

Models of support for students with high needs



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Scope:

The scope of this review was to report on models of support in inclusive education contexts internationally, but with a focus on Australia. It is acknowledged that inclusive education is generally applied in a much broader term with a focus on an ‘education for all’ that considers the needs of any potentially marginalised students and the removal of barriers or obstacles that prevent them from accessing high quality education.

The terms of reference for this report, however, relate to students with high needs which could include: challenging behaviours; medical and health conditions; physical disabilities; or other multiple and complex needs that could potentially create barriers that would prevent them from accessing high quality education.

Disclaimer:

Data reported and the subsequent analyses are based on information gleaned from a variety of sources. The authors have not attempted to validate these data and are unable to vouch for the authenticity of them. While all attempts have been made to include reference only to published sources through reputable journals, government publications, internationally accepted authorities, and education system websites, the authors are not responsible for any misrepresentations obtained directly from these sources.

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Executive summary

Introduction

High quality schooling is vital to improved quality of life and school policies and practices play a pivotal role in improving student outcomes and promoting greater effectiveness. Over the past two decades there has been a massive increase in the diversity of students that attend regular schools that has corresponded with the worldwide development of an inclusive education approach to schooling. Inclusive education school systems have necessarily been required to change school policies and practices to provide both *equitable* access and *high quality* schooling for *all* students. Some students, however, have higher levels of need and require additional and effective support to achieve and participate at the same levels as others. If the benefits of the adopted model of support is not available, effective and accessible by the students most in need, this can lead to further inequalities in adulthood that reduce employability, productivity and social cohesion.

A commitment to achieving high quality education for all students including those with high needs has long been an important part of the culture of Catholic Education in Melbourne (CEM). The roles and responsibilities of Catholic school leaders and teachers have changed and developed in recent years. In addition to and considering these changes and inclusive education policy developments, the appropriateness of the support arrangements and the suitability of current models of support for the future are being examined. CEM commissioned the authors of this report to review current *Models of Support* for students who present with high needs in schools, for consideration as alternative models that may be appropriate for Catholic schools of the future. For the purposes of this review, students with high needs include those with challenging behaviours; medical and health conditions; physical disabilities; or other multiple and complex needs that could potentially create barriers that would prevent them from accessing high quality education.

The literature reviewed comprises three main strands of Models of Support: Placement, Personnel and Student focused models.

- *Placement* models of support involve the provision of alternative physical arrangements either on a temporary or permanent basis.
- *Personnel* models of support involve the provision of a range of personnel in addition to the teacher.

- *Student focused* models of support describe the level of support provided: at the first level provision is within the regular school; the second level is intermediary support for returning a student to the regular school; and finally, a third level provides an alternative educational pathway.

Method of data gathering and analysis

The process of obtaining information for this review was multifaceted and the quality and quantity of materials varied considerably. International and Australian data were obtained from a variety of sources including government sites and published reports and journal articles. Examples of models of support were extracted from those adopted by school systems and informed on public websites and/or published research. Published academic research that was reported in peer reviewed international and Australian research journals was retrieved from searches conducted on all major search data bases. More than 200 individual data sources were reviewed, of which 125 form part of this synthesis.

Key Findings

Educational systems in both Australia and internationally have developed a continuum of placement options for students with high needs that range from a fully inclusive model to placement in a segregated specialist facility designed to cater specifically for the needs of students with the most complex conditions. Whilst all systems promote an inclusive approach to placement as a first-choice option; they also provide a range of alternative facilities specifically designed to support those students whose educational needs are not being served in the inclusive classroom. All placements are reported to be student centred and decisions regarding alternative options are made only after extensive consideration of a student's needs and in collaboration with families. None of the systems reviewed promoted placement in the inclusive classroom as the only schooling option for students with high needs.

A wide range of professional and non-professionals work to support students with high needs in schools. These staff are employed under a variety of working conditions involving consultancy directly with students in schools and classrooms and within a single school, or acting in an itinerant capacity across schools. Most common are the variously named teaching support staff or assistants e.g. learning support assistant, teacher aide, integration aide, special needs assistant and indigenous education assistants and/or officers that are present in many inclusive classrooms. The widely-held view is these assistants

support the inclusion of students with disabilities and other learning needs by differentiating the curriculum.

Qualified professionals such as psychologists, counsellors and social workers, especially when employed in a part-time capacity, report that they can spend only minimal time with individual students and often in an ad hoc way. Similarly, itinerant paraprofessionals indicate that time pressures prohibit them from providing what they consider to be essential and intensive interventions or support. This is of particular relevance to the provision of support for learners with high needs and undoubtedly contributes to the decisions to place these students in alternative settings outside of their inclusive school. Collaboration with teachers, families and other members of the school community is reported to be a vital component of effective support for these students, yet sufficient time is rarely available for this.

A range of support structures are evident within schools depending on the local context organised to provide for individual student's particular learning needs. These structures are, however, primarily designed to support students with mild to moderate learning challenges. For students who experience greater challenges, three layers of student focused support were identified from the literature. These layers of support are grounded upon the principle that intensive assessment and team decision making must involve all stakeholders and families before options for support are determined and offered to individual students. At the first layer, additional support may be provided by school-based personnel or itinerant teachers and can include individual or small group and short term, full, or part-time withdrawal intervention. If a student has not responded to the first layer of support, second layer interventions are offered through placement in a separate alternative facility typically temporary where more concentrated efforts are provided by specialists. At this second stage, the intention is that the intensive individualised support will enable the student to return to and successfully participate in the regular classroom. The third layer of support is provided when it is deemed that a student has long term and highly complex needs that cannot be foreseeably supported within the regular classroom. These students are offered a more permanent form of support in a segregated specialised context where it is believed their specific needs can be best met.

Implications for Policy and Practice

Models of student support vary enormously between government and non-government systems depending upon the context, geographical access, and the availability of personnel.

Although all systems reviewed actively promote inclusive education, there are simultaneously some students with high needs that reportedly are not able to be supported in the inclusive school. Alternative specialist placements, therefore, continue to be a commonly accepted approach for supporting students identified with high needs across all jurisdictions.

For some students who have disengaged from schooling and /or are at-risk of not completing high school, school refusers, or those identified with severe behavioural or mental health conditions, alternative placement may potentially be key to supporting these students to meet their learning and other challenges and succeed with schooling. Alternatively, the provision of opportunities for additional and more intensive support within an inclusive school, i.e. at comparable levels to that which can be accessed in a specialist placement may, overcome the need for an alternative placement. At this stage, no systems appear to offer similar levels of support within regular schools. This precipitates the need for more alternative placements. With models of support increasingly relying on additional placement options in Australia, consideration should be given as to *how* more effective and intensive support might be provided in the inclusive school for students at-risk of being transferred to alternative placements. Unless trained professionals are given sufficient time to support learners with high needs within inclusive schools, then inclusive schooling for these students is going to be very challenging to maintain. Of further concern is the lack of opportunities for professionals to collaborate with one another and thus enhance the impact of their expertise and avoid duplication of effort.

Of further concern is that teaching assistants or support staff who may or may not have specialist training, appear in many places to have become the primary form of learning support for students with high needs. In many models of support students can spend the majority of their school time with the 'learning support assistant'. While internationally, large-scale research has documented the various models of support assistants; in Australia, limited findings from small scale studies indicate that there are inconsistencies and ambiguities in the perceived roles of these staff that are influenced by the expectations of classroom teachers. Much greater work is needed to explore the learning outcomes for students with high needs when mainly supported by unqualified assistants.

Effective school leaders are pivotal to these processes. Thus, it is critical that school leaders are well prepared to use research driven practices that develop dynamic school environments that engage all members of the school community in improving engagement and learning.

To ensure that models of support are designed and implemented to meet students with the most complex needs, it is critical that policy reinforces options that are appropriate and as

inclusive as is possible. There is a great opportunity here for policy to establish guidelines that reflect the expectation of an inclusive approach to education, whilst acknowledging that in more severe instances alternative options may be necessary. Aligned with policy is the importance of increasing accountability to monitor decisions that are being made. Alternative placements have been established to provide for the most vulnerable group of children. Without policy and a regulatory framework, nonetheless, these have the potential to dominate decisions for an increasing number of students; as is already evident across Australia. It would be an easy option to slip back and adopt an exclusionary approach for supporting learners with the most challenging needs. By ensuring that more effective support is provided at an early stage and within the regular school system this can be avoided. This approach, however, would depend on much earlier identification, rigorous assessment processes and accountability conducted in schools and then addressed through in-school programs.

A lack of details on system directed initiatives and the variety of interventions used for supporting children with complex needs, makes it difficult to determine the degree of use of the different models of support across diverse regions. It is also challenging trying to consolidate the best practice models for student support as models of inclusive practice are not always easily available at a systemic level; examples mostly occur at the individual school level. While acknowledging that this small-scale review does not have the capacity to be completely comprehensive, the review does provide information on a range of models of support that are being implemented for students at various stages of need from an international and Australian perspective.

It is recognized that outcomes of the review of models of support reported here are context dependent and, therefore, need to be considered in light of the specific conditions in schools in CEM and supported by further investigation. It would seem important to obtain data on the various support staff currently working with students with high needs across CEM and the impact of their work on student learning outcomes.

Introduction

This paper reports on a review of published academic research and publicly available material regarding ‘models of support’ for students with highly complex and challenging behaviours as well as students with very low academic functionality and/or highly complex medical or mental health conditions and/or physical challenges.

International data were obtained from a variety of sources including government websites, national reports and published journal articles. Australian data were obtained from the eight Government education jurisdiction websites, the 28 individual Catholic Dioceses, the national and all state or territory associations for the Catholic sectors, the Australian Bureau of Statistics, Education Council, and published reports and articles. Published academic research was retrieved from searches conducted on all major search data bases including SCOPUS and OVID. Search terms included: school system models of student support / and disabilities; psychology/ists; teaching / education assistants / aides; school counsellors; speech pathology/ists; mental health support; OT; paraprofessionals; specialist support; all with ‘and school support’; and behaviour support in schools, among others. These were further used in separate searches with the terms ‘review’ and ‘research’ and ‘model’. More than 200 individual data sources were reviewed, of which 130 form part of this synthesis.

The scope of this review was to report on models of support in inclusive education contexts internationally, but with a focus on Australia. It is acknowledged that inclusive education is generally applied in a much broader term as ‘education for all’ that considers the needs of any potentially marginalised students and the removal of barriers or obstacles that prevent them from accessing education. The terms of reference for this report, however, relate to students with the most complex needs that could include challenging behaviours; medical and health conditions; physical disabilities; and/or other multiple and complex needs that could potentially create barriers that would prevent them from accessing high quality education.

Inclusive education

Inclusive education is the education of all learners within the same regular classroom that provides appropriate accommodations to ensure that the needs of all children are met. As proposed by UNESCO (2012):

Education is not simply about making schools available for those who are already able to access them. It is about being proactive in identifying the barriers and obstacles learners encounter in attempting to access opportunities for quality education, as well as in removing those barriers and obstacles that lead to exclusion. (UNESCO, 2012, para.1).

This definition adopts an education for all approach where inclusive practice is having a broad focus that caters for all learners regardless of ability, status, background, or any other special need (Ainscow, Dyson, Goldrick, & West, 2011).

Change in regular schools

The shift from a former segregated dual system to an inclusive education approach has had tremendous influence on education systems, schools, and all stakeholders involved in education (Ainscow et al., 2011; Webster et al., 2010). This is particularly noticeable in Australia (Deppeler et al., 2016; Forlin, Chambers, Loreman, Deppeler, & Sharma, 2013). Regular schools can now be expected to include students from different socio economic backgrounds, those living in poverty, racial minorities, asylum seekers, refugees, children with disabilities or who are high achieving, together those who have mental health conditions, among others (McGlynn & London, 2013). With a fully inclusive approach to education schools can also expect to have to cater for more complex and challenging needs of students requiring high levels of support. While some schools embrace this new paradigm shift, others struggle with the logistical, pedagogical and philosophical changes required to accommodate the needs of such diverse student populations.

Compared with other Organisation for Economic Co-operation and Development (OECD) countries such as Finland, Australia has some way to go in providing high-quality and equitable education. According to Kenway (2013), social advantage and disadvantage and educational success and failure are closely linked in Australia's school system. While the evidence provided in the Gonski Report (Gonski, Boston, Greiner, Lawrence, Scales, & Tannock, 2011) showed that socially disadvantaged students, those with disability, and indigenous students were disproportionately concentrated in government schools, a proportion were enrolled in Catholic and Independent schools where parental choice preferred all siblings to attend the same independent school. With the emphasis on inclusive education there is now an increase in the diversity of students in schools. In Australia, however, "the narrowing of the way in which schools are valued and measures of efficiency and accountability have had the consequent impact on discouraging schools from taking on students who are seen to be problematic in a range of ways" (DEEWR, 2013, p. 46).

Parental choice

In Australia, education has moved into an era where parental choice is now to be expected and where families can have enormous impact on the role of schools. Independent public government schools in Australia (as introduced in WA), for example, are governed by a School Board where families and other community members have considerable say over the direction a school should take. Likewise, non-government independent schools governed by parent and community bodies or diocese find that they have to support learners with much more complex needs than previously as their choice not to include students with disability is limited (Forlin & Chambers, 2013).

Decisions regarding the provision of support for the inclusion of students with disability need to be taken seriously to ensure that family support is positive. Where students are simply ‘placed’ in the regular classroom without effective support or provision, this can lead to negative family attitudes towards the process of inclusion based on their child’s experiences of schooling (Chmiliar, 2009). With families’ experiences of inclusion being formed quite early in a child’s schooling, they may struggle to have the child’s areas of difficulty realised and appropriate early interventions made (Isaksson, Lindqvist & Bergström, 2010). Failure of the school or teacher to recognise and address student learning challenges sufficiently early in schooling can lead to longer term learning and behavioural challenges and tensions between the school and families.

Students with complex needs

A range of challenges are noted to be endemic to students considered at high risk of school failure. Negative predictors associated with at-risk students can include grade retention, chronic absenteeism, behavioural challenges, elevated levels of delinquency, higher incidents of violent and aggressive behaviour, teenage pregnancy, higher levels of psychological/mental health conditions and educational and occupational expectations that are pessimistic rather than optimistic (Bemak, Chi-Ying, & Siroskey-Sabdo, 2005; Clarke, & Visser, 2017). Students with these types of behaviours are more likely to use alcohol, smoke, take drugs and eventually drop out of school. Students considered at-risk may benefit from receiving training in self-discipline, social, relationship building and positive problem solving skills (Edwards, Mumford, & Serra-Roldan, 2007).

Inclusive Education in Australia

Recent reviews of the status of inclusive education across all states and territories indicate that despite operating under the same federal acts, all educational jurisdictions are managing and enacting inclusive education in a range of diverse ways (Anderson & Boyle, 2015; Deppeler, et al., 2016). While Anderson and Boyle found inconsistent levels of access and educational outcomes for students they noted that across the jurisdictions “Rates of segregation and exclusion (through both the provision of education in ‘alternative’ settings and disciplinary action) are on the increase, with disproportionate representation of students from minority groups” (Anderson & Boyle, 2015, p. 5).

Several national key points were identified by Forlin et al. (2013) regarding practices in Australia for inclusive education. These include:

- All jurisdictions have well-developed policies that support inclusive practices.
- A range of placement options are available in each state and territory with highly structured approaches for identifying students with disability who require additional support.
- Complex and varied procedures are developed to support decision making for placements and level of support, with schooling in the regular classroom being considered the first and best option whenever possible.
- All jurisdictions provide special schooling options for students with disability, but students’ ability to access these schools varies across and within states and territories.
- In-school support varies but is generally provided through additional staffing, multidisciplinary teams, and special programs.
- A comprehensive range of additional pathways are offered in secondary schools that are closely linked to transitions to post school options. (Forlin et al., 2013, p. 20).

A review of non-government schools in regards to inclusive education found that they have a high degree of autonomy in the way they identify students with needs and in the placement options and support that they provide; as well as the modifications or adaptations that are made to curricula and pedagogy to meet student need (Forlin & Chambers, 2013). Examples of good inclusive practice have not been collated for all jurisdictions as these occur at the individual school level. The report, nonetheless, concluded that good practices were related to personalised instruction, staffing, development of inclusive cultures and access to professional learning.

Government v non-government schools

The enormous diversity in educational practices between government and non-government schools has been considered an issue of equity regarding availability of support and access to effective inclusive education between schools and across sectors (Deppeler et al., 2016). The strong reliance on access to supplementary state and federal funding for non-government schools to support students with disability made sustainability of programs challenging.

Since 2002, there has been an increase in the percentage of students with disability enrolled in non-government schools with the numbers almost doubling by 2012 (Independent Schools Council of Australia [ISCA], 2012; National Catholic Education Commission [NCEC], 2012). Nonetheless, most students with disability (78 %) continue to be enrolled in Government schools compared to 22 % enrolled in non-government schools (ABS, 2011).

Of the 735,403 students across all jurisdictions enrolled in Catholic schools in 2012, a total of 30,506 were identified as having a disability, i.e. approximately 4.2 % of total enrolments. In the Catholic sector 97 % of students with disability attend regular schools, as opposed to special schools (NCEC, 2012). In the Independent schools' sector, 550,000 students were enrolled across all states and territories in 2011 and of these 14,102 were students with disability (ISCA, 2013). In 2012, a total of 79 % of students with disability in independent schools were being educated in regular schools with 21 % in special schools (ISCA, 2012).

In 2011, the proportion of students with disability nationally was 5.1% and was about twice as high in government schools (6.0%) compared with non-government schools (3.3%) (Report on Government Services, 2013). Australian Bureau of Statistics (ABS) data indicate that in 2010, 78% of students with disability attended Government schools, 16% attended Catholic schools and 6% attended Independent schools (ABS, 2011). In total, there were 416 special schools in Australia of which 332 were in the Government sector, 27 in the Catholic sector and 57 in the Independent sector (ABS, 2011). In 2012, special schools accounted for 4.5% of all schools throughout Australia (ABS, 2013).

Data recorded by individual states up until now has been difficult to compare due to several conditions including differing definitions and understanding of identifying the level of disability. The introduction of the *Nationally Consistent Collection of Data on School Students with Disability* (NCCD) hosted by the Australian government aims to overcome this. The 2017 Guidelines (Education Council, 2017) state:

A student is eligible to be counted in the NCCD where there is evidence at the school that the student has been provided with an Adjustment/s for a minimum period of 10 weeks of school education ... to address the functional impact of a disability (p. 21).

The most recent report by the Council of Australian Governments (COAG) Education Council in December 2016 containing the 2015 results of the NCCD, however, the authors still posit interpretation with caution given the early stage in establishing the collection model (Education Council, 2016). The report, nevertheless, determined that based on data provided, 18% of students nationally were receiving some form of educational adjustment due to disability. Of note is that this figure is more than threefold the 5.1% reported earlier in 2011 (Report on Government Services, 2013). Summaries of the distribution of the NCCD data across government and non-government schools were provided. Table 1 presents the distribution of students by sector and level of adjustment.

