



Literature Review

Remote learning for students with a disability: Game changer or moment in time?

Remote learning for students with a disability: Game changer or moment in time?
Literature Review.

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Glossary

ACD	Association for Children with a Disability
Adjustments	An action or form of assistance taken to help a person take part in education on the same basis as their peers
Amaze	A peak body for people with autism and their supporters
APST	Australian Professional Standards for Teachers
Autism	A neurodevelopmental disability affecting communication and social interaction
DSE	Disability Standards for Education (2005)
IEP	Individual education plan or individual learning plan
Inclusion	"A process of systemic reform embodying changes and modifications in content, teaching methods, approaches, structures and strategies in education to overcome barriers with a vision serving to provide all students of the relevant age range with an equitable and participatory learning experience and environment that best corresponds to their requirements and preferences" (United Nations, 2016, para. 11)
QDTP	Quality differentiated teaching practice
Remote learning	Temporary period of supervised offsite learning when students and teachers are unable to attend their school site
Royal Commission	Australian Royal Commission into Violence, Abuse, Neglect and Exploitation of People with a Disability 2019-2023. Terms of reference at: disability.royalcommission.gov.au
School connectedness	Extent to which a student feels accepted, valued, and supported in their school environment
SSG	Student support group, or learning and support team is a team around a student who requires additional or specialised support
Transition	Students moving from one class, school, location or services to another
UDL	Universal Design for Learning is a set of principles for curriculum development that give all individuals equal opportunities to learn

Introduction

This literature review focuses on the implications of remote learning for students with disability and their families. It investigates a range of factors that impact on the provision of education through remote learning for students with disability across different categories and the resources required to support their engagement in, and access to learning.

Literature included in this review relates to pedagogical services provided by early childhood services and schools to support students with disability, rather than therapeutic services. The social implications for students are reviewed along with educational factors, and implications for inclusion and support by schools. Following an overview of the legal and policy frameworks supporting the education of students with disability, this review investigates benefits, challenges and opportunities for both remote learning and transition back to in-person educational settings for students and their families.

The review draws from Australian and international research into the impact of remote learning for students with disability, published between March 2020 and April 2022. It synthesises findings to provide considerations and recommendations arising from the literature. The themes emerging include flexible approaches to learning, connectedness and wellbeing,

home-school partnerships, supported teachers, and effective transitions. Each theme first discusses challenges experienced by students, families and teachers and then identifies benefits and opportunities.

Finally, the review presents strategies to support students' transition back to in-person schooling that were identified in the research. While there were limited findings specific to students with disability returning to school from the pandemic, we point to evidence for how general strategies can be adapted to best meet the needs of these students.

The initial brief for this review was to focus on transition back to school from remote learning due to COVID-19 lockdowns. This remains a relevant and pressing topic, particularly in the face of disruption from natural disasters, ongoing isolation for students and teachers due to sickness, and the co-existing immunity and health challenges occurring in students with disability.

Footnotes on inclusive language

'School' is used throughout this review to refer to all places offering education, including early childhood education and care, mainstream and specialist schools.

The review uses person-first language to discuss students with disability. It is however acknowledged that many persons with a disability prefer identity-first language (e.g., disabled persons, or autistic persons). The review consciously avoids the terms 'special needs', and aligns with inclusive language principles that are common in Australia (Graham et al., 2020).

Frameworks for inclusion

There are several guiding frameworks for inclusion that establish the foundation for policies, and set expectations for educational practice for students with disability in Australia.

Inclusion involves a process of systemic reform embodying changes and modifications in content, teaching methods, approaches, structures and strategies in education to overcome barriers with a vision serving to provide all students of the relevant age range with an equitable and participatory learning experience and environment that best corresponds to their requirements and preferences.

United Nations, 2016, para. 11

United Nations Convention on the Rights of Persons with Disabilities

General Comment No. 4 to Article 24 of the *Convention on the Rights of Persons with Disabilities* outlines nine features of inclusive education.

- Whole systems approach: Sets government and education jurisdictions' responsibility for resourcing inclusion, and embedding it in culture, policies and practices.
- Whole educational environment: Calls for committed institutional leadership for inclusion.
- Whole person approach: Stipulates the need for flexible curricula, teaching and learning approaches, enacted in accessible learning environments with support and adjustments in place where required.
- Supported teachers: All educational staff should receive training to become capable at establishing inclusive learning environments.
- Respect for and value of diversity: All members of the community are welcomed equally.
- Learning-friendly environment: Learning environments should make everyone feel safe and supported, in which students can express themselves and build positive relationships.
- Effective transitions: Students with disability should be supported during transitions between levels of schooling
- Recognition of partnerships: Partnerships with associations and parents/families are encouraged to enhance educators' understanding of disability. Parents are seen as 'assets with resources and strengths to contribute'.
- Monitoring: Regular, ongoing review that involves students with disabilities and parents.

United Nations, 2016, para. 12

Principles of Catholic Social Teaching

This collection of guiding principles addresses the concern for the good of all humanity that underpins the mission of Catholic schools. It offers a way of thinking, being and seeing the world. It provides a vision for a just society in which the dignity of all people is recognised, and those who are vulnerable are cared for.

Catholic Social Services Australia, 2020

Alice Springs (Mparntwe) Education Declaration

The *Alice Springs (Mparntwe) Education Declaration* outlines two goals and associated indicators to establish an education system characterised by excellence, equity, and the opportunity for students to become confident and lifelong learners. Among other aims, this Declaration emphasises inclusive education, provision of personalised and varied learning environments and opportunities, development of resilience and a sense of belonging, and the establishment of partnerships between education communities and parents, carers and families to support students' progress through their schooling career.

