australia in 2009 but their summary of findings is not expected to be released until April 2011. The Ministerial Advisory Committee: Students with Disabilities therefore provides the following information as an indication only of the number of children and students with ASD and their place of educational enrolment, as the best available information at the time.

⁴ The data provided by Autism SA was taken from their database in March 2010.

According to the Autism SA database (March 2010) there were approximately 3400 children and students with ASD who were registered clients of Autism SA enrolled in education settings across the three education sectors. Approximately 1370 of these students (40 per cent) were enrolled in schools with special provisions (i.e. either a special school or schools with a disability unit or special class). A very small number of children and students were recorded as being home-schooled (n=10) and there were approximately 90 children and students for whom their school was unknown to Autism SA. The remaining children and students were enrolled and included in mainstream classes (n=1930; 57 per cent).

**Autism SA record of distribution of students with ASD
in South Australian schools
March, 2010**



The data showed that most children and students with ASD were located in schools in the northern metropolitan area, including the peri-urban communities around Gawler and the Barossa Valley. Other areas to note were Marion and Christies Beach in the southern metropolitan area. In the country Kadina, Wallaroo, Murray Bridge and Mt Gambier had higher numbers of children and students with ASD. It was noted that special schools and disability units were available in these areas, which raised the question of the correlation between the availability of specialised services and where children and students with ASD attended school.

From Autism SA's perspective, the total number of children and students with ASD attending special schools was 456 (13 per cent of the total database). Overall, special schools had the highest percentage enrolment of children and students with ASD with an average of 40 per cent enrolments (ranging from 0 to 94 per cent)⁵. The majority of these children and students had a diagnosis of Autistic disorder. Only ten children and students with Asperger's disorder were enrolled in special schools.

Modbury Special School had the highest *number* of children and students with Autistic disorder (n=81; 53 per cent of their total enrolments) and Ashford Special School had the highest *percentage* of children and students with Autistic disorder (n=62; 94 per cent of their total enrolments). It may appear from these data that Modbury and Ashford special schools have become de facto special schools for children and students with Autistic disorder (because of their high proportion of students with this disorder). However, the Ministerial Advisory Committee: Students with Disabilities has no evidence that high numbers of children and students necessarily indicate specialist education for this cohort, as the components that

⁵ Kilparrin Teaching and Assessment School and Services enrolled only two students with Autistic Disorder, Regency Park School (for students with physical disabilities) enrolled only one student with Autistic Disorder and the South Australian School for Vision Impaired had no enrolments of students with ASD.

indicate quality educational provisions may not all be in place i.e. staff training and ongoing support, curriculum adaptations, appropriate instructional environments, behaviour support strategies and family involvement. It was beyond the scope of this project to determine if these education settings are providing quality educational provisions for children and students with ASD. This is an area for possible further investigation.

Most of the children and students with ASD attending special schools were in the metropolitan area (n= 412; 90 per cent). Of the country special schools only Murray Bridge Special School had comparable enrolment (i.e. based on percentage) to the metropolitan special schools (n=15; 50 per cent of their enrolment). All other country schools had 30 per cent or less enrolment of children and students with ASD.

The data also showed there were high numbers of children and students with ASD in schools where there were disability units (n=354; 10 per cent) and special classes (n=550; 16 per cent), but there were also high numbers of children and students with ASD included in mainstream classes (n=1930; 57 per cent). More children and students with Asperger's disorder (78 per cent) than Autistic disorder (40 per cent) were included in mainstream classes. Further, some schools with disability units or special classes also had low numbers of children and students with ASD.

Project group members were unable to determine clearly from the data if there was a correlation between the availability of specialised services and higher enrolments of children and students with ASD, although in some cases it would appear so. In particular, the lower number of children and students with Autistic disorder attending mainstream classes correlates with the higher incidence of intellectual disability associated with this diagnosis and the increased likelihood of these children and students accessing special education settings compared to those with Asperger's disorder. The data generally reflected the State's education policy of inclusion and the provision of a range of educational services from which families can choose, with a higher incidence of choice in metropolitan and outer metropolitan locations.

Autism SA consultant teachers further informed the project group that most children and students with ASD are distributed across a range of school settings and within schools across a range of classes. They reported that in mainstream settings there were a few cases where children and students with ASD were clustered together, either in a disability unit or class, or grouped together in a mainstream class because of the exceptional skills of the classroom teacher.

Legislation

Australian perspective

People with disabilities living in Australia have the same human rights as all other members of the community, including the right to access and participate in educational institutions. The Commonwealth *Disability Discrimination Act, 1992* (DDA) and the South Australian *Equal Opportunity Act 1984* make discrimination on the basis of disability unlawful. Both Acts aim to promote equal opportunity and access for people with a disability.

In relation to all children and students with a disability, South Australian education is guided by the aforementioned Commonwealth and State disability and equal opportunity laws, as well as State education and children's services laws (i.e. *Education Act, 1972*; *Children's Services Act, 1985*⁶) and the Commonwealth *Disability Standards for Education, 2005*.

⁶ The South Australian Education Act and the Children's Services Act were in the process of legislative reform at the time of writing.

The Commonwealth *Disability Standards for Education* (2005) regulate the obligations of education providers according to the *Disability Discrimination Act* (1992). The standards address five aspects of education in particular:

- enrolment
- participation
- curriculum development, accreditation and delivery
- student support services
- programs to prevent harassment and victimisation.

In 2007, the DECS published the document *On the Same Basis* to provide educators with a practical guide to support the implementation of the *Disability Standards for Education 2005*.

In addition to the national and state legislation, Australia is a signatory to the United Nations *Convention on the Rights of Persons with Disabilities 2006* and the *Optional Protocol to the Convention on the Rights of Persons with Disabilities*. The *Convention on the Rights of Persons with Disabilities* states that persons with disabilities should be guaranteed the right to inclusive education at all levels, regardless of age, without discrimination and on the basis of equal opportunity. The purpose of the Convention is 'to promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and to promote respect for their inherent dignity' (United Nations, 2006, Article 1). (See Appendix 5 for an extract of the relevant Articles of the *Convention on the Rights of Persons with Disabilities*).