Table 1: Distribution of students with disability by sector and level of adjustment as a percentage of total student population (2015)

Level of Adjustment	Government	Catholic*	Independent	All Sectors
Support within QDTP	5.8%	3.2%	7.4%	5.5%
Supplementary	8.3%	8.6%	6.9%	8.2%
Substantial	3.4%	1.7%	2.0%	2.8%
Extensive	1.9%	0.4%	0.8%	1.5%
All Adjustments	19.4%	14.0%	17.1%	18.0%

Note. QDTP = quality differentiated teaching practice. Source: Education Council, 2016, p. 8

From Table 1 it is evident that as the level of support increases from supplementary to extensive the percentage of students in non-government schools reduces significantly compared to government schools.

When considering state and territory differences for percentage of level of adjustment, Table 2 reports the findings. From this table, it is possible to see quite noticeable differences between jurisdictions for level of adjustment with some differences being more than double e.g. in Victoria support by differentiated teaching practice is 6.2% while it is only 2.2% in Northern Territory (NT) where, conversely, extensive support is much higher in the NT than other states.

Table 2: Distribution of students with disability by state and territory and level of adjustment as a percentage of total student population

Level of Adjustment	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Support within QDTP	3.9%	6.2%	7.3%	5.9%	6.0%	3.1%	2.2%	3.1%	5.5%
Supplementary	10.1%	6.3%	7.7%	10.0%	7.9%	5.0%	5.3%	6.7%	8.2%
Substantial	2.6%	2.8%	3.9%	2.5%	2.0%	2.4%	4.0%	2.0%	2.8%
Extensive	1.3%	1.8%	1.8%	1.0%	0.8%	0.7%	2.0%	0.9%	1.5%
All Adjustments	17.9%	17.1%	20.7%	19.4%	16.7%	11.3%	13.6%	12.7%	18.0%

Note. QDTP = quality differentiated teaching practice. *Source:* Education Council, 2016, p. 9

For the total 18% of students nationally identified with a disability and requiring adjustments Table 3 provides the distribution according to system. For students requiring substantial or extensive adjustments the non-government schools cater for a very small number compared to government schools. See report pages 9-12 for details according to disability category (Education Council, 2016).

Table 3: Distribution of students with disability by sector and level of adjustment as a total of the 18% of students identified with a disability

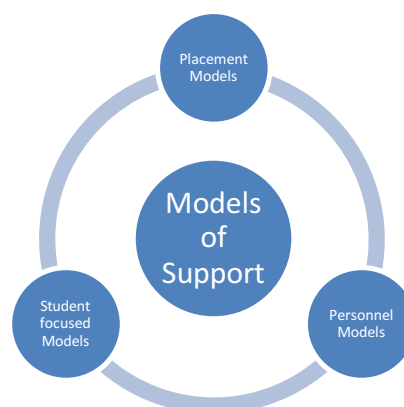
Level of Adjustment	Gov	Catholic	Ind	All Sectors
Support within QDTP	21%	4%	6%	31%
Supplementary	30%	10%	6%	46%
Substantial	12%	2%	2%	16%
Extensive	7%	1%	1%	8%
Share of all students requiring adjustments	70%	16%	14%	100%
Share of all Australian school students	65%	20%	14%	100%

Note. QDTP = quality differentiated teaching practice. *Source:* Education Council, 2016, p. 11

Models of support for learners with highly complex needs

There are many established approaches that are readily employed in schools to support learners with mild to moderate support needs, grounded upon differentiated teaching practice or the provision of supplementary support. Cost effective evidence-based strategies for students with moderate risk for social and learning failure within a multi-tiered system of support (MTSS) include the School-wide Positive Behaviour Interventions and Supports (SWPBIS) model (Rodriguez, Campbell, Fairbanks Falcon, & Borgmeier, 2015). This approach usually involves standardized interventions that do not contain a lot of individualization to meet student needs. Research based components that should form part of a SWPBIS comprise (a) explicit skill instruction, (b) structured prompts for appropriate behavior, (c) opportunities to practice skill in natural setting, and (d) frequent feedback on the skill (Anderson & Borgmeier, 2010).

There are, however, considerably fewer evidence-based models proposed for supporting learners with more complex needs including those with very low cognitive abilities, highly challenging medical or health conditions, severe physical disabilities and highly challenging behaviours within regular classes. The following analyses of data summarises the major models used internationally and across all jurisdictions in both government and Catholic education systems in Australia, to provide support for this diverse range of students needing specific support.



An extensive analysis of literature from government and non-government education websites and published research into the areas of support for learners with complex needs internationally and in Australia, identified models of support that appear to revolve around three major areas of placement, personnel and student focused models.

- 1) *Placement* models of support involved the provision of alternative physical arrangements either on a temporary or permanent basis. This can include a special class within a school setting, an on-site specialist facility, a segregated facility or special school with temporary or permanent placement.

2) *Personnel* models of support involved the provision of a range of personnel in addition to the teacher. These can include psychologists, social workers, school counsellors, teaching assistants, mentors, itinerant teachers and in-school learning support teachers.

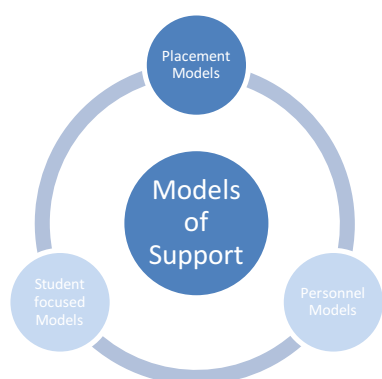
3). *Student focused* models of support describe the level of support provided: at the first level provision is within the regular school; the second level is intermediary support for returning a student to the regular school; and finally, a third level provides an alternative educational pathway.

Each of these models of support are reviewed, summarising the general approaches taken and providing evidence of best practice when available. This summary is unlikely to be complete, though, as many individual schools and local education systems have adopted their own models of support depending upon their unique contexts; with few of these being readily available for critiquing. Most government web sites contain information about students with disabilities although they are frequently difficult to navigate and rarely provide details on specific models of support being used for learners with more complex and challenging needs.

In Australia, there is limited information available on the models employed to provide support to students with complex needs through the non-government sector's state and territory association web sites. A lack of details on non-government system directed initiatives and great variety in the procedures used for supporting children with complex needs, makes it difficult to determine the degree of use of differing models across all jurisdictions. Specifically, it is problematic trying to consolidate the best practice models for providing support as examples of good models of inclusive practice have not been gathered at systemic level as these mostly occur at the individual school level.

The following sections, nevertheless, provide a comprehensive analysis of the major types of support models in place for dealing with learners with highly complex needs from an international and Australian perspective.

Placement Models for Learners with highly complex needs



International Placement Models of Support

A review of selected Western countries (England, USA, Ireland, Finland) provides information on the types of models of support most frequently used related to helping learners requiring substantive adjustments to access the curriculum. Although explanations of support for students with different levels of need will be discussed within general

approaches, wherever possible separate models of support for students with more complex and challenging needs are emphasised. While these countries promote an inclusive approach to education they all retain a continuum of placement options from full-time placement in a regular classroom to full-time placement in a segregated specialist school. This is particularly noticeable for students with more complex needs and challenging behaviours where the model of support is now tending quite strongly towards alternative placements.

England

England was selected as it has a national education system but many decisions are made within local education authorities who can choose the type of provisions they wish to make to meet the needs of their students. England also has a well-established model of supporting students with the most complex and challenging needs by providing a range of alternative segregated facilities.

According to governmental statistics (Department for Education, 2016) on special educational needs in England, the greatest percentage of students with a statement or Education Health and Care (EHC) plan (42.9%) are placed in maintained special schools. Comparatively, 1.9% of students attend non-maintained special schools. Students attending state-funded primary and secondary schools were 25.5% and 23.5% respectively. A further 5.7% of students with a statement or EHC plan attended an independent school. A small percentage of students (0.6%) attended student referral units and the remaining 0.1% were taught in maintained nursery schools.

The British Government states that special schools for students aged 11 years and above can specialise in one of four areas namely: 1) communication and interaction; 2) cognition and learning; 3) social, emotional and mental health; or 4) sensory and physical needs. Individual counties also provide guidance and support for managing students who

have challenging behaviour within mainstream schools. Surrey County Council, for example, has specialist teaching teams providing expertise and practical support to schools and families. The teams are made up of learning and language and behaviour support specialist teachers (Surrey County Council, 2017).

There is a very well established diverse range of alternative placement provision outside mainstream education for students with highly complex needs in England. These include pupil referral units or pupil re-integration units (PRUs) (in some Local Education Authorities), alternative provision (AP) academies, AP free schools, residential special schools and colleges and hospitals for students who have chronic health needs. Academies are publicly-funded independent schools (GOVUK, 2017a). Other alternatives for secondary-aged students not coping within mainstream schools include apprenticeship schemes and practical training programs.

The primary model of placement support utilized to help students exhibiting complex barriers to education, including those who are excluded or at risk of exclusion and those with challenging social, emotional and mental health needs, is the use of a PRU, an AP academy or an AP free school. These can take many forms and are flexible and less restricted in the curriculum they can offer. PRUs operate outside of normal schooling and are designed to help those children who might not fit in to the normal school regime for a variety of different reasons. Many accommodate the most disruptive and troubled students. England currently has more than 400 PRUs catering for an excess of 20,000 students exhibiting very complex needs.

In his review Taylor (2012) reported that good PRUs can provide appropriate support in an alternative placement if difficult behaviour problems develop in a regular school. Furthermore, PRUs assess students' needs and provide personalised programs with the aim of students returning to mainstream education or to progress into further education or employment. Taylor (2012) also reported that placement in a PRU can help students who have serious emotional challenges and simultaneously improve their behaviour and achieve high academic standards. Students often attend additional forms of AP off-site whilst enrolled at a PRU (GOVUK, 2016). PRUs have been reported by teachers and senior leaders in primary and secondary education to be the most commonly commissioned AP (Straw, Tattersall, & Sims, 2016).

If a mainstream school is unable to provide suitable education for a student, an alternative placement in an AP could be considered, for example, due to exclusion (temporary or permanent) or for medical or behavioural needs. As a precautionary measure, mainstream schools often use an AP to avoid the need for exclusion. The duration of a

placement is determined, therefore, by the individual needs of a student. When a student remains on a mainstream school's roll and is attending an AP, the school retains accountability, acting as a commissioner (Education Funding Agency, 2015).

Alternative placement in AP free schools can be established by a suitable organisation or group, for example, parents, teachers or community groups (Department for Education, 2011). There is no requirement, however, for most APs to register with any official body; nor are there formal arrangements for their quality to be evaluated (GOVUK, 2016). In a review of APs, OFSTED reported:

In a quarter of the schools surveyed, the curriculum for students who attended alternative provision (AP) on a part-time basis was too narrow. While that was an improving picture since 2011, it meant that these students did not have the opportunities they required to prepare them for their next steps in education or training. More positively, the clear majority of students who attended alternative provision (AP) were taking English and mathematics qualifications, usually at an appropriate level (Ofsted, 2016, p. 7).

United States

Special needs legislation in the United States (US) centres on *The Individuals with Disabilities Education Act* (IDEA, 2004) (Fox, 2016). The aim of the Act is to ensure all pupils receive a free appropriate public education (FAPE) which includes the provision of special education and related services in conjunction with an individualised education program (IEP) (US Department of Education, 2017). The IDEA further assures that children and their parents or guardians have the right to timely evaluation, with access to all conducted meetings, paperwork and transition planning (Cortiella & Horowitz, 2014).

The Act legislates for special education and related services to children and youth who have one or more of 13 learning disabilities including dyslexia, dyscalculia, Auditory Processing Disorder and ADHD and are aged between 3–21 years old (Cortiella & Horowitz, 2014). Individual states, nevertheless, have their own policies advocating different models of support and placements, with some offering specialist programs for students requiring provision for a range of specific disabilities. A continuum of educational placements is offered for students with diverse learning needs. The continuum spans, as in other countries, with regular classrooms at one end using supplementary aids and services, to self-contained, pull-out programming or placement in an alternative facility for full or part of the school day.

The IDEA legislation stipulates that children with a learning disability should be educated in a placement offering the least restrictive environment (LRE) with children

without disabilities (Lipkin & Okamoto, 2015). Students with a learning disability are, therefore, being increasingly educated in general education classrooms in the US (Cortiella & Horowitz, 2014). The range of placements from least to most restrictive environments is: 1) typical classroom with in-class supports; 2) typical classroom with special education placement pull-out; 3) special education classroom with opportunities for children to be taught in a mainstream classroom when appropriate; 4) special education school; and 5) special education school which may have residential placement on-site (Lipkin & Okamoto, 2015).

Legislation in the United States identifies a student with emotional and behavioural challenges under four key concepts. 1). exhibiting emotional or behavioural functioning which is different from age-appropriate ethnic or cultural norms, adversely affecting their academic progress, social relationships, personal and classroom adjustment, self-care or vocational skills; 2). Exhibiting behaviours that are severe, chronic and frequent, occurring at school and at least one other setting, including one of eight characteristics or behavioural patterns associated with EBD; 3). the IEP team has used several information sources, for example, observations and reviewed interventions previously used and documented; and 4). the IEP team not identifying or refusing to identify a student as being EBD solely based on factors including another disability, socio-economic circumstances or medical or psychiatric diagnoses (adapted from Wisconsin Department of Public Instruction, 2017).

Using a Response to Intervention (RTI) data-based process and Multi-Tier System of Supports (MTSS), early identification and support for students with learning and/or behavioural challenges and disabilities is conducted for all students in general education classrooms (Cortiella & Horowitz, 2014). Students who are identified as experiencing learning or behavioural challenges are subsequently provided with interventions at increasing intensity levels and their progress closely monitored.

To address the needs of children identified with EBD placed within the regular school system, the Department of Education's Office of Special Education Programs (OSEP) provides support for the use of the Positive Behavioural Interventions and Supports (PBIS) program in schools (www.pbis.org). Currently, PBIS has been implemented in over 23,000 schools across the US. When applied at the schoolwide level, PBIS is usually referred to as SWPBS (Schoolwide Positive Behaviour Support) or SW-PBIS (Schoolwide Positive Behavioural Interventions and Supports). The underlying theme of SWPBS or SW-PBIS is for behavioural expectations to be taught to students in the same way that core curriculum subjects are taught in schools.

Ireland

The education system in the Republic of Ireland was selected as it has had several recent major changes in the way it provides support for diverse learners and especially those with more complex needs.

In the Republic of Ireland, legislation was enacted between 2003 and 2013 for students with special educational needs (SEN) (McConkey, Kelly, Craig, & Shevlin, 2016). Until 2004/2005, students with SEN could enrol for placement in a special school as long as they met the criteria relating to the category of disability; or enrol in a mainstream school whether in an ordinary class, special class or a special educational unit (Kelly, Devitt, O'Keeffe, & Donovan, 2014). The *Education for Persons with Special Needs* (EPSN) Act, however, was passed into law in July 2004 specifying that children should be educated, wherever possible, in an inclusive environment (National Council for Special Education, 2014). The Act sub-categorises students with SEN based on education and resource implications with the most demanding sub-groups considered as students with emotional and behavioural disorders (EBD), particularly those with attention deficit/hyperactivity disorder, oppositional defiant disorder and conduct disorder (Scanlon & Barnes-Holmes, 2013).

The model of placement options for students ranges from full-time enrolment in mainstream classes to full-time enrolment in special schools (National Council for Special Education, 2012, 2014). In mainstream schools, where appropriate, additional teaching support from a learning support or resource teacher is provided. In special classes in a mainstream school, according to the category of disability, a lower student-teacher ratio will be specified. For example, for every six children with Autism Spectrum Disorder (ASD), there will be one teacher. A similar teacher allocation method is adopted in a special school. For example, there will be one teacher for every eight students for children with moderate general learning disability (National Council for Special Education, 2014).

A major report issued in 2012 in Ireland on the education of students with complex needs for challenging behaviours arising from severe emotional disturbance or behavioural disorders, recommended that the placement of students in a special school or class should be viewed as a temporary intervention. The report concluded that the original mainstream school placement should be held, thus, allowing the student to return later (National Council for Special Education, 2012). The report further recommended that for students with severe emotional and behavioural disorders, the special school should, where possible, be located on the mainstream school's campus. Furthermore, the need was recommended for care when

considering residential placements for a very small number of students as part of the continuum of provision (National Council for Special Education, 2012).

Additional supports are provided for schools who have students with EBD/severe EBD. These include the National Educational Psychological Service (NEPS), National Behavioural Support Service (NBSS), assistive technology, enhanced capitation grants and the special school transport scheme. A further component of the support received by post-primary schools is the visiting teacher service (Department of Education & Science, 2007). This service predominantly supports children with visual impairment and deaf or hard of hearing.

In a report commissioned by the National Council for Special Education (NCSE) in Ireland, (McCoy, 2014), it stated that there was a substantial number of special class placements provided across primary and post-primary sectors. Of the primary school population 0.5% of students with disabilities were educated in special classes; and 7% of primary and 24% of post-primary schools were operating at least one special class.

Updated on an annual basis, a national database in Ireland (National Intellectual Disability Database (NIDD)) is maintained detailing the numbers of children who receive support from specialist intellectual disability services including medical, psychological, therapeutic and family supports (McConkey et al., 2016). The data from this database show that in recent years there has been a steady increase of children with intellectual disabilities placed in classes in mainstream schools and a decrease in numbers attending special schools with even fewer attending special classes (McConkey et al., 2016). In contrast, though, Kelly, Devitt, O'Keeffe, and Donovan, (2014) report that “there is an increasing trend in the numbers of students enrolling in special schools and illustrate the burden placed on special schools in accommodating these students as they adjust to the special school environment”. Kelly et al. (2014) also report that students are struggling with inadequate supports for their academic learning in mainstream education in Ireland and their psychosocial, emotional and behavioural needs are not being met. They further contend that for inclusive education to be successful, there not only needs to be a full implementation of systematic educational change but also “universal, responsive, classroom practices that are responsive to the diversity of individual student needs” (Kelly et al., 2014, p. 79).

Finland

The Finnish education system was chosen as it is renowned for its inclusive approach and highly acclaimed results of students' achievement in high stakes testing.

In Finland, national education administration is organised at two levels. The Ministry of Education and Culture has the responsibility for Education policy. The implementation of the policy is the responsibility of a national agency, The Finnish National Board of Education (Ministry of Education and Culture, 2012). The Finnish National Agency for Education states on its website that:

The fundamental principle of Finnish education is to provide equal opportunities for learning and growth to every student. Support for learners plays a key role. This entails removing barriers to learning, physical, attitudinal or pedagogical, early intervention and support and welfare.

(Finnish National Agency for Education, 2017)

The Finnish education system, in addition to supporting students within mainstream education, still has a placement model that includes special classes and special schools for some students with more profound needs. Although their education is separate, it is based on the curricula of the mainstream education system with specific syllabi and resources that are decided on an individual basis (European Commission, 2015a). An important difference in the Finnish education system compared to the educational systems and legislation of countries such as the United Kingdom and the Republic of Ireland, is that legislation does not categorise students according to their disability or support needs.

