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Education

CONTEMPORARY MODELS OF FUNDING INCLUSIVE EDUCATION FOR STUDENTS WITH AUTISM SPECTRUM DISORDER

A REPORT COMMISSIONED BY THE PROGRAM FOR STUDENTS WITH DISABILITIES (PSD) REVIEW UNIT OF THE DEPARTMENT OF EDUCATION AND TRAINING FOR THE STATE OF VICTORIA

Umesh Sharma, Ph. D.

Chris Forlin, Ph.D.

Brett Furlonger, Ph.D.

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Contemporary Models of Funding Inclusive Education for Students with Autism Spectrum Disorder

Umesh Sharma, Chris Forlin and Brett Furlonger

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Glossary of Acronyms

ABA	Applied Behaviour Analysis
ACT	Australian Capital Territory
ADHD	Attention Deficit Hyperactivity Disorder
ARACY	Australian Research Alliance for Children and Youth
ASD	Autism Spectrum Disorder
AVT	Advisory Visiting Teachers
DECD	Department for Education and Child Development
DET	Department of Education and Training
DETE	Department of Education, Training, and Employment
HI	Hearing Impairment
EA	Education Aid
EAP	Education Adjustment Program
ERIC	Education Resources Information Centre
ICSEA	Index of Community Socio-Educational Advantage
IEP	Individual Education Plan
ILP	Individual Learning Plan
LEA	Local Education Agency
LSU	Learning Support Unit
NAC	National Autism Centre
NAPLAN	National Assessment Program – Literacy and Numeracy
NCSE	National Council for Special Education
NRC	National Research Council
NSW	New South Wales
NSW DET	New South Wales Department of Education and Training
NT	Northern Territory
NTDET	Northern Territory Department of Education and Training
NZ	New Zealand
PD	Professional Development
PECS	Picture Exchange Communication Strategies
PI Coordinator	Performance Improvement Coordinator
PSD	Program for Students with Disability
QLD	Queensland
RAM	Resource Allocation Model
RTI	Response To Intervention

RTLB	Resource Teaching Learning and Behaviour
SA	South Australia
SDR	Register of Students with Severe Disability
SEG	Special Education Grant
SEN	Special Educational Needs
SEND	Special Educational Needs and Disability
SES	Social Economic Status
SESP	Special Education Support Program
SET	Special Education Teacher
SNPI	Special Needs Profiling Instrument
SS	Student Support
TAS	Tasmania
UK	United Kingdom
VIC	Victoria
WA	Western Australia
WSSLS	Whole-School Student Learning Support

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Executive Summary

This report was commissioned by the Program for Students with Disabilities (PSD) Review Unit of the Department of Education and Training for the State of Victoria. It provides a systematic analysis of local and international funding models with a focus on those that foster best practice inclusive education for students with Autism Spectrum Disorder (ASD). A particular emphasis is on identifying models used by various jurisdictions across Australia. It further provides recommendations for consideration in relation to funding models that could best support inclusive education within the Victorian context.

Funding models are critically reviewed as to their potential effectiveness for the Victorian context. Key considerations when choosing appropriate funding models to support students with ASD are highlighted and recommendations based upon best practice models potentially most applicable for supporting students with ASD within inclusive classrooms are outlined.

Students with ASD experience a pervasive life-long developmental disability affecting social and communication skills; with support needs that range from requiring minimal or no additional support to high levels of need. The number of students identified with ASD is on the rise with the prevalence growing faster in Australia than for any other disability.

The heterogeneity of the population of individuals with ASD presents as a unique instructional challenge as they exhibit a wide range of behavioural and learning challenges to educators and administrators. Each student with ASD is distinctive and every attempt must be made to understand each student's particular needs, abilities and interests when making decisions regarding the level of support needed.

Best practices for supporting students with ASD were identified as including early assessment and intervention; intensive behavioural interventions; specific teaching strategies; ongoing assessment and monitoring; active involvement of families; teacher and para-professional training; multi-agency collaboration; and transition planning. Most of the strategies identified are likely to benefit not only students with ASD but any student with additional learning needs.

Analysis of funding models to facilitate the implementation of inclusive educational policy demonstrates that there is currently no agreed-upon method for the support of students with ASD. Most jurisdictions nationally and internationally do not fund students with ASD differently compared to students with other disabilities. In almost every region, funding is based upon the level of student need rather than their type of disability.

Internationally, countries are not adopting a single approach to funding students with special educational needs. A continuum of approaches exist that range from census-based funding to categorical approaches with most countries adopting a combination of methods. These typically involve through-put funding provided direct to schools or districts to support the majority of students who exhibit mild to moderate additional learning needs; together with targeted input funding directly linked to the more severe needs of a small number of individual students. Decisions regarding the allocation of additional funds do not tend to be based on the type or category of disability but are focussed exclusively on the level of student need. Additional resources may also be provided based upon demographic challenges such as for students in rural or remote schools, low SES areas, disenfranchised groups, or if their needs are complex and concomitant with another disability.

Across Australia, all States and Territories have firmly established structures for supporting students with disability, although many procedures for identifying the eligibility of students and type of support required are quite complex. Through-put funding to schools includes additional loadings for students with disability that may be used at a school's discretion to support students with mild to moderate ASD. Additional targeted input funding is available in all systems for students having high to very high support needs for ASD. This input funding is allocated on application and according to individual level of need with strict criteria for accessing it. Some systems offer intensive withdrawal time-limited programs at a district level for small numbers of students with ASD. District or state-wide consultants are also available in most systems to consult with schools; including specialists in supporting students with ASD.

A lack of consistency across jurisdictions in measuring outcomes is a key issue in being able to assess achievement from additional funding for whole school support programs for students with disability. Despite good intentions of policy makers and departments of education, sometimes the way the education of students with ASD is resourced may lead to tension and create wider gaps in policy and practice. Most jurisdictions have indicated in their policy documents that they have in-built measures of accountability, transparency and equity but how these measures are operationalized remains unclear from the information available. Funding and resourcing of education of students with ASD must be seen in context. Any new funding model must include a process for measuring the effectiveness of the use of this funding by viewing the impact that it makes on improving student learning.

Ten key areas are identified from the literature that require consideration when developing the most appropriate funding models for supporting students with ASD (see Figure 1). These highlight the range of influences that are likely to have an impact on funding decisions. Each of these should be reviewed in detail for the specific context of Victoria prior to deciding on an approach to adopt. The model selected should aim to minimize performance differences between schools while maximizing the progress of all students at each stage of schooling. Funding support should be output focused; designed and used to promote improved student performance.

Four funding models have emerged from this review as current best practice for supporting learners with ASD. These are recommended for consideration for providing more effective and equitable approaches to ensuring the needs of students with ASD are met.

1. **Targeted input funding** - all systems recognize that some students with ASD will require ongoing support that is targeted directly at their individual needs. Input funding remains the best practice for meeting the needs of the small number of students with ASD requiring a high level of support.

2. **Through-put funding** - determined on a per capita funding basis. Best practice models include base-line funding for all students and additional support for school type (kindergarten, primary, secondary), geographical region, educational disadvantage, socio-economic status (based on ICSEA), and the number of students identified by the school as requiring additional learning support (with or without a defined disability). Students with mild to moderate support needs for ASD are generally supported under this model.

3. **Output funding** - linked to increased school liability for ensuring students are achieving desired outcomes. In Australia, increasingly funding is allocated according to results on national NAPLAN scores, thus providing a state-wide equitable means for identifying the percentage of students who are achieving in the lowest stanine within a school. Funding is automatically allocated without the need for labelling or categorizing students. This funding can be used to target students with ASD identified through NAPLAN as requiring support in literacy or numeracy.

4. **State or District-wide funding** - most systems also provide state or district-wide personnel who can be accessed by schools through a consultancy model. Support includes access to specialist teachers for ASD who can assist in providing information about resourcing, planning and curriculum development. They can also visit schools to observe students' needs and work collaboratively with classroom teachers and school-based teams to develop appropriate interventions. Psychologists and other consultants such as behaviour analysts, speech therapists and occupational therapists are also usually available through these avenues.

Increasing school-based funding provides greater authority to schools regarding decision-making. Nevertheless, systems need to ensure that the increased autonomy is balanced with effective accountability mechanisms. Compulsory professional learning for school leaders should be seen as key to ensuring improved student outcomes are achieved resultant from the affiliated funding being provided to schools.

With quality teaching being seen as the most significant in-school factor for improving student outcomes, the effectiveness of existing preparation programs and also mentoring for new teachers needs consideration to ensure that teachers are able to implement quality programs for supporting all students with ASD within regular classrooms.

6 August 2015

1. Key Objectives

1.1. To undertake a systematic review of local and international funding models with a focus on those that foster best practice inclusive education for students with autism;

1.2. To provide recommendations for consideration in relation to funding models that could best support inclusive education within the Victorian context.

2. Introduction

This review presents an exploration of how best to fund students on the Autism Spectrum within inclusive school settings. Funding models to facilitate the implementation of inclusive educational policy have demonstrated that there is currently no agreed-upon method for the support of this group of students. Indeed, the heterogeneity of the population of individuals with Autism Spectrum Disorder (ASD) presents as a unique instructional challenge as they exhibit a wide range of behavioural and learning challenges to educators and administrators.

This report reviews international and Australian literature to identify current best practices for supporting students with ASD in inclusive classrooms. Funding models are analysed as to their potential effectiveness for the Victorian context. Key considerations when choosing appropriate funding models to support students with ASD are highlighted and recommendations based upon best practice models potentially most applicable for supporting students within inclusive classrooms are outlined.

3. Methodology

In order to identify articles for the review, electronic databases (ERIC, PsychInfo and Google scholar) were searched using keywords such as "autism", "inclusive education" and "funding models"; "ASD", "inclusive education" and “funding models". As a key focus of the review was to look at contemporary funding models, the search was restricted to articles published since 2005. We have incorporated additional articles relevant to the broader focus of the review (e.g. best practices to teach students with ASD).

We also included policy documents that were available in the public domain and relevant to the review. Abstracts of all identified articles were read to determine the eligibility of the identified article for inclusion in the report. It became clear that the majority of the articles identified in the process did not specifically describe funding of students with ASD. Instead, most articles described funding for all students with disability and referred to education of students with ASD in various parts of the report. This is not a surprising finding considering most jurisdictions, nationally and internationally, do not fund the education of students with ASD differently compared to students with other disabilities. We made every possible attempt to glean and report information that would be useful for funding of education for students with ASD. We also checked the references of all identified articles to identify additional articles for the review.