Education Council, 2019

Disability Standards for Education

The Disability Standards for Education (DSE) (Cth) (2005) prescribe the right for students with disability to receive education "on the same basis" as students without disability, with reasonable adjustments in areas such as admission, courses, and assessment. Educators are required to consult the student or parent/carer prior to making an adjustment to ensure the adjustment is reasonable.

DSE (Cth) 2005, §2.2.3

Nationally Consistent Collection of Data on School Students with Disability (NCCD)

Schools are required to document adjustments for students with disability through the Nationally Consistent Collection of Data on School Students with Disability (NCCD). Students do not need to qualify for additional disability funding in order to be included in the NCCD (de Bruin et al., 2020). Rather, teachers are expected to accommodate all students with disability through adjustments made as part of Quality Differentiated Teaching Practice (QDTP) or through adjustments made at a supplementary, substantial or extensive level.

Education Services Australia, 2022

Australian Professional Standards for Teachers (APST)

Teachers design and implement teaching strategies, activities, programs and policies that support the participation and learning of students with disability.

Focus area 1.6 Strategies to support full participation of students with disability

Descriptor at career stage			
Graduate	Proficient	Highly Accomplished	Lead
Demonstrate broad knowledge and understanding of legislative requirements and teaching strategies that support participation and learning of students with disability.	Design and implement teaching activities that support the participation and learning of students with disability and address relevant policy and legislative requirements.	Work with colleagues to access specialist knowledge, and relevant policy and legislation, to develop teaching programs that support the participation and learning of students with disability.	Initiate and lead the review of school policies to support the engagement and full participation of students with disability and ensure compliance with legislative and/or system policies.

AITSL, 2017

A focus on enablers not barriers

Much of the research available for this literature review was based on surveys of parents of students with disability, in some cases conducted by parent advocacy and support organisations. There is less published research from the perspective of students themselves, or of teachers, schools and systems.

It also appears that much of the research published in this period focused on students with autism. Autism has been heavily researched in recent years. It is a developmental condition that impacts on a student's ability to understand social communication and adjust to new social contexts (American Psychological Association, 2013). During the pandemic, there was enormous change within social contexts, including frequent unexpected changes in day-to-day living as well as changes to schooling in the form of remote learning. Educators are invited to consider the research into how students with autism responded to remote learning and how their experiences may also resonate with students with other disabilities.

The themes discussed in the next section of this review emerged from the limited literature available on how students with disability were affected by remote learning, and the lessons schools, systems and families can learn from the recent pandemic experience and ongoing disruptions. Within each theme the review describes the challenges identified in Australian and international research, and discusses associated benefits and opportunities that emerge. The themes include increased flexibility, a greater focus on wellbeing, improved home-school partnerships, enhanced support for teachers, and closer attention to effective transitions. The intention of the review is to draw together strategies that support education leaders to focus on enablers rather than barriers to inclusion.



Flexible approaches to learning

Challenges

Australian and international literature shows that many students with disability did not experience a quality education during remote learning periods associated with COVID-19 restrictions (Dickinson et al., 2020; Marella et al., 2020; Pellicano et al., 2020; Renshaw & Goodhue, 2021; Smith et al., 2022). Quality education stipulates the need for flexibility of curriculum, teaching and learning, accessible environments, and support and adjustments enacted where required (AITSL, 2017; DSE [Cth] (2005); Education Council, 2019; Education Services Australia, 2022; United Nations, 2016).

Flexible approaches to learning include the use of technology to facilitate learning through multiple modalities. Teachers increasingly aim to bring the technologies of students' everyday lives (e.g., podcasts, social media platforms) into the classrooms to foster student engagement (Colton, 2021). In addition, using devices such as tablets can contribute to accessibility and provide students with disability with multiple modalities (e.g., reading an e-version of a textbook, listening to an audio-version of a book, or learning through games) (Cumming & Strnadová, 2020; Main et al., 2016).

However, multiple Australian reports highlighted a lack of support and accessibility for students with disability during remote learning (Dickinson et al., 2020; Marella et al., 2020; Pellicano et al., 2020; Renshaw & Goodhue, 2021; Smith et al., 2022). Organisations such as Amaze, and the Association for Children with a Disability (ACD) undertook several surveys

of members during the initial phase of the COVID-19 pandemic in 2020. Both national and state level studies indicated inaccessible learning materials, a lack of adjustments to curriculum, teaching and learning, inconsistent personalised support and a lack of updated Individual Education Plans (IEPs) to support students in their learning (Amaze & ACD, 2020; Dickinson et al., 2020; Dickinson et al., 2021; Pellicano et al., 2020; Smith et al., 2022).

Conversely, some teachers in an Australian case study (Ewing & Cooper, 2021) reported that individualisation for students with disability was better facilitated through remote learning, as they could message students privately without other students being aware of this interaction. However, most teachers highlighted challenges with providing tailored support for these students, predominantly due to the increased workload associated with differentiation through online platforms. One senior secondary teacher stated that her lessons were "less [individualised] as the preparation was so time consuming, I did not have enough time to totally differentiate" (Ewing & Cooper, 2021, p. 9). Further, in contrast with expectations outlined under the Disability Standards for Education (Cth) and Australian Professional Standards for Teachers (AITSL, 2017), some parents/carers of children with autism were advised that schools were relieved from their obligation to differentiate learning activities during this time (ACD & Amaze, 2020). This resulted in additional burden placed on families to adjust such materials for their children (Dickinson et al., 2020) and increased stress for students (Pellicano et al., 2020).