In governmental literature, nevertheless, special needs education emphasises inclusiveness. It is stated that:

In Finland, the ideology is to provide special needs education primarily in mainstream education. If a student cannot be taught in a regular teaching group, he or she must be admitted to special needs education. This education is provided at regular schools wherever possible. All students of compulsory school age have the right to general support, that is, high-quality education as well as guidance and support. Intensified support must be given to those students who need regular support measures or several forms of support at the same time. The aim is to prevent existing challenges from becoming more serious or expansive. If children cannot adequately cope with placement in mainstream education in spite of general or intensified form of support, they must be given special support. The main purpose of special support is to provide students with broadly based and systematic help so that they can complete compulsory education and be eligible for upper secondary education.

(Finnish National Agency for Education, 2017, pp. 7-8).

The level of support (general, intensified or special) and the needs of students are individually assessed and can vary on a spectrum of temporary to continuous, from minor to

major; and support can be one form of support to several simultaneous forms (European Commission, 2015b). The most commonly used support measures provided to students are remedial instruction, part-time special needs education, an individual learning plan that is intensified with special support, an individualised syllabus, or the lengthening or delaying of compulsory education. In mainstream schools, teaching assistants receive training to learn how to assist students unable to fully access the curriculum (Hendrickson, 2012).

Following a detailed assessment, a written pedagogical report is compiled by the student's teacher(s). Other experts may be consulted where a student's well-being and overall development are in question (European Agency, 2017). Subsequently, a pedagogical statement is prepared by the education provider prior to ascertaining the level of special support that will be given. The statement outlines the student's learning and schooling as a whole; an assessment of the effects of the intensified support that has been provided; detail of the learning abilities and special needs of the student with regard to their learning and schooling; an assessment of the pedagogical and learning environment types, student welfare and other student supports; and an assessment on whether the student requires an individualised syllabus in one or more subjects (European Agency, 2017).

In Finnish schools, there are essentially four pathways for the education of students with special educational needs (SEN) (Huizenga, 2013). The first pathway aims for students with SEN to be taught in mainstream classes and when necessary, small teaching groups. If they have minor challenges in their learning or adjustment, they may be provided with part-time special education provided by an SEN teacher. Part-time special education does not require an IEP nor any official decisions made, as it is considered temporary support only occupying part of the school day (Takala, Pirttimaa, & Törmänen, 2009). The second pathway is for students to receive permanent instruction in a small group class within their mainstream school. The third is for students with severe learning disabilities, in which the curriculum will be modified. The final or alternate pathway is for the most severe students who only are educated in special schools if the first three pathways are not a feasible option.

There are six special basic state-owned schools in Finland that are intended for students who have a hearing or visual impairment or a physical or other impairment. In addition, the state has six reform schools that cater for students from "very problematic backgrounds and suffer from severe emotional disorders or social maladjustments" (European Commission, 2015c). In a study on the school placement of students with SEN and their sense of belonging, it was reported that they felt 'better' in their current school due to its positive climate (Pesonen, Kontu, Saarinen, & Pirttimaa, 2016). The authors discussed that in their previous schools, students had received "inadequate support due to their teachers'

inability to understand their unique characteristics” (Pesonen et al., 2016, p. 12). In particular, Paju, Rätty, Pirttimaa, and Kontu (2016) reported on the inclusion of students with SEN in Finnish mainstream schools and the confidence, knowledge, and ability of staff (teachers, principals and teaching assistants) to meet their specific needs. Paju et al. (2016) concluded that additional and in-service training are essential, as well as more effective collaboration between special and general education, to share the knowledge of teaching students with SEN in practice.

The Finnish government also recognises that students may need support due to a specific illness or difficult life circumstance. For such students, hospitals and community homes may be facilitated for their education. For students being educated in a hospital, the local authority has the responsibility for the student’s teaching arrangements, whereas, for students receiving their education in a community home, the school operating there will bear the responsibility (European Commission, 2015c).

In addition, seven vocational special schools are provided within the Finnish education system to promote vocational education and the training of students who need specialised support. The vocational special schools provide education for students who have the most complex and severe disability or chronic illnesses, however, should places be available, students with no disabilities or illnesses can also be admitted (European Commission, 2015c).

Australian Placement Models of Support

According to Gonski et al., (2011) the public education system in Australia is carrying the burden of an increasingly diverse student population. The outcome of this is evident as each of the eight educational jurisdictions have developed policies and increased funding levels to support students. All states and territories provide a range of placement options for learners requiring adjustments. These span a continuum from full inclusion to provision within a fully segregated facility. Each jurisdiction has its own set of criteria and processes for enrolment in these various educational settings. Most government systems offer partial inclusion in special classes, units or centres between these two extremes of support. Most non-government systems rely heavily on inclusion within a regular school as additional facilities are not so readily available. Yet for students with highly complex needs there are fewer options available across both systems.

Regarding the implementation of the range of settings for students with disability in Australia, there are broad similarities in the provision of support offered. All jurisdictions

must comply with the Disability Standards for Education, 2005 (Commonwealth of Australia, 2006) that clarify educational responsibilities under the Disability Discrimination Act (Commonwealth of Australia, 1992). Each education system (Government, Catholic, and Independent), provides support services using different nomenclature to describe them (Dempsey, 2011).

The following section of this review has adopted the approach used by several states to focus on four key areas of support for students. These are students requiring support for: disability, sensory, medical and mental health (Med & MH), and behaviour. Analysis of support models is presented under these four broad categories for both government and non-government systems.

Government placement models

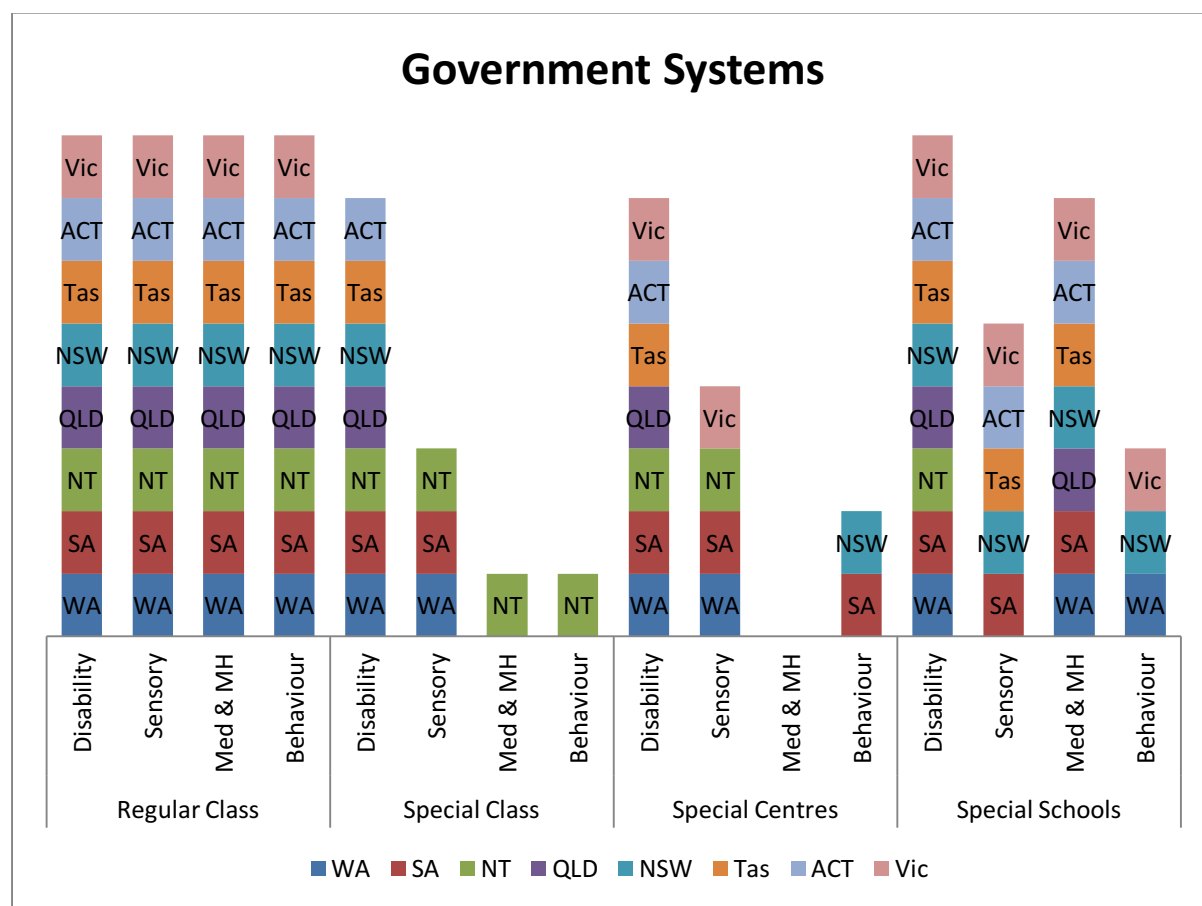
Analysis of all Australian government education web sites indicates the range and models of placement options available. Table 4 summarizes current placement options provided by state and territory governments to support learners with a range of additional learning needs. See Appendix A for a complete detailed review. All regular primary and secondary schools provide support for students across all learning need areas. In addition, all systems have established special classes within regular schools and / or special centres to provide more intensive support. Most centres are linked directly to a regular school but function as independent schools with opportunities for inclusion.

Table 4: Placement Support Models in public education systems across all jurisdictions in Australia

Government	Regular Class				Special Class				Special Centres				Special Schools			
	Disability	Sensory	Med & MH	Behaviour	Disability	Sensory	Med & MH	Behaviour	Disability	Sensory	Med & MH	Behaviour	Disability	Sensory	Med & MH	Behaviour
WA	✓	✓	✓	✓	✓	✓			✓	✓			✓		✓	✓
SA	✓	✓	✓	✓	✓	✓			✓	✓		✓	✓	✓	✓	
NT	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓			
QLD	✓	✓	✓	✓	✓				✓				✓		✓	
NSW	✓	✓	✓	✓	✓							✓	✓	✓	✓	✓
Tas	✓	✓	✓	✓	✓				✓				✓	✓	✓	
ACT	✓	✓	✓	✓	✓				✓				✓	✓	✓	
Vic	✓	✓	✓	✓					✓	✓			✓	✓	✓	✓

Note. Med & MH = medical and mental health

Special schools are still available in all systems for students with disability. Some states provide designated special schools for students with sensory needs (SA, NSW, TAS, ACT, VIC) while others provide more intensive support in Centres (WA, SA, NT, VIC). All systems provide special schools for students with medical and /or mental health conditions, usually through a hospital school arrangement (Figure 1).



Note. Med & MH = medical and mental health

Figure 1: Government jurisdictions offering alternative placements for students with special needs

Four government systems (WA, NSW, VIC and TAS) provide special schools for students with social and emotional behaviours.

For example, in WA, intensive support for highly disengaged students is delivered in the public system through trained staff from 13 engagement centres visiting students within regular schools; and one learning academy – a small special school model designed for individual support. In addition, the Association of Independent Schools of Western Australia (AISWA), offers 10 *Curriculum and Reengagement in Education* (CARE) schools / campuses. These mainly focus on secondary aged students deemed to be at risk and who have been unable to access or have significant challenges in accessing mainstream education.

In NSW, there are 106 special schools (also known as schools for specific purposes or SSPs). Their teaching and support staff provide educational services to students in specialist

settings. The knowledge, expertise and specialist resources available in these schools, support students with intellectual disability, mental health and behaviour needs, and students in hospital.

In Victoria, the Austin Hospital School provides educational programs for students admitted to the Paediatric Ward. The LEAP Program is a group activity based and part-time (3 days per week) initiative for 13-14 year olds that aims to re-engage students in a positive learning environment by providing academic, social skills and activity based model of support. The REV (Return to Education and Vocation) Program is a similar program focussing on 15-17 year-olds. These initiatives focus on enhancing interpersonal skill development, promotion of personal skills and development of baseline workplace skills. A Social Education Program is provided for primary aged students who are experiencing social, emotional and / or behavioural challenges at their enrolled school. Students learn and practise appropriate social skills, develop self-esteem and confidence and experience success in academic and social activities. Students are aged from 5 – 12 years and attend the program for two hours per week for one term.

The Eastern Ranges School also offers a unique program for primary and secondary students to Year 10 with complex ASD (expanding to Year 12 in 2018). This is one of only two schools in North Eastern Region Victoria offering specialised placement for this group of students. All students attending the schools also have high support needs for co-morbidity of ASD with intellectual disability, language disorder, severe health conditions and / or complex behaviours.

Tasmania provides an eSchool with several campuses catering for the education of students with medical, psychological, pregnancy, or other school initiated reasons. The school also provides face to face support in the hospital school and part time out of school face to face STARS program to develop social skills of students with high functioning Autism.

Several new initiatives are proposed across Australia for implementation from 2017 to support students with complex and challenging needs. In 2016, WA had over 4000 students identified with ASD enrolled in local public schools. Whilst the majority of these students will continue to be supported in mainstream schools a new model of support is to be provided for those at high risk of disengagement and underachievement and / or with very complex and often challenging behaviours, social communication and social interaction skills. To better support these students WA will be introducing new programs in 16 schools, commencing in 2017 to be fully implemented by 2020. The new programs will target age appropriate academic engagement and achievement. The model will provide a dual system of

support with time spent in a ‘homeroom’ class undertaking the specialised learning programs and time in mainstream classrooms with additional support.

To cater for the increasing number of students with disabilities who have high support needs in NT a new specialist school will open in 2017. The school is being built in two stages. The first stage will cater for 84 preschool and primary school students from Palmerston and the Darwin rural areas (see <https://nt.gov.au/learning/special-education/school-psychology-services>). This school and existing special schools cater for students with significantly below average intellectual functioning and concurrent deficits in adaptive functioning - in the bottom two per cent in areas such as communication, self-care, social and interpersonal skills, functional academic skills, work, health and safety with multiple needs.

As part of the Queensland government’s commitment to inclusive education an independent wide-ranging review into disability policy in Queensland state schools is to be finalised in January 2017. The review has examined the policies and processes for providing reasonable adjustments for all students with disability who meet the broader Disability Discrimination Act 1992 definition of disability.

Further to the major review of support for students with complex needs and challenging behaviours in the ACT, the Government is continuing to report on the progress made in building on the existing foundations to improve systems and supports for students with complex needs and challenging behaviour (ACT Government Education & Training, 2015).

Non-Government placement models

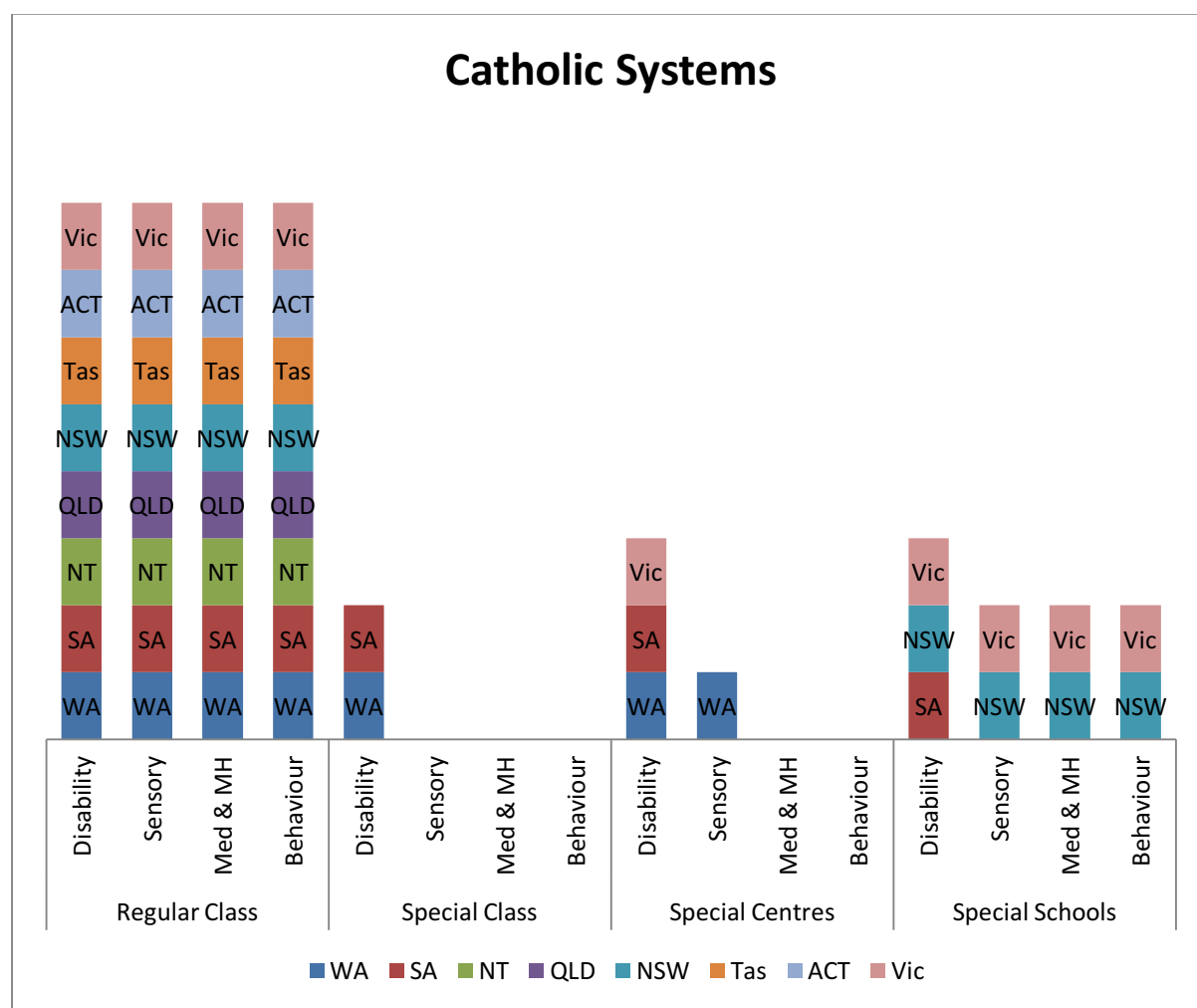
Analysis of all state and territory Catholic Education web sites indicates the range and models of placement options available. See Appendix B for a complete detailed review. The Catholic Education system like government systems provides support for students across all learning need areas in regular primary and secondary schools (Table 5). Special classes are provided in some Catholic schools in WA and SA for students with disability. Western Australia, SA and VIC also have special centres for some students with disability. WA provides six units for students with profound hearing impairment attached to regular schools.

Table 5: Placement Support Models in Catholic systems across all jurisdictions in Australia.

Catholic	Regular Class				Special Class				Special Centres				Special Schools			
	<i>Disability</i>	<i>Sensory</i>	<i>Med & MH</i>	<i>Behaviour</i>	<i>Disability</i>	<i>Sensory</i>	<i>Med & MH</i>	<i>Behaviour</i>	<i>Disability</i>	<i>Sensory</i>	<i>Med & MH</i>	<i>Behaviour</i>	<i>Disability</i>	<i>Sensory</i>	<i>Med & MH</i>	<i>Behaviour</i>
WA	√	√	√	√	√				√	√						
SA	√	√	√	√	√				√				√			
NT	√	√	√	√												
QLD	√	√	√	√												
NSW	√	√	√	√									√	√	√	√
Tas	√	√	√	√												
ACT	√	√	√	√												
Vic	√	√	√	√					√				√	√	√	√

Note. Med & MH = medical and mental health

Special schools are available in SA, NSW and Victoria. Two Catholic special schools are offered in South Australia for students with disability. In New South Wales, Catholic education provides several special schools for students with disability, sensory needs or ASD. Each of these schools also provides an outreach service to regular Catholic schools (Figure 2). There is also another independent school Suneden, that provides a non-government, low fee paying, non-denominational school for 60 – 65 children with intellectual and multiple physical disabilities aged 5-21 years. A range of educational programs are tailored to suit the needs of the individual students. These programs are supported by an on-site Speech Pathologist, Occupational Therapist and Physiotherapist. Suneden has close links with external agencies to assist with the provision of support and programs, including Novita, Minda Inc., Bedford Industries, Autism SA and the Down Syndrome Society.