Another key focus of this review was also to identify models used by various jurisdictions across Australia to fund the education of students with ASD. A slightly different approach was employed to identify literature for inclusion in this review. We first examined the policy documents available on the departmental websites. After reviewing the material, we drafted specific questions of clarification arising from the information available on the websites. Departmental representatives were contacted through email and asked to address these questions to provide additional information. In some cases, telephone interviews were also conducted to gather/clarify information provided.

4. Defining Autism Spectrum Disorder (ASD)

An Autism Spectrum Disorder is a pervasive life-long developmental disability affecting social and communication skills (Autism New Zealand, n.d.). Students with ASD experience complex disorders that are neuro-developmental in origin and present in a wide variety of divergent outcomes (Australian Advisory Board on ASD, 2011).

ASD affects five times as many boys as girls, although it is harder to diagnose in girls (Australian Advisory Board on ASD, 2011). Autism covers a wide spectrum of individual needs although there are some generic characteristics that are critical to understand when providing support for students identified to be on the spectrum. Their impairments include difficulties with social communication, imagination, and social interaction. Students identified with ASD may, nonetheless, exhibit savant skills in specific areas. In addition, some students may display repetitive behavioural patterns or become obsessed with objects or behaviours. Many students, being hypersensitive to outside stimuli, experience great difficulty with sensory issues with the expectation of events potentially leading to extreme anxiety or panic. However, it is important to keep in mind that many of these students with ASD also show strengths in their abilities, curiosity, and creativity and have achieved educational and professional success. They also may exhibit strong cognitive and verbal skills that allows them to reorganize information, problem solve and achieve at high levels.

It is generally accepted that the number of students identified with ASD is on the rise (Baker & Stokes, 2007) and that the prevalence of students with ASD in Australia is growing at a faster rate than any other disability (Australian Advisory Board on ASD, 2011). According to State and Territory data in Australia, the prevalence of ASD in 2003-2004 ranged from 3.6 to 21.9/10,000 for 0-5 year olds; 9.6 to 40.8/10,000 for 6-12 year olds; and 4.4 to 24.3/10,000 for 13-16 year olds (MacDermott, Ridley, Glasson, & Wray, 2006). For the period 2003 to 2009 by using Centrelink data, Buckley (2009) (cited in Australian Advisory Board on ASD, 2011) found that the prevalence had increased by 1.7 times. The Australian Bureau of Statistics, likewise, reported a 79% increase in the prevalence of ASD from 2009 to 2012.

It is unclear as to the actual cause of this increase in prevalence. It has been suggested that the increase might be a result of better identification or the need for more severe diagnosis in order to receive funding to support learners with social, emotional and behavioural difficulties (Sigafoos et al., 2010). An anonymous survey conducted by Skellern, Schluter and McDowell (2005) of child psychiatrists and paediatricians in Queensland involved with confirming a diagnosis of ASD, concluded that increased incidence rates were directly related to the need to increase symptoms in order to reach diagnostic thresholds to secure appropriate funding to meet their needs. This process has been referred to as ‘diagnosis for dollars’ and ‘bounty hunting’ (Winter et al. 2006). Regardless of the cause, this continued increase in numbers indicates that support services will need to expand if governments are to ensure that all students identified with ASD are able to receive an appropriate education within inclusive classrooms.

5. Best Educational Practices for Students with ASD

The primary purpose of the brief was to review various funding models related to inclusive education of students with ASD. We believe the purpose cannot be achieved if readers are not aware of the best educational practices for students with ASD. The amount of information on teaching and educational approaches can be confusing and conflicting at times. Some systematic reviews and reports commissioned by government departments have brought clarity to effective approaches to educate students with ASD (Iovannone, Dunlap, Huber, Kincaid, 2003; Parsons, Guldberg, Macleod, Jones, Prunty, Balfe, 2011; Simpson, 2005; National Research Council (NRC), 2001; National Autism Center (NAC), 2009; National Professional Development Center on Autism Spectrum Disorders, 2009). We have used these documents to provide a succinct description of the key themes that have emerged from this literature. We are aware that this information is not comprehensive; however, it is relevant to the key focus of the review on identifying potential funding models for educating students with ASD.

The following eight themes are identified from the literature that pertains to key areas of support for students with ASD:

5.1 Early assessment and intervention

(Iovannone, et.al, 2003; NAC, 2009; NRC, 2001; Simpson, 2005; Parsons, et. al., 2011)

There is overwhelming consensus that early assessment and intervention maximises the chances to identify difficulties that a child may face early and it also improves the possibility of providing targeted intervention that result in positive outcomes for the child. Research from the field of neuroscience has showed that early intervention can result in creating new neural pathways and compensate for the damage to the neural system. Early assessment and intervention improves emotional, educational, and social development of the students. It also reduces the chances of secondary disability in the child.

5.2 Intensive behavioural interventions

(NAC, 2009; NRC. 2001; Parsons, Guldberg, et. al, 2011, Virginia Department of Education, 2011; Wong et. al, 2015)

There is strong evidence that targeted behavioural interventions have often resulted in improved learning and behavioural outcomes. Interventions derived from the field of Applied Behaviour Analysis (ABA) have generally shown positive outcomes in both increasing appropriate behaviours and reducing behaviours of concern. It is also apparent that no single behavioural strategy can be identified as most effective, as each individual student's language and cognitive skills need to be taken into account in deciding about the intervention. The research overwhelmingly supports findings that proactive and preventative strategies used within a whole school framework are more effective than interventions directed at managing consequences. Use of functional behavioural assessment in developing individualised behavioural intervention programs has often shown positive outcomes for students with ASD.

5.3 Specific teaching strategies

(Iovannone, et.al, 2003; NAC, 2009, NRC, 2001; Simpson, 2005; Parsons, et. al., 2011; Virginia Department of Education, 2011)

Four groups of strategies have emerged as most effective when teaching specific tasks to students with ASD. These include 1) structured and systematic instruction; 2) video-based instructions or video modelling; 3) social stories; and 4) Picture Exchange Communication Strategies (PECS). There is a body of research that shows the use of computer-assisted instruction can also facilitate acquisition of new skills and maintenance of skills acquired through other means (Wong, et al., 2015). Considering modelling works well with students with ASD to teach new skills, some researchers have recommended using same-age peers in the teaching of new skills. Researchers (e.g. Wong, et. al., 2015) have identified 27 teaching strategies that have been found to have strong evidence bases as being effective to teach students with ASD. The strategies identified include computer-assisted instruction, parent-implemented instruction, functional behaviour assessment, and social skill training.

5.4 Ongoing assessment and monitoring

(NAC, 2009, NRC, 2001; Simpson, 2005; Virginia Department of Education, 2011)

It is critical that assessment and monitoring take place on a regular basis. Educators may need to modify the assessment method to determine the level of understanding of the student about a particular topic and then use the information in determining the next teaching activities and goals for the individual child. It may sound onerous to undertake assessments on a regular basis. If assessments are planned and implemented in consultation with the rest of the school community, however, they become a most effective pedagogical tool. Ongoing monitoring for students with ASD is critical also to determine if a student is making progress in acquiring the necessary skills. Monitoring should be seen as a way to measure progress of the student. It can also be indicative that a teacher might need additional support if a student does not make any progress.

5.5 Active involvement of families

(Iovannone, Dunlap, Huber & Kincaid, 2003; Wong et al., 2015; Parsons et.al, 2011; Virginia Department of Education, 2011)

There is strong evidence emerging that when parents are involved in the education of their child, there are often positive outcomes. Some researchers have found that it is critical to empower parents to deliver instruction in social, communication and behavioural skills to their children as it is likely to result in improved outcomes for them. It is found that one off training is not as effective as training provided over a time period. Investment by schools in developing parent training programs is found to enhance parental satisfaction with the school programs for their students.

5.6 Teacher and para-professional education

(NAC, 2009; NRC, 2001; Parsons, Guldberg, et. al, 2011, Virginia Department of Education, 2011)

Successfully including students with ASD in regular classroom requires that teachers and para-professionals have the necessary skills and knowledge to teach and support all students. Teachers and para-professionals not only need to learn technical skills to educate students with ASD effectively; they also need to acquire skills to work effectively with other para-professionals and parents. Some of the key skills that teachers and parents need to acquire relate to preventing and managing challenging behaviours, peer-tutoring, co-operative learning and small group instructions to target the specific skills for an individual student.

Teacher assistants also need to learn about the way they can work successfully with teachers in delivering effective educational programs for students with ASD. It is important that teacher assistants are not always asked to work with targeted individual students, as they could also support individuals within a small group of students. This practice reduces the chances of stigmatising a student with additional needs as different from others. Simpson (2005) recommends that educators need to learn to apply specific teaching strategies with the highest degree of fidelity. He states that a strategy will only work if it is applied by a knowledgeable person. If an effective and proven teaching strategy is used by a professional incorrectly, the technique is unlikely to deliver expected outcomes. It is, therefore, necessary when training educators and para-professionals that efforts are made to equip them with all the key aspects of using specific teaching strategies.

5.7 Multi-agency collaboration

(NRC, 2001; Parsons, et al, 2011; NAC, 2009)

It is possible that a child with ASD would require services from a range of professionals. It is critical that all relevant service providers collaborate and co-ordinate their services to avoid confusion and deliver the programs in consultation with the families. One way to promote inter-agency collaboration could be achieved through establishing an Autism Specific Multiagency Team at school or district level. The team should take overarching responsibility of co-ordinating and delivering services to the students and their families.

5.8 Transition planning

(Simpson, 2005; Parsons, et al. 2011; Wong, et al, 2015)

Some students with ASD may find it difficult to transition to new environments. It is important that systematic plans are in place for transitioning students with ASD at different stages of schooling. Both sending schools (or agencies) and receiving schools (or agencies) need to plan and co-ordinate for smooth transition of students to the new environments. Families are at heightened levels of stress at the time of transition and they also need to be supported and consulted to ensure positive experiences for their children with ASD.

5.9 Summary

A review of the themes above indicates that most of the strategies identified are likely to benefit not only students with ASD but any student with additional learning needs. It is also important to avoid suggesting that there is a set ASD pedagogy. Each student with ASD is unique and every attempt must be made to understand each student's particular needs, abilities and interests when making pedagogical decisions.