These findings align with international studies. Two qualitative Scottish studies examining student experiences with remote offline learning (i.e., no live engagement with the teacher took place; McCorkell & Lobo, 2021) and teacher experiences implementing remote learning (Beattie et al., 2021) found that secondary school students with autism experienced less differentiation compared with on-site learning (McCorkell & Lobo, 2021) and demonstrated a reduction in quality teaching practices such as modelling, questioning and instructional support (Beattie et al., 2021; McCorkell & Lobo, 2021). Similarly, American teachers recognised that students with autism struggled with remote learning, as teachers and parents were unable to provide the required support (Hurwitz et al., 2021).

While accessibility issues and associated lack of support became visible during remote learning, these are not unique to the pandemic. Australian reports have consistently highlighted a lack of accessibility for students with disability (Commonwealth of Australia, 2016; Deloitte Access Economics, 2017; New South Wales Audit Office, 2016). Most recently, the Royal Commission into Violence, Abuse, Neglect and Exploitation of People with Disability (2021) identified “repeated failures [of schools in Queensland and New South Wales] to identify and implement appropriate reasonable adjustments” (p. 48). Recent experiences might offer opportunities to establish more inclusive learning environments.

Benefits and opportunities

Despite strong Australian evidence highlighting a lack of accessible practices for students with disability, benefits of remote learning were also reported. The 1:1 support from parents/carers enabled some students’ learning (Amaze, 2020), with home learning environments posing less stimulation and fewer distractions than schools (Marella et al., 2020; Pellicano et al., 2020). The flexibility of remote learning provided students with freedom to adjust their sleep patterns and opportunities for independence by setting their own pace to complete tasks before a certain day instead of during a class period (Armitage & Loukomitis, 2020; McCorkell & Lobo, 2021; Pellicano et al., 2020). Scheduled breaks between classes, allowing students to move around or talk to family, were further perceived as beneficial (McCorkell & Lobo, 2021; Pellicano et al., 2020). Anecdotal benefits included consistent student-teacher interaction and feedback, creative teaching approaches using multimodal activities, and clear expectations when lesson plans could be accessed (Armitage & Loukomitis, 2020; McCorkell & Lobo, 2021).

Increased use of technology improved accessibility for some students with disability (Marella et al., 2020). Online learning that incorporated multiple modalities and range of interactive activities including informal play or connection appeared most effective in facilitating successful social and education interactions (Dickinson et al., 2021). Remote modalities have been shown to be particularly effective to support the socioemotional needs of children and adolescents with autism (Clare et al., 2018).

Overall, schools that provided inclusive education practices to students with disability prior to the pandemic appeared more likely to sustain such practices during remote learning, including the use of IEPs and Student Support Groups (SSG) (Amaze & ACD, 2020; ACD & Amaze, 2020). Where educational and social support for students with disability was intentional and planned, students received appropriate support and could engage better with learning (Dickinson et al., 2020). The importance of intentionality also emerged in an American study on the effects of remote learning during the pandemic, where it was reported that “some students with disabilities, particularly those with emotional and attention issues, thrived in online environments that, when constructed with intentionality, fostered focused, individualized learning experiences” (Morando-Rhim & Ekin, 2021, p. 6).

These findings highlight the importance of inclusive practices. Practices that worked well for students with disability during remote learning such as clear expectations, regular feedback, flexible teaching approaches, personalised support, are in fact quality teaching practices that should form part of teachers’ regular toolkit for

all students (AITSL, 2020). Schools have a responsibility to strengthen teachers’ inclusive education practice. Practices such as quality differentiated teaching practice (QDTP) and Universal Design for Learning (UDL) (Cologon & Lassig, 2020) align with the Australian Government’s (2020) recommendation to increase teacher capability to make adjustments for students with disability.

These findings point to the importance of the intentional use of technology in face-to-face education. Adopting technology to offer multiple modalities could be used to record lessons for students to re-watch, as part of a blended approach to teaching, and facilitate virtual communication with students and parents, and virtual staff meetings (Ames et al., 2021; Armitage & Loukomitis, 2020). The continued use of technology is especially important in the post-pandemic educational landscape, where staff and students may still be absent from school due to contracting COVID-19, or due to other health issues that warrant brief or extended periods of remote learning. Technology use can help ensure continuity of students’ learning meaning they are not reliant on face-to-face attendance.



Connectedness and wellbeing

Challenges

This review found evidence that students with disability experienced a reduced sense of connectedness and wellbeing with peers and school during remote learning. Students need to feel safe and supported in inclusive learning environments that enable self-expression and the establishment of positive relationships (United Nations, 2016). They should have a sense of belonging (Education Council, 2019) and be able to fully participate in all aspects of education (DSE; Cth). Inaccessible teaching practices, as highlighted in the previous section, meant that students with disability were not always able to fully participate in educational activities (Amaze, 2020; Amaze & ACD, 2020; ACD & Amaze, 2020; Dickinson et al., 2020; Marella et al., 2020; Pellicano et al., 2020; Renshaw & Goodhue, 2021). As a result, some students with disability experienced declined mental health (Amaze, 2020), an increased sense of isolation due to limited interaction with teachers (Armitage & Loukomitis, 2020; Dickinson et al., 2020), and a loss of connection with peers, especially if they were not invited or unable to attend online learning environments (Marella et al., 2020), or if learning only took place offline (McCorkell & Lobo, 2021).