In May 2009, the Victorian Government launched their *Autism State Plan*, which is a collaborative plan of the Department of Human Services, Department of Education and Early Childhood Development and Autism Victoria. It is the first of its kind in Australia (Department of Human Services, 2009)

International perspectives

The United Kingdom (UK) and the United States of America (USA) have recently enacted autism specific legislation, strengthening these countries' positions of support for people with ASD. The UK's *Autism Act 2009* is designed to ensure appropriate service provisions for adults with ASD. The *Combating Autism Act 2006*, the *Expanding the Promise for Individuals with Autism Act 2007* and more recently the *Autism Treatment Acceleration Act 2009* of the USA aim to provide additional treatments and resources, increase access to effective therapies and increase essential support services for people with ASD.

The USA *Autism Treatment Acceleration Act 2009* articulates the following understandings, which are relevant to South Australian education services and to this report:

- There is a strong consensus within the research community that intensive treatment as soon as possible following diagnosis not only can reduce the cost of lifelong care by two-thirds, but also yields the most positive life outcomes for children with autism spectrum disorders.
- The term 'interventions' means educational methods and positive behavioural support strategies designed to improve or ameliorate symptoms associated with autism spectrum disorders.
- There is a shortage of appropriately trained personnel across numerous important disciplines who can assess, diagnose, treat, and support children with autism spectrum disorders and their families.
- Practicing professionals, as well as those in training to become professionals, need the most up to date practices informed by the most current research findings.

The European Social Charter stipulates that persons with disabilities (children, adolescents and adults) must be integrated into mainstream facilities, that education and training must be made available within the framework of ordinary schemes and, only where this is not possible, through special facilities. This means that in order to guarantee an equal and non-discriminatory treatment of persons with disabilities, mainstream and special schools must ensure adapted teaching. States must take measures (such as the support of teachers and the accessibility of premises) in order to enable integration and must demonstrate that tangible progress is being made in setting up education systems which exclude nobody. (Council of Europe, 2006)

The Council of Europe's Committee of Ministers to member states on the education and social inclusion of children and young people with autism spectrum disorders recommends that, 'children and young people with autism spectrum disorders should be given specific teaching in mainstream schools wherever possible and provided with opportunities to learn skills and gain understanding in order to engage in socially inclusive situations' (Council of Europe: Committee of Ministers, 2009, item 3:11). In addition, 'a range of school options, in no particular order, should be available to meet the diverse needs of children and young people with autism spectrum disorders. Support and opportunities for social integration should be provided in whatever situation best fits their current needs' (Ibid, item 3:12.).

Evidence based educational practice for children and students with ASD

International interest in efficacious education services for children and students with ASD and their families based on empirical evidence has developed as the demand for services has grown worldwide. An abundance of information on educational methods and environmental conditions for children and students with ASD is now available and, in South Australia, this knowledge is being shared through training programs for educators, therapists and families, with Autism SA the provider for most of the training. Educators and families continue to seek to know which intervention methods are best to use with children and students with ASD across all stages of their development.

A selection of findings from more recent research undertaken with the principal aim of informing governments, families and practitioners of best evidence-based practices for policy and practitioner development is available in Appendix 6.

In summary, researchers have consistently reported findings that children and students with ASD present with a range of needs in relation to their autistic behaviours and associated learning difficulties. Children and students presenting with ASD and significant levels of learning difficulties require different education provisions to those with average or above academic abilities. It is not possible for one style of educational provision to meet the needs of all children and students with ASD. A range of options is required. The most appropriate options are determined by careful assessment of the individual child by qualified professionals working together using a multidisciplinary team approach. This approach to quality education provisions for children and students with ASD is also effective for children and students with other additional needs in the classroom and, in addition, has potential benefits for typically developing children.

Brigg (2009), in his address to special educators⁷, reflected on the Australian approach to education of children and students with ASD, emphasising that many children with ASD find the adjustment to mainstream preschool programs difficult and, in line with the findings of Roberts and Prior (2006), suggests that small group,

⁷ This publication was based on the 2008 Des English Memorial Lecture, delivered by Mr John Brigg at the Australian Association of Special Education conference held in Melbourne, Victoria.

intensive, behavioural interventions be delivered by special education credentialed teachers in the early years (prior to these children entering year one of school). Brigg further suggests that as children with ASD grow older and progress through school, their teachers need adequate support in terms of professional learning and additional resources, in particular to support children and students' needs in mainstream classes. Supplementary to this, flexible programs are required in the upper primary years as the social gap between students with ASD and their typically developing peers grows, and for secondary students, the option of small group programs should be made available targeting individual need and focused on individual learning pathways.

The Ministerial Advisory Committee: Students with Disabilities has reported to the South Australian Minister for Education on two previous occasions concerning the educational needs of older students with ASD. In 1999, the focus was on the needs of secondary students with ASD (Ministerial Advisory Committee: Students with Disabilities, 2000), and in 2005 on quality educational practices for students with Asperger's disorder (Ministerial Advisory Committee: Students with Disabilities, 2006). In both reports findings showed that students with ASD were struggling in their educational settings despite appearing to have adequate, and often superior, academic abilities. Concerns had been raised about the number of students with ASD who had experienced distress attending school and that some were not completing secondary school. Findings indicated that students with ASD benefit from a flexible but consistent and predictable approach because they have a need to be familiar with their environment and other people's actions. In general, changes cause anxiety for students with ASD and they may respond poorly to spontaneous change. It may also take them longer to adjust to changes. Friendships, social relationships, bullying and harassment represented some of the most difficult aspects of school life for secondary students with ASD and social and relational learning was considered equally as important as academic attainment. Findings on the level of professional knowledge and experience available to schools and how best to work with these students for positive educational outcomes were discussed. It should be noted that these studies were undertaken by the committee when students with ASD were verified by the DECS using different criteria to those currently used and many students with Asperger's disorder, in particular, were not considered eligible for additional support. The category of Autistic/Asperger's disorder has since been introduced (in 2007) and additional support is now more accessible to these students.⁸

Indicators of quality education for children and students with ASD

Indicators of quality educational practice for children and students with ASD are also recorded in the literature. In 2001, the University of the State of New York published *Autism Program Quality Indicators* with the support of the New York State Education Department. These indicators were designed to be used as a self-review and quality improvement guide for schools and programs serving children and students with ASD from the ages of 3 to 21. Fourteen areas were covered:

- individual evaluation
- development of the individualised education program
- curriculum
- instructional activities
- instructional environments
- review and monitoring of progress and outcomes
- family involvement and support
- inclusion

⁸ Prior to 2007, Catholic Education SA and the Association of Independent Schools SA reported on students with ASD to the Non-Government Schools Secretariat for different purposes.