6. Funding Models for Students with ASD - International Context

According to Moore et al., (2007) the push for reform of funding models is grounded upon three key concerns:

a. The increasing number of students identified with additional learning needs and the resulting increase in costs for schools to provide for these students;
b. Unease over the efficiency with which resources are used; and
c. The impact of funding models as incentives for contra-indicated practices (such as placement in special education facilities), over-identification and misdiagnosis of students.

When reviewing funding models for supporting learners with ASD in most instances approaches were focussed on identification of a disability and then level of need rather than category of disability per se. In many systems, students with ASD were supported either within general funding models if their needs were mild or by additional funding based on the level of support they required. This review, therefore, considers funding models that incorporate support for learners with ASD into general funding approaches together with specific support allocated according to identification of a disability and level of need.

There is little doubt that approaches to funding influence the provision for students with special educational needs. While strict qualification criteria through categorization models at a systemic level aim to ensure equality of provision, this does not necessarily allow for contextual or social strata group differences or urban versus rural needs to be taken into consideration. Yet funding schools in a more generic way without increased accountability equally does not automatically ensure appropriate support for all learners. This is particularly pertinent in Australia where there are noticeable patterns of socio-economic and indigenous disadvantage in school performance at both intra- and inter-state levels (Lamb & Teese, 2012).

Many systems are endeavouring to juggle fiscal constraints while ensuring that reforms to support the increasing movement towards inclusive education in a more cost-effective way are being more critically evaluated (Banks et al., 2015). Indeed, the continued uses of categorical systems for resource allocation, that are contrary to philosophies of inclusive education, remain controversial (Banks & McCoy, 2011).

Over the past decade, across all developed countries, the allocation of funding to support students with additional learning needs has been increasing. However, the funding for learners with special educational needs remains in flux (Banks, Frawleyc, & McCoya, 2015). Indeed, most countries are spending between 12% and 20% of their education budget on resources for special education based on a variety of funding models. A review of international literature undertaken in 2007 on studies of funding models for special education (Moore, Ferrier, Long, Sharpley, & Sigafoos, 2007), identified four key aspects:

a. Funding for students with disability is dominated by an accommodation model where funding is provided to accommodate the needs of students (e.g. curricula, environment, assessment, instruction);
b. Funding models emphasize process — due process, procedural adherence, fiscal accountability — rather than outcomes such as student learning;
c. The level of funding varies with assessments of the intensity of support needed;
d. Funding models are primarily in two dimensions — funding is allocated directly to parents or to schools/districts or it is based on categories of disability or estimates of the proportion of students with disability in the population.

Most countries appear to be moving from a national or district funding model, whereby all funds are allocated on a categorical basis through a competitive process monitored by education systems, to a more devolved system. This school-based approach aims to allow for local decision-making regarding the use of funds to enable attention to be given to the specific needs of individual students within local contexts.

While a school-based funding model will enable increased autonomy, this is grounded upon principals having a clear understanding of inclusive education and delivering national or state objectives to meet the needs of all learners (Banks et al., 2015). Delegating funds to schools for decision-making, rather than to individuals, conversely, does not always guarantee the purposes for which they will be used (Ridell, Tisdall, & Mulderrig, 2006). According to Williams, Lamb, Norwich and Peterson (2009), there remains insufficient clarity about what is expected to be delivered. Such models, thus, may require greater accountability and monitoring to ensure that students with special needs are the principal beneficiaries of the funding and that learning outcomes are improved.

For example, in Sweden funding is allocated directly to schools through local municipalities. Considerable local variation consequently occurs in access to funding by individual students and this seems to have led to an increase in the use of special settings where resourcing is guaranteed (Ridell et al., 2006). Similarly, in Greece funding for students with special needs is devolved to school level but limited funding and a rigid curriculum does not allow for sufficient differentiation to support all learners.

In Belgium until recently, special education funding was based on a diagnosis of a disabling condition (Lebeer, et al, 2010). A student needed to be assessed first by the Centre for Pupil's Counselling and after lengthy assessment procedures was determined eligible for funding. Lebeer, et al. (2010, p 376) report that "despite measures and financial incentives to 'broaden' the school and keep children as much as possible in mainstream education, referral to special schools has increased by 50% during the past 10 years in Belgium". Significant increases in the number of students diagnosed with ASD were also noted. The increase in the number of students diagnosed with disabilities has put significant pressure on the education budget. Due to increased cost of funding education of all students with disabilities (including those with ASD) and increased pressure from parents, the Belgium government has developed a new framework to fund the education of children with disabilities. The new system takes educational needs into consideration when deciding how much funding is needed for a particular student. Labeer et al. reports (p. 380) "before, it was sufficient to have, for example, a label of autistic spectrum disorder to have special educational needs and therefore a referral to a special school or right to have a SEN teacher in mainstream school. In the new system, a child with this condition might have no need of a curricular adaptation or a higher assistance". Based on the analysis of the Belgium model, the authors concluded (p. 385) that "children with the same diagnosis may need very different levels of support. Rather than categorizing children in more or less homogenous target groups based on diagnosis, children with multiple, complex needs who are not easily assigned to one target group can be clustered and get the appropriate level of support.

In New Zealand, there are two levels of funding. Funding is allocated to all schools via an operations grant to provide for all the students in their schools. To support students with special education needs, schools receive a further Special Education Grant (SEG) based on how many students it has requiring additional support and its decile ranking (New Zealand Ministry of Education, n.d.). No additional funding is available depending on the number of students with SEN in the school. The SEG is provided as additional in-class support for students likely to be having difficulties with learning but their needs are not high enough to receive support through the Ongoing Resource Scheme. The SEG funding is used to support learners with moderate support needs, including those with learning disability, mild autism, ADHD, or other such conditions (NZ Ministry of Education, n.d.). Use of the SEG is determined by the school depending upon the needs of the students in their school and may include:

- Resources and materials;
- Training for teachers on issues relevant to students with special education needs;
- Extra services involving specialist advice, help with teaching or providing training seminars by psychologists, behaviour consultants, physiotherapists and other specialists; and
- Additional teacher or teacher's aide time.

New Zealand Ministry of Education (n.d.)

For students with high / very high levels of need, an additional four programs are available to provide support. These are all competitive and categorical based on input funding and are for individual students:

1. Ongoing Resource Scheme
2. Communication Service
3. Severe Behaviour Service
4. School High Health Needs Fund

In addition to the grants, schools in New Zealand can access resource teachers through their cluster for support with students with learning, and behaviour difficulties, vision, hearing or physical disabilities.

Funding for students with special educational needs was further considered by Jahnukainen (2011) by comparing how the education of students with disability is funded in Alberta in Canada and Finland. Governance of education of students with disability in Canada rests entirely with provincial governments rather than the Federal government. There is no Federal department of education or office of education in Canada. Jahnukainen compared two similar jurisdictions; both had high living standards, a well-developed public education system, and obtained top results in international school achievement tests.

In Alberta, Canada students are identified as having special educational needs if they meet the criteria of having one of 17 disabling conditions (locally referred to as "codes"). These conditions are classified into two major categories of "severe" or "mild to moderate" disabilities. Only four disabling conditions fall under the "severe" category. These are severe cognitive disability; students with clinical conditions that require constant supervision to ensure safety needs (e.g. social emotional disorders); students with physical and neurological conditions that require extensive learning modifications and/or personal care; and students with a combination of two or more of the above conditions. There are 13 disabling conditions that cover the mild to moderate codes (e.g. learning disability). The students with ASD (depending on their needs) are likely to fall into either category.

The distinction between the two categories is critical as it determines how much funding a student will receive (Jahnukainen, 2011). All students classified under the mild to moderate categories are funded through "base instructional funding" that all schools receive. This funding is provided to school boards irrespective of whether or not students have special educational needs. Schools receive the base instructional funding depending on the number of students enrolled (this type of funding is sometime referred to as Census funding). The school boards are responsible in allocating these funds to meet the learning needs of all students in the mild to moderate degree of disabling conditions. School boards receive approximately three times the general special education funding if a student is classified as having a severe condition. The funding is allocated to address the learning needs of an individual student unlike the "base instructional funding".

In Finland, there are 14 categories of special needs funded by the national government. Out of the 14 categories, eight relate to difficulties in learning (and include students with specific learning difficulties, reading and writing difficulties) and the remaining six relate to students with more profound impairments (e.g. students with high support needs). Until 2010, funding was allocated to students (sometimes described as bounty funding) depending on the severity of disability. Funding could range from 1.5 to 4.0 times the amount compared to funding for the education of students without identified special needs. In more recent years, Finland has reformed their funding and schools now get base funding and there is no extra funding attached to an individual student. This is a significant shift from a combination of bounty and base funding to base funding only.

The funding system in Alberta was reviewed in 2008 and it was found that the complex coding system placed unprecedented pressure on the system to undertake costly assessment procedures to determine eligibility to receive the necessary services. It is possible that a large number of students who have genuine needs had to wait to receive necessary services as it needs to be first determined if they are eligible to receive the services or not. On the other hand, Finland with its recent change in the funding system is more "cost effective" and offers special education support to many students who in Alberta would need to "wait [for] the result from specialised assessments with no guarantee that he or she would even qualify for the support necessary in the severe special education categories" (Jahnukainen, 2011; p. 497). The focus of special education funding in Finland is clearly on prevention and outcomes. It has been claimed that the gap between high achievers and low achievers is decreasing in Finland (Jahnukainen, 2011).

When reviewing the impact of different funding models on improved student learning outcomes, there has been very limited research that is evidence-based. A major review of the literature undertaken by Sigafoos, Moore, Brown, Green, O'Reilly, and Lancio (2010) was only able to identify 10 studies that had investigated the outcome of five broadly different funding models. Even then, these studies relied on limited data such as surveys, analysis of existing data sources, or qualitative analysis of the funding models. Such information provided stakeholder perceptions and enrolment trends but were limited in their ability to measure the actual impact of the funding reform on student outcomes.

The five funding models identified by Sigafoos et al (2010) were related to the broad categories of discretionary, categorical, voucher, census-based, or cost-based. These reflected a continuum of approaches from census-based at one end to categorically-based at the other. Of note was that most applications of the models investigated in reality included elements of more than one approach to funding. Each of these models was seen to have noticeable benefits but also a number of detriments. Table 1 summarises the findings noted by Sigafoos et al. (2010).