Note. Med & MH = medical and mental health

Figure 2: Catholic jurisdictions offering alternative placements for students with special needs.

NSW provides a specialist secondary school for students who fail to function effectively in mainstream schools due to social emotional or mental health conditions or school refusals and who may also be at risk of not completing their education. They also offer a residential centre for students in Years 7-10 and their families who require support in the preservation and restoration of their family relationships.

In Victoria, there is one independent non-systemic catholic special school for students with intellectual, multiple and sensory disabilities and complex medical needs. This school also offers an early intervention bridging program for preparatory aged children aiming to access regular schools. Currently there is a residential facility for long term permanent care of children with an intellectual disability, although this is in the process of being handed over to St John of God Accord in 2017. One non-residential school works in partnership with five local schools to provide for the educational and social needs of hearing impaired students. For young people with social and emotional challenges two schools are available. These

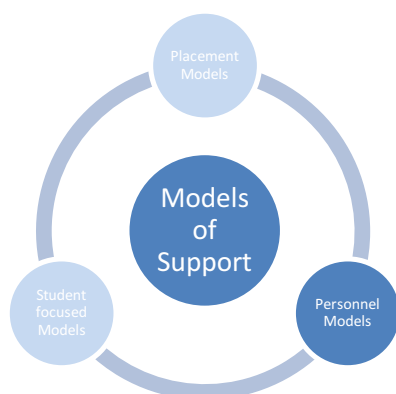
schools provide a flexible learning education facility for students who are struggling with behaviour and attitudes towards learning in mainstream schools.

In all jurisdictions, additional support is available through a variety of NGOs and paraprofessionals to support families and children with complex personal and educational needs. Hospital schools are also available in most places. No information about specialist facilities were found on Catholic Education websites for NT, QLD or Tasmania.

Summary

It is evident that each jurisdiction and educational system that was reviewed has developed their own placement options for learners experiencing severe behavioural challenges and / or complex intellectual, physical, medical or health conditions. In all instances a continuum of settings were provided, ranging from a fully inclusive model to placement in a segregated specialist facility designed to cater for the severity of student need. Whilst all systems promoted an inclusive approach to placement and advocated this as a first-choice option; they had all initiated a range of other placements to cater for those children whose needs were so complex that placement in the regular classroom was not providing them with the best educational option. All placements were student centred and chosen only after extensive investigation of a student's needs and in close collaboration with families. None of the systems reviewed promoted placement in the regular class as the only schooling option for students with complex needs.

Personnel models of support for learners with highly complex needs.



Analysis of international and Australia wide school systems identified personnel models of support that involved a wide range of allied health and peripatetic staff including educational psychologists, teaching assistants, school counsellors, social workers, mentors, speech-language pathologists, physiotherapists, itinerant teachers and in-school learning support teachers. While the intention of the

support that they offer may be similar by way of training, their actual involvement in schools in supporting learners with complex needs varies considerably both between and within countries. Customarily the involvement of paraprofessionals has been by direct engagement with students, usually in a withdrawal mode providing structured but limited interventions. In recent years, however, there have been considerable and rapid changes in the education of students with special needs, predominantly within the whole school movement which has been a major drive in the changing role of support staff (Chambers, 2015; National College for Teaching and Leadership, 2011). It is clear that the number of stakeholders involved to support inclusion demands a re-evaluation of their roles, if they are to better support a more inclusive approach. The following provides an overview of the support offered by these paraprofessionals both internationally and within Australian schools.

Educational Psychologists

According to Squires, Farrell, Woods, Lewis, Rooney and O’Conner (2007), educational psychologists are considered to be essential for supporting the inclusion of students with special educational needs. One of the on-going consequences of an inclusive education approach has been the noticeable change in the roles and responsibilities of professionals working with children, including those of the educational/school psychologist. Traditionally, school psychologists have been associated with assessments and categorising students who display learning or socio-emotional challenges (Bartolo, 2015). In some jurisdictions, they have had few opportunities to use or broaden their role and skills in working with schools to shift from a narrow focus on student deficit assessment towards more preventative and responsive approaches (Eckersley & Deppeler, 2013).

School psychologists have also seen their role as indirectly supporting teacher resilience, for example, with student behaviour management and wellbeing strategies;

providing general information about learning disabilities; or implementing programmes for vulnerable students at the classroom or school levels (Beltman, Mansfield, & Harris, 2016). Teachers, in contrast, have perceived school psychologists as primarily having a responsibility for students with learning or behavioural challenges but do not play a key role in supporting teacher resilience due to their general part-time presence in schools; current support is considered by teachers to be *ad hoc* (Beltman, Mansfield, & Harris, 2016).

Bartolo (2015), reports that school psychologists are now associated with the development of schools for all and receiving additional training so that their extensive knowledge and specific skills are adequately utilised to support inclusive schools and their continued development and to provide appropriate support for students with high needs. To provide support for inclusive education they need to change their practice from a prior case-based clinical approach to one that focuses more on a whole school model with collaborative efforts with members of the school community (Deppeler, 2014; Zwiers & Johnson, 2012). With medical and mental health conditions, for example, good nutrition and increased physical activity are considered important to the educational development of students, school psychologists are regarded crucial in ensuring that such conditions are now included on the school agenda (Shaw, Gomes, Polotskaia, & Jankowska, 2015). It is also considered important that school psychologists are better trained in the screening and early identification of students perceived to be at high-risk so that more appropriate interventions can begin as early as possible (Severson, Walker, Hope-Doolittle, Kralochwill, & Gresham, 2007).

In Australia, legislative and policy changes, alongside new initiatives introduced by the Australian Psychological Society to support psychologists in schools, have led to changes in contractual agreements for employment (Eckersley & Deppeler, 2013). Instead of being employed directly by a school system there has been an increasing number of Australian psychologists hired by government agencies. This has resulted in psychologists being used in different ways to hitherto. According to Eckersley and Deppeler (2013) who reviewed the role of a small number of psychologists in Victorian schools, they reported that school psychologists “expressed a strong desire to move away from the narrow and inadequate focus on the assessment of student deficits towards more preventative and responsive approaches” (p. 10). They were, however, stymied in doing this even though they had the training and skills. It was reported that their role was determined by the school principal and combined with a lack of leadership structure within the school system itself as there were no senior psychologist positions to advocate for change, the status quo remained. Eckersley and Deppeler proposed that an initial move to improving the delivery of psychology in Victorian schools should “involve the development of leadership structures from within the profession

to provide support for collaborative, evidence-based and preventative professional practice” (p. 12).

Teaching Assistants

The role and responsibilities of the teaching assistant (TA) in recent years has dramatically changed. Internationally, the use of the TA to support the education of students with disabilities has reportedly increased (Bourke, 2009; Giangreco & Doyle, 2007; Giangreco 2013). In the UK, this “unprecedented increase has resulted in profound changes, with TAs comprising a quarter of the workforce in mainstream schools: 32% and 15% of the nursery/primary and secondary school workforces, respectively” (Webster, Blatchford, & Russell, 2013).

In Australia, similar trends are happening as a consequence of the increasing numbers of students with disabilities and additional learning challenges enrolled in mainstream schools (Butt, 2016). Concern has been expressed that by accepting this practice TAs have inadvertently become the “primary mechanism to support students with disabilities in the general education environment” (Giangreco, Broer, & Suter 2011, p. 25). One of the outcomes of the landmark Deployment and Impact of Support Staff (DISS) study (2003-2009) that provided detailed examination of TA work in schools was clear guidance on maximising the impact of TAs on student academic progress: 1) the way that leaders and teachers *deploy* students that TAs are allocated to work with; 2) the nature and quality of TAs interactions with students and 3) preparedness of teachers and TAs for their respective roles including the planning and communication between them (Webster, Russell and Blatchford (2013).

In acknowledging these changes, TAs propose that they are inadequately prepared to support students with increasingly complex needs (Cockroft & Atkinson, 2015). Tensions and conflicts between TAs and teachers include inconsistent relationships, lack of a clear definition of their role and teacher demands (Clarke & Visser, 2017). A greater need has been realised for effective collaboration between TAs, teachers and other school professionals, so that they successfully meet these increasing and more demanding requirements expected of them (DaFonte & Capizzi, 2015; Giangreco, Suter, & Doyle, 2010).

As the role of TAs has broadened much greater than originally intended, inconsistencies develop in the perceptions, practices and expectations of how they themselves believe they can support learners and what teachers expect (Keating & O’Connor, 2012). In Irish schools, for example, questions are being raised regarding the capacity of TAs to carry

out assigned duties due to insufficient training. Especially in relation to the required skills and differentiated teaching recommended in the *Education for Persons with Special Educational Needs* (EPSEN) Act. The promotion of inclusion in mainstream Irish schools for students with SEN appears to have the potential to be undermined unless TAs are better equipped to deal with the more challenging demands being placed on them (Keating & O'Connor, 2012).

The provision of teacher aides as a model of support has rapidly increased across all jurisdictions in Australia. Additional funding has been allocated to enable more of these positions within schools across the country, however, there has been little evidence to suggest that this form of intervention is in any way effective (Boyle et al., 2011). In Australian schools, expectations now are for TAs to provide instruction, manage student behaviour, design curricula, facilitate learning and to work with several students within the regular classroom as opposed to previously working with just one student, often in a withdrawal mode (Chambers, 2015). Similarly, Howard and Ford (2007) reported most TAs were responsible for planning, producing and modifying materials for individual or small-group activities and 57% said that they regularly were engaged in differentiating tasks for students without any direction from teachers. What is more concerning being that TAs are often required to execute complex teaching and differentiation tasks and yet do not need to have any formal qualifications. A review of teachers' aides and teachers' perceptions of the role of the TA in a Victorian state high school concluded that whereas there was agreement for most areas this was not the case for curriculum (Gibson et al., 2016). While the TAs considered that greater involvement in curriculum planning would help them in undertaking their support role, teachers proposed that it was their role to identify student learning goals. Bourke and Carrington (2007) reported further, that in Queensland schools, TAs were often positioned to take responsibility for students' learning in ways that were inequitable for the students as well as the TAs.

Thus, students with complex learning needs may receive high levels of support from unqualified TAs (Howard & Ford 2007; Webster et al. 2011; Rutherford 2012) and with little or no preparation as within "some jurisdictions in Australia, a person can be employed as a TA with no training or qualifications beyond Year 10" (Butt, 2016, p. 997). The fundamental issue associated with the heavy reliance on TAs to support students with disabilities is when schools assign the least qualified staff to students who present the most complex learning challenges. It is paramount, therefore, that TAs are given adequate training and opportunities to enhance their skills, knowledge and confidence especially when working with students

displaying complex and challenging behaviours through growth, prevention and positive child engagement (Arthur-Kelly et al., 2017).

School counsellors

The role of school counsellors is to work collaboratively with teachers to support students and families, however, many are experiencing less time to fulfil their designated duties due to taking on additional support roles in schools such as handling discipline conditions referred to them by teachers (Stone-Johnson, 2016). In the US, school counsellors, teachers and school administrators are separately trained and therefore, teachers generally have a lack of professional knowledge and understanding of the capacity of school counsellors to support them. This is particularly noticeable when compared to countries such as Finland and Singapore where there exists a stronger understanding of the role of counsellors by teachers (Stone-Johnson, 2016).

Whilst many Australian jurisdictions provide in-school counsellors there are a range of options available outside the school system. School based counsellor services include providing personal counselling to help manage family, teacher or peer relationships; responses to crisis; and to provide advice and support for referral to other appropriate support services. School counsellors can also assist in supporting attendance and managing behavioural conditions both at school and at home.

Outside agencies offer additional confidential and online services that are particularly important for students with more complex needs. In South Australia for example, counselling support can be obtained through Child and Adolescent Mental Health Service (CAMHS), Headspace, Kids Helpline, ShinSA, parent helpline, and counselling online (<https://www.sa.gov.au/topics/education-and-learning/schools/school-life/counselling-in-schools>).

Social workers

In all grades, social workers can play a vital role in nurturing the social-emotional development of students and by providing support for them to remain in school through collaboration with teachers, administrators and families (Huang, 2017). Effective collaboration between school-based social workers and teachers can contribute to the development of the skills, knowledge and attitudes for students living life-long healthy lives (Testa, 2012).

The role of social workers in the effectiveness of school, family, and community partnerships has also been considered important. Although deemed complex to establish, enablers have been identified that demonstrate partnerships that work and lead to improved school outcomes. These include having:

A shared vision and aims; democratic governance; a supportive policy and organisational environment including external funding; workers with skills and clear roles; activities for project momentum; and ongoing review and evaluation.

(Frederico & Whiteside, 2016, p. 51).

Within a three-tiered positive behavioural support system, in the US for example, social workers engage students in strengths-based activities (Leyba, 2010). Social workers generally perceive facilitating such activities as part of their regular school role, through the organisation and integration of classroom groups, counselling groups and programs that are scheduled schoolwide or after school. At Tier 1, this involves all students within a school. Social workers have the responsibility to facilitate clubs, events and service projects within this tier. In Tier 2, social workers organise service learning projects for students displaying social or behavioural concerns. For Tier 3, social workers assist students with EBD in taking responsibility for leading activities such as community groups or assisting in an instructional skills classroom (Leyba, 2010).

The workload of school-based social workers in Australian schools is increasing. According to public debate the ratio of social workers to students in Victorian schools, for example, is nowhere near meeting the recommended 1: 500 students but in some cases, it is up to 1: 10,000 and higher (The Age, November 18th, 2014).

A review of the role of 65 social workers in Australian schools in 2012 indicated a mean number of six schools being serviced by each worker (Lee, 2012). Their major role was reported as counselling, paperwork, case management and consultations. They reported that key conditions in providing support included a lack of time, lack of resources, and lack of recognition given to social work perspectives and their roles. Social workers in Australia are supported by the Australia Association of Social Workers (<https://www.aasw.asn.au/>).

Speech-Language Pathologists

Along with other student support professionals (e.g. Student Support Services Officers, psychologists and social workers) Speech-Language Pathologists (SLPs) report that they struggle to deal with everyday student challenges and have little time to deal with some of most vulnerable students or those with the most complex needs. A national survey of 2,762

school-based SPLs in 28 states in the US reported that “91% of SLPs had no scheduled time to support evidence-based practices” (Hoffman et al., 2013, p.266).

In Australia, insufficient speech language services are also evident. Drawing upon data from the Australian Early Development Census (AEDC) McCormack and Verdon (2015) reported that not all children in the early years of schooling have access to necessary speech-language pathology services. Along with geographic location this is due to insufficient resources and funding. McCormack and Verdon (2015) suggest that greater collaboration among “health, education and disability sectors” is one way to ensure appropriate SLP support is available for children and their families (p. 284).

Indeed, various collaborations have been developed as a strategy to increase the frequency of therapy and to extend the impact of the speech-language pathologists. For example, Feiler and Watson (2010) highlighted the potential benefits of providing *indirect speech-language* support through the training of teaching assistants to delivery therapy. Similarly, Cirrin et al., (2010) in reviewing the effects of different service delivery models on communication outcomes, reported that highly trained speech-language assistants who are supervised by speech pathologists can effectively provide therapy to some students. Another common strategy is to train parents to work with their children on speech-language activities (McLeod & Baker, 2014; Thomas, McCabe & Ballard, 2017). Research on the effectiveness of this practice varies across contexts but with some evidence to suggest that children with complex needs may benefit from speech pathology services that include a parent-training element (Mullen, 2007). Increasingly, speech pathologists are employing information technologies such as iPads as a therapy tool (Gliddon, 2011). A wide range of Apps have been developed (Gosnell, 2011), although there is little empirical research to confirm the effectiveness of these over more traditional means.

Mentors

Mentoring is frequently employed using many different formats to support students with complex needs within regular schools. In the US, it is suggested that school-based mentoring is one of the fastest growing forms of mentoring (Herrera, Grossman, Kauh, Feldman, & McMaken, 2007). Mentoring of youth has been found to promote positive social emotional development. Rhodes, Spencer, Keller, Liang and Noam (2006) reported that the development of a close mentoring relationship acted as a catalyst for three interconnected processes: (1) enhancement of social and emotional development; (2) improvements in cognitive functioning through conversation, joint activity, and guided instruction; and (3)

promotion of positive identity development. They also acknowledged, nevertheless, that strategies employed in one instance may not be as successful with other youth, depending on their background, beliefs, and values.

Other mentoring programs have also been reported as providing positive experiences for young people. For example, the use of Beatbullying peer mentors in the UK has been very positive in supporting children who are being bullied (Banerjee, Robinson, & Smalley, 2010). Likewise, the Big Brothers Big Sisters model has been successful in the US (Herrera et al., 2007).

Mentoring and teaching share similarities: they can both be considered dyadic relationships, and require learning goals and tasks (Simões & Alarcão, 2014a). The influence of parental involvement, communication between mentors and parents, and the commitment of mentors towards planned goals can have a significant impact on the outcomes of school-based mentoring programs (Simões & Alarcão, 2014b).

Mentoring youth as an intervention can be considered well-suited for decreasing rejection sensitive behaviour, as relational risks can be practiced in an interpersonal context that is less threatening to the student (Kanchewa, Yoviene, Schwartz, Herrera, & Rhodes, 2016). In addition, trusting mentoring relationships can result in a wide range of positive outcomes for youth including behavioural manifestation reductions of rejection sensitivity and assertiveness with their peers (Kanchewa et al., 2016). Providing students with a tutor as well as a volunteer peer and/or adult mentor can aid in their emotional, behavioural and academic adjustment (Rhodes & Roffman, 2003).

A number of mentoring programs are offered across Australia to school-aged children and youth although many are operated by NGOs. In2Life is an example of an intervention support program that targets youth with the most complex needs for homelessness, drug use, school refusal, and suicidal behaviour (<http://in2life.org.au/>). This is community based and provides support services to young people who have found life difficult and their choice factor relatively unsuccessful. Many other mentoring programs can be found at <http://www.mentoring-australia.org/links.htm> each catering for students mainly with complex and high support needs.

Itinerant (Visiting) teachers

Itinerant (or visiting) teachers are usually provided by education systems to support schools who have students with more complex and specialist needs (Compton, Appenzeller, Kemmery, & Gardiner-Walsh, 2015). They operate on a call for service model and provide

assistance and advice to teachers of students requiring additional support, rather than providing interventions direct to the student. As such they are only able to provide limited assistance to individual schools. Most itinerant teachers, nonetheless, will be experienced and qualified in working with students within a given specialist area e.g. Autism Spectrum Disorder (ASD), Attention Deficit Hyperactivity Disorder (AD/HD), learning disabilities, hearing or vision impaired. They can offer expert advice to schools where they may have only one or two children requiring support in a specific area of need.