- community collaboration
- planning the move from one setting to another [transition]
- challenging behaviour
- personnel
- program evaluation.

(University of the State of New York, 2001)

Comparable guidelines for the Australian education context have not yet been developed but recently the Australian Advisory Board on Autism Spectrum Disorders published a position paper entitled *Education and Autism Spectrum Disorders in Australia* (2010), to guide the provision of educational services for school-age children and students with ASD across Australia. The board calls for education services for children and students with ASD to be governed by the following principles.

- Every child and adolescent with ASD should have access to an educational service appropriate to his/her needs.
- All government and non-government educational sectors should provide educational services that cater to the needs of children and adolescents with ASD.
- Educational services must be responsive to all children and adolescents across the autism spectrum.
- There should be a range of educational services for children and adolescents with ASD.
- Educational services must address the students' needs in communication, social skills, learning, sensory issues and behaviour and include family involvement.
- Educational services are based on sound evidence and quality indicators.
- Following an application for service, enrolments should proceed in a timely manner to ensure students with ASD access appropriate education services as soon as possible.

The board does not specify the type of education setting preferred for these services.

In addition, the *Positive Partnerships: Supporting school aged students on the Autism Spectrum* training program, published in 2008 and delivered by the Australian Autism Education Training Consortium, is an Australian based initiative that aims to improve educational outcomes for children and students with ASD Australia-wide. The training manuals describe best practices and quality indicators. Autism SA is a member of the training consortium and delivers workshops in South Australia. The Australian Government has committed funding to provide the training and workshops until 2012.

The autism project group of the Ministerial Advisory Committee: Students with Disabilities has concluded that the following features are important indicators of quality education services for children and students with ASD in South Australia.

- Leaders are committed to provide quality education practices for children and students with ASD at their preschools and schools.
- Effective partnerships are built between families, education providers and other agencies to ensure consistency in practice between home and preschool or school for children and students with ASD.
- Preschools and schools focus on education and teaching as their core business. Teachers and support staff support children and students with ASD to access the curriculum, rather than provide them with therapy interventions.

- Children and students with ASD are provided with explicit instructions for educational tasks and direct teaching methods, supported by the use of visual strategies and structured routines.
- The outcomes of education for children and students with ASD are routinely evaluated and educational methods adjusted, as required.
- A positive approach to support behaviours of children and students with ASD is employed.
- Staff working with children and students with ASD are appropriately trained.
- A multi disciplinary approach is adopted by the education service to enable collaborative work with other professionals in relation to therapeutic interventions for children and students with ASD.

South Australian disability specific special schools

Most of the special schools in South Australia cater for children and students with a primary diagnosis of intellectual disability⁹ but there are three schools specifically for children and students with other disability types. Regency Park School caters for children and students with physical disabilities and communication needs, the South Australian School for Vision Impaired (SASVI), caters for children and students with vision impairment and Kilparrin Teaching and Assessment School and Services caters for children and students who are deafblind or have complex sensory impairments and additional disabilities. Regency Park School and SASVI offer a hub and spoke model of service. Both schools have a main campus and satellite programs located in mainstream schools (i.e. the *Link Program* and *Vision Support Program*, respectively). They also offer statewide support services. Kilparrin Teaching and Assessment School and Services has a main campus and offers statewide support services, but does not have satellite classes. (See Appendix 7 for more details on the structure of Regency Park and SASVI schools.)

The hub and spoke model of service provided by Regency Park and SASVI is similar to the way autism specific education is provided in New South Wales by ASPECT and in Victoria by the Department of Education and Early Childhood Development. The model allows for disability specific environmental conditions in specific purpose settings and for experts in disability specific education to work with the children and students enrolled. These experts are also available to offer their professional expertise to colleagues in mainstream services where children and students are included. Anecdotally, the model appears to have been successful for children and students with physical disabilities and sensory disabilities in South Australia, and for children and students with ASD in New South Wales and Victoria. (For information on autism specific special education provisions in other jurisdictions of Australia see Appendix 8.)

⁹ There are twenty special schools in South Australia for students with a disability—seventeen Department of Education and Children's Services (DECS) schools, two Catholic Education SA (CESA) schools and one Independent special school.



Conclusions

South Australian education services provide an inclusive culture with approximately 93 per cent of all children and students with a disability included in mainstream schools (Department of Education and Children's Services, 2010)¹⁰. Of these, approximately 82 per cent are included in mainstream classes. Comparatively, approximately 78 per cent of children and students with Asperger's disorder and 40 per cent of children and students with Autistic disorder are included in mainstream classes (based on 2010 data across the three education sectors provided by Autism SA). The challenge for educators at present is to maintain an emphasis on inclusion while accommodating the specialised individual requirements of children and students with ASD, when inclusion may be a difficult experience.

Emotional and physical abuse—including bullying—in mainstream school settings have been reported as major issues with negative consequences for children and students with ASD, sometimes leading to non-attendance at school. (Ministerial Advisory Committee: Students with Disabilities, 2003; Ministerial Advisory Committee: Students with Disabilities, 2006; Bottroff & Slee, 2008). In addition, the Committee examined anecdotal evidence of children and students' levels of suspension and exclusion from schools. It seems that children and students with ASD are being excluded from school because of their aggressive behaviours, both verbal and physical. (J Martin [Autism SA] pers comm July)¹¹. Explicit teaching of social skills and a whole of school positive approach to behaviour support are recommended for children and students with ASD (Australian Autism Education Training Consortium, 2008).

Research has shown that appropriate educational goals for children and students with ASD are the same as those for all children and students i.e. the development of social and cognitive abilities, verbal and non-verbal communication and adaptive skills, the reduction of behavioural difficulties and generalisation of skills and abilities across multiple environments. Education services for children and students with ASD should be built on the effective implementation and management of evidence based practices, taking into consideration the strengths and additional needs of individuals.