Table 1 - Five funding models identified by Sigafoos et al. (2010)

Model	Explanation	Benefits	Detriments
Discretionary funding	Provision of additional funding or allocation of a percentage of the school budget for special education purposes	▪ Increased capacity to provide SEN services, but only for schools that received extra funding ▪ Development of innovative, age-appropriate programs ▪ Did not significantly increase the percentage of students identified as having high support needs	▪ Increased use of alternative placements ▪ Narrowing of curriculum offerings ▪ Substantial administrative costs associated with the identification process
Categorical	A set amount of additional funding is provided for each student with an identified disability (may be given to the school or to the parent)	▪ Strengthened parent choice ▪ Increased expenditure on direct services	▪ SEN funds being used primarily to hire teaching assistants ▪ Curtail accountability to parents ▪ Create inequities for students with SEN ▪ Increased litigation related to special education entitlements
Voucher	A direct public payment to parents to cover their child's public or private school costs – payable directly to the parent or the school chosen by them	▪ Increased access to preferred and more specialised services	▪ Effects of voucher programs on educational outcomes and cost-effectiveness is unclear
Census-based	Funding received by a school district or LEA was based on the number of students and weighted by SES or type and degree of disability	▪ Did not appear to reduce SEN enrolments in regular schools	▪ Increasing SEN costs
Cost-based	Based on estimating the actual costs of providing special education services (allocated to schools according to the number of students meeting the definition for mild or more Severe / multiple disabilities)	▪ Costs contained by first estimating the actual per-student cost	

None of these five models identified by Sigafoos et al., (2010) were seen to be related to either a significant increase in costs or a difference in the learning outcomes of the students identified as having SEN. Sigafoos et al., (2010) concluded that a potential way to classify funding models might best involve the application of two axis i.e. 1) a census- to categorical-based continuum and 2) a district- to parent-controlled continuum. Within these models, funding could be further allocated according to demographic and constitutional variables including SES, rural or urban, and type of disability.

6.1 Input, through-put and output funding models

Funding models may also be classified into input, through-put, or output funding.

Input funding, demand-driven or categorical funding are all based on allocating individual funding to identified students based on a the severity of a student's needs (Ferrier Long, Moore, Sharpley, & Sigafoos, 2007). This model firmly locates the problem within the child, applying a deficit approach to allocating support. Nevertheless, this model is still favoured by many countries in an attempt to ensure that individual students' needs are met and that funding is targeted to the student. The input approach is particularly prevalent when supporting students with high and profound support needs, including those with ASD, who often require extensive and intensive direct support. Examples of an input approach through a voucher system are evident in Holland where what has been termed a 'back-pack' model exists whereby funding follows a child (Pijl & Veneman, 2005). Similarly, in the UK personalized budgets have been recommended that allow parents greater control over resourcing for their child (Lamb, 2009). Input funding model has been criticized by a number of authors, as the funding requires looking for pathology within a student and is counterproductive to the philosophy of inclusive education (e.g. Pijl, 2014; Riddell, Tisdall & Mulderrig, 2006; Shaddock, et. al., 2009).

The through-put or base funding model, alternatively, provides funding through block grants allocated directly to local authorities, districts or schools. This may be census-based with funding allocated according to weighted characteristics. While this places less emphasis on a child's individual needs and reduces the labelling issue, it places greater responsibility in the hands of the school or local authorities. Pijl (2014) identified several advantages of the through-put model. Firstly, it reduced bureaucracy as schools and local authorities were able to decide for themselves how to use the budget. Secondly, schools had more flexibility in using the budget as per their discretion. Thirdly, the system was less prone to engage in strategic behaviour to over-identify disability. Lastly, it encouraged schools to be more educationally inclusive. According to Banks et al. (2015) through-put funding may, nevertheless, lead to inaction at a school as the funds are allocated regardless of any accountability for student outcomes. Many countries adopt a combined input and through-put approach. For example, Sweden mainly utilizes a through-put model that is supported by an input approach for students with high support needs being education in special schools. This type of funding would be used to provide support for students with mild to moderate support needs for ASD.

The output (or outcome) model has tended to be overlooked by countries when determining how to fund students with additional learning needs. Yet it would seem undeniably germane that the intention of additional funding should ultimately be linked to improved student learning. By focusing on quality outputs, it has been proposed that special education can be more effectively aligned with the current accountability agenda applied for students without special educational needs (Shaddock, MacDonald, Hook, Giorcelli, & Arthur-Kelly, 2009). A typical measure to monitor this is through the use of documented Individual Education Plans (IEPs). To ensure greater accountability for funding, more education systems are now moving towards a model of measuring student progress or outcomes as a means of assessing the impact of funding reforms (Banks et al., 2015). Alternatively, some systems are using national testing to identify schools where achievement is in the lowest 10% and then automatically allocating additional funds to support these learners. In this way, students with ASD with mild support needs in literacy and / or numeracy would be able to receive support. However, schools just above 10% might be inadvertently encouraged to do worse in order to attract more funding.

This is evident in the UK where their new *Special Educational Needs and Disability Code of Practice* (Department for Education & Department for Health, 2015) provides a greater emphasis on measures of accountability for funding use. While it still proposes a combination funding model using both input and through-put funding approaches determined by a local funding formula, this is linked more closely to measures of outputs.

A new model proposed for Ireland (NCSE, 2014), similarly, adopts this approach. Their projected funding model involves an output model together with a through-put perspective that allows schools greater autonomy whilst still retaining a process of increased accountability for student learning by monitoring and evaluating procedures. The proposed new system of funding is based on needs rather than disability category. It is expected that the model will limit the need for labelling, thus reducing the stigmatizing of students, and reduce the current administrative burden placed on schools to obtain funding (Banks et al., 2015). However, without accountability per se for resource allocation, this model relies heavily on schools 'doing the right thing' by appropriately managing resources to ensure that students with SEN are targeted to receive suitable support. For accountability, therefore, it is proposed that school output measures should include standardized testing in addition to profiling; although this approach has been cautioned as potentially disenfranchising schools to achieve and to retain funding (Smith & Douglas, 2013).

6.2 Summary

It would seem that countries are not adopting a single approach to funding students with special educational needs (Mitchell, 2015). In practice, most are utilising a range of methods. A continuum of approaches exist that range from only census-based funding (e.g. Finland, Sweden & Greece) to categorical approaches (e.g. Alberta in Canada; New Jersey, USA; U.K.). Most countries, though, are adopting a combination of these methods by using some form of targeted funding in addition to base funding (e.g. New Zealand). These typically involve through-put funding provided direct to schools or districts to support the majority of students with SEN who exhibit mild to moderate additional learning needs; together with input funding directly linked to the more severe needs of a small number of individual students and allocated directly to the school or parent for the identified child. It is also apparent that a greater emphasis is beginning to be placed on implementing output funding models that will ensure the quality of education received by the additional funding and make schools and districts more accountable for using the funds to improve the learning of students with additional support needs.

An important question regarding establishing any new funding model for students with ASD would be what practices and services are required to support inclusion of students with ASD in mainstream schools and how resources can best be allocated to enable them to receive quality education and achieve to their potential alongside their peers. Based on international models most students with mild or moderate additional learning needs would seem to be supported by school-based through-put funding. This allows schools the autonomy to utilise the funding according to the actual needs of students within their school community. For students with higher support needs, most countries apply a range of targeted input funding to augment this; allocated through discretionary subsidies depending on the level of individual student need. Decisions regarding allocating these additional funds do not tend to be based on the type or category of disability but are focussed exclusively on the level of student needs. Additional resources may also be provided based upon demographic challenges such as for students in rural or remote schools, low SES areas, disenfranchised groups, or if their needs are complex and concomitant with another disability.

7. Funding Models for Students with ASD – Australian Context

According to a major report undertaken by the Australian Research Alliance for Students and Youth (ARACY), all Australian States and Territories have firmly established structures for supporting students with disability (Forlin, Chambers, Loreman, Deppeler, & Sharma, 2013). Many procedures, though, are quite complex for identifying the eligibility of students and the type of support required. Funding decisions are needs based with support being offered at different levels, often through elaborately articulated frameworks.

Table 2 provides a summary of the current funding models applied in the different jurisdictions across Australia. These data are obtained via Government web sites, published reports and by contact with representatives from the different departments of education, wherever possible, in order to confirm the currency of these models. In some instances, it was not possible to endorse this information.

Table 2 - Funding models employed in all states and territories of Australia for students with ASD

State	Funding Model	Mild to Moderate Needs	High to Very High Needs	Staffing	Regional Resource Teachers
WA	Through-put, Input & Output	Through-put Student-centred funding model based on number of children & school level (commenced 2015) Output Funding allocated to schools for the number of children in the lowest 10% of NAPLAN scores	Input Avail for specific students with disability. Funding allocated to schools based on individual categories of educational need and teaching & learning adjustments required	'Disability allocation' will replace teacher, EA & other staff	District consulting teachers for Tier 1 & 2 support. Tier 3 support only for students with identified disability from SEND Learning Disabilities Education Service
NSW	Through-put, Input & Output	Through-put Student-centred funding model based on number of children, school level & climate. Output 'Every Student Every School' resource allocation for low level adjustments for disability based on 3yr data from NAPLAN	Input 'Students with disability in regular classrooms' Funding Support is a targeted disability program. SS must have an identified disability as defined by the NSW DET criteria.	School Learning Support Team	Regional funding support committee
NT	Input	Input Based on application through Support Service Request Form in consultation with *Student Services Case Manager* *Special Needs* using Special Needs Profiling Instrument (SNPI)	Input Special Education Support Program (SESP) SS must have an identified disability as defined by the NT DET criteria	Special Education Teacher (SET) School Support team School contact	Autism Advisors provide advice and support to school communities and families for students with ASD
Qld	Through-put & Input	Through-put Whole-school Student Learning Support Resources (WSSLS)	Input Education Adjustment Program (EAP). SS must have an impairment (formal diagnosis) and activity limitation	School team Case manager/ School contact person	Advisory visiting teachers (AVT), Therapists, Teacher aides, DET funded nurses

State	Funding Model	Mild to Moderate Needs	High to Very High Needs	Staffing	Regional Resource Teachers
TAS	Through-put & Input	Through-put 'Fairer funding Model' Base funding per capita + loadings for five key areas of disadvantage Linked to Schooling Resource Standard	Input Register of Students with Severe Disability (SDR)	Support teachers in each school	Learning Service Teams (regional) include: Speech & Language pathologists, Autism Consultants, PI coordinators, HI service, Vision
SA	Input	Input Disability Support Program allocated on a per capita basis through Education Office in collaboration with team leaders	Input Disability Support Program allocated on a per capita basis through a state-wide moderation process	Team leaders	Regional disability coordinators State-wide Autism Intervention Program Panel
ACT	Input		Input Student Centred Appraisal of Need based on: 1. Access 2. Participation	Student Support	Disability Education Partners
VIC	Through-put & Input	Through-put Base funding per capita + equity loadings for student family occupation, middle years, secondary years and mobility	Input Program for Students with Disability (PSD) (moderate to high level disability) Levels 1-6	Student Support Group	Student Resource Package

Note. Information presented in the table was gathered from a range of sources and it was not always possible to verify the currency of data due to constant reforms occurring across the states and territories.