For itinerant teachers, forming and maintaining collaborative relationships with general educators is considered essential (Compton et al., 2015). Despite having this opinion, itinerant teachers striving to establish and maintain such relationships is problematic, primarily due to the time constraints they encounter, insufficient administrative support and the varied perceptions of general educators regarding the necessity for collaboration (Compton et al., 2015). In Uganda, itinerant teacher programmes have been introduced in partnership with the local ministries of education (Ejuu, 2016). The itinerant teachers work alongside the classroom teachers and assist with the transcribing of class work, tests and examinations for students with complex needs or provide an advisory role to classroom teachers. In addition, itinerant teachers support families of children who are not being educated in school to help them prepare for school or employment (Ejuu, 2016). A review of the role of the visiting teacher service in Ireland for children with hearing or visual impairment, reported that their role was multifaceted with a range of influences that impacted on their work in facilitating inclusive educational practice (McLindena, & McCrackenb, 2016). It further highlighted the complex ecology in which these service providers operate and the wide range of educational supports and activities they need to provide within and between the different systems.

Similarly, in Australia visiting teachers are employed in the various jurisdictions to support learners in regular schools who have specific needs that require specialist support. Discussions with seven specialist itinerant support teachers for students with visual impairment (VI) in Victoria identified several barriers they encountered in undertaking their role (Morris, & Sharma, 2011). These included a lack of understanding among regular school educators of the needs of children with VI, a lack of awareness of their role as visiting teachers, insufficient resources, a lack of time, and inadequate training. Developing good working relationships with school staff was deemed critical to ameliorating some of these barriers.

Providing support via a visiting teacher service is often challenging in Australia, with many states having clientele who live in very remote and isolated communities. A survey of

parents of children receiving support for deaf or hearing impairment in regional and rural Western Australia was, nonetheless, very positive (Checker, Remine, & Brown, 2009). The parents reported overall high levels of satisfaction with the service but proposed that contact regarding their child's needs, progress and accessibility to services could be improved through more regular and longer visits by the visiting teachers.

Learning support teachers

Most school systems now advocate that every school must have a dedicated learning support teacher and / or learning support team to oversee the provision required for students with disabilities or at-risk. The roles of learning support staff can vary depending upon individual school and classroom organisation. Learning support teachers often provide additional support specifically to students with SEN supporting their effective inclusion in mainstream education (Mulholland, & O'Connor, 2016). They may, for example, pair with classroom teachers or assist with routine teaching-related tasks (e.g., lesson preparation) to reduce teachers' workload, and allow them to focus on teaching (Navarro, 2015).

Learning support staff may also be deployed in non-teaching and routine tasks having a positive impact on student attainment. Students will benefit from more individual help and attention from either the support staff or the teacher and thus, potentially enabling students' learning needs to be achieved. A more flexible learning environment can also be achieved with the addition of learning support staff allowing for the increased engagement and inclusion of students in classroom activities (Navarro, 2015).

Learning support teachers are quite widely established across Australian schools. Their role is usually to work alongside teachers to provide support to students with diverse learning needs to enable them to participate in common educational experiences. Some will have dedicated roles such as the Support Teacher Learning Difficulties (STLD) in WA. Of critical importance is that support teachers must be part of a whole school community where collaboration between them and teachers is valued and enabled (Fielding-Barnsley, 2005).

School Leaders

As highlighted earlier in this review leaders impact the way schools use teaching assistants (Webster, Blatchford, & Russell, 2013). It is also well established that school leaders are pivotal in creating effective learning environments for teachers and students (Hallinger, 2014; Hitt & Tucker, 2016; Mulford et al., 2009; Supovitz, Srinides & May, 2009). Our understanding about what effective school leaders do has grown substantially over the past

decade. Drawing on evidence from a systematic review of research Hitt and Tucker (2016) identified five domains of effective leader practices:

1. Establishing and conveying the vision
2. Facilitating a high quality learning experience for students
3. Building professional capacity
4. Creating a supportive organization for learning
5. Connecting with external partners

(Hitt & Tucker, 2016, p. 544)

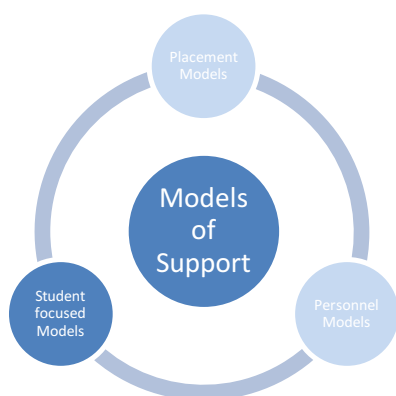
These five domains and the associated dimensions of practice share much with the findings from research relevant to models of support reviewed in this report. The importance of establishing a shared vision and clearly communicating this vision has been highlighted so that the implementation of various practices is consistent with the vision. Modelling what is expected and the collection of a variety of forms of student data helps everyone understand the school's progress towards the common goals. Building capacity through shared leadership and professional learning affirms the importance of teacher quality for students' learning and engagement. It also promotes the view that responsibility for learning is a shared endeavour and should not, therefore, reside with any single teacher or professional or any other single member of the community. Consistently throughout this review, there has been an important emphasis placed on the development of positive and trusting relationships with members of the school community that includes students and families and other members of the wider school community. Professional collaboration among teachers, professionals and families establishes and nurtures shared expectations and responsibilities. These leadership practices "create dynamic and innovative learning environments for adults and children alike" (Hitt & Tucker, 2015, p. 562.)

Summary

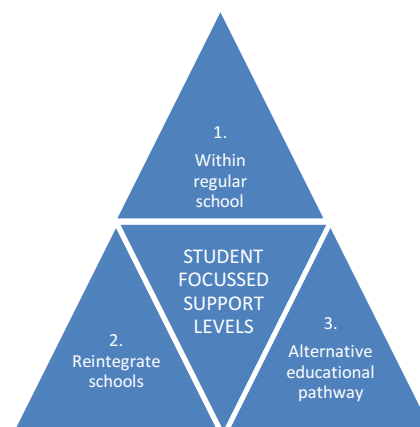
A wide range of support staff, either employed within a school or acting in an itinerant capacity, are involved in supporting the education of students requiring additional support. Of major consequence, would seem that those who spend most time with these students within the regular school system and who are expected to provide the differentiation to curriculum using effective pedagogies are the least well-trained. The qualified staff such as psychologists, speech-language pathologists, counsellors and social workers, especially when employed in a part-time capacity, all seem to be able to spend only minimal time with individual students and in an ad hoc way. Itinerant paraprofessionals indicate that time

pressures prohibit them from providing what they consider to be essential and intensive interventions or support. This is particularly noticeable for supporting learners with the most complex needs and undoubtedly contributes to the more rapid placement of such students into alternative options outside of the regular school. They further report that providing support for individuals within a regular school requires time for collaboration between themselves, teachers and other school-based staff and that sufficient time is not available. Unless trained paraprofessionals are given more time to support learners with more complex needs within the regular school system, then inclusive education for these students is going to be very difficult to maintain. School leaders may also need to be better prepared to manage a range of personnel and to create environments that support collaboration, teacher effectiveness and promote student learning and engagement.

Student Focussed Models of Support for Learners with Highly Complex Needs.



This section considers a range of specific models of support that are provided direct to students requiring major adjustments to learning. These have been selected as they are reported to be ‘best practice’ approaches



with decisions being evidence-based resulting from effective pilot projects to implement them. As these are self-reported by the authors with few having external validation, decisions regarding the actual effectiveness of these need to be made with caution. On a positive note, though, almost all of these are published in refereed journal articles or undertaken by well-established professional reviewers which indicates that the quality of the reporting and data is professionally acceptable by their peers.

Student focussed models of support are offered at three levels, namely, those that occur within the existing regular school system; those that offer an intermediary for reintegration into the regular school; and finally, those that provide an alternative educational pathway. The first level of support is generally the first respondent approach when students are finding learning difficult and have been identified as requiring additional support to enable them to achieve to their potential. Intervention is provided within the existing resources of a school and it is expected that student will respond to these. At the next level when a student’s needs are more complex and they have not responded to support provided by the school, interventions may be offered through an alternative temporary placement where more intensive support can be provided by specialists. It is expected that this placement will provide the necessary adjustments to enable the student to be reintegrated back into the regular school. The third level of support is when the needs of the student are deemed to be so complex that previous interventions have been unsuccessful. At this stage an alternative schooling option is usually provided on a more permanent basis. The following section provides examples of student focussed models of support that have been used at all three levels.

Level One: Models of Support within Regular Schools

Reviewing models of practice, the key approaches in regular schools seems to focus on two stages of whole-school practice and in-class support.

- 1) At a whole-school level, good practices include adjustments to cultures, policies, and practices; development of support structures; regimes of funding support; and the provision of and access to equitable learning opportunities.
- 2) At an in-class level, good practices include differentiating or introducing alternative curricula, the application of universal design, use of technologies, individual planning through the IEP and a focus on quality teaching for all students.

Both stages are closely intertwined as quality teaching practices in the classroom require support and school-wide collaboration. The role of school leaders is a key ingredient for providing this support and in cultivating quality teaching in school staff (Salisbury & McGregor, 2005). A facilitated leadership approach where all practitioners “can become more involved in the creation of a shared vision and shared decision making in whole school developments” (Jones, Forlin & Gillies, 2013, p. 71), is more likely to lead to greater inclusive practices. For both types of support, though, there is a lack of evidence-based research on the impact of these practices on changes in learning outcomes for students with disability (Forlin et al., 2103). Using meta-analytic techniques Leithwood & Sun (2012) reviewed transformational school leadership research and concluded that more attention by practitioners and researchers should be focused on the impact of specific leadership practices as less on leadership models. In one example of this kind of research Klar & Brewer (2013) examined the ways in which successful principals in high-needs schools enacted and adapted core transformational leadership practices to suit their context and concluded that further research is needed to understand how principals can best learn *how* to adapt their leadership practices.

Peer support for students who experience more severe learning challenges in inclusive classrooms has also proved to be highly effective and beneficial to their learning (Carter et al., 2016; 2015). Benefits include more peer interactions, increased academic engagement, greater progress on individualised social goals, increased social participation, the formation of new friendships (Carter et al., 2016) and a reduction in bullying (Bradley, 2016). Peer support programmes encourage personal and social growth but can also have a positive impact on school ethos regarding accepting individual differences of students (Lee, 2016).

Although paraprofessionals provide extensive support for students with severe disabilities, their continual presence can hinder peer social interactions (Carter et al., 2015).

When supporting learners with more complex and on-going behavioural conditions, recent studies in the US have focused on the impact of SWPBS or SW-PBIS (e.g., Andreou, McIntosh, Ross, & Kahn, 2015; Flannery, Fenning, Kato, & McIntosh, 2013; Horner et al., 2014; Mathews, McIntosh, Frank, & May, 2013). The effects of SW-PBIS on the levels of problem behaviours of over 36,000 high school students were examined by Flannery et al. (2013). Their three-year study reported statistically significant decreases in the problem behaviour of participants. Analyses also showed that the degree of reduction of problem behaviour was statistically related to the degree in which the critical features of SW-PBIS were delivered, as measured by the School-wide Evaluation Tool (SET). Mathews et al. (2013), in comparison, used the PBIS Self-Assessment Survey with school personnel in 261 schools in various SWPBS settings – schoolwide, non-classroom, classroom and individual. Their study aimed to explore the extent to which SWPBS predicted the fidelity of its implementation over a three-year period. Results found, perhaps unsurprisingly, that the positive acknowledgment of appropriate behaviour increases the likelihood of desired behaviours in the future and fosters student-teacher positive interactions. Many of the schools represented in this study using SWPBS were also reported to be using tangible rewards as a systems-level intervention. Furthermore, positive reinforcement, matching academic instruction and curriculum materials to individual student needs were reported as critical mechanisms for SWPBS to be sustained in a school environment.

Many school-wide models in Australia also utilise the SWPBS model as a prominent framework for implementing a multi-tiered system of support (MTSS) (Urbis Pty. Ltd., August, 2011). MTSS is also used for providing schools-based mental health interventions. Implementing MTSS, in practice though, requires consideration of a range of functional applications. These include “recognition of the complexity of the implementation process, use of data-based intervention and implementation decision making, the importance of interdisciplinary cooperation and leadership, and provision of ongoing technical assistance” (Forman & Crystal, 2015). Forman and Crystal also suggest that there is a need for better specification of implementation strategies and identification of core implementation components to strengthen the research-based information underpinning the usefulness of this approach.

A review of the literature undertaken by Urbis Pty Ltd in 2011 for the NSW government aimed to evaluate the effectiveness of school-based programs designed to address psychological-emotional wellbeing and mental health conditions of students. The

review analysed national and international models of effective practice within educational settings. Programs deemed to be most effective for the prevention of mental ill health or the promotion of well-being in general included the following elements such that they:

- are aimed at promoting mental health rather than preventing mental illness
- involve the whole school and include changes to the school's environment
- assist students to develop adaptive, cognitive and behaviour strategies
- involve parents and the wider community
- consider the age and gender of the children
- are implemented over a long period (continuously for more than one year)

(Urbis Pty Ltd., August 2011, p. 137)

Examples of good practice include interventions that involve the child, family and school in a multisystem approach. The most effective models of support identified by Urbis Pty. Ltd. involved three overlapping intervention approaches:

1. The use of universal programs. Ones that focused on prevention and included classroom-based approaches; included changes to the school environment; and involved the family and community.
2. The use of selected interventions for students at risk for developing emotional or behavioural disorders; including group approaches.
3. Interventions that were targeted for individual students who have been identified as having an emotional or behavioural problem or a mental health disorder.

(Adapted from Urbis Pty. Ltd, August, 2011, p. 140).

Several specific programs related to respectful behaviours and safe schools are frequently employed in Australian schools. For example, the Department of Education and Early Childhood Development in Victoria acknowledge the use of the following programs in their schools: *Friendly Kids Friendly Classrooms*, *Bounce Back! You Can Do It! M-Power Girls*, *KidsMatter*, *MindMatters*, *Bar None Community Awareness Kit for Schools* and *Protective Behaviours* programs (DEECD, 2010). Resources that use the 'Respectful Behaviours, Respectful Schools' approach are being implemented in many jurisdictions across Australia (e.g. ACT, Tasmania, Victoria, W.A.). This approach provides guidance and materials for schools on behaviour support for all students, including those with complex needs and challenging behaviour. For example, *MindMatters* is a mental health initiative for secondary schools promoted by the Australian Government Department of Health, designed

to improve the mental health and wellbeing of young people

(<https://www.mindmatters.edu.au/>)

Most early interventions for children exhibiting conduct problems focus primarily on parent education as parental supervision, consistency of discipline, and clarity of expectations have been found to intercede with other environmental factors resulting in the non-compliant behaviours (Bonin, Stevens, Beecham, Byford, & Parsonage, 2011). Providing intervention in the early years when it is most likely to be effective and families and children can both be engaged in a consistent approach is more likely to redress emerging behaviour problems.

An earlier review of research and practice in regards to primary school students' disengagement in Australia identified key aspects of programs that enhanced student engagement. These included strategies to support general curriculum initiatives; general pedagogical initiatives; self-esteem and well-being programs; peer support; school-community partnerships; and programs for disadvantaged schools (Murray, Mitchell, Gale, Edwards, & Zyngier, 2004). The authors noted that of the programs they identified none were concerned only with behavioural engagement but they also had the potential to enhance students' feeling of belonging or affective engagement. Recommendations from a review of in the ACT included the practice of providing a safe and calming / sensory space within each school that would be appropriate to support students with complex needs and behavioural conditions (Shaddock, Packer, & Roy, 2015).

The following are examples of specific models of support that can be used for students with more complex social emotional and behavioural conditions within regular school placements.

Full Service / Extended Schools

Full service / extended schools provide opportunities for multi-disciplinary teams to work on a regular school site enabling early support for children and teachers. These schools work in partnership with other agencies (such as health and social care) to support children and young people achieve their potential. They provide early intervention services, health and social support, usually in predominantly low socioeconomic areas. Services may also include childcare and learning and recreational activities for the wider community. In June 2010, 98% of schools in the UK nationally were reported to be providing access to the full core offer of extended services (Department for Education, UK, 2010). The full-service model school is ideally placed to support children educationally, psychologically and socially. It also encourages greater intracommunity engagement.

Full-service community schools in the US similarly include partnerships between a school and its community. Together with traditional academics, youth development, family support, health and social services, and community development may also be available. Services can also include high-quality early learning programs and service; remedial education, aligned with academic supports and other enrichment activities; family engagement, including parental involvement, parent leadership, family literacy, and parent education programs; mental health services; mentoring and other youth development programs; programs that provide assistance to students who have been chronically absent, truant, suspended, or expelled; among many others (U.S., Department of Education, <https://ed.gov/programs/communityschools/index.html>). Enabling collaboration between education and health is a key feature of the Whole School, Whole Community, Whole Child (WSCC) model to meet the needs and support the full potential of each child (Chiang, Meagher, & Slade, 2015).

A review of the outcomes of community schools in the Netherlands reported that their key roles were cooperating with other institutions, involving parents, and offering extracurricular activities (Heers, Klaveren, Groot, & Maassen van den Brink, 2016). Regarding the impact of participating in extracurricular activities on student learning, they found that academic performance was not influenced by this, although involvement was related to reduced dropout and risky behaviour. Cooperation and parental involvement was positively related to academic achievement and negatively to dropout and risky behaviour.

Schools which offer full service to students have also been reported as successful overseas and in Australia. An initial national trial of full service models in Australia began in 2008 through government funded collaboration projects but was disbanded with a change in government in 2013. Some schools have continued to provide this model in a range of forms focusing on engagement with local agencies and the community to offer a small number of additional services. On-site before and after school child care is a noticeable example of this in Australia. It was recently proposed that for Western Australia full-service models can go beyond the traditional education mandate to deal with the complex needs of modern families by providing local access to government services (WA Labor, 2015), “At its most ambitious, the model puts the school at the centre of a hub or precinct that offers multiple services for the whole community, the kind of model represented by the United Kingdom’s Full Service and Extended Schools (FSSES) program” (p. 3).

Got It! (Getting On Track In Time!) program

This program was initiated in New South Wales for children aged five to eight years in K-2 with challenging behaviours. The model incorporates both universal and targeted components (Plath, Croce, Crofts, & Stuart, 2016). The *Got It* model is based on care rather than a single standardized intervention. The program provides principles and a framework into which different evidence-informed interventions, appropriate to the school context and families, are incorporated. In addition to addressing the non-compliant behaviours of students two outcomes were highlighted. The model was most effective in including parents who would not otherwise have had early access to intervention; and in the development of positive relationships between children, families, and the school systems enabling effective ongoing support.