With regard to the most appropriate education setting for children and students with ASD, the research literature does not recommend any particular setting as the most effective. The literature discusses positive outcomes across a range of settings, including specialist autism schools, integrated environments (i.e. partial segregation and partial inclusion) and full inclusion in mainstream schools. Much of the literature on best practices discusses special education in terms of the type of interventions provided for children and students with ASD, rather than the type of setting. The literature discusses the importance of individualised education planning, as well as didactic and environmental accommodations, which could be provided across a range of settings.

Previously, South Australian parents of children and students with a disability have indicated to the Ministerial Advisory Committee: Students with Disabilities their desire to have the full range of services available from which to choose (Ministerial Advisory Committee: Students with Disabilities, 2001). Parents have requested more disability

¹⁰ Further breakdown of the 93 per cent of students with disabilities studying in mainstream schools shows 82 per cent were enrolled in mainstream year levels, 7 per cent in special classes on mainstream sites, and 4 per cent in disability units on mainstream sites. (DECS 2010, p. 2)

¹¹ Anecdotal data collected by Autism SA indicates that approximately 79 students with ASD were suspended or excluded from their school during Terms 1 and 2, 2010 (age range: 5 to 17 years; gender: 3 females, 76 males).

units in primary and secondary schools and more special classes located at mainstream settings to deliver the specialisation required by their children while providing the opportunity to mix with their mainstream peers. In some cases, parents have requested flexible options for dual enrolment in mainstream and special settings.

Providing the least restrictive environment to learn is optimal for all children and students with a disability, including those with ASD, and is consistent with legislative commitments. For some children and students with ASD, however, the impact of their autism overrides their academic competency, which causes challenges to their ability to learn in the mainstream school context. A continuum of educational options for this cohort is necessary to accommodate the range of children and students' needs and abilities.

The current proposal offered by the Government for DECS to establish two autism disability specific units in South Australia will add to the range of services already offered by the education sectors. These units have the potential to become centres of excellence, demonstrating quality educational practices with the capacity to provide mentoring and professional learning to other educators and professionals from other disciplines, such as speech pathology, occupational therapy, psychology and disability services, who provide support to these children and students.

The proposed model differs from the hub and spoke model already established in South Australia for children and students with physical and sensory disabilities, and that of New South Wales and Victoria for children and students with ASD. It should be considered whether these proposed autism specific units would benefit from an additional team of centrally based autism experts (hub) to provide additional support and who could also be available to provide professional learning and practical support to school leaders, teachers and support workers in their local preschools and schools. Such services would complement the services already provided by Autism SA.

In addition, education providers should consider ways for children and students with ASD to transition in and out of autism specific settings, so that children can access appropriate autism interventions when required but also work towards developing their capacity for generalisation of skills and inclusion in the community. Systems to ensure effective matching of children and students' needs to settings should be developed with appropriate eligibility and exit criteria.

The educational methodology of autism specific education settings, particularly in the early years, should be based on the principles of explicit, direct teaching, with skilled use of scaffolding¹² and visual systems to support children and students to access the curriculum. The aim is to equip children and students with the essential social, communication and behavioural skills to enable them to participate successfully in mainstream education. The development of indicators to guide the implementation of quality educational practice for children and students with ASD in South Australia should be supported by the Minister for use by the education sectors. Allied health professionals should be available to work in collaboration with parents and teachers using a multidisciplinary approach to achieve the best outcomes.

It is noted from the literature and the experience of experts that educators require professional training and ongoing support to know how to plan for and respond to the needs of children and students with ASD, irrespective of the type of educational setting. Education providers need to employ specialist trained staff and train existing

¹² Scaffolding is a term used by educators as a metaphor to describe and explain the role of adults or more knowledgeable peers in guiding children's learning and development to achieve a greater level of independent competence.

staff to use interventions that have empirically demonstrated positive outcomes for children and students with ASD.

Professional learning in evidence based educational practices and practical classroom strategies for children and students with ASD should be provided in a variety of formats on an ongoing basis for school leadership teams, teachers and support workers. This professional learning is to be part of a broader, on-going systems level of professional learning program that takes into account key elements of inclusive education.

To complement the professional development of the existing workforce, all pre-service teacher training programs in South Australia should contain information on the impact of ASD on the developing child and instruction in evidence based education practices for teaching children and students with ASD. Closer links between the education sectors, universities and Autism SA should be developed to encourage research on ASD based on rigorous data collection. Such research could identify possible current exemplary practice in South Australia and provide further information on improving children and students' educational outcomes, developing successful models of educational practice and building workforce capacity to teach children and students with ASD.

Further information on recent Government contributions and planned future developments relevant to children and students with ASD and their families is contained in Appendix 9. Finally, the Ministerial Advisory Committee: Students with Disabilities would like the Minister to be aware of the difficulty in collecting verifiable data on the distribution of children and students with ASD in South Australia because the data recorded by Autism SA and the education sectors differ. It is suggested that these agencies work together to ensure that in the future accurate and reliable data are available to the Minister, when required, to inform educational service developments for children and students with ASD in South Australia.



Advice to the Minister

On the basis of these findings and conclusions, the following advice is provided to the Minister for Education and Minister for Early Childhood Development for consideration.

Autism specific education services

- Education options for children and students with Autism Spectrum Disorder in South Australia should be increased to include autism specific education settings. These settings should complement other education options already available to children and students with Autism Spectrum Disorder.
- Education sectors should provide clear eligibility criteria for entry into autism specific settings and clear processes should be established for children and students to transition in and out of these settings as required.
- Children and students with Autism Spectrum Disorder should have access to structured autism specific interventions when needed, but also be provided with opportunities to generalise their skills in more inclusive environments.
- The educational methodology of autism specific education settings, particularly in the early years, should be based on the principles of explicit, direct teaching, with skilled use of support staff, visual systems and routine structures to support children and students to access the curriculum.
- Autism specific settings should become centres of excellence and grow their capacity to provide training, consultation and mentoring for education staff and professionals of other disciplines, such as occupational therapy, speech pathology, psychology and disability services who provide support to these children and students.