7.1 Western Australia

Western Australia has endeavoured to change their funding model from one that was considered to fund school types and programs through "numerous funding lines using complex multipliers and formulas" (Department of Education, 2013), to a more simplified system based on equity of funding for individual students. The model relies on four key principles of fairness, responsiveness, flexibility and transparency. How these principles are operationalized remains unclear from the information available. All schools are financed through a one-line budget and receive funding depending on the number of students and school level: kindergarten, primary, secondary. Additional funding is provided for targeted students with disability and schools need to ensure that the total value of this funding is directed to the student's individual needs (Department of Education, 2013). This additional input disability allocation has two components: a) Individual allocations for students with an eligible disability; and b) Separate educational adjustment for those who require teaching and learning adjustments but may not be eligible for the disability allocation. This funding is not targeted or student specific.

In WA, schools need to apply for the disability allocation for individual students which is determined across seven levels with each generating a different amount of funding from $8,900 at Level 1 to $68,000 at Level 7. Funding levels are determined by disability type, school type, severity of disability and level of teaching and learning adjustments required. Students with ASD are eligible for this funding depending on their level of need. The second allocation for students who require adjustments, but who do not necessarily have a diagnosed disability, is automatically provided to schools based on the proportion of students in the lowest 10% of NAPLAN results. This funding is to support students with additional needs or disability who are undiagnosed or do not attract the Individual Disability Allocation. Students with a learning disability (including those with mild ASD) are eligible for support from this funding as determined by the school.

7.2 New South Wales

In NSW funding for students is progressively being determined using the Resource Allocation Model (RAM). This is underpinned by five core principles of student and school need; evidence-based; efficiency and transparency; certainty; and sustainability and adaptability (McGilchrist, 2014). It remains unclear how the five core principles are operationalized in NSW. Similar to the WA model this provides baseline funding for all schools depending on the location, climate and type of school. Additional targeted and equity loadings are applied to schools for students requiring low level adjustment for disability with significant learning difficulties, mild intellectual disabilities, language delays and disorders, or behaviour difficulties. Funding is determined by a three-year review of NAPLAN data.

NSW has also implemented a *Funding Support* model that is a targeted disability funding program for students with an identified moderate or severe level adjustment need for disability (NSW DET, nd a). Students with ASD would be eligible for this funding depending on their level of need. The needs of students are considered across five domains and 10 focus areas (NSW Department of Education & Training, nd b). The process for accessing these funds is managed through a regional funding support committee. Even though this model is one of input funding, principals have the responsibility for determining how this is allocated to address the identified needs of the targeted students. There are a number of approved uses of the funding including:

- Training and development activities;
- Additional teacher time;
- Teachers aide (special) time;
- Teacher release;
- Transfer of duty; and
- Program co-ordination time.

NSW Department of Education & Training. (nd a, p. 6).

New South Wales is increasingly using student profiling as a means to determine support required for a student (Smyth-King, Personal Communication, June 22, 2015). The department has developed a tool to assist teachers to determine the skills, strengths and educational needs of their students with disabilities (including students who may be classified as having ASD). The profile can then be used to meet the learning and support needs of the individual students. The tool determines what support is required by the teacher to support the student. The development and use of the tool seems to be a significant step towards a non-categorical system of supporting students with disabilities. It is important to note that the profiling tool is not used to determine level of funding for an individual student. However, the tool has the potential to be used for this purpose.

7.3 Northern Territory

The Northern Territory Department of Education Strategic Plan 2013-2015, *Creating Success Together* covers all aspects of education for all students. Support for students with a disability is provided using a 'bottom-up' approach at three levels within the Student Support Service Model framework which is based on a Response to Intervention (RTI) approach (Northern Territory Government (n.d.). At Level 1, support is to be provided through whole school / whole class programs and initiatives. At Level 2, the School Support Team identifies cohorts of students with specific learning needs and develops programs providing specific support for these students using the Special Needs Profiling Instrument (SNPI). Level 3 is for students requiring intensive individual support through the Special Education Support Program (SESP). Students with ASD would be eligible for support across all three levels depending upon the severity of their disability.

The SNPI is used by the Northern Territory to determine the level of additional support required for students considered to be 'at risk' i.e. students who are identified by the school support team as being at educational risk due to academic, behavioural, emotional and/or social difficulties and may show early warning signs of disorder or disability (Northern Territory Government, 2014). Within the student services support teams, there are designated Autism Advisors who provide advice and support to school communities and families for students with ASD. Input funding for students at Level 3 with identified disabilities and additional educational adjustment needs is provided by the SESP (Northern Territory Government, 2011). This funding is only available to students who meet specific criteria and is managed via Teaching, Learning and Inclusion. Schools need to submit confirmation of a diagnosed disability; a SNPI; and the education adjustment plan (EAP), for each applicable student (Northern Territory Government, 2014). Eligibility is determined termly by the Northern Territory Special Education Support Program Panel. Specific criteria exist for students with ASD. Of particular interest in the NT is that in order to receive this targeted SESP funding, attendance of more than 60% is expected for students with ASD.

7.4 Queensland

In Queensland additional resources are provided to schools rather than to individual students to support programs for all students in a school, including students with disability who either do not meet or do meet EAP criteria (Queensland Department of Education, Training & Employment (DETE), n.d.). This support is allocated through the Whole-School Student Learning Support Resources (WSSLS) model or through-put model. These resources are managed by the principal to support the delivery of high quality education programs within an inclusive school setting, which may include the engagement of additional specialist teaching staff. Some programs may be designed to support a wide range of students with disability whilst others might support a smaller identified group including those with learning or reading difficulties (Queensland Department of Education & Training, 28 June, 2013).

Students with disability requiring significant educational adjustments in Queensland schools are identified through an Education Adjustment Program (EAP). This supports targeted students who experience both an impairment and activity limitation in one or more of six categories including ASD. This process requires diagnosis, verification and validation. Verification for the EAP category of ASD requires two criteria: 1) A formal medical diagnosis, and 2) The disorder results in activity limitations and restricted participation. Specialist staff including advisory visiting teachers (AVT), therapists, teacher aides and DET funded nurses is available to support these students. Further targeted educational support may include assistive technology; alternative format material; special provisions for assessment; speech-language therapy services; and / or learning support.

7.5 Tasmania

The changes to the support for schools in Tasmania are underpinned by two major reforms, namely, an amendment in how schools are funded and a plan to make schools better (Tasmania Department of Education, 2013). Funding is designed to address educational disadvantage and facilitate a high quality education for every student. Tasmania is focusing changes upon five evidence-based areas for better schooling: quality teaching; quality learning; empowered school leadership; meeting student need; and transparency and accountability. Schools will need to have a School Improvement Plan through which they will use the funds to meet the individual learning needs of their students. This may involve using the funds for PD for staff, mentoring new teachers, access to better skilled support staff, early literacy and numeracy interventions, developing partnerships or purchasing digital resources. Existing programs such as 'Raising the bar', 'Launching into Learning' and 'Special programs for students with disability' will continue to be funded.

In Tasmania, they have introduced a '*Fairer Funding Model*' that is being phased in over a six year period from 2014 to 2019 and used to distribute the Better Schools funding. This model links all funding to a schooling resource standard and includes a per capita base fund depending upon school type (primary, secondary, district high or senior secondary) with additional loadings for five disadvantaged groups:

- Students from low socio-economic backgrounds;
- Students with disability;
- Aboriginal and Torres Strait Islander students;
- Students who need help with English;
- Schools that are disadvantaged by their size or remoteness

Geographical location and infrastructure needs are also considered when allocating additional funding. Each school is allocated a support teacher from 1- 5 days per week. Their role is to support school and classroom teachers to improve outcomes for students with disability or additional support needs.

Schools use Individual Education Plans for students with disability which includes those with ASD and the education system provides a range of specialist services and resources across Tasmania. All schools belong to a Learning Service which provides additional support to schools for students with disability. Each Learning Service in the state has a team of specialist staff such as social workers, school psychologists, speech and language pathologists and autism consultants. The autism consultants are qualified teachers with specific expertise in working with students with ASD and provide support and assistance to families and schools. They may also be involved with planning for individual students, supporting appropriate curriculum differentiation and providing PD to increase the capacity of schools to cater for these students. There are a range of programs offered for students with mild to moderate ASD including the establishment of an Autism specific class at one primary school.

For students requiring higher levels of support for ASD in regular schools in Tasmania, funding is provided through the 'Register of Students with Severe Disability' (SDR). To be eligible for this register on the basis of ASD requires a confirmed diagnosis in the upper moderate/severe range from a multi-disciplinary team of professionals with supporting documentation from an appropriate medical specialist e.g. Paediatrician or Psychiatrist. In addition, students must demonstrate functional abilities consistent with this diagnosis with the learning or educational implications being the most severe. The amount of additional funding allocated for students identified with severe ASD is $23,432.

7.6 South Australia

In South Australia, policy provides that any course, program or service should be designed so that it can be modified to enable a student with a disability to participate (South Australian Department for Education & Child Development (DECD), 2014). Short term specific Autism intervention programs are available for students who have verbal and non-verbal cognitive abilities within or above the average range, difficulties with behaviour, yet the ability to access the regular class curriculum of peers. These offer a 4-8 week intensive individualized withdrawal program depending on year level with transition back to the local school determined on completion of negotiated set goals. Placement in the program is determined by a state-wide Autism Intervention Program Panel, chaired by a DECD senior psychologist. It is unclear as to what happens if the set goals for a student are not achieved after 8 weeks of withdrawal.