Check-In, Check-Out (CICO)

This is an individual behaviour intervention support program implemented in the USA, based on the application of behaviour report cards (Rodriguez, et al., 2015). The program is explicitly and systematically embedded within a multi-tiered model of support and focusses on defining and teaching behavioural expectations, giving regular feedback, and increasing positive adult interactions and relationships between students and teachers. Each child on the program ‘checks in’ in the morning with a designated teacher where the students’ card is checked and then taken to all classes. Every teacher who works with the student is responsible for completing the card. At the end of the day the student “checks out” with a designated teacher and rewards are calculated and given.

Behaviour and Education Support Teams (BESTs)

Considered an innovative practice in the UK, the provision of Behaviour and Education Support Teams (BESTs) also referred to as Targeted Youth Support Schemes, have been operating in various ways (Sheppard & Clibbens, 2015). To be able to respond to local needs BESTs can involve a range of multi-agency participants working as teams to identify children and their families at risk of developing emotional, behavioural and attendance problems and to carry-out early intervention work. Some BESTs are established on school premises, some include parents and the children themselves, but most tend to involve social workers as key members of the team. BESTs focus is on the promotion of resilience and positive mental health with particularly vulnerable families who would be identified as being high-risk.

Coping Cat

Coping Cat is a 16-session cognitive behavioural treatment designed by Philip Kendall and colleagues at the Child and Adolescent Anxiety Disorders Clinic at Temple University in the US. It is geared to support children aged from 7 to 13 years old with separation anxiety disorder, related anxiety disorders, and/or social phobia. The program focuses on (1) recognizing anxious feelings and physical reactions to anxiety; (2) clarifying cognition in anxiety-provoking situations (i.e., unrealistic expectations); (3) developing a plan to help cope with the situation (i.e., determining what coping actions might be effective); and (4) evaluating performance and administering self-reinforcement as appropriate (see <http://www.cebc4cw.org/program/coping-cat/detailed>). A range of behavioural training strategies are employed including modelling, role-playing, relaxation and contingent reinforcement. Coping Cat also has a version for youth aged 14-17, known as the C.A.T. Project.

WRAPAROUND

The WRAPAROUND process has been employed since the early 1980s as an effective child centred model for supporting students with highly complex needs. The process involves establishing a team of individuals who are relevant to the well-being of the child or youth (e.g. family members, service providers, teachers, psychologists, medical staff and NGOs). The team collaboratively develops an IEP, then oversees the implementation and evaluation of it. The approach focusses on the strengths and needs of a child providing an intensive, holistic and individualized method of engagement. The method typically involves a four-phase approach of engagement and team preparation; initial plan development; implementation; and transition (see <http://nwi.pdx.edu/wraparound-basics/>).

WRAPAROUND has been used extensively including supporting students with mental disorders (e.g. <http://www.bazelon.org/Where-We-Stand/Success-for-All-Children/Mental-Health-Services-for-Children/Wraparound-Services-.aspx>) and at-risk youth in the justice system (e.g. <http://www.cjcj.org/Direct-services/Wraparound-Program.html>).

Social Skills Training

Social skills training programs are widely employed within regular schools. These have been found particularly useful for supporting students who have difficulty in establishing meaningful social relationships with peers and teachers. Extensive synthesis of research into the effectiveness of these programs found that typical interventions averaged no more than 3

hours per week over a period of 10 to 12 weeks (Gresham, Van & Cook, 2006). It was considered that this was insufficient to remediate students with more complex and long standing needs. More intensive intervention on social skills training of at least 60 hours together with classroom-based interventions were found to be significantly more effective with large decreases in behaviour problems and substantial changes in teacher ratings of behaviour.

Positive Youth Development Model (PYD)

The PYD model offers a strength-based approach to prevention and intervention for students considered to be ‘at-risk’ for school failure (Edwards, Mumford, & Serra-Roldan, 2007). This model embraces several different approaches although they all promote and emphasise a focus on positive characteristics. PYD encourages adjustment to five core competencies: (1) positive sense of self, (2) self-control, (3) decision-making skills, (4) a moral system of belief, and (5) prosocial connectedness (Guerra & Bradshaw, 2008).

A central premise of PYD is that promoting mastery of social and emotional core competencies provides a connection between positive youth development and risk prevention programming. Based on building blocks for success 40 specific developmental assets have been identified that help children survive, thrive and achieve their full potential. These include social relationships, experiences, environments and interactions that have been shown to promote positive student outcomes including both external i.e. provided by families, individuals and communities) and internal i.e. personal qualities or characteristics of young people (Guerra & Bradshaw, 2008). While highly resilient children usually display many of these assets, it is proposed that directly teaching them to children at-risk may help ameliorate the challenges they face and improve their capacity to develop greater resilience thus reducing high risk behaviours.

Level Two: Reintegration Models of Support for Transition back into Regular Schools

Whilst most jurisdictions internationally and across Australia provide a range of support mechanisms for students attending regular schools, it is clear from the literature that for students requiring additional support for more complex social/emotional/behavioural needs that this is increasingly being provided in alternative placements as a mediatory role for preparing them for reintegration back into the regular school.

A few of these models provide an alternative program within a separate classroom or building on-site of a regular school. The majority, though, are being provided within purpose built or redeveloped buildings on a different site. Some sites are fully secured and others offer part or full-time residential care in addition to schooling. Many school districts offer a range of intervention programs with increasing stages of support which can lead to potential placement in a behaviour intervention specialised program class (see e.g. [http://www.ocdsb.ca/programs/se/sepr/Pages/BehaviourInterventionProgram\(BIP\).aspx](http://www.ocdsb.ca/programs/se/sepr/Pages/BehaviourInterventionProgram(BIP).aspx)).

Recommendations from a recent major review regarding strategies for educating children with complex needs and challenging behaviours in the ACT, included the need to ensure a range of options were made available in addition to regular class placement (Shaddock, et al., 2015). For primary school-aged children, it was recommended that this should include an “appropriate educational setting (or combination of settings), that provides them with appropriate behavioural support and therapeutic intervention” (Shaddock et al., 2015, Recommendation 7.1, p. 24). For secondary aged students at-risk of disengaging from school the recommendation was for the provision of other flexible learning options with access to “an appropriate alternative education program throughout their secondary schooling” (Shaddock et al., 2015, Recommendation 7.5, p. 24).

Various models of support have been initiated to provide an opportunity for intensive intervention with the aim to reintegrate student back into regular schooling. The following provide some examples of these.

Internalizing and School Refusal Behaviour Program (ISRB)

This is one of several similar programs offered in the US. Intervention is provided in a separate school offering a safe classroom environment. A team of professionals works with students exhibiting complex social and emotional challenges who require a small, structured and supportive environment in which to learn. Close collaboration is made with parent(s) and the students’ home school district to develop personalized intervention accounting for psychosocial, developmental, and cultural factors while matching motivation and capability to increase student attendance, educational, and socio-emotional achievement. Students follow the regular curriculum through a highly structured approach (see <http://www.lifeworksschools.com/academic-programs/internalizing-and-school-refusal-behavior-program-isrb/>). The goal is to enable students to maximise their potential and to reintegrate them back into a less restrictive environment in the public-school system. The program is currently returning a minimum of 20% of students each year.

Behavioral Education Center (BEC)

This centre is part of a wide range of options offered to schools within one district in the US. It was established to support local school districts in educating students ages 5-26 years with severe emotional impairment and unmanageable behaviour problems and to assist them in building their capacity to educate all students. It is located within a separate wing of an elementary school. The program is self-contained so that students receive all their instruction within these classrooms until they are ready to be mainstreamed into outside classes. Because the student is separated from his/her local school and peers to attend this program, it is important to first determine if the student's needs can be met in his/her local school with special education, individualised programming attempts, additional resources, and supplemental services. (see <http://www.vbisd.org/domain/146>).

Other options include the provision of programs for students in K-12 with severe emotional impairments; classrooms for students in K-3 who exhibit severe behavioural challenges and for young adults with mental illness; and the provision of consulting, coaching and support services for local schools.

Operation Newstart

Operation Newstart is a re-engagement program offered at five locations in Victoria with support from the Royal Children's Hospital Mental Health Services. It supports students from government secondary schools across Melbourne. The intervention program provides for students aged 14-17 years deemed to be at high educational risk for expulsion and/or not completing secondary education. A small number of students (n=8) are selected for a 7-week intensive intervention program for 3-4 days per week. In addition, they are expected to continue to attend their own school for two days per week. The programs provide a multi-layered approach with a strong focus on self, family, school and community. It is recorded that nearly 2500 students have successfully completed the course since its inception in 1997. According to the program information “respected contemporary research demonstrates substantial improvements in emotional symptoms, conduct behaviour and peer interactions, hyperactivity and pro-social behaviour” (see <http://onv.org.au/>).

Helping Young People Achieve (HYPA)

HYPA is a South Australian initiative that provides Flexible Learning Options (FLO) through a State Government funded program targeted at young people from Year 5 age to 19 years of age who are at risk of leaving school early or who have left school without completing Year

12 or its vocational equivalent (see <https://www.hypa.net.au/>). Case managers work with students individually and within group programs to address potential barriers to education and to support students to return to school or engage in other learning or employment options. They oversee each student's involvement in a program to develop an educational plan that involves improving self-esteem, confidence and resilience, communication and relationship skills through community projects. Specific programs target young people who have been involved with the Justice system (Juvenile Justice Flexible Learning Options) or who require an alternative to a mainstream placement (Studio West or BOLT) by offering an off-site alternative education option for students struggling to participate in regular schools.

In2school

The *In2School* intervention program uses a three phase wraparound approach to help school refusers. Delivered in partnership with the Melbourne Graduate School of Education, the Royal Children's Hospital Mental Health and Travancore School, a mental health-focused special school in Melbourne's north-west, the students aged between 11 and 14 have been school refusing for between three months and two years and have diagnoses of anxiety and/or mood disorders. *In2School* provides intensive support for up to six months to assess, plan and implement needs-based, personalised programs for each participant at home, in the clinic and in the classroom. The program involves individual therapy, along with parent sessions that support families to better manage the return to school process.

The program although in its infancy has achieved positive results. The first group of seven *In2School* students successfully returned to full-time schooling in Term 1, 2016, after completing the program from July to December 2015 and only one student's school attendance since lapsed. The staff report that students' mental health, quality of life, social interactions with peers and positive experiences at school all show great progress.

Connect 10

The Connect 10 program is offered at three colleges in the ACT to cater for students in Years 9 or 10 who require different and more flexible learning opportunities. Students are deemed to be either at risk of non-completion in the regular school or who have been suspended or expelled from secondary school. These programs are designed to provide an alternative pathway for students to either complete their leaving certificate or as a transition for reintegration back into a regular school. Placement is considered long term and designed to engage students in learning and training and to support transition to future pathways.

Typo Station

Typo Station is a camp situation in Victoria run as a social enterprise of Mind Australia to support students with managing the effects of mental ill-health (<http://www.auscamps.asn.au/camps/380/>). Mind also operates services in South Australia, Queensland and Western Australia. Camps are geared to student need and staff can cater for students with complex mental health conditions.

Level Three: Models of Support using Alternative Education Pathways

For some students, it is recognised that they will require continued support through an alternative program outside of the regular education system. These models have several common elements with the main aim of providing a curriculum that will meet the requirements of individual students with the most challenging needs. These include:

1. Students attending these programs are either excluded from or at-risk of being excluded from a regular school; or are disenfranchised and electing not to attend school
2. The intention is to provide an alternative highly structured intervention model that will support students to transition into post school options
3. All students have the most complex needs and after intensive support these are not able to be addressed within a regular classroom in their local school
4. Programs are student focussed with goals and targets being individualised
5. There is a very high teacher-student ratio of at least 1:3
6. A range of peripatetic staff including psychologists, psychiatrists, social workers, welfare officers, and medical staff among others provide additional ongoing support
7. Teachers are highly trained and experienced in supporting learners with complex needs
8. Many students come from dysfunctional home lives or are living away from home or on the streets
9. There is often ongoing involvement with the police and social services

In every system, there still exist special schools that cater for students with the most challenging and complex disabilities. In recent years, a new plethora of special schools have arisen to provide an alternative and more flexible access to education. These are designed especially for students without a designated disability but who have high needs and find the regular schooling system inadequate to meet them. These schools provide alternative

education for children and youth at-risk of school failure, and those with complex mental health conditions and behaviour challenges. In 2012, there were 416 special schools in total in Australia of which 332 were government schools (Children with Disability Australia, 2012, p.3). This accounted for 4.5% of all schools.

The following specific examples of alternative models of support for learners with the most complex needs have been extrapolated from the literature. These include special schools catering for students with high support needs, other than those with a disability.

Catch22 (Example of Pupil Referral Units or Pupil Re-Integration Units in the UK)

There are many organisations in the UK that provide full-time and part-time alternative program support via their networks of registered schools. One such provider, Catch 22, has 26 alternative placement facilities where they provide “... full-time and part-time education for young people displaying a wide range of complex barriers to education, including those who are excluded or at risk of exclusion and those with social, emotional and mental health needs or special educational needs” (Catch22, 2017). Their weekly timetable provides students with a broad and balanced curriculum up to 25 hours per week.

Curriculum and Reengagement in Education (CARE) schools

These schools are provided in Western Australia to cater for secondary aged students who have significant challenges in accessing mainstream education. CARE schools are on segregated sites and provide a modified curriculum. Most students attending these schools have complex social challenges often associated with mental health conditions, homelessness, and/or drug and alcohol abuse, and that needs to be addressed before they can engage with the curriculum. Local government funding is available for CARE schools (see <https://www.ais.wa.edu.au/curriculum-and-reengagement-education-schools> for further information).

Models of Support for Post School Transition

In addition to providing alternative approaches for students during compulsory school years some programs are offered for students with high needs to support transition into post school options:

Teens+

TEENS+ is a 4-year transitional education programme in Edinburgh for young people aged 17-24 with complex additional support needs and severe communication problems, who have left school. The programme at Stage 1 comprises an extension of the students' previous education, with emphasis on the transition to a more independent life in the community. The curriculum offers four elements: learning; communication; life skills; and sports.

Stage two of the project, LIFE+, is an education and training programme for the older students. This offers them the opportunity to access work placements and continue life-long learning. LIFE+ builds upon the students' previous education and skills within a safe environment, with an emphasis on training in employability skills, such as: building relationships; negotiation skills; communication skills and time management skills.

The Multiple and Complex Needs Initiative (MACNI)

The Multiple and Complex Needs Initiative (MACNI) in Victoria is a time-limited specialist service for youth aged 16 years and older, who have been identified as having multiple and complex needs. This includes people with combinations of mental illness, substance abuse, intellectual impairment, acquired brain injury and forensic conditions. Often these individuals pose a risk to themselves and to the community. <http://www.dhs.vic.gov.au/about-the-department/plans,-programs-and-projects/projects-and-initiatives/cross-departmental-projects-and-initiatives/multiple-and-complex-needs-initiative>

Summary

It is expected that a range of supportive structures will be in place within the regular school that will support the learning and positive engagement of students with mild to moderate challenges. For those with more complex needs, three hierarchical levels of student focussed support were identified from the literature. Each of these relies on intensive assessment and team decision making involving families before being offered to individual students. The first layer of support for this cohort of students is that which continues to be offered within the regular school. This additional support identifies and establishes support provided by school-based personnel or itinerant teachers and that may include short term full or part-time withdrawal intervention, individually or in small groups. The second layer is offered when a student has not responded to the additional and intensive support provided by the regular school. This may involve interventions offered through an alternative temporary placement in a separate facility where more concentrated support will be provided by specialists. At this

level, it is aimed to provide rigorous and individualised support that will enable the student to reintegrate back into the regular classroom. The third level of support is when it is deemed that a student has long term complex needs that cannot be foreseeably supported within the regular classroom. These students are offered support in segregated specialised schools where better support for their specific needs can be provided.

Conclusion

If all students are to be educated successfully in regular classrooms, including those with highly complex needs then genuine inclusive practice will require:

... a well-established process for implementing policy by accommodating the needs of all learners. In addition, it is important to ensure that teacher education, resources, policy, and processes, are made available at all levels and stages of execution to enable inclusion to move beyond rhetoric. If classrooms of the future are going to continue to accommodate an increasingly diverse group of learners, then governments must adopt a more proactive and realistic role to establish policy and to provide support for practices that address the fundamentally different needs of all learners (Forlin & Chambers, 2017).

The setting in which students are educated may influence expectations and understandings of the needs and the curriculum that may be offered. While placement in an inclusive setting does not guarantee that the student will receive appropriate support and curriculum access, this is increased when teachers make thoughtful adjustments for their students. Providing withdrawal support for students may not necessarily improve academic outcomes and as noted by Obiakor, Harris, Mutua, Rotatori, & Algozzine (2012) this may actually impact upon social and behavioural interactions leading to potential deterioration in behaviour if the child resents being removed from the general education classroom. Yet if inclusion is to be successful for all students, including those with more complex needs, then access to the specialist support staff that is readily available in segregated facilities will need to become more readily available within the regular school system. The positive impact of specialist support will be enhanced in collaborative environments where there is time for specialists to engage with other allied health professionals, teachers and families in the school community (Deppeler, 2014; 2012).

Although the shift to an inclusive education model has now been firmly established in most countries, with the challenges being faced by schools when endeavouring to include students with increasingly complex needs, many systems are now resorting to more segregated provision as being best practice, at least in the interim, for these students. This trend is also occurring in Australia.

Placement in alternative settings including segregated classrooms within regular schools or enrolment in fully segregated settings, is becoming an accepted answer for the increasing number of students being suspended and excluded from schools (Beauchamp,

2012) and for disengaged students who are refusing to attend their local school. Students from low socioeconomic areas, those who have a disability, are male, or Indigenous, are up to eight times more likely to be suspended and offered an alternative placement (Daly, 2013). According to Anderson and Boyle (2015) there is confirming evidence that suggests that the number of students in Australia being placed in segregated settings is on the rise. Since 2000 the number of segregated settings across all jurisdictions has increased by 13%, while, conversely the number of schools has fallen by 1.3% (Anderson & Boyle, 2015). In 2015 in WA, for example, there were approximately 900 students enrolled in CARE schools, indicating an increase of 81% of students over the previous five years. Graham, Sweller and Van Bergen (2010), suggest that, conversely, this trend for placement in segregated settings is not supported by any evidence that identifies improved educational outcomes for students. This placement trend also seems to go against the continuing focus for governments to provide increased levels of funding for supporting inclusive educational practices. As posited by Slee (2011), the purpose of this practice poses the question of whether it is for the benefit of the students being excluded, or for the schools who are excluding them.

The Government systems in all jurisdictions across Australia have established processes for supporting learners with complex needs and these are monitored locally by designated specialists or schools. Like the government schooling system, monitoring of outcomes for students with additional learning needs in non-government schools and determining whether appropriate progress is being made does not appear to be undertaken in any consistent way (Forlin & Chambers, 2017). In the non-government sector the Catholic Education system offers greater opportunities for monitoring schools as it provides an approach in which individual schools in specific regions are overseen by Dioceses. The independent associations in states and territories, however, provide only a facilitative and non-systemic authority. The standard of accountability for the outcomes of students with disability in non-government schools similarly reflects that seen in government schools, as being less than for other students.