Development of Workforce Capacity

- A Workforce Development Strategy should be devised by the education sectors to provide a systemic approach to training school leadership, teachers and support workers in the provision of quality education services to children and students with Autism Spectrum Disorder, and to build the education sectors' capacity for quality services to this cohort of children and students.
- An additional team of centrally based autism experts, to provide additional support and who could also be available to provide professional learning and practical support to school leaders, teachers and support workers in their local preschools and schools, should be considered to complement the services already provided by Autism SA.
- Additional provisions should be made available to education providers in country regions where access to professional development, training and resources to support education services for children and students with Autism Spectrum Disorder is limited.

Collaboration

- Education staff should work in collaboration with families and professionals of other disciplines to ensure consistency for children and students with Autism Spectrum Disorder between their school, home and community environments.
- Collaboration between the health, disability and education sectors should be promoted and strengthened with regard to the wellbeing of children and students with Autism Spectrum Disorder and their families.
- Universities should work with Autism SA and the education sectors to provide relevant pre-service and in-service training in quality educational practices for children and students with Autism Spectrum Disorder. Research and evaluation of models and services should also be undertaken to inform best practice for this cohort of children and students in South Australia.

Evaluation of education practices

- The education sectors should adopt quality indicators for regular review of their education practices for children and students with Autism Spectrum Disorder.

Data

- Autism SA and the education sectors should work together to ensure accurate and reliable data are available to inform future educational service developments for children and students with ASD in South Australia.



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Appendix 1

Project group membership

Chairperson

Ms Margaret Wallace

Ministerial Advisory Committee: Students with Disabilities
Chair

Members

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Department of Education and Children's Services
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Ms Libby Burns

Association of Independent Schools of SA
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Mr Jon Martin

Autism SA
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Ministerial Advisory Committee: Students with Disabilities Secretariat

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Appendix 2

List of other people consulted

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Autism SA

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Department of Education and Children's Services

Ms Jen Mathwin-Raymond	Principal Ashford Special School
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Dr Keren Wicks	Principal Kensington Centre
Ms Michelle Baylis	Data Manager, Students with Disabilities Disability Services

■ Appendix 3

Diagnostic criteria for ASD

The Diagnostic and Statistical Manual of Mental Disorders (DSM), published by the American Psychiatric Association, together with the International Classification of Diseases (ICD) published by the World Health Organisation set the standard criteria for the diagnosis of ASD.

The DSM has been amended on five occasions since its first publication in 1952—in 1968, 1980, 1987, 1994 and most recently in 2000. Autism was not included as a separate diagnostic condition in the original release of the DSM (DSM-I, 1952) or that which followed (DSM-II, 1968). These first two editions classified children exhibiting autistic type behaviours as schizophrenic—childhood type. The DSM III (1980) saw the inclusion of autism as a separate diagnostic category under a new class of conditions known as Pervasive Developmental Disorders. The DSM III was refined in 1987 (DSM-III-R), clarifying the criteria for diagnosis of people with Atypical Pervasive Developmental Disorder. The DSM IV was released in 1994, which included more subtypes to the category of Pervasive Developmental Disorders, highlighting the ‘spectrum’ of autistic disorders, including Asperger’s disorder. The DSM-IV was further refined in 2000 to become the DSM-IV-TR. This latest edition is the current diagnostic tool used by professionals along with the ICD–10 (1992)¹³.

ASD is the term used to describe the subset of five Pervasive Developmental Disorders—Autistic disorder, Asperger’s disorder, Pervasive Developmental Disorder – Not Otherwise Specified (PDD-NOS; which includes Atypical Autism), Childhood Disintegrative Disorder and Rett’s disorder (American Psychiatric Association, 2000). ASD is most commonly understood to mean a diagnosis of Autistic disorder, Asperger’s disorder or PDD-NOS/Atypical Autism. In South Australia the interpretation of ASD is taken to mean the collective of only two of these disorders—Autistic disorder and Asperger’s disorder.

The DSM is currently under review again and the fifth edition (DSM 5) will be published in 2013. This edition will supersede previous editions. The DSM 5 will use the category *Autism Spectrum Disorder* (ASD) in place of the category *Pervasive Developmental disorders* currently used in the DSM IV. ASD will then be understood to include people with Autistic disorder, Asperger’s disorder, PDD-NOS (including Atypical Autism) and Childhood Disintegrative Disorder. The fifth disorder in the current Pervasive Developmental Disorder category (Rett’s disorder) will be listed as a separate category in its own right.

¹³ The DSM and ICD have aligned since 2000 and discussions concerning future publications of these diagnostic manuals aim to ensure they remain aligned. The DSM 5 is due for publication in 2013 and the next edition of the ICD (ICD 11) is due for publication in 2014.

Appendix 3 continued

Proposed DSM 5

Autism Spectrum Disorder

Must meet criteria 1, 2, and 3:

1. Clinically significant, persistent deficits in social communication and interactions, as manifest by all of the following:
 - a. Marked deficits in nonverbal and verbal communication used for social interaction;
 - b. Lack of social reciprocity;
 - c. Failure to develop and maintain peer relationships appropriate to developmental level.
2. Restricted, repetitive patterns of behaviour, interests and activities, as manifested by at least TWO of the following:
 - a. Stereotyped motor or verbal behaviours, or unusual sensory behaviours;
 - b. Excessive adherence to routines and ritualized patterns of behaviour;
 - c. Restricted, fixated interests.
3. Symptoms must be present in early childhood (but may not become fully manifest until social demands exceed limited capacities).

(American Psychiatric Association, 2010)

■ Appendix 4

Prevalence of ASD

Epidemiological reports on the prevalence of Autism Spectrum Disorder (ASD) have been undertaken for approximately forty years but nevertheless remain unreliable. Anecdotally there appears to have been a steadily increasing demand for services reported by agencies, which is disproportionate to the growth in population (Roberts & Prior, 2006). The heightened awareness of, and concern about, the increasing incidence and prevalence of ASD has stimulated debate as to whether the increase is due to broadening of the diagnostic category and greater awareness of the disability, or a true rise in incidence, possibly due to an environmental risk factor (Fombonne, 2003; Fombonne, 2005; Silove et. al., 2008).