Young people with autism, like other students, struggled with stay-at-home orders, with one young person describing that, "as stressful as school was", he missed his social contacts at school (Pellicano et al., 2020, p. 24). Constructs of school connectedness (i.e., school bonding, school attachment, school engagement and school climate) are useful to highlight how remote learning negatively impacts on these constructs, thereby reducing feelings of belonging for students with

disability (Page et al., 2021). Specifically, inaccessible educational activities resulted in limited school engagement, limited contact with teachers and peers (school bonding and school climate), and limited ability to be "contributing members to the environment" (school attachment; Page et al., 2021, p. 152). Further, Dickinson et al., (2021) reported that existing school-based supports currently in place for children with disability were not included in the transition to remote learning. Social and behavioural support, access to individual support workers (such as specialist allied health staff) or specialised equipment, and curriculum adjustments to ensure accessibility were substantially reduced or omitted from remote learning for these students (Dickinson et al., 2021). In addition, Smith et al. (2022), drawing on the same study as Dickinson et al. (2021), highlighted that support from teachers "was identified as sporadic by some of our participants in free text comments, with some reporting having no contact at all" (p. 7).

These findings are consistent with anecdotal findings from an Australian case study into remote learning in Australia that reported "students perceived and reciprocated the level of engagement demonstrated by teachers" (Ewin & Cooper, 2021, p. 8). Students saw teachers as online facilitators who were online for a limited amount of time only, leading to feeling a lack of engagement. Similarly, teachers reported difficulties monitoring student engagement during remote learning, leading to an observation that "presence did not equate with engagement. Students were adept at maintaining presence while engaging with other online activities" (Ewin & Cooper, 2020, p. 7).

Within-child factors also appeared to contribute to decline in students' health and wellbeing overall. Parents reported that physical exercise activities were reduced, and daily routines were significantly affected resulting in further difficulties with self-regulation, particularly for students with autism (Mete Yesil et al., 2021). As extended periods of remote learning have impacted on all students' wellbeing (Gore et al., 2020), factors contributing to social isolation and reduced wellbeing must be considered when reviewing children's ability to adjust to remote learning in the future.

Benefits and opportunities

Where Australian schools actively provided social support by connecting students with disability with their peers, students appeared to feel more engaged with their learning community and less socially isolated (Dickinson et al., 2020). Further analysis of the Dickinson et al. (2020) dataset revealed that "social support was significantly associated with better learning processes and reducing isolation of students with disability. The impact of social supports was much more significant than even education supports" (Smith et al., 2022). Social support, as reported by students

and their families, included "consistent but not too frequent contact, the opportunity to connect with peers, having schoolwork that was the same content as peers but modified appropriately and knowing there was somewhere to go to for help and someone who cared to check in or respond to questions and concerns" (Smith et al., 2022). Existing systems of pastoral care, well-established across independent and Catholic schools, contributed to students' wellbeing (Armitage & Loukomitis, 2020). Some students with autism appeared more comfortable communicating with teachers and peers via virtual platforms (Hurwitz et al., 2021; Page et al., 2021).

There is an opportunity for schools to purposefully plan social engagement between teachers and students and among peers (Page et al., 2021; Pellicano et al., 2020). The creation of "individualized contingency learning plans" (Hurwitz et al., 2021, p. 2) could provide schools with a tool for this, while consulting with students with disability in the process (Pellicano et al., 2020). Further, the provision of specialist advice or support for families around how to include factors such as physical exercise or family routines may assist in parents in improving children's wellbeing overall and subsequently, their ability to effectively participate in remote learning and returning to school (Dickinson et al., 2021).

Home-school partnerships

Challenges

Australian parents of students with disability reported a lack of proactive support from schools to ensure remote learning was accessible to their children. Parents and students are important assets to help teachers understand students' learning requirements (APST 1 and 7; AITSL, 2017; United Nations, 2016), and consultation with them is legally required to assess what reasonable adjustments to curriculum, teaching, learning and assessment are needed for the student to access education on the same basis as students without disability (DSE; Cth). Two studies, in Victoria (Amaze, 2020; Dickinson et al., 2021) and one Australia-wide study (Dickinson et al., 2020), revealed a lack of contact between schools and families to discuss student's individual requirements to access learning (Amaze, 2020) and to monitor the accessibility of learning (Dickinson et al., 2020). As learning activities were inaccessible to students with disability, the onus was on families to make adjustments so students could engage with learning content (Dickinson et al., 2021). The time required to make such adjustments— together with the increased need to advocate for their child—placed an additional burden on parents (Dickinson et al., 2020, 2021; Marella et al., 2020), impacting on siblings' capacity to learn and parents' ability to carry out paid employment (ACD & Amaze, 2020; Dickinson et al., 2021; Marella et al., 2020).

These findings were also reported internationally. Mete Yesil et al. (2021) found that while families reported an increase in one-on-one time spent with their children, time spent playing, reading and participating in recreational activities was reduced overall. Further, as to be expected, 'screen' or device use, was markedly increased. Generally, many parents reported they did not feel that they received adequate support from their child's school to manage remote learning or to advocate for their child's needs (Dickinson et al., 2021).

On the other hand, teachers reported challenges with engaging parents due to family circumstances or lack of student engagement. Some teachers in rural and low socioeconomic areas experienced limited student engagement because laptops supplied for children were used by parents instead (Page et al., 2021). This led some teachers to call parents to check on their child's welfare as they had not logged on for several days. Issues with accessing technology are indicative of a larger problem of the pandemic; the latest review of the DSE reported that "the education experiences of students with disability from low socioeconomic status (SES) families during the COVID-19 pandemic appear to have been compounded by several factors" including "poor access to technology (both hardware and connectivity – further exacerbated for many rural and remote families), where a large family may have to share one computer" (Australian Government, 2020, p. 20).