The ACT report on support for learners with complex needs and challenging behaviours contains 50 recommendations relating to both government and non-government schooling systems (Shaddock et al., 2015). These include considering the physical layout of schools following principles of universal design; the inclusion of appropriate learning areas and facilities; reviewing policies, practices, and procedures; and providing on-going coaching to teachers. Recommendations for Independent and Catholic schools include the need for them to establish procedures to ensure that behaviour support plans are approved by school leadership and to report the use of restrictive practices to a nominated officer within their

education system. It was also recommended that for greater accountability by non-government systems that the Government should seek “an amendment to the Education Act 2004 (ACT) to require Catholic and Independent Schools to report data of suspensions and exclusions of students, including the proportion of students with a disability and students in out of home care, to the Registrar of Non-Government Schools” (Shaddock et al., 2015, Recommendation 11.7, p. 26). The ACT government has provided a detailed response as to how it will further these recommendations (ACT Government Education & Training, 2015). In almost every system there is acknowledgment that for students who have complex needs they may require more than what can be offered within a regular class. For supporting learners with high needs, the evidence from this review has identified three broadly distinct but closely linked approaches being used in most educational systems. These approaches relate to 1). placement models of support that consider temporary or permanent schooling site options; 2). personnel models of support that focus on the provision of paraprofessionals; and 3). student focused models of support that an individual student may access (Figure 3).

Internationally and across Australia a continuum of placement options from full-time placement in a regular classroom to full-time placement in a segregated specialist school have mostly been retained. In general, four options are provided including full-time placement in inclusive regular schools; a special class within a regular school; a special centre on or off site of a regular school; and a separate specialist facility. All systems have their own set of criteria for access to these differing placement options. Placement options tend to more readily available in government systems with non-government systems or schools relying heavily on placement within the regular school.

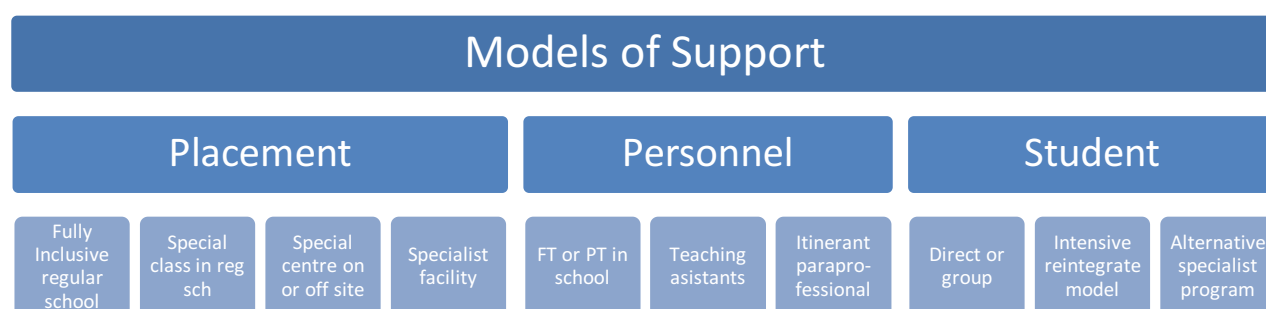


Figure 3: Three key models of support for students with high needs

The second model of support is framed around the use of personnel to support learners with additional needs. This can involve gaining support from a wide range of personnel offered either full-time or more usually part-time within a school. Additional in-school personnel in

regular schools includes a strong focus on the employment of education assistants, who are usually present in an almost full-time capacity. In addition, a wide range of paraprofessionals who provide expertise in targeted areas for individual students tend to be available in an itinerant capacity. Access to personnel support tends to be limited in regular schools, relying heavily on government subsidies for students with an identified disability. In specialised facilities, however, access is considerably higher with most specialist schools providing intensive support by qualified paraprofessionals.

The third model is student focused providing a three-layer structure to access additional support. The initial level of provision is what can be provided within the regular school. This includes many programs that can be implemented across the whole school or targeted to meet the needs of small groups of students. The second layer is the provision of intermediary support that is most frequently offered outside the regular school. This support is designed for short term intensive intervention by experts with a goal to return a student to the regular school through a structured and supported reintegration program. The third level provides a more permanent alternative educational pathway offered through a flexible schooling option outside of the regular school system.

Approaches are determined on an individual basis and established after intensive analysis of student need. Only after interventions at each layer have been thoroughly executed and evaluated to be ineffective in meeting the student's specific needs are more intense and segregated options considered. These layers of increasingly intensive support are available in some form across most government systems. Provision of these options rely heavily on government commitment and funding and therefore are surprisingly not available to the same degree in non-government systems.

It is clear, however, that good practices related to personalised instruction, high quality teaching, development of inclusive cultures, and access to professional learning are being implemented in many non-government and government schools. The impact of these positive approaches can be seen in the increasing number of children with diverse needs now being effectively included within regular classrooms.

For supporting learners with high needs there is a noticeable increase in the number of specialised and more flexible alternative facilities being developed which is indicative of the challenges regular schools are facing in supporting these learners. Movement towards placement models within alternative facilities providing specialist programs is particularly noticeable for students with high support needs for mental health conditions, challenging behaviours or other multiple and complex needs. For these students, the model of support is now tending quite clearly towards alternative placements.

The outcome of this review reported here needs to be interpreted with caution when considering potential models for moving CEM towards the future in providing support for students with high needs. These models are all context dependent and, therefore, need to be interrogated carefully to ensure they will meet the specific conditions in schools in CEM. It would seem clear that further investigation is critical to obtain data on the various support staff currently working with students with high needs across CEM and the impact of their work on improving student learning. Investigating the range of existing models and the effectiveness of them, both in the short and long term for providing support that will enable students with high support needs to achieve to their potential, is also an essential next step. This would then provide a strong foundation to inform a choice of models to be selected that can build upon existing structures to address the needs of a small but challenging cohort of students.

References

- ACT Government Education & Training (2015). Expert panel on students with complex needs and challenging behaviour: ACT government response. Canberra: ACT Government Publishing Services.
- Ainscow, M., Dyson, A., Goldrick, S., & West, M. (2011). *Developing equitable education systems*. Abingdon, UK: Routledge.
- Anderson, C. M., & Borgmeier, C. (2010). Tier II interventions within the framework of School-wide Positive Behavior Support: Essential features for design, implementation and maintenance. *Behavior Analysis in Practice*, 3, 33–45.
- Anderson, J., & Boyle, C. (2015). Inclusive education in Australia: Rhetoric, reality and the road ahead. NASEN, DOI:10.1111/1467-9604.12074
- Andreou, T. E., McIntosh, K., Ross, S. W., & Kahn, J. D. (2015). Critical incidents in sustaining school-wide positive behavioral interventions and supports. *The Journal of Special Education*, 49(3), 157-167.
- Arthur-Kelly, M., Farrell, G., De Bortoli, T., Lyons, G., Hinchey, F., Ho, F. C., ... & Fairfax, W. (2016). The reported effects of a systematic professional learning program on the knowledge, skills, and concerns of Australian early childhood educators who support young children displaying or at risk of challenging behaviours. *International Journal of Disability, Development and Education*, 1-19.
- Australian Bureau of Statistics. (2011). Schools Australia, 2010. Retrieved from www.abs.gov.au/ausstats/abs@.nsf/mf/4221.0.
- Australian Bureau of Statistics. (2013, March). *Schools Australia, 2012*. Retrieved from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Latestproducts/4221.0Main%20Feature%202012>
- Banerjee, R., Robinson, C., & Smalley, D. (2010). Evaluation of the Beatbullying peer monitoring programme. Sussex, UK: School of Education, University of Brighton
- Bartolo, P. A. (2015). The role of psychologists in inclusive settings. In D. Chambers (Ed.), *Working with teaching assistants and other support staff for inclusive education* (pp. 49-63). Emerald Group Publishing Limited.
- Beauchamp, T. (2012). *Addressing high rates of school suspension*. Parramatta, Australia: Uniting Care.
- Beltman, S., Mansfield, C. F., & Harris, A. (2016). Quietly sharing the load? The role of school psychologists in enabling teacher resilience. *School Psychology International*, 37(2), 172-188.
- Bemak, F., Chi-Ying, R. & Siroskey-Sabdo, L. A. (2005). Empowerment groups for academic success: An innovative approach to prevent high school failure for at-risk, urban African American students. *Professional School Counseling*, 8, 1096–2409.
- Bonin, E., Stevens, M., Beecham, J., Byford, S., & Parsonage, M. (2011). Costs and longer term savings of parenting programs for the prevention of persistent conduct disorder: A modelling study. *BMC Public Health*, 11, 803–811.
- Boyle, C., Scriven, B., Durnin, S., & Downes, C. (2011). Facilitating the learning of all students: The ‘professional positive’ of inclusive practice in Australian primary schools. *Support for Learning*, 26, 2, 72–78.

- Bradley, R. (2016). 'Why single me out?' Peer mentoring, autism and inclusion in mainstream secondary schools. *British Journal of Special Education*, 43(3), 272-288.
- Butt, R. (2016a). Employment procedures and practices challenge teacher assistants in mainstream schools. *School Leadership & Management*, 36(1), 63-79.
- Butt, R. (2016b). Teacher assistant support and deployment in mainstream schools, *International Journal of Inclusive Education*, 20(9), 995-1007.
- Bourke, P. E., & Carrington. S. (2007). Inclusive Education Reform: Implications for Teacher Aides. *Australasian Journal of Special Education*, 31 (1), 15– 24.
- Carter, E. W., Asmus, J., Moss, C. K., Biggs, E. E., Bolt, D. M., Born, T. L., ... & Fesperman, E. (2016). Randomized evaluation of peer support arrangements to support the inclusion of high school students with severe disabilities. *Exceptional Children*, 82(2), 209-233.
- Carter, E. W., Moss, C. K., Asmus, J., Fesperman, E., Cooney, M., Brock, M. E., ... & Vincent, L. B. (2015). Promoting inclusion, social connections, and learning through peer support arrangements. *TEACHING Exceptional Children*, 48(1), 9-18.
- Catch22. (2017). *Alternative education in primary and secondary schools*. Retrieved from <https://www.catch-22.org.uk/offers/alternative-education/>
- Chambers, D. (2015). The changing nature of the roles of support staff. In D. Chambers (Ed.), *Working with teaching assistants and other support staff for inclusive education* (pp. 3-25). Emerald Group Publishing Limited.
- Checker, L., J., Remine, M. D., & Brown, P. M. (2009). Deaf and Hearing Impaired Children in Regional and Rural Areas: Parent Views on Educational Services. *Deafness and Education International*, 11(1), 21–38.
- Chiang, R. J., Meagher, W., & Slade, S. (2015). How the whole school, whole community, whole child model works: Creating greater alignment, integration, and collaboration between health and education, *Journal of School Health*, 85(11), 775-784.
- Children with Disability Australia (2012). *Special schools and the Australian government education reform: Policy paper*. Author: Victoria, Australia.
- Chmiliar, L. (2009). Perspectives on inclusion: Students with LD, their parents, and their teachers. *Exceptionality Education International*, 19(1), 72-88.
- Cirrin, F. M., Schooling, T. L., Nelson, N. W., Diehl, S. F., Flynn, P. F., Staskowski, M., Torrey, T. Z. & Adamczyk, D. F. (2010). Evidence-based systematic review: effects of different service delivery models on communication outcomes for elementary school-age children. *Language, Speech and Hearing Services in Schools*, 41, 233-264.
- Clarke, E., & Visser, J. (2017). How do teaching assistants view their role in managing behaviour and cultivate their learning and understanding in relation to managing behaviour? *Teacher Advancement Network Journal*, 9(1), 66-79.
- Cockroft, C., & Atkinson, C. (2015). Using the Wider Pedagogical Role model to establish learning support assistants' views about facilitators and barriers to effective practice. *Support for Learning*, 30(2), 88-104.
- Commonwealth of Australia. (1992). *Disability Discrimination Act 1992*. Retrieved from <http://www.comlaw.gov.au/Details/C2013C00022>.
- Commonwealth of Australia. (2006). *Disability standards for education 2005*. Retrieved from: <http://foi.deewr.gov.au/documents/disability-standards-education-2005>.

- Compton, M. V., Appenzeller, M., Kemmery, M., & Gardiner-Walsh, S. (2015). Itinerant teachers' perspectives of using collaborative practices in serving students who are deaf or hard of hearing. *American annals of the deaf*, 160(3), 255-272.
- Cortiella, C., & Horowitz, S. H. (2014). *The state of learning disabilities: Facts, trends and emerging conditions*. New York, NY: National Center for Learning Disabilities. Retrieved from <http://www.hopkintonsepac.org/wp-content/uploads/2015/12/2014-State-of-LD.pdf>
- Da Fonte, M. A., & Capizzi, A. M. (2015). Working collaboratively with support staff for inclusive education. In D. Chambers (Ed.), *Working with teaching assistants and other support staff for inclusive education* (pp. 195-218). Emerald Group Publishing Limited.
- Daly, E. (2013) *Student suspensions: A research review, Stage One*. Hobart, Tasmania: Commissioner for Children, Tasmania.
- Dempsey, I. (2011). Trends in the proportion of students with a disability in Australian schools, 2000–2009. *Journal of Intellectual & Developmental Disability*, 36(2), 144–145.
- Department for Education UK (2010). Percentage of schools providing access to extended services: June 2010. <http://webarchive.nationalarchives.gov.uk/20130401151655/http://www.education.gov.uk/researchandstatistics/statistics/allstatistics/a00196148/dfe-percentage-of-schools-providing-access-to-exte>
- Department for Education. (2011). *Free schools in 2013: How to apply*. London: Department of Education. Retrieved from: <http://dera.ioe.ac.uk/12492/1/how%20to%20apply%20guidance%20-%20alternative%20provision.pdf>
- Department for Education. (2015). *Policy paper: 2010 to 2015 government policy: Children outside mainstream education*. Retrieved from <https://www.gov.uk/government/publications/2010-to-2015-government-policy-children-outside-mainstream-education/2010-to-2015-government-policy-children-outside-mainstream-education>
- Department for Education. (2016). *Special education needs in England: January 2016*. London: Department of Education. Retrieved from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/539158/SFR29_2016_Main_Text.pdf
- Department of Education and Science. (2007). *Inclusion of students with special educational needs: Post-primary guidelines*. Dublin: Department of Education and Science.
- Department of Education, Training and Employment (DETE). (2014). *Annual Reports*. Retrieved <http://deta.qld.gov.au/publications/annual-reports/index.html>.
- Department of Education, Employment and Workplace Relations (DEEWR), (2013). Report on the Review of Disability Standards for Education 2005, DEEWR.

- Deppeler, J. M. (2014). Developing equitable practices in schools. Professional collaboration in research. In P. Jones (Ed.), *Bringing Insider Perspectives into Inclusive Teacher Learning. Potentials and challenges for educational professionals*. (pp. 178 - 189). UK: Routledge.
- Deppeler, J. M. (2012). Developing inclusive practices: Innovation through collaboration. In C. Boyle, & K. Topping (Eds.), *What Works in Inclusion?*. (pp. 125 - 138). UK: Open University Press.
- Deppeler, J. M., Forlin, C., Chambers, D., Loreman, T. J., & Sharma, U. (2016). Equity and Quality: Inclusive Education in Australia for Students with Disabilities. In J. Deppeler, & D. Zay (Eds.), *Inclusion Through Shared Education*. (63-81). (Inclusive Education and Partnerships). USA: Deep University Press.
- Eckersley, K., & Deppeler, J. (2013). Mapping the practice of psychologists in schools in Victoria, Australia. *The Australian Educational and Developmental Psychologist*, 30(02), 157-170.
- Education Council. (2017). 2017 *Guidelines for the Nationally Consistent Collection of Data on School Students with Disability*. (PDF) 978-1-76028-396-4. Commonwealth of Australia: Author. Retrieved from https://docs.education.gov.au/system/files/doc/other/2017_nccd_guidelines_final_-_web_accessible.pdf
- Education Council. (2016). Nationally consistent collection of data school students with disability. Improving educational outcomes: Emergent data on students with disability in Australian schools. Education Services Australia: Author. Retrieved from <http://www.educationcouncil.edu.au/site/DefaultSite/filesystem/documents/Accessible%20version%20of%20Improving%20educational%20outcomes%20report.pdf>
- Education Funding Agency. (2015). High needs funding: Alternative provision. Additional guidance 2016 to 2017. London: Department of Education.
- Edwards, O. W., Mumford, V. E., & Serra-Roldan, R. (2007). Positive youth development model for students considered at-risk. *School Psychology International*, 28(1), 29-45.
- Ejuu, G. (2016). Moving in circles along a straight path: The elusiveness of inclusive education in early childhood development in Uganda. *Journal of Childhood & Developmental Disorders*, 2(1).
- European Agency. (2017). *Finland: Identification of special educational needs*. Retrieved from <https://www.european-agency.org/country-information/finland/national-overview/identification-of-special-educational-needs>
- European Commission. (2015a). *Finland: Educational support and guidance*. Retrieved from https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Finland:Educational_Support_and_Guidance
- European Commission. (2015b). *Finland: Special educational needs provision within mainstream education*. Retrieved from https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Finland:Special_Education_Needs_Provision_within_Mainstream_Education
- European Commission. (2015c). *Finland: Separate special educational needs provision in early childhood and school education*. Retrieved from https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Finland:Separate_Special_Education_Needs_Provision_in_Early_Childhood_and_School_Education

- Fielding-Barnsley, Ruth (2005) The attributes of a successful Learning Support Teacher in Australian inclusive classrooms. *Journal of Research in Special Educational Needs* 5(2), 68-76.
- Finnish National Agency for Education. (2017). *Support for students and students*. Retrieved from http://www.oph.fi/english/education_system/support_for_students_and_students
- Flannery, K. B., Fenning, P., Kato, M. M., & McIntosh, K. (2014). Effects of school-wide positive behavioral interventions and supports and fidelity of implementation on problem behavior in high schools. *School Psychology Quarterly*, 29(2), 111-124.
- Forlin, C. (2010). The role of the school psychologist in inclusive education for ensuring quality learning outcomes for all learners. *School Psychology International*, 31(6), 617-630.
- Forlin, C., & Chambers, D. (2013). *Report 2. Inclusive education for students with disability: A review of the non-government sector in Australia*. Report to the Australian Government Department of Education & Australian Research Alliance for Children and Youth, Canberra.
- Forlin, C., & Chambers, D. (2017). Catering for diversity: Including learners with different abilities and needs in regular classrooms. In R. Maclean (Ed), *Life in schools and classrooms: Past, present and future*, 555-572. Springer. DOI: 10.1007/978-981-10-3654-5
- Forlin, C., Chambers, D., Loreman, T., Deppeler, J., & Sharma, U. (2013). *Inclusive Education for Students with Disability: A review of the best evidence in relation to theory and practice*. Report to the Australian Government Department of Education, Employment and Workplace Relations & Australian Research Alliance for Children and Youth, Canberra.
- Forman, S. G., & Crystal, C.D. (2015). Systems Consultation for Multitiered Systems of Supports (MTSS): Implementation Issues. *Journal of Educational and Psychological Consultation*, 25, 276–285.
- Fox, S. J. (2016). Review of Multicultural education for learners with special education needs in the twenty-first century. *Education Review//Reseñas Educativas*, 23, 1-5.
- Frederico, M., & Whiteside, M. (2016). Building school, family, and community partnerships: Developing a theoretical framework. *Australian Social Work*, 69(1), 51–66, <http://dx.doi.org/10.1080/0312407X.2015.1042488>
- Giangreco, M. F., Suter, J. C., & Doyle, M. B. (2010). Paraprofessionals in inclusive schools: A review of recent research. *Journal of Educational and Psychological Consultation*, 20, 41-57.
- Giangreco, M.F., Carter, E.W., Doyle, M.B., & Suter, J.C. (2010). Supporting students with disabilities in inclusive classrooms: Personnel and peers. In R. Rose (Ed.), *Confronting obstacles to inclusion: International responses to developing inclusive schools* (pp. 247–263). Abingdon, UK: Routledge.
- Gibson, D. Paatsch, L., & Toe, D. (2016). An analysis of the role of teachers’ aides in a state secondary school: Perceptions of teaching staff and teachers’ aides. *Australasian Journal of Special Education*, 40(1), 1-20.
- Gliddon, J.(2011). Talking technology with Speech Pathology Australia. Available from: <http://ehealthspace.org/casestudy/talking-technology-speech-pathology-australia>