The Disability Support Program provides input funding for students who have at least one of seven specified disabilities that includes ASD. There is a set of eligibility criteria for each category. The criteria are matched against the assessment and general disability information gathered by a DECD Psychologist and / or Speech Pathologist. The level of student need is determined through Support Services who classify students according to the department's guidelines.

Funding for students with mild support needs is allocated through the Education Office in collaboration with team leaders. For students requiring higher levels of support, funding is allocated through a state-wide moderation process (DECD, personal communication, 1st July, 2015). Disability funding is allocated on a per capita basis to support improved learning outcomes for individual students and may be used for specific intervention programs. Additional staffing allocations are also made depending upon the identified level of support needed by students within a school.

7.7 Australian Capital Territory

The ACT provides Learning Support Units (LSU) located in primary and high schools and colleges for students who have an intellectual disability or ASD (Education & Training Directorate, 2015). Access to these units is based on meeting the ACT Student Disability criteria. In addition, the ACT provides Autism specific LSUs located in primary and high schools. Disability Education Partners work in teams to support schools to develop, plan and evaluate strategies for ensuring student access, engagement and participation in schooling.

For students with disability, input support is determined based upon a student's need for access and participation through Student Support (Education & Training Directorate, 2010). These two major dimensions of educational need include support for access (communication, mobility, personal care: health & well-being, personal care: dietary & medical conditions, & safety) and for participation (social development, curriculum participation, communication, behaviours, literacy & numeracy). Support is determined at four levels (Groups 1-4) through a collaborative appraisal process with the parents and the school. All students receiving this support require an individual learning plan (ILP).

7.8 Victoria

The current model of support for students in Victoria includes student centred, school-based and targeted initiatives (Alan Wilson, Personal Communication, 22 June, 2015). Through-put funding provides per capita allocation, plus additional equity funding for disadvantaged groups including student family occupation, middle years, secondary years and mobility. Language support programs are also offered to mainstream schools when needed. These additional loadings are determined from the school's annual census that provides detailed information of student enrolment.

Targeted short to long-term initiatives that are state-wide intervention programs are provided on the basis of information from the school census on the school population or application of expression of interest. These programs are inclusive of students with disability and additional learning needs.

Input funding is further allocated to supplement support for students with moderate to high level disability identified by the Program for Students with Disability (PSD). This is allocated across six PSD levels and provides additional support for students with ASD. Accountability arrangements for the PSD Program are incorporated into existing school accountability frameworks. Schools need to establish educational goals and to report annually on student progress.

7.9 Summary

Funding support for students with ASD varies considerably between the States and Territories with all systems identifying these students as having mild to high support needs. Most jurisdictions across Australia have indicated in their policy documents that they have in-built measures of accountability, transparency and equity but how these measures are operationalized remains unclear from the information available. Generic through-put funding to schools that includes additional loadings for students with disability may be used at a school's discretion to support students with mild to moderate ASD. Additional funding is available in all systems for students having high to very high support needs for ASD. This input funding is allocated on application and according to individual level of need with strict criteria for accessing it. Some systems offer intensive withdrawal time-limited programs (e.g. ACT) at a district level for some students with ASD. District or state-wide consultants (e.g. NSW, Tasmania) are also available in most systems to consult with schools, including specialists in supporting students with ASD.

8. Key Considerations for Funding Students with ASD

How we resource and fund the education of students with ASD will determine if inclusive policies are implemented as they were intended. The current review indicates that, despite good intentions of policy makers and departments of education, sometimes the way the education of students with ASD is resourced may lead to tension and create wider gaps in policy and practice. Funding and resourcing of education of students with ASD should be seen in context. Research on how best to achieve inclusive education for all (e.g. Ferguson, 2008; Jackson, Ryndak, & Billingsley, 2000; Mitchell, 2015; Kugelmass, 2004) and lessons learnt from other jurisdictions (within Australia and other countries) can guide the development of better funding models for the education of students with ASD for the local context. A lack of consistency across jurisdictions in measuring outcomes has been identified as a key issue in being able to assess achievement from additional funding for whole school support programs for students with disability (Forlin et al., 2013). Concomitant with introducing a new funding model must lie an agreed upon process for measuring the effectiveness of the use of this funding by viewing the impact that it makes on improving student learning.

Ten key areas have been identified that require consideration when selecting/developing the most appropriate funding models for supporting students with ASD (see Figure 1).

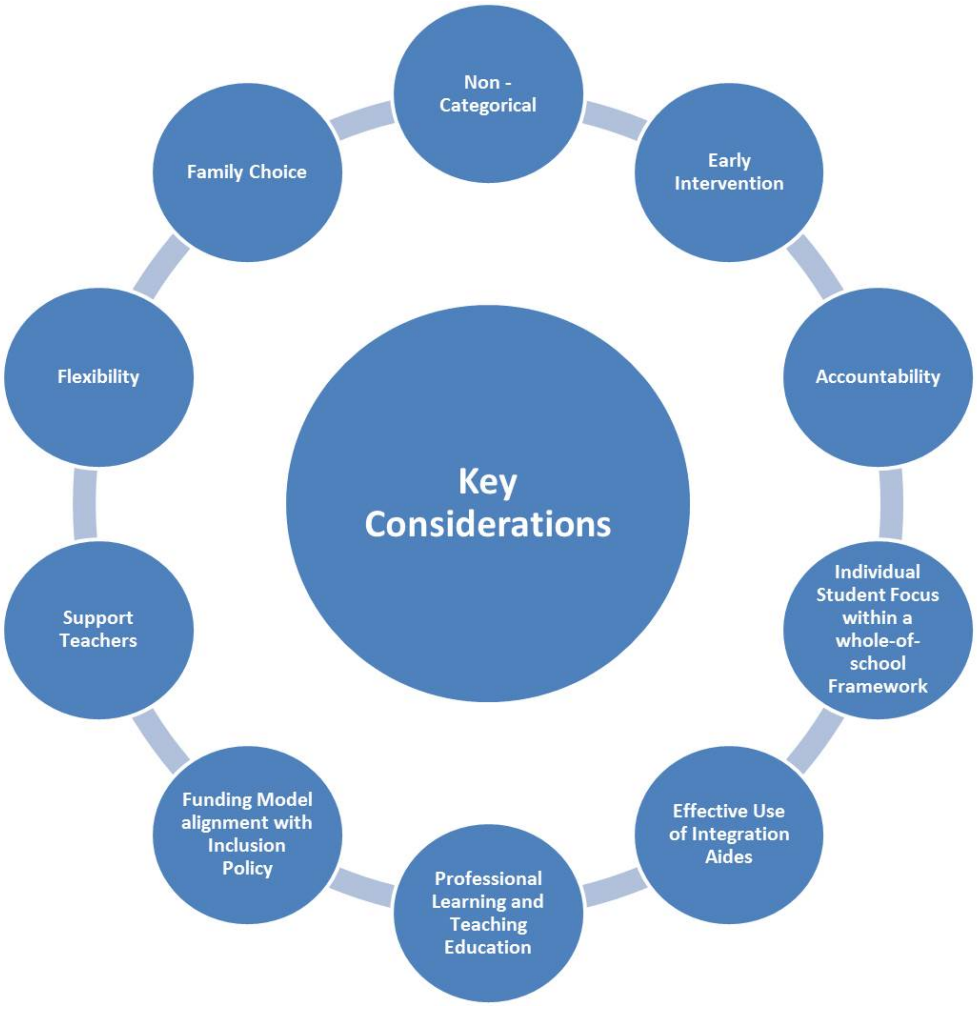

Figure 1 - Key Considerations for Funding Students with ASD

8.1 Non-categorical

One of the key findings that has emerged from the review is a need to have funding models that takes account of the learning needs and adjustment requirements of a student. Clearly, there is a shift away from "diagnoses" towards careful assessment of the interaction between the student and the environment. This will potentially reduce the incidence of labelling and reduce or eliminate the cost of assessments to determine eligibility and level of funding. When allocating funding using input funding models, a tendency has been observed for assessors to inflate the amount of support that is required in order to obtain more funding. Clear and succinct funding models are, therefore, needed to ensure that funding claims are not augmented but accurately reflect a student's needs.

8.2 Early intervention

No child should be required to wait to access an appropriate service (Australian Advisory Board on ASD, 2010). Eligibility for early intervention should be available at whatever stage a child is identified as having ASD (Australian Advisory Board on Autism Spectrum Disorders, 2011). Early intervention support by way of therapy for young students with ASD, nevertheless, requires a high level of expertise due to the high prevalence of challenging behaviours in this population (Australian Advisory Board on ASD, 2013).

8.3 Accountability

Accountability should be integrated in any funding model. Schools need to inform the funding agency about how the funds provided to a school (a) improved the academic and social outcomes of both individually funded students and those without a disability, and (b) assisted the teaching community in better implementing inclusive practices. Often schools ask for additional funds to support the inclusion of a student with ASD. However, schools are rarely asked to report how additional funding made available to them made any significant impact for funded students and the school. It is important to recognise that incorporating accountability in practice is difficult. For example, should schools be put at a disadvantage by the removal of additional funding because they have improved the students' performance or rewarded for poor performance by increased funding made available if students get worse in their performance. Sodha and Margo (2010) recommend that schools should be given more responsibility for the learning of all learners, including those with additional needs. More responsibility schools have for the education of all their learners, the better they become in implementing inclusive education. Sodha and Margo (2010), however, cautioned that on-going monitoring actions, both internal and external to schools, are needed to ensure that schools continue to maintain the gains.

8.4 Focus on individual students within a whole-school framework

Good practice in inclusive education in Australia was summarized in the ARACY Report at both whole-school and in-class levels (Forlin et al., 2013). Good practices at a whole-school level included:

- Adjustments to school culture, policies and organizational practices;
- Development of support structures through collaborative planning;
- Strength based assessment whereby collaborative teams focus on the student's strengths and uses this information to design and implement the student's educational program and to address the student's challenges.
- Appropriate regimes of funding support and access to state-wide consultants;
- Provision of and access to equitable learning opportunities for all students; and
- Nurturing quality teaching practices by all staff.