Further limitations to home-school partnerships included parents' inability to cope with remote learning, sending their children back to school when schools opened for children of essential workers, with one teacher describing: "The ones who are attending every day have the parents who drop them off and say, 'I am not an essential worker but I can't deal with them anymore'. We did not have any essential workers we just had parents who were exasperated because they could not help with homeschooling and could not get thee (sic) kids to log on" (Page et al., 2021, p. 148). Further limitations included parents' lack of training and skills impacting on their ability to effectively teach their children at home (Dickinson et al., 2021; Hurwitz et al., 2021). Finally, while 1:1 support was also reported to benefit students with autism (Amaze, 2020), students need to be able to recognise the parent as a legitimate educator; one parent of a child with autism attributed her child's disengagement to his inability to accept that a parent, instead of a teacher, would teach him (Page et al., 2021).

Benefits and opportunities

Research suggests that when students received support, especially social support, from teachers (or the school more broadly) educational and social outcomes improved. This was particularly evident when support was provided at a greater intensity and in multiple forms. For example, Smith et al. (2022) found that families who received one type of support reported a 24% improvement in feeling part of a learning community and a 35.8% improvement on the perception of receiving adequate support in students' education, with both results being statistically significant. Statistically significant improvements were also seen

for families receiving two or more types of support: there was an 88% improvement on whether students felt part of a learning community, a 109% improvement on the perception of receiving adequate support in students' education, a 47.5% improvement on whether students were perceived to be engaged in their learning, and a 18.2% decrease on whether students felt lonely. These findings provide some insight into the benefits of effective collaborations between families and schools.

While there is strong evidence that partnerships with parents were not generally effective during remote learning, there are opportunities to improve these partnerships in the future. Remote learning has given parents a better idea of their child's skills and challenges (Amaze, 2020; Dickinson et al., 2020; Marella et al., 2020; Page et al., 2021), which strengthens their position as 'assets' (United Nations, 2016, para. 12) for schools to use in consultation processes. As one parent reflected, "in some ways, I'm grateful for the shutdown as it shed light on hidden issues [with provided support] and has enabled me to fight for a better deal for my son" (Dickinson et al., 2020, p. 32). The renewed call for clearer strategies for schools to consult students and families under the Disability Standards for Education (Australian Government, 2020; Catholic Schools New South Wales, 2020; The Centre for Inclusive Education, 2020) could assist in shifting the onus for inclusive education from parents to schools. Collaboration between schools and families is key to facilitating the best possible outcomes for students with disability. Families can provide valuable insights into the individual needs of their children, and how to support them to perform at their best. This presents a unique opportunity for teachers to be able to make adjustments that will facilitate effective engagement and learning (Dickinson et al., 2021).

Supported teachers

Challenges

A gap exists in the literature related to teachers' experiences of remote teaching of students with disability during COVID-19 restrictions. Generally, staff training is imperative to ensure the establishment of inclusive learning environments (United Nations, 2016). In Catholic education systems, principles of Catholic Social Teaching align with inclusive education principles in their focus on preferential options for those vulnerable to marginalisation and attention to participation of all people in society (Catholic Social Services Australia, 2020). While the pandemic was an unexpected, sudden event, a lack of professional development focusing on inclusion was evident prior to 2020 (Australian Government, 2020).

Staff training is also important to enable teachers to use different technologies that align with learning objectives and students' digital literacy level (Ames et al., 2021). This need for training is evident in non-remote learning settings too, as pre-pandemic research has highlighted the need to increase the impact of teachers' technology use (Ertmer & Ottenbreit-Leftwich, 2010; Heitink et al., 2017). The existing need for training was exacerbated by the unexpectedness of the COVID-19 pandemic, as the majority of education staff were not prepared to teach remotely (Cowden et al., 2020). As a result, anecdotal evidence highlights teachers' impacted work-life balance (Beattie et al., 2021) and increased workload, with reports of teachers from some non-government schools experiencing increased expectations from school leadership to "keep fee-paying parents happy" (Armitage & Loukomitis, 2020, p. 9).

Benefits and opportunities

Some teachers reported feeling energised by new teaching approaches and being more capable and adaptable than they had anticipated (Armitage & Loukomitis, 2020). Such positive experiences with remote learning appear to be associated with existing use of technology in schools, a strong focus on professional development within the school and clearly communicated expectations from school leadership to manage teachers' workload (Armitage & Loukomitis, 2020). The importance of school leadership was also reported by Ewing and Cooper (2021), with a Year 2 teacher stating that her principal "was very active in 'setting the tone'. From the 'get go' it was important that we had high expectations from the students, so that they could see that we were taking their learning during this time seriously" (p. 7).

Opportunities therefore include strong leadership support for teachers to facilitate student engagement and a culture of high expectations of all students. In addition, ongoing training and support is required for teachers to develop "technological pedagogical content knowledge" (Mishra & Koehler, 2006, p. 1026) to ensure effective use of technology (Beattie et al., 2021; Brown et al., 2020) and implementation of inclusive, flexible teaching practices discussed above. School leaders play an important role in setting the tone and expectations, facilitating effective professional development and ensuring teachers are well-prepared and well-supported.