- Gonski, D., Boston, K., Greiner, K., Lawrence, C., Scales, B., & Tannock, P. (2011). *Review of funding for schooling. Final Report*. Retrieved from: <http://www.deewr.gov.au/Schooling/ReviewofFunding/Documents/Review-of-Fundingfor-Schooling-Final-Report-Dec-2011.pdf>.
- GOVUK. (2016). Alternative provision: Progress made, but still more to be done. Press Release. Retrieved from <https://www.gov.uk/government/news/alternative-provision-progress-made-but-more-still-to-be-done>
- GOVUK. (2017a). *Types of schools: Academies*. Retrieved from <https://www.gov.uk/types-of-school/academies>
- GOVUK. (2017b). *Types of schools: Overview*. Retrieved from <https://www.gov.uk/types-of-school/overview>
- Gosnell, J. (2011). Apps: An Emerging Tools for SLPs: A plethora of apps can be used to develop expressive, receptive, and other language skills. *The ASHA Leader*. 16 (12), 10-13.
- Graham, G., & Spandagou, I. (2011). From vision to reality: Views of primary school principals on inclusive education in New South Wales, Australia. *Disability and Society*, 26(2), 223–237.
- Graham, L., Sweller, N., & Van Bergen, P. (2010). Detaining the usual suspects: Charting the use of segregated settings in New South Wales government schools, Australia. *Contemporary Conditions in Early Childhood*, 11(3), 234–248.
- Gresham, F. M., Van, M. B., & Cook, C. R. (2006). Social skills training for teaching replacement behaviors: Remediating acquisition deficits in at-risk students. *Behavioral Disorders*, 363-377.
- Guerra, N. G., & Bradshaw, C. P. (2008). Linking the prevention of problem behaviors and positive youth development: Core competencies for positive youth development and risk prevention. *New Directions for Child and Adolescent Development*, 1–17.
- Hallinger P. (2014). Reviewing reviews of research in educational leadership: An empirical assessment. *Educational Administration Quarterly*, 50, 539–576.
- Hitt, H. D. & Tucker, P. D. (2016). Systematic review of key leader practices found to influence student achievement: A unified framework. *Review of Educational Research*, 86(2), 531–569.
- Heers, M., Klaveren, C.V., Groot, W., & Maassen van den Brink, H. (2016). Community schools: What we know and what we need to know. *Review of Educational Research*, 86(4), 1016-1051.
- Hendrickson, K. A. (2012). Assessment in Finland: A scholarly reflection on one country's use of formative, summative, and evaluative practices. *Mid-Western Educational Researcher*, 25(1/2), 33-43.
- Herrera, C., Grossman, J.B., Kauh, T.J., Feldman, A.F., & McMaken, J. (2007). *Making a Difference in Schools: The Big Brothers Big Sisters School-Based Mentoring Impact Study*. ERIC ED503245.
- Holcombe, W., & Plunkett, M. (2016). The bridges and barriers model of support for high-functioning students with ASD in mainstream schools. *Australian Journal of Teacher Education (Online)*, 41(9), 27. Retrieved from [h8p://ro.ecu.edu.au/ajte/vol41/iss9/2](http://ro.ecu.edu.au/ajte/vol41/iss9/2)

- Horner, R. H., Kincaid, D., Sugai, G., Lewis, T., Eber, L., Barrett, S., ... & Algozzine, B. (2014). Scaling up school-wide positive behavioral interventions and supports: Experiences of seven states with documented success. *Journal of Positive Behavior Interventions*, 16(4), 197-208.
- Howard, R., & Ford, J. (2007). The Roles and Responsibilities of Teacher Aides Supporting Students with Special Needs in Secondary School Settings. *Australasian Journal of Special Education*, 31(1): 25– 43.
- Huang, A. L. (2017). School social workers in the USA: Using collaboration to maximize service delivery and utilizing evidence based practices for social skills building. *Social Work and Social Sciences Review*, 18(3), 101-112.
- Independent Schools Council of Australia. (2012). *Independent update Issue 5, Students with disability*. ACT: Author.
- Independent Schools Council of Australia. (2013). *Independent schooling in Australia: The Independent school sector SNAPSHOT 2013*. Retrieved from www.isca.edu.au.
- Isaksson, J., Lindqvist, R., & Bergström, E. (2010). Struggling for recognition and inclusion: Parents' and students' experiences of special support measures in school. *International Journal of Qualitative Studies on Health and Well-being*, 5(1), 1-11.
- Jones, P., Forlin, C., & Gillies, A. (2013). The contribution of facilitated leadership to systems development for greater inclusive practices. *International Journal of Whole Schooling*, 9(1) online at http://www.wholeschooling.net/Journal_of_Whole_Schooling/IJWSIndex.html
- Kanchewa, S. S., Yoviene, L. A., Schwartz, S. E., Herrera, C., & Rhodes, J. E. (2016). Relational experiences in school-based mentoring the mediating role of rejection sensitivity. *Youth & Society*, 0044118X16653534.
- Keating, S., & O'Connor, U. (2012). The shifting role of the special needs assistant in Irish classrooms: A time for change? *European Journal of Special Needs Education*, 27(4), 533-544.
- Kelly, A., Devitt, C., O'Keeffe, D., & Donovan, A. M. (2014). Challenges in implementing inclusive education in Ireland: Principal's views of the reasons students aged 12+ are seeking enrollment to special schools. *Journal of Policy and Practice in Intellectual Disabilities*, 11(1), 68-81.
- Kenway, J. (2013). Challenging inequality in Australian schools: Gonski and beyond. *Discourse: Studies in the Cultural Politics of Education*, 34(2), 286–308.
- Klar, H. W. & Brewer, C. A. (2013). Successful leadership in high-needs schools. *Educational Administration Quarterly*, 49(5), 768-808.
- Labor, W.A. (August 2015). *Creating strong communities: Full service schools*. WA Labor Consultation Paper. W.A: Author.
- Lamb, S., Jackson, J., Walstab, A., & Huo, S. (2015). *Educational opportunity in Australia 2015: Who succeeds and who misses out*, research report prepared by the Centre for International Research on Education Systems for the Mitchell Institute. Melbourne. Retrieved from: <http://www.mitchellinstitute.org.au/reports/educational-opportunity-in-australia-2015-who-succeeds-and-who-misses-out/>

- Lee, E. (2016). The value and feasibility of implementing peer support programmes to facilitate the successful integration of students with special educational needs into mainstream secondary schools in Hong Kong (Doctoral dissertation, University of Bristol).
- Lee, J-S. (2012). School social work in Australia. *Australian Social Work*, 65(4).
- Leithwood, K. L. & Sun, J. (2012). The nature and effects of transformational school leadership: a meta-analytic review of unpublished research. *Educational Administration Quarterly*, 48(3), 387-423.
- Leyba, E. (2010). How school social workers integrate service opportunities into multiple elements of practice. *Children & Schools*, 32(1), 27-49.
- Lipkin, P. H., & Okamoto, J. (2015). *The Individuals With Disabilities Education Act (IDEA) for children with special educational needs*. Retrieved from <http://pediatrics.aappublications.org/content/pediatrics/136/6/e1650.full.pdf>
- Mathews, S., McIntosh, K., Frank, J. L., & May, S. L. (2014). Critical features predicting sustained implementation of school-wide positive behavioral interventions and supports. *Journal of Positive Behavior Interventions*, 16(3), 168-178.
- McConkey, R., Kelly, C., Craig, S., & Shevlin, M. (2016). A decade of change in mainstream education for children with intellectual disabilities in the Republic of Ireland. *European Journal of Special Needs Education*, 31(1), 96-110.
- McCoy, S., Banks, J., Frawley, D., Watson, D., Shevlin, M., & Smyth, F. (2014). Understanding special class provision in Ireland. Phase 1: Findings from a national survey of schools. Trim, Co. Meath: NCSE.
- McGlynn, C., & London, T. (2013). Leadership for inclusion: Conceptualising and enacting inclusion in integrated schools in a troubled society. *Research Papers in Education*, 28(2), 155-175.
- McLindena, M., & McCracken, W. (2016). Review of the visiting teachers service for children with hearing and visual impairment in supporting inclusive educational practice in Ireland: examining stakeholder feedback through an ecological systems theory. *European Journal of Special Needs Education*, 31(4), 472-488.
- Ministry of Education and Culture. (2012). *Finnish education in a nutshell. Education in Finland series*. Retrieved from http://www.oph.fi/download/146428_Finnish_Education_in_a_Nutshell.pdf
- Morris, C., & Sharma, U. (2011). Facilitating the inclusion of children with vision impairment: Perspectives of itinerant support teachers. *Australasian Journal of Special Education*, 35(2), 191–203.
- Mulford B., Kendall D., Ewington J., Edmunds B., Kendall J., Silins H. (2009). Successful principalship of high-performance schools in high-poverty communities. *Journal of Educational Administration*, 46, 461–480.
- Mulholland, M., & O'Connor, U. (2016). Collaborative classroom practice for inclusion: Perspectives of classroom teachers and learning support/resource teachers. *International Journal of Inclusive Education*, 1-14.
- Mullen, R. (2007). The state of the evidence: ASHA develops levels of evidence for communication sciences and disorders. *The ASHA Leader*, 8-25.

- Murray, S., Mitchell, J., Gale, T., Edwards, J., & Zyngier, D. (2004, November). *Student disengagement from primary schooling: A review of research and practice. A report to the CASS Foundation*. Melbourne Australia: Centre for Childhood Studies Faculty of Education, Monash University. Retrieved <http://www.cassfoundation.org/2016/wp-content/uploads/2016/07/StudentDisengagement.pdf>
- National Catholic Education Commission [NCEC]. (2012). *Australian Catholic schools 2012*. Retrieved from: http://www.ncec.catholic.edu.au/index.php?option=com_docman&task=cat_view&gid=41&Itemid=53.
- National College for Teaching and Leadership (2011). *The changing role and influence of senior support staff in schools*. National College for Leadership of Schools and Children's Services, Available from: <https://www.gov.uk/government/publications/the-changing-role-and-influence-of-senior-support-staff-in-schools>
- National Council for Special Education. (2012). *The education of students with challenging behaviour arising from severe emotional disturbance/behavioural disorders, NSCE Policy Advice Paper No. 3*. Trim, Co. Meath: NCSE. Retrieved from: http://ncse.ie/wp-content/uploads/2014/09/EBDPolicyReport_1.pdf
- National Council for Special Education. (2014). *Children with special educational needs: Information booklet for parents*. Trim, Co. Meath: NCSE.
- Navarro, F. M. (2015). Learning support staff: A literature review. OECD Education Working Papers, (125), 0_1.
- Obiakor, F. E., Harris, M., Mutua, K., Rotatori, A., & Algozzine, B. (2012). Making inclusion work in general education classrooms. *Education and Treatment of Children*, 35(3), 477-490.
- Ofsted. (2016). *Alternative provision: The findings from Ofsted's three-year survey of use of schools' use of off-site alternative provision*. Manchester: Ofsted. Retrieved from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/500918/Alternative_provision_findings_from_Ofsteds_threeyear_survey_of_schools_use_of_off-site_alternative_provision.pdf
- Paju, B., Rätty, L., Pirttimaa, R., & Kontu, E. (2016). The school staff's perception of their ability to teach special educational needs students in inclusive settings in Finland. *International Journal of Inclusive Education*, 20(8), 801-815.
- Pesonen, H., Kontu, E., Saarinen, M., & Pirttimaa, R. (2016). Conceptions associated with sense of belonging in different school placements for Finnish students with special education needs. *European Journal of Special Needs Education*, 31(1), 59-75.
- Plath, D., Croce, N., Crofts, P., & Stuart, G. (2016). Outcomes of a school-based program for young children with disruptive behaviors. *Children & Schools*, 38(1) January, 9-19.
- Report on Government services. (2013). *Chapter 4, school education*. Retrieved from ROGS report http://www.pc.gov.au/_data/assets/pdf_file/0003/121764/06-government-services-2013-chapter4.pdf.
- Rhodes, J. E., & Roffman, J. G. (2003). Nonparental adults as asset builders in the lives of youth. In R. Lerner & P. L. Benson (Eds.), *Developmental assets and asset-building communities: Implications for research, policy and practice* (pp. 195–209). New York, NY: Kluwer Academic/Plenum.

- Rhodes, J. E., Spencer, R., Keller, E., Liang, B., & Noam, G. (2006). A model for the influence of mentoring relationships on youth development. *Journal of community psychology*, 34(6), 691–707.
- Rodriguez, B. J., Campbell, A., Fairbanks Falcon, S., & Borgmeier, C. (2015). Examination of critical features and lessons learned for implementation of a tier 2 intervention system for social behavior. *Journal of Educational and Psychological Consultation*, 25(2-3), 224-251.
- Rutherford, G. (2012). In, out or somewhere in between? Disabled students' and teacher aides' experiences of school. *International Journal of Inclusive Education*, 16, 757–774.
- Salisbury, C., & McGregor, G. (2005). *Principals of inclusive schools*. Retrieved from http://www.urbanschools.org/pdf/principals.inclusive.LETTER.pdf?v_document_name=Principals%20of%20Inclusive%20Schools
- Scanlon, G., & Barnes-Holmes, Y. (2013). Changing attitudes: Supporting teachers in effectively including students with emotional and behavioural challenges in mainstream education. *Emotional and behavioural difficulties*, 18(4), 374-395.
- Severson, H. H., Walker, H. M., Hope-Doolittle, J., Kralochwill, T. R., & Gresham, F. M. (2007). Proactive, early screening to detect behaviorally at-risk students: Conditions, approaches, emerging innovations, and professional practices. *Journal of School Psychology*, 45(2), 193-223. <http://dx.doi.org/10.1016/j.jsp.2006.11.003>
- Shaddock, A., Packer, S., & Roy, A. (2015). *Schools for all children and young people*. Report of the expert panel on students with complex needs and challenging behaviour. Available www.det.act.gov.au/_data/assets/pdf_file/000/62074-Expert-Panel-Report-Web.pdf
- Shaw, S. R., Gomes, P., Polotskaia, A., & Jankowska, A. M. (2015). The relationship between student health and academic performance: Implications for school psychologists. *School Psychology International*, 36(2), 115-134.
- Sheppard, M., & Clibbens, J. (2015). Preventive therapy and resilience promotion: An evaluation of social work led skills development group work. *Child and Family Social Work*, 20, 288–299.
- Simões, F., & Alarcão, M. (2014a). Mentors and teachers: Testing the effectiveness of simultaneous roles on school performance from a basic psychological needs perspective. *Instructional Science*, 42(3), 465-483.
- Simões, F., & Alarcão, M. (2014b). Teachers as school-based mentors for at-risk students: A qualitative study. In *Child & Youth Care Forum* (Vol. 43, No. 1, pp. 113-133). Springer US.
- Slee, R. (2011). *The irregular school: Exclusion, schooling and inclusive education*. Oxon: Routledge.
- Slee, R. (2013). How do we make inclusive education happen when exclusion is a political predisposition? *International Journal of Inclusive Education*, 17(8), 895–907.
- Squires, G., Farrell, P., Woods, K., Lewis, S., Rooney, S., & O'Connor, M. (2007). EPs' contribution to the every child matters agenda: The parents' view. *Educational Psychology in Practice*, 23, 343–361.

- Stone-Johnson, C. (2016). Intensification and isolation: Alienated teaching and collaborative professional relationships in the accountability context. *Journal of Educational Change*, 17(1), 29-49.
- Straw, S., Tattersall, J., & Sims, D. (2016). *NFER teacher voice omnibus. Research report: July 2016*. London: The National Foundation for Education Research/Department for Education.
- Supovitz J., Sirinides P., May H. (2009). How principals and peers influence teaching and learning. *Educational Administration Quarterly*, 46, 31–46.
- Surrey County Council. (2017). Schools and learning: Behaviour support guidance for schools and teachers. Retrieved from <https://www.surreycc.gov.uk/schools-and-learning/teachers-and-education-staff/educational-advice-and-support-for-teachers/behaviour-support-guidance-for-schools-and-teachers>
- Takala, M., Pirttimaa, R., & Törmänen, M. (2009). Inclusive special education: The role of special education teachers in Finland. *British Journal of Special Education*, 36(3), 162-173.
- Taylor, C. (2012). *Improving alternative provision*. London: Department of Education. Retrieved from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/180581/DFE-00035-2012.pdf
- Testa, D. (2012). Cross-disciplinary collaboration and health promotion in schools. *Australian Social Work*, 65(4), 535-551.
- UNESCO. (2012). *Addressing exclusion in education*. Retrieved from: <http://unesdoc.unesco.org/images/0021/002170/217073e.pdf>
- Urbis Pty. Ltd. (August, 2011). The psychological and emotional wellbeing needs of children and young people: Models of effective practice in educational settings, final report. Prepared for the Department of Education and Communities, NSW.
- US Department of Education. (2017). *Child with special needs*. Retrieved from <https://answers.ed.gov/link/portal/28022/28025/Article/570/Child-with-special-needs>
- US Department of Education. (2017). Child with special needs. Retrieved from <https://answers.ed.gov/link/portal/28022/28025/Article/570/Child-with-special-needs>
- Webster, R., Blatchford, P. & Russell, A. (2013). Challenging and changing how schools use teaching assistants: findings from the Effective Deployment of Teaching Assistants project. *School Leadership & Management*, 33(1), 78-96.
- Webster, R., Blatchford, P., Bassett, P., Brown, P., Martin, C., & Russell, A. (2010). Double standards and first principles: framing teaching assistant support for pupils with special educational needs. *European Journal of Special Needs Education*, 25(4), 319-336.
- Webster, R., P. Blatchford, P. Bassett, P. Brown, C. Martin, & A. Russell. (2011). The Wider Pedagogical Role of Teaching Assistants. *School Leadership and Management*, 31 (1), 3– 20.
- Webster, R., Russell, A. & Blatchford, P. (2013). Maximising the impact of teaching assistants: Guidance for school leaders and teachers, Routledge: London and New York.

Wisconsin Department of Public Instruction. (2017). Services for children with an emotional behavioral difficulty. Retrieved from <http://dpi.wi.gov/sped/program/emotional-behavioral-disability>