At an in-class level, good practices included:

- Differentiating, adapting, or introducing alternative curricula;
- The use of evidence-based and culturally responsive practices;
- The application of universal design for planning, instructional and assessment accommodations;
- The use of assistive and adaptive technologies;
- Individual planning through an IEP; and
- A focus on quality teaching for all students.

To develop effective programs to support learners with ASD, it is important to consider teaching methods, environmental provisions, family partnerships and collaboration with other professionals (Ministerial Advisory Committee: Students with disability, South Australia, 2010). Educational services for students with ASD need to be evidence-based, flexible, and outcome-focussed. A person-centred approach is considered to be the most appropriate form of support, considering the broad range of behaviours exhibited by individual students. The following list of nine indicators for effective practices is associated with positive outcomes for students with ASD:

a) The provision of a range of placement and support options with student progress regularly assessed;
b) Trained and knowledgeable staff, who are adequately supported;
c) A systematic and flexible multi-faceted approach to instruction within structured teaching and learning environments that consider ecological and social factors to provide predictability and routine;
d) Additional support to enable students to navigate transitions;
e) A multi-disciplinary collaborative approach involving parents and a team of professionals such as behavior analysts, speech pathologists, occupational therapists and psychologists;
f) A specialized and broad-based curriculum that addresses social, communication, learning and sensory issues integrated with the regular curriculum;
g) Personalized intervention based on comprehensive assessments and tailored to individual student's strengths and needs;
h) Socio-emotional support and social skills programs including therapeutic interventions both in and out of school; and
i) A positive approach to behaviour support.

Adapted from the literature and the Australian Advisory Board on Autism Spectrum Disorders (2010, pp. 6-7)

8.5 Effective use of Integration Aides

The use of funding to provide integration aides has been a mainstay of support in many regions for an extended period of time. There is no doubt that integration aides can and do play an important role in the successful implementation of inclusive education programs for students with ASD. Yet often these staff are the least qualified to provide the intensive support needed to help students with ASD who have the most complex needs. If schools are to continue using funding to employ integration aides then considerably more attention must be placed on adequately preparing them to support students with ASD.

While teacher assistants can have a positive effect on pupils, a large scale study of more than 20,000 teachers and support staff in primary, secondary and special schools in England and Wales over a five-year period study showed that primary and secondary pupils supported by teacher assistants (or integration aides) made less progress on average than those students of similar ability, who do not receive such assistance. Overall, the more support they received the less progress they made leading to the conclusion that teacher assistants' support, while making teachers' jobs more productive, did not lead to pupils making better progress in English, maths and reading (Blatchford, 2009). These findings should not detract from the sterling job teaching assistants are seen to do but rather acknowledge that their misuse and over use as a teaching resource needs to be seen in the light of a wider systematic problem (Giangreco, 2010). It is important that teacher assistants need adequate training to perform their roles in supporting inclusion of students with ASD. However, extra training will not address systemic changes required to address inherent inequities present in schools "where the more challenging the learning characteristics of the student, the more likely he or she is to receive instruction from teacher assistants rather than teachers" (Giangreco, 2010, p.344).

8.6 Professional learning and teacher education

Reliance on in-class differentiation through quality differentiated teaching practice to support all learners places the main emphasis on teachers having appropriate skills to be able to assess individual learning needs, implement appropriate interventions and monitor progress. In this manner, the greatest support should be directed towards professional learning for teachers, education assistants, and peripatetic staff involved in working directly with the students. It is critical that professional learning curriculum is determined based on the research evidence that has identified necessary skills, knowledge and attitudes required of educators to teach students with ASD effectively in inclusive classrooms.

8.7 Alignment of funding models to Inclusion policy

Across all jurisdictions in Australia, there is currently no single method for the support of students with ASD. What is evident is that the movement towards inclusive education remains strong and that regular schools increasingly have to provide support for learners who would have previously been educated in segregated facilities. Without additional support through appropriate funding mechanisms, it will not be possible for schools to provide the degree of support required by many students with ASD in order to access the regular curriculum. Sometimes the way the education of students with ASD is funded could go against inclusion policies and philosophy. For example, in some jurisdictions more funds are available to students with ASD if they are educated in segregated settings. This clearly incentivises placements of students with ASD in segregated rather than inclusive settings.

8.8 Support teachers: A school-based Inclusion team

Every system that we reviewed had enacted some form of school-based support team. In some jurisdictions this was a dedicated role led by a deputy principal, in others this was led by a special education teacher and in others a school-team of several teachers undertook this role. According to the Australian Advisory Board on ASD "Having a knowledge and understanding about ASD and the implications of ASD on a student's learning and participation needs is critical in being able to identify the 'reasonable adjustments' to successfully support students with an ASD in all Australian schools" (2010, p.6). Teachers, therefore, need to be well trained and knowledgeable if they are going to be able to support learners with ASD within school interventions (McGee & Morrier, 2005). The resource teacher of learning and behaviour (RTLB) model, implemented in New Zealand, is a good example (Thomson, et al. (2003).

8.9 Flexibility

The need for specialised and comprehensive multi-faceted approaches (Batten, Corbett, Rosenblatt, Withers & Yuille, 2006), within a flexible continuum of service provision (Ministerial Advisor Committee: Students with disability, 2010) would seem most pertinent to underpin any decisions regarding support. Alternative placements in some systems include ASD special schools; small support or satellite classes within regular schools staffed by ASD-specialist teachers; and ASD-specific itinerant teacher services. Although there is a strong move away from placement in segregated settings for students with ASD, some systems do provide withdrawal / intensive programs for students who are expected to be able to follow the regular curriculum if their social and behavioral issues are addressed. If inclusive education is the primary goal then how such placements can lead to inclusion need to be considered from the beginning and planned carefully.

According to a review of the literature undertaken in 2010 by the Ministerial Advisory Committee: Students with disability in South Australia, best practice pedagogy was to allow students with ASD to transition between specialist settings and regular class placements to develop their skills as needed, with opportunities to practice these skills in more inclusive environments. Other stakeholders recommended that any alternative placements should be seen as transitionary rather than permanent (Australian Advisory Board on ASD, 2010). The aim should be to allow students with ASD to temporarily obtain skills in specialist settings in order to move them back into more inclusive placements.

8.10 Family choice

Family choice has become of key importance for decisions regarding school placement for students with ASD. The Australian Advisory Board on ASD continues to highlight this importance for parental choice of schools. They posit that "Provisions available to parents of a child with an ASD should be equal to the choices available to parents of students without a disability. Accordingly funding mechanisms across the government and non-government sectors should support such availability of choice and student need" (2010, p. 3). The system should support parents not only in making choices but making *informed* choices. Parents need to be informed in greater detail about the pros and cons of making any particular decision about their child. Parents need to be told about the long-term impact of making any decision about their child.

8.11 Summary

These ten key considerations highlight the range of influences that are likely to impact on funding decisions regarding supporting students with ASD. Each of these should be reviewed in detail for the specific context of Victoria prior to deciding on an approach to adopt. When considering the form a funding model should take to address current and posited future expectations, two basic requirements have been identified. According to Lamb and Teese (2012) any model should aim to minimize performance differences between schools while maximizing the progress of all students at each stage of schooling. They suggest that the first is one of horizontal efficiency that focuses on minimizing the gap between schools of students achieving national minimum standards. The second is one of vertical efficiency that ensures that all students make good progress across all stages of schooling. Lamb and Teese (2012) propose that funding support should be output focused, designed and used to promote improved performance. Further, according to the Australian Advisory Board on Autism Spectrum Disorders "A generalist service model does not provide consistently positive economic and social outcomes for people with ASD" (2011, p. 4). The Australian Advisory Board on ASD proposes eight principles that should guide educational services for students with ASD:

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

Australian Advisory Board on Autism Spectrum Disorders (2010, p. 2).

9. Various Funding Models that could Best Support Inclusive Education within the Victorian Context for Students Requiring Support for ASD

Although there remains enormous variation in practices both within and between countries for learners who require additional support, there are a number of new models evolving which may be more effective and equitable approach to ensuring their needs are met. These new approaches are underpinned by a number of key principles to:

- Enable inclusive education
- Provide a more equitable model for supporting all learners
- Give schools greater decision-making regarding implementing more locally appropriate programs
- Increase accountability for the use of funds
- Improve student learning through more locally targeted programs
- Reduce stigmatization caused by labelling and categorizing students in order to receive support
- Reduce the wait time to receive funding
- Reduce complexity
- Ensure that funding continues to support a child if they move schools

Four funding models have emerged from this review as current best practice for supporting learners with ASD. In some systems they have selected to use only two or three of these. It would seem, however, that systems which are applying a combination of all four models are providing a more streamlined approach to provision for students, with greater flexibility for supporting the diversity of student needs within different schools across a range of social and geographical regions. Each of these models is described with recommendations for consideration for the Victorian context. It is possible that Victoria may be able to develop one model that captures best ingredients of different models described below.

9.1 Model 1: Input Funding

This approach to supporting learners with an identified disability has been the mainstay of previous funding models. Distribution of subsidy previously required categorizing of students depending upon their disability type and level. This model is still applied to some extent in almost all systems for supporting students with disability identified with high-level support needs. The input process funding model, nevertheless, more recently focuses on identifying the level of support and adjustment needed rather than the category type. All systems recognize that for some students with disability they will require ongoing support that is targeted directly at their individual needs. This input funding remains the best practice for meeting these needs for the small number of students with disability requiring a high level of support.

Input funding is the preferred model most frequently applied for supporting learners with ASD with moderate to high levels of need.