Effective transitions

Challenges

There is mixed evidence of effective transitions of students with disability returning to onsite learning. Transition support is required for students with disability under GC4 (United Nations, 2016) and the Disability Standards for Education (Cth). This support is especially important for students with autism, for whom challenges with transitions and associated anxiety are common characteristics (Bruck et al., 2021). During the Australian COVID-19 response, periods of remote learning were interchanged with onsite learning for some or all students, depending on restrictions in different states and territories. Parents reported a lack of clarity related to whether their child with disability was allowed to attend school (ACD & Amaze, 2020). Gatekeeping practices by some schools further restricted eligible students with autism from returning to school (Amaze, 2020; Pellicano et al., 2020) or encouraged parents to enrol their child with autism at a special school during remote learning instead (Dickinson et al., 2020).

Research on transitioning back to school has focused predominantly on students with autism. When restrictions eased, transitions were challenging for some students with autism; one parent described her son's difficulty coping with changing social rules, for example when students were required

to socially distance in class but were simultaneously encouraged to play contact sports (Pellicano et al., 2020). An increase in autism-related behaviours may further complicate transitions back to school. A Japanese study showed no difference in stress levels between children with and without autism but indicated that "children with ASD experienced increased restricted and repetitive behaviors and became more frustrated by a change in their schedules and handwashing during the COVID-19 pandemic" (Hosokawa et al., 2021, p. 294). In America, special education teachers reported that COVID-restrictions, including remote learning, reduced their ability to work on behavioural and social goals with students with autism (Hurwitz et al., 2021). This may lead to heightened anxiety when these students "are expected to refocus on social performance" (p. 9) upon their return to school, with schools needing to anticipate and plan for "increases in externalizing behaviors associated with anxiety like aggression and defiance" (p. 9).

While transition difficulties have become increasingly clear throughout the pandemic, Bruck et al. (2021) report that highly variable transition supports existed between schools pre-pandemic. Similarly, the Australian Government (2020) advocates for stronger transition support as part of the Disability Standards for Education.

Benefits and opportunities

Positive experiences with transitioning back to school after periods of remote learning included prioritisation of students with disability to return, video calls from teachers showing the changed classroom in combination with social stories for all students in class, phased returns to onsite learning (i.e., building up the number of days), teacher aide support upon students' return to school, and allowing siblings of students with disability and other small groups of children to attend school (Amaze, 2020; ACD & Amaze, 2020; Armitage & Loukomitis, 2020). Parents indicated that small-group learning enabled educators to provide additional behavioural support to mitigate increased behavioural challenges developed during remote learning (Amaze, 2020).

Therefore, opportunities for schools include proactively inviting students with disability to return to school (ACD & Amaze, 2020), and acknowledging the additional time students with disability may need to adjust to onsite learning (Brown et al., 2020). Literature on transitions for students with autism further emphasises the importance of student involvement in transition planning (Marsh et al., 2017; Nuske et al., 2019), with self-identified goals and monitoring of progress contributing to reduced anxiety and increased self-determination (Webster et al., 2017).

Transitions after periods of remote learning should include an assessment of students' learning progress, and wellbeing (Brown et al., 2020), and increased mental health support (Amaze, 2020). In addition, while transitions to school were phased to minimise health risks, a return to school should prioritise "the development of health literacy designed to help students build the core knowledge and skills required to understand and apply health information" (Mann et al., 2021, p. 449).





What can schools do?

As states and territories in Australia transition students from remote learning back into the classroom it is important to consider the impact COVID-19-related restrictions have had on the learning experience of all students, including those with disability, and to ensure that a structured and considered transition is planned. Literature featuring return to school strategies is still emerging, particularly for students with disability; however, this review presents some preliminary findings and recommendations to support students' transition back to school. In addition, the review identifies opportunities for schools to implement strategies that contribute to inclusive learning experiences of students with disability during remote learning as well as upon returning to the physical classroom. These strategies relating to health literacy, inclusive teaching and learning, school connectedness, home-school partnerships, teacher capacity and student-centred transitions are presented below.

Promote health literacy

As COVID-19 remains active in the community, there is an opportunity for schools to promote health literacy, including mental health and wellbeing, among students. Inclusive health education ensures that all students, including those with developmental and/or intellectual disabilities, develop the required knowledge to allow them to understand health information and take appropriate action to safeguard their physical and mental health.

Inclusive health education is characterised by:

- **development and monitoring of health management plans**
Such plans should be grounded in collaboration between families and school-based health representatives (such as allied health staff) to identify specific health risks for students with disability. Plans are to be developed through consultation with students and their families, and include a focus on how these prevention plans will be implemented and, if required, adapted.
- **incorporation of health literacy concepts as classroom teaching priorities**
This develops students' knowledge and skills in understanding and acting on health information. Inclusive strategies such as using visual supports, social stories and checking students' understanding contribute to accessibility of teaching.
- **safe classroom and remote learning environments**
A review of safety policies and procedures should ensure that all learning spaces comply with security and health requirements or that adjustments can be made. Safety relates to physical safety, but also includes providing learning environments that safeguards students' wellbeing.
- **broad health literacy messaging for the whole school community**
Established communication pathways ensure that the latest health requirements are communicated and that existing practices are reaffirmed. Such communication is offered through multiple modalities, such as video, written text and using visual supports. Feedback is sought from the school community to ensure that all members of the community can access and understand health information.



Embed inclusive practices into teaching and learning

School leaders and teachers face ongoing work to embed inclusive practices into teaching and learning. Studies conducted during periods of remote learning have highlighted the lack of accessibility of teaching and learning, with limited differentiation and limited consultation with students and families. This lack of accessibility impacted on students' inclusion as they could not participate in activities with their peers. As these findings align with those raised in broader, pre-pandemic studies on inclusive education, there is an imperative for schools to ensure all students can experience inclusive teaching and learning.