Prevalence estimates worldwide range from 20 per 10,000 (1:500) (Williams et. al., 2006) to 116 per 10,000 (1:86) (Baird et. al., 2006). There are several factors likely to contribute to this variation including the evolving definition of ASD and variability in diagnosis amongst professionals over time. One study from the United Kingdom has shown direct evidence to support the theory that changes in diagnostic criteria may have contributed toward the rise in the number of people diagnosed with autism, rather than the onset of an epidemic. Professor Dorothy Bishop undertook this study with a sample of adults who had previously been diagnosed with developmental language disorders in the 1980s and educated in special schools or classes, who now would be diagnosed with ASD (Bishop et. al., 2008). She reported:

'These were children that people were saying were not autistic in the 1980s, but when we talk to their parents now about what they were like as children, it's clear that they would be classified as autistic now.' (*Science Daily*, 9 April 2008.)

From an Australian perspective Buckley (2004) and Williams (2006) separately have reported national prevalence estimates. Buckley sourced data from the Department of Family and Community Services and Centrelink (i.e. in relation to the Carers Allowance; 2004), and Williams sourced data from the Australian Institute of Health and Welfare (drawing on data from the Commonwealth State/Territory Disability Agreement National Minimum Data Set [CSTDA NMDS] for all States and Territories: 2004)—and from Centrelink: 2003–05. These authors reported on the prevalence of ASD among children aged younger than 16 years. Their findings presented a range of results from 34 per 10,000 (1:294) (Buckley, 2004) to 120.5 per 10,000 (1:83) (Williams, 2006) Australia wide. Buckley later undertook a study on the prevalence of ASD in children aged six to twelve years and found 110 children per 10,000 (1:90) diagnosed with this disorder (Buckley, 2009). Buckley also found that South Australia's prevalence statistics on average appeared to be slightly below the national average but fluctuated from year to year (ibid, 2009).

From a South Australian perspective, MacDermott and Williams reported on the prevalence of autism in all the States and Territories of Australia using the same data sourced from the Australian Institute of Health and Welfare (drawing on data from the CSTDA NMDS for all States and Territories collected during 2003 and 2004). These authors reported that the prevalence estimates of autism among children aged younger than 16 years in South Australia in 2004 was 49.5 per 10,000 (1:202) (MacDermott et al., 2006; Williams et. al., 2008). Buckley reported that

■ Appendix 4 continued

More recent data from South Australia concur with the global trend of increasing prevalence of ASD. In June 2009, the South Australian population was approximately 1.6 million, of which approximately 400,000 (25 per cent) were children aged 0 to 18 years (Australian Bureau of Statistics, 2010). In the same year, there were approximately 4000 people diagnosed with Autism Spectrum Disorder (3300 of whom were children—2000 of whom were children diagnosed with Asperger's disorder) (J Martin [Autism SA] 2010, pers comm March). Accordingly, the total cohort of people with ASD in South Australia represents approximately 0.25 per cent of the total population or 25 per 10,000 (1:400). However, based on current population based prevalence statistics, South Australia should have a cohort of approximately 9000 people living with ASD (0.56 per cent of the population; 56 per 10,000 or approximately 1:180)—but not all people with ASD choose to be diagnosed or seek assistance. If only the 2009 population of children diagnosed with ASD were considered, the South Australian cohort of children with ASD represents 0.825 per cent of the total South Australian population of children (aged younger than 18 years), or approximately 83 per 10,000 (1:120). The Australian Advisory Board on Autism Spectrum Disorders reported that in 2010 the prevalence of ASD Australia wide is approximately six people per 1,000 (1:167).

Appendix 5

Extract from the United Nations *Convention on the Rights of Persons with Disabilities, 2006*

With regard to children with disabilities, *Article 7* of the Convention states that:

- States Parties¹⁴ shall take all necessary measures to ensure the full enjoyment by children with disabilities of all human rights and fundamental freedoms on an equal basis with other children.
- In all actions concerning children with disabilities, the best interests of the child shall be a primary consideration.
- States Parties shall ensure that children with disabilities have the right to express their views freely on all matters affecting them, their views being given due weight in accordance with their age and maturity, on an equal basis with other children, and to be provided with disability and age-appropriate assistance to realise that right.

With regard to education, *Article 24* of the Convention states that:

- States Parties recognise the right of persons with disabilities to education. With a view to realising this right without discrimination and on the basis of equal opportunity, States Parties shall ensure an inclusive education system at all levels and life long learning directed to:
 - The full development of human potential and sense of dignity and self-worth, and the strengthening of respect for human rights, fundamental freedoms and human diversity;
 - The development by persons with disabilities of their personality, talents and creativity, as well as their mental and physical abilities, to their fullest potential;
 - Enabling persons with disabilities to participate effectively in a free society.
- In realizing this right, States Parties shall ensure that:
 - Persons with disabilities are not excluded from the general education system on the basis of disability, and that children with disabilities are not excluded from free and compulsory primary education, or from secondary education, on the basis of disability;
 - Persons with disabilities can access an inclusive, quality and free primary education and secondary education on an equal basis with others in the communities in which they live;
 - Reasonable accommodation of the individual's requirements is provided;
 - Persons with disabilities receive the support required, within the general education system, to facilitate their effective education;
 - Effective individualised support measures are provided in environments that maximise academic and social development, consistent with the goal of full inclusion.

States Parties shall enable persons with disabilities to learn life and social development skills to facilitate their full and equal participation in education and as members of the community.

¹⁴ State Parties is the term used by the United Nations to describe the signatories to the convention.

■ Appendix 6

Evidence based educational practices for children and students with ASD

The United States National Professional Development Centre (NPDC) on ASD developed a process for reviewing research literature on education practices for children and students with ASD and established criteria for identifying evidence-based practices in education for these children and students (concentrating only on *Focused Intervention practices not Comprehensive Treatment Models*¹⁵). Their research named 24 focused intervention practices as having sufficient evidence to demonstrate their efficacy in teaching children and students with ASD. The practices were classified according to their positive outcomes for children and students' development in the areas of academic, behaviour, communication, play, social and transition skills. The authors list these practices in alphabetical order (rather than preferential order) and provide descriptors of the methods employed. Guidelines for selecting the most appropriate evidence-based practices relative to the learning objectives of individual children and students are also provided in their publication (Odom et. al., in press).