9.1.1 Strengths of input-based funding models:

Input-based models have several advantages. These advantages include:

- Systems control funding decisions and monitor accountability
- State-wide decision making to ensure equity across schools
- Funding targets individual students with the greatest needs
- Funding follows students when changing schools with no need to reapply for support
- Students with highest needs are allocated funding to support their specific individual needs

9.1.2 Challenges of input-based funding models

Some of the challenges related to input-based funding models are:

- Requires categorisation and labelling of students
- Onerous paperwork is required to receive funding
- Increased emphasis on bureaucracy external to the school community
- Funding creep – whereby the needs of a child are exaggerated to obtain greatest funding support

9.1.3 Recommendations for Consideration

Based on our review, here are some considerations for designing an input-based model to better educate students with ASD in inclusive classrooms and schools:

a) *Input funding should be provided for students requiring high to profound levels of support for ASD.*
b) *Funding should be determined using the simplest model with the least amount of paperwork necessary to coordinate this.*
c) *Schools should be allowed to utilize this funding in ways they consider to best meet the needs of the students.*
d) *Schools should be accountable for the funding and be able to demonstrate how the funding influenced the outcomes for funded student(s)*

9.2 Model 2: Through-put Funding

With the changing and more socially inclusive landscape of schools, it is increasingly important to consider how to provide additional funding for students who are ineligible to access the input funding but who still require additional support for mild to moderate learning needs. To provide for these students, systems have implemented a range of funding models that allow schools to make greater decisions regarding how to support their unique student clientele. Through-put models have, therefore, emerged that are generally determined on a per capita funding basis that takes into consideration a number of pertinent aspects of schools. Through-put funding models are also linked to decentralisation of governance with greater school autonomy; increased flexibility over the use of funds; and improved effectiveness of use of resources.

Best practice models include not only base-line funding for all students but also additional support considering school type (kindergarten, primary, secondary), geographical region, educational disadvantage, socio-economic status (based on ICSEA), and the number of students identified by the school as requiring additional learning support (with or without a defined disability). In this way, schools are provided with a one-line budget that reflects their local needs but gives schools the ability to utilize this funding, as they deem most appropriate. Students with mild to moderate support needs for ASD are generally supported under this model.

9.2.1 Strengths of school-based through-put funding models:

School based through-put models have several advantages. These advantages include:

- Communities are empowered and inspired to make local decisions to meet local needs
- Greater decision-making at local level directly related to student and school need
- Non-categorical (avoid labelling)
- Increased flexibility over use of funds
- Immediate ability to adapt programs as needs change throughout a year
- Reduced emphasis on external to school bureaucracy
- Significantly reduced administrative burden to receive funds
- Increased accountability for student achievement
- Improved student monitoring systems

9.2.2 Challenges of school-based through-put funding models

Some of the challenges related to thorough-put funding models are:

- Ensuring all groups of students are targeted
- How to manage individual students who may require one-on-one support for periods of time
- Sharing funding equitably across all groups of need
- Managing differences of opinion over which programs to offer to which students
- Increased emphasis on school self-audits to monitor accountability
- Ensuring strong leadership with highly skilled leaders

9.2.3 Recommendations for Consideration

Based on our review, here are some considerations for designing a through-put funding model to better educate students with ASD in inclusive classrooms and schools.

a) *Through-put funding should be made available to support students with mild to moderate levels of need for ASD.*
b) *In addition to base-line funding for all schools, additional funding should be provided dependent upon a school's estimate of the number of students who require additional learning support (with or without a defined disability) including those with ASD. This may require the use of educational profiling tools to determine which students need additional support.*
c) *Funding should be determined by school-based decision-making to identify students requiring additional support.*

9.3 Model 3: Output Funding

In many systems there has been a significant trend towards devolving responsibility away from education department governance systems towards school-based decision making. While this gives schools greater autonomy, it also poses an additional role on the authority to ensure increased accountability and monitoring of student learning. The most recent funding model to emerge to support this has been the output approach. This continues to provide schools with additional funding when needed for students but it is tied strongly to increased school liability for ensuring students are achieving desired outcomes. In international systems, output funding has tended to be linked to a student's IEP which has to identify expected outcomes and then funding is allocated for the specified support that will be required to achieve the outcomes. The IEPs are subsequently used to monitor and report on student outcomes. While this is suitable for the small number of students identified with high level of support needs for an identified disability, it is not functional for supporting a larger number of students with milder support needs who would not traditionally have an IEP.

The output funding model that is emerging in Australia is somewhat unique in that it is linking funding for students with mild to moderate additional learning needs to results on national NAPLAN scores. This provides a state-wide equitable means for identifying the percentage of students who are achieving within a school in the lowest stanine, so that funding can be allocated to schools with the greatest needs. Such a model is significantly less onerous for schools as the funding is automatically allocated without the need for labelling or categorizing students and without any additional paper work. This funding can be used to target students with ASD identified through NAPLAN as requiring support in literacy and numeracy

9.3.1 Strengths of output-based funding models:

Output - based funding models have several advantages. These advantages include:

- Funding decisions are evidence-based
- Non-categorical (avoid labelling)
- Provides funding at point of need to overcome educational disadvantage
- Funding targets specific groups of students who are not achieving to potential in identified schools
- Greater decision-making at local level directly related to student and school need
- Increased flexibility for developing programs to target students with additional learning support needs
- Reduced emphasis on external-to-school bureaucracy
- Reduced gatekeeping in receiving funds
- Increased accountability for student achievement directly linked to student outcomes

9.3.2 Challenges of output-based funding models

Output- based funding models also have several challenges. These challenges include:

- Ensuring all targeted students receive appropriate interventions
- Sharing funding equitably across all groups of need
- Managing differences of opinion over which programs to offer to which students
- Increased emphasis on school self-audits to monitor accountability
- Ensuring strong leadership with highly skilled leaders
- Develop and maintain effective monitoring processes for demonstrating improvement in student learning (this should also be seen as a strength of output funding)

9.3.3 Recommendations for Consideration

Based on our review, here are some considerations for designing an output funding model to better educate students with ASD in inclusive classrooms and schools.

a) *Output funding should be made available to assist students with ASD requiring learning support for literacy and numeracy.*
b) *Funding should be determined by NAPLAN scores regulated over a two year cycle to identify the number of students in the lowest 10 percentile ranking within a school.*

9.4 Model 4: State or District-wide Support Funding Model

In addition to providing funding direct to schools through input, through-put, or output funding, most systems also provide district or state-wide personnel who can be accessed by schools through a consultancy model. Schools can either access this support through the state system directly or consultants are made available within school districts or school clusters. Such support includes access to specialist teachers for ASD who can assist in providing information about resourcing, planning and curriculum development. They can also visit schools to observe students' needs and work collaboratively with classroom teachers and school-based teams to develop appropriate interventions. Psychologists and other consultants such as behaviour analysts, speech therapists and occupational therapists are also usually available through these avenues.

9.4.1 Strengths of State or District-wide funding models:

State or District-wide funding models have several advantages. These advantages include:

- Expert staff are available to consult on students with specific disabilities such as ASD
- Funding is allocated to the resource centres rather than schools to ensure greater coverage of access
- Specialist teachers target specific groups of students or individuals as need arises
- Increased flexibility for using limited numbers of experts across wider areas and numbers of schools.
- Limited administration to receive support
- Direct support available for class teachers working with individual students

9.4.2 Challenges of State or District-wide funding models

State or District-wide funding models also have several challenges. These challenges include:

- Ensuring sufficient consultants are available to support all students when required
- Sharing consultants equitably across all schools
- Developing and maintaining effective collaborative processes between schools and consultants for ensuring maintenance of programs
- Deciding whether consultants should report to school principals or outside servicing organisations.

9.4.3 Recommendations for Consideration

a) *State or District-wide funding should be made available to provide access to appropriate qualified experts on ASD*
b) *Consultants should be able to support schools working with students with ASD through the use of collaborative processes*

9.5 Role of Schools

To support these new funding models, it becomes clear that leaders will need to emerge who have the capacity to take on the increased expectations and accountability for schools. Allocating funds directly to schools relies on school leaders and staff having the skills to identify the specific needs of their students and to be able to implement appropriate intervention programs and school-wide support that will ensure that all needs are being met. In some countries such as the UK and many European systems, it is evident that the emphasis is on most students being able to be taught effectively through the use of generic approaches within regular classrooms (Ridell, Tisdall, & Mulderrig, 2006). Conversely, in other countries such as the USA, pedagogy is premised on separate and distinctive teaching methods for students with different learning needs. Allocating funding direct to schools enables them to investigate the best practice approaches for their own students and to provide appropriate support for learners with additional needs for ASD.

While increasing school-based funding provides greater authority to schools regarding decision-making, systems need to ensure that the increased autonomy is balanced with effective accountability mechanisms. There is still a key role for systems to play in safeguarding that alongside increasing school-based decision making that there is also a comparative increase in greater accountability for using the additional funding to improve student learning. In future, evidence-based student-centred practice with internal and external validation should increasingly guide funding models.

Concomitant with the increase in school-based decision making there will be an anticipated need to ensure that school leaders are well trained to be able to effectively administer these new approaches. Compulsory professional learning for school leaders should be seen as key to ensuring improved student outcomes are achieved resultant from the affiliated funding being provided to schools. In addition, improved access to professional learning for teachers, education assistants and potentially parents, should form an important part of how funds are utilised within schools to support student learning.

In education systems where a regimented curriculum is advocated, teachers may have limited autonomy or time to develop more flexible approaches for supporting a range of students with different learning needs (Didaskalou & Vlachou, 2004). Concomitant with the increasing push towards including all regular class students in national testing, these may work against increasing inclusive approaches to learning for students with special learning needs. Conversely, allocating additional through-put funding based on the number of students in the lowest percentile on NAPLAN might work to increase schools' willingness to encourage these students to participate in state-wide testing.

A further implication lies in the strength of current teacher training programs in preparation for supporting all learners within multi-diverse classrooms. With quality teaching being seen as the most significant in-school factor for improving student outcomes, consideration needs to be given to the effectiveness of existing preparation programs and also mentoring for new teachers to ensure that they are able to implement appropriate programs for supporting all students with ASD within regular classrooms.

10. Conclusion

There remains ongoing debate regarding the most effective pedagogy for teaching students with additional learning needs. What is accepted, though, is that early diagnosis and appropriate interventions are essential to ensure suitable support is given.

According to the Australian Advisory Board on ASD, any funding mechanism needs to "be developed and established to respond to the growing prevalence of ASD and to ensure equitable and sustainable funding" (2011, p. 2). We have found various ways of funding inclusive education for students with ASD. There is, however, a clear lack of consensus with regards to how inclusive education for students with ASD is *best* funded. Each funding model that we reviewed has several advantages and disadvantages. It seems appropriate to adopt mixed models rather than choosing one. This approach may build upon the strengths of an individual model while addressing the challenges related to other models. It may also be useful to pilot the chosen funding model for a short time within a region before rolling it out throughout the State. The key considerations identified in the report can be used to create a matrix to evaluate if the proposed model(s) has/have addressed the critical issues relating to funding of inclusive education for students with ASD.

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