Inclusive teaching and learning can be established by:

- **implementing Universal Design for Learning principles**
Offering students learning opportunities through multiple modalities can be facilitated by providing choices, and through the use of technology and other assistive devices. Teachers' and students' technology skills, as developed through periods of remote learning, can be leveraged to provide students with the option of accessing curriculum, instruction and lesson materials in various forms.
- **differentiating and adjusting instruction, lesson materials, activities, and assessment**
Differentiation and implementation of reasonable adjustments help ensure that teaching, learning and assessment are suitable for all students. While differentiation and adjustments are required under the Australian Professional Teaching Standards (AITSL,

2017) and the Disability Standards for Education 2005 (Cth), pre-pandemic research as well as findings from periods of remote learning indicate that a lack of differentiation and adjustments impacted on students' ability to access and engage with learning. Students with disability are likely to continue to experience periods of school absence due to contracting COVID-19 or because co-morbidities dictate home schooling while COVID-19 is transmitted. Therefore, a stronger focus on differentiation and reasonable adjustments is required to ensure that these students can progress their learning.

- **continuous consultation with students and their families about Individual Education Plans**

Reports on remote learning highlighted a lack of IEPs or, if IEPs were in place, a lack of adjustment to plans as students' circumstances and support requirements changed. Consultation helps ensure that IEPs are up to date and that there is a shared understanding of required support and learning goals between schools, students and families.

- **establishing multi-disciplinary partnerships**

Collaboration with internal and external support staff is important to provide continuity of learning for students with disability. During periods of remote learning, students and families reported a reduction in support provided by internal and external support staff, which impacted on students' learning progress and wellbeing. Strong multi-disciplinary partnerships ensure that a shared understanding exists of students' support requirements. All partners, including allied health staff, teachers, students and their families, should understand the goals of collaboration and systematically monitor progress towards these goals.



- **establishing predictable routines with clear objectives and positive expectations**

Upon transitioning back to school, students with disability need to adjust to a changed learning environment where different rules may apply to before the pandemic. In addition, teachers may be absent due to isolation requirements. Predictable routines help students know what is expected of them, and communication of these routines to relief staff helps ensure consistency of expectations relating to schedules and classroom behaviour.

- **implementing teaching strategies that promote social emotional learning**

During periods of remote learning, students reported feeling isolated and experienced decreased wellbeing. Embedding social emotional learning into everyday teaching helps build students' emotional and social capabilities and can increase academic outcomes as well as improve mental health and engagement. Collaborative learning is one such strategy, enabling students to work with peers while developing and applying social emotional competencies. To ensure students can participate meaningfully in collaborative learning, explicit instruction in social skills and behavioural expectations in group work may be required. Such guidance may be required to support and respond to student behaviour in whole class, small group and individual instruction settings

Strengthen school connectedness

As students with disability experienced social isolation and reduced school connectedness and wellbeing during periods of remote learning, there is an opportunity for teachers to design learning environments that strengthen school connectedness.

Such learning environments are characterised by:

- **active learning strategies to encourage students to become active participants in learning**

Active learners are involved in setting learning goals and success criteria, engage in learning with their peers, are given frequent opportunities to respond during learning activities, and receive regular constructive feedback.

- **inclusion in everyday learning activities**

This involves having access to the same learning opportunities as peers, meaningful engagement with similar-aged peers, and knowing how to access support if required. Students with disability who are segregated from their peers through placement in a special unit, or who usually sit beside a teaching assistant to do their work, may not be provided with sufficient opportunity to meaningfully engage with their peers. This lack of opportunity can exacerbate feelings of social isolation and negatively impact on mental health and wellbeing.



- **strong teacher-student relationships**

Teachers actively invest in developing relationships with all students. This requires teachers to develop a deep understanding of students' interests, learning strengths and challenges, as well as required support. This understanding helps teachers to plan and implement accessible learning opportunities that align with students' interests.

- **opportunities for social interaction**

Students with disability benefit from social interaction, although for some students unstructured social interaction such as that taking place on playgrounds or during sports days can lead to increased anxiety. Schools need to consider their student population and use this knowledge to develop appropriate opportunities for social interaction. Opportunities could include cross-age lunch clubs with structured activities, or unstructured events with scaffolding for students who require additional support.

- **the use of technology to maintain connectedness**

The use of technology for communication with teachers and peers had a positive effect on some students with disability during remote learning. Continued use of technology to connect with teachers and peers can support students with disability to engage in learning-related and social interaction, with a return to face-to-face learning. As students and teachers are likely to continue experience occasional periods of remote learning due to illness or isolation requirements, technology-based communication helps ensure continuation of engagement and school connectedness.

- **active monitoring of students' socialisation, mental health and wellbeing**

Monitoring informs strategies to increase awareness of mental health implications of the pandemic, as well as lead to the establishment of transparent pathways for teachers, students or families seeking support for students' mental health. This can take place formally through internal data collection and informally via teacher, parent, and student report. Such monitoring should continue through transition periods and longitudinally, incorporate the school context and relate to students' families and their internal wellbeing. Where required, functional behaviour assessments can determine why challenging behaviours occur and to identify appropriate support.

Develop strong home-school partnerships

Parents and students expressed a desire for stronger home-school partnerships during periods of remote learning. As the need for stronger partnerships has also been emphasised in reviews of inclusive education pre-pandemic, it is important that schools take the opportunity as part of their review and planning cycle, to prioritise the strengthening of relationships with students and families.