From an Australian perspective, Roberts and Prior conducted a review of interventions and treatment options for young children with ASD in 2006. They commented on the broad range of interventions being employed to assist children with ASD to improve their general adaptive functioning. These interventions were classified as biological, psychodynamic, behavioural, developmental, communication focused, sensory-motor focused, a combination of approaches and family-based approaches. Roberts and Prior reported that,

A consistent finding in the research studies is that different children with autism respond in different ways to any given treatment or intervention program. (p. 14).

They concluded that no single program will suit all children with ASD and their families. However, there can be short and long term benefits from early, intensive, family-based treatment programs when these are appropriately adapted to the child's pattern of strengths and limitations and take account of family circumstances (ibid, 2006). Their research indicated that intensive educational and behavioural interventions have produced the most positive outcomes so far (i.e. interventions based on the principles of Applied Behaviour Analysis¹⁶). They recommended that these interventions begin between the ages of two and four years and should be extensive and intensive – up to 20 hours per week.

¹⁵ The authors describe Comprehensive Treatment Models (CTMs) as organised packages of practices and components designed to address a broad array of skills and abilities. These should be described well enough to be replicated by others and have a process for assessing implementation. LEAP, Lovaas Institute, the May Institute and the Princeton Child Development Institute are examples. Focused Interventions, in contrast to CTMs, are individual instructional practices or strategies that teachers and other practitioners use to teach specific educational targets—skills and concepts. These practices may take place in classrooms, clinics, homes or communities and are based on explicit teacher behaviours that can be described and measured. Prompting, reinforcement, Picture Exchange Communication Systems (PECS) and visual supports are examples of focused intervention practices.

¹⁶ Applied Behaviour Analysis (ABA) is based on the principle that influencing a response associated with a particular behaviour may cause that behaviour to be shaped and controlled. ABA involves the use of behavioural methods to measure behaviour, teach functional skills, and evaluate progress. (http://www.autism.net.au/Autism_ABA.htm)

■ Appendix 6 continued

More recently, in 2009, the Irish National Council for Special Education commissioned the *International Review of the Literature of Evidence of Best Practice Provision in the Education of Persons with Autistic Spectrum Disorders*. Despite a systematic search of electronic databases focusing on empirical studies—coupled with an analysis of articles, reports, reviews, expert opinions and professional experiences—this research again found insufficiently strong evidence to promote any one specific type of intervention or approach for all children and families. Rather, the findings indicated that a range of interventions (i.e. eclectic provision) should continue to be provided. They advised that ‘further evidence is needed on the impact of specific educational settings and interventions across a range of ages and sub-groups within the autism spectrum’. (Parsons et al., 2009, p 6.)

With regard to teaching practices, Rose et al. (2003) list several core elements of educational practice, with empirical support, which should be included in any sound comprehensive instructional program for children and students with ASD. These include:

- environmental and curricular modifications, general education classroom support and instructional methods including systematic instruction
- specialised curriculum content
- individualised supports and services for students and families
- comprehensible and structured learning environments
- a functional approach to problematic behaviour
- family involvement and home/school collaboration
- attitudinal and social supports
- a coordinated team commitment
- recurrent evaluation of inclusion procedures.

Simpson et al. (2003) developed a model for successful inclusion of children and students with ASD in mainstream classrooms called the *Autism Spectrum Disorder Inclusion Collaboration Model*. They propose several interlinked components and emphasise the importance of collaboration, consideration of the individual learner and instructional factors. The authors suggest that availability of trained aides to support children and students with ASD is a pivotal part of ensuring their success. They stress that aides should only be used to support children and students directly when necessary and that at other times they are best employed working to assist other children and students on an as needed basis. They comment further on the importance of professional training for teacher aides, as well as teachers, and that this training needs to be continuous, with an emphasis on knowing and understanding the impact of ASD. Jordan (1999) also emphasised the need for appropriately trained personnel. She explained that the complex needs of children and students with ASD necessitate a multi-person, multifaceted, multidisciplinary, collaborative approach to planning and implementing a comprehensive program.

Shared responsibility by general and special educators in mainstream school communities is another theme in the literature. Simpson et al. (2003) point out that shared responsibility is essential to ensure success and that this is best achieved by effective communication, shared decision making and participatory management. Trust between parents and educators is also a necessary element in enhance communication and effective implementation of the educational program in general (Mandalawitz, 2002).

■ Appendix 6 continued

Further, the research literature discusses the importance of a positive school climate. The positive attitudes of school leaders toward inclusion of children and students with ASD and those of parents of children with other additional needs, as well as those of typically developing children are critical. Reduced class sizes (to allow for the more intensive input required by children and students with ASD) and adequate teacher planning and consultation time are other themes discussed in the literature. With regard to the development of children and students' social skills in inclusive settings, highly systematic approaches have been shown to be the most effective for promoting interaction between children with ASD and their typically developing peers. Gains made were more likely to be maintained in inclusive settings (Odom & Strain, 1984; 1986).

Appendix 7

Regency Park School South Australian School for Vision Impaired (SASVI)

Regency Park School is a Government special school. Children and students attending the main campus have a physical impairment and intellectual disability, and a significant percentage of children and students have severe and multiple disabilities. The school is soon to be re-located to a purpose built site adjacent to Ocean View College¹⁷, as part of the *Education Works* initiative of the South Australian Government.

Regency Park School has four *Link Programs* in addition to the main campus. Link Programs are fully inclusive programs that enable children and students with physical disabilities to attend mainstream schools on a full time basis. The programs are a collaborative partnership between the host school and the Regency Park School. Children and students do not have an associated intellectual disability. They are enrolled at Regency Park School and are able to access and participate in mainstream classes. Children and students are placed in classrooms appropriate to their age and academic level and receive staff support and resources from Regency Park School. The four Link Programs are located at Ross Smith Secondary School, Unley High School, Mitcham Junior Primary and Primary Schools and Madison Park Junior Primary and Primary Schools. In addition, Regency Park School provides a Statewide Outreach Specialist Service to the Government, Catholic and Independent sectors in relation to children and students with physical disabilities.

Similarly, the South Australian School for Vision Impaired (SASVI) is a Government special school. The main campus is co-located with Kilparrin Teaching and Assessment School and Services (a special school for children and students who are deafblind and/or who have complex sensory impairment/s [vision and/or hearing] and additional disabilities) and Ascot Park Primary school (a mainstream primary school). SASVI mainly caters for primary aged students but also accommodates secondary students with additional disabilities. SASVI provides a *Vision Support Program* at Charles Campbell Secondary School and Seaview High School, where students attending these secondary schools work within the regular program with additional support negotiated individually. Teachers from SASVI work as support teachers of students with vision impairment at these schools. SASVI also provides services to children and students in mainstream preschools and schools throughout South Australia, in the Government, Catholic and Independent sectors.

¹⁷ Ocean View College is a mainstream comprehensive birth to year 12 school.

Appendix 8

Autism specific education services

There is a range of educational options for children and students with ASD available in Australia, including autism specific settings (schools and units). Roberts and Prior (2006) briefly reported on specialist autism education provisions as part of their review of effective models of practice. They reported on services provided by Autism associations, Government, Catholic and Independent education sectors, and some children were recorded as home schooled.

Where specialist autism schools, units and classes operate, some appear to be successfully based on a hub and spoke model of service structure, where there are specialist settings (the hub) and satellite classes or units in mainstream settings (the spokes). This model provides opportunity for integration and inclusion with access to intervention from autism specialists as required, and with varying intensity. Victoria has six Government autism specific schools, some of which have satellite classes co-located with mainstream schools and in New South Wales, ASPECT operates autism specific schools with satellite classes hosted by mainstream schools. ASPECT's education services are non-government and have grown to provide six special schools with two more planned in the near future and 78 satellite classes in metropolitan and country regions of New South Wales. ASPECT's enrolment in 2010 was approximately 700 with an additional 700 children and students with ASD on their waiting list (T Clark [ASPECT] 2010, pers comm June).

In addition to ASPECT schools, New South Wales has a number of Government autism specific special education classes, as well as other non-government autism specific education providers, such as Woodbury School, and Giant Steps School. Woodbury School is based on an Applied Behaviour Analysis approach to education for children and students with autism and Giant Steps is based on its own approach, which originated in Canada. The first Australian based Giant Steps school was opened in Tasmania in 1994.

Concerning other jurisdictions, Queensland also has autism specific schools and units. The Australian Capital Territory has autism specific units co-located with mainstream schools and in Western Australia there are four preschool and junior primary autism specific units for four and five year olds, which work towards the children's integration in mainstream schools. Western Australia's autism programs are offered to four and five year olds in ten Education Support Centres (which are similar to South Australia's Disability Support Units) and several of the ten special schools in Western Australia offer programs for children and students with ASD from kindergarten to year 13.

Some states and territories also utilise education department based specialist autism advisers or teams of advisers to provide advice and practical support to schools.

From an international perspective, autism specific schools and education services are available in the United Kingdom, Singapore, Canada, the United States of America, New Zealand and in European countries, amongst others in the world.

Appendix 9

Recent Government contributions towards services for families of children with ASD and planned future developments

In the 2005/06 financial year, the South Australian Government provided a once-off payment of \$180,000 to Autism SA to reduce their waiting lists for diagnostic services.

In March 2006, the State Government committed \$1 million over four years for diagnostic services, assessments and ongoing early intervention for young children with ASD in South Australia. This was followed in 2010 with a further commitment of an additional \$1 million per annum, totalling a \$2 million commitment per annum for these services.

In 2008, the Australian Government invested in service developments Australia wide for children with ASD and their families through the *Helping Children with Autism* package. The Australian Government committed \$190 million for four years (up to June 2012) to provide:

- increased access to early intervention services for children aged 0 to 6 years
- education and support for families and carers of children with an ASD
- new Medicare items for diagnosis and early intervention treatment for children aged under 13 years
- workshops and information sessions for parents and carers of school-aged children
- professional development for teachers and school staff who work with children and students with ASD.

As part of this package, the Australian Government promised to open six autism specific childcare centres with 20 places each across Australia. The first of these centres was established in 2009 at the Anglicare SA – Daphne Street Childcare Centre, Prospect, Adelaide (now known as the Anglicare SA – Daphne Street Childcare and Specialist Early Learning Centre).

Another component of the *Helping Children with Autism* package is a four year program of professional development for teachers and other school staff who are working with children and students with ASD (the *Positive Partnerships: supporting school aged students on the autism spectrum* project). Autism SA is a member of the Australian Autism Education and Training Consortium (AAETC) and has been contracted to provide this training. Workshops and information sessions for parents and carers of school aged children with ASD are also part of the project and the aim is to improve the educational outcomes for school aged children with ASD.

Appendix 9 continued

Future developments

The Ministerial Advisory Committee was aware of the following future developments relevant to South Australian children and students with ASD and their families at the time of writing this report, but this list is not exhaustive.

Professional learning

- The Positive Partnerships Program will continue until 2012 to deliver training for teachers and to establish professional networks.
- Autism SA proposes to review their professional learning and support to secondary schools.
- Flinders University will deliver a double degree in Education and Disability Studies from 2011.

Family support

- The Positive Partnerships Program workshops for families will continue until 2012.
- The Productivity Commission is gathering information to inform the Australian Government on the proposed National Disability Insurance Scheme.

Autism specific education settings

- DECS will develop two autism specific disability units.
- Autism Specific Centres for Early Childhood and Parenting continue to be established in each state of Australia as part of the *Helping Children with Autism* package. An Australia wide evaluation of the outcomes for children and families will begin in 2011.

Research

- Collaborative research undertaken by Macquarie University, ASPECT and Autism SA to compare the satellite school model of education provisions provided by ASPECT with the consultative model of professional support provided by Autism SA has been proposed.

Review of services

- The Social Inclusion Board has been asked by the South Australian Premier and Minister for Disability to develop a blueprint for the long-term reform of the way people with a disability are provided with services.