Strong home-school partnerships are characterised by:

- **active consultation of schools with students and their families**

The Disability Standards for Education require that schools consult with students or their parents/carers about adjustments that the student receives. Student Support Groups or



'the team around the student' (AITSL, 2020) provide a mechanism to consult with students about their accessible learning requirements, and to monitor student learning. Consultation includes collaborative goal setting, determining and adjusting support requirements and celebrating student success. Consultation can be facilitated by building open communication channels between schools and families, and ensuring regular check-ins with families to share examples of success in proportion to challenges (National Center on Intensive Intervention et al., 2021).

- **a deep understanding of the socioeconomic and family context that shapes students' lives**

The pandemic has not affected all students equally, with negative learning outcomes and limited accessibility exacerbated by students' socioeconomic status or trauma background. Schools need this knowledge to inform personalised student support. Conversations with students and collaboration with families will help schools ascertain how personal factors resulting from COVID-19 (such as illness, changes to family routines or structure) may have impacted students' academic performance or health and wellbeing needs. Support required could include family check-ins, adjusted learning materials for periods of home learning, and address students' physical and psychological safety.

Support teachers' capacity to teach inclusively

The gaps in differentiation and student support as identified pre-pandemic and during periods of remote learning have

highlighted the need for increased teacher skills and capabilities in inclusive practices, as well as reinforcing the lack of support provided to many teachers.

Development of teachers' skills and capacity can be enabled by:

- **professional learning**

School leaders have an important role in ensuring teachers can access appropriate professional learning and then implement learned skills. Professional development could focus on differentiation, UDL strategies, adjusting instruction, lesson activities and assessment tasks, and the use of technology to promote learning and student engagement.

- **collaboration among teachers to share successful practices in inclusive teaching strategies**

Sharing knowledge of individual students or characteristics of disability can support colleagues in differentiation and making reasonable adjustments. Upon transitioning back to school, teachers can share successful strategies they implemented during periods of remote learning to ensure students with disability do not experience future disruption in their support.

- **collaboration between teachers and support staff**

A return to face-to-face learning provides an opportunity for teachers to purposefully plan the deployment of support staff in their classrooms. Sharing in-depth knowledge of student characteristics and learning progress, as developed by both teacher and support staff during the pandemic, can be used to plan appropriate support. School leaders and systems need to provide for this planning to occur, so that in-class and school-level support is intentional, rather than ad-hoc.



- **monitoring teacher wellbeing**

Teachers' workload increased during periods of remote learning, and support between colleagues and friends became difficult to sustain. This had negative impacts on wellbeing. School leaders should monitor teacher wellbeing formally and informally, and provide opportunities for teachers to reconnect with others.

Take a student-centred approach to transitions

Transitioning to remote learning and back to face-to-face learning can be highly stressful events for students with disability, especially when a return to face-to-face learning includes transitioning to a different year level or educational facility, such as from primary to high school. A student-centred approach to transitions ensures that students' preferences are considered, and support requirements are tailored to minimise stress and disruption.

Examples of student-centred approaches to transitions are:

- **consulting students and families while developing transition plans**

For some students with disability, consultations may include visual supports, or be conducted through activities other than a formal conversation. Consultations may also have to take place over multiple occasions.

- **maintaining a focus on continuity and consistency upon return to face-to-face learning**

Continuity of learning can be achieved by celebrating students' success during periods of remote learning. Success

experienced by students in areas of academic outcomes, social development or the acquisition of new skills can be used as a foundation upon which to build future learning opportunities. Consistency can be achieved by developing a deep understanding of student characteristics, routines and learning preferences during periods of remote learning. For example, some students with disability preferred flexible timetabling, enabling them to work at their own pace and time of day. Other students needed more routine. A student-centred approach to transitions ensures that students' individual preferences are considered.

- **developing strategies for students to manage uncertainty**

Students' learning experiences may continue to be disrupted due to unexpected staff changes, or due to larger transitions such as the change from primary school to secondary school. While strategies such as implementing consistent routines can facilitate transitions, disruptions can hinder the implementation of such strategies. Schools can address disruption by supporting students to acknowledge and manage periods of uncertainty to the best of their ability.

Key messages

- A strong foundation of accessibility, supplemented with reasonable adjustments to pedagogy, learning and assessment, is key to ensuring students with disability have equal opportunity to learn and thrive.
- The gaps in support for students with disability, as experienced during periods of remote learning, reflect the gaps that have been reported in pre-pandemic reviews of inclusive education practices in Australia. Schools have work to do to ensure a solid foundation of accessibility and support structures for students with disability that can be maintained in the event of a crisis.
- Recognising that teacher professional development in inclusive practices is associated with more positive teacher attitudes and increased self-efficacy and skill, systems and schools need to identify and address gaps in teacher preparedness and skills to deliver the curriculum for students with disability, both during face-to-face learning and during periods of disruption.
- Frameworks for inclusion and principles of Catholic Social Teaching endorse a system- and school-wide approach to inclusion, replacing ad-hoc strategies for specific students with disability. A strong focus on inclusion leads to more flexible forms of learning delivery and support for all students.
- The COVID-19 pandemic has brought to the fore the potential of remote mechanisms to support mental health, social and emotional learning and academic learning of all students. When implemented purposefully and with fidelity, such mechanisms can supplement face-to-face teaching and safeguard student outcomes during periods of disruption.



References

- Amaze. (2020). *Learning in lockdown: Results from Amaze's Term 3 School Experience Survey*. <https://www.amaze.org.au/wp-content/uploads/2020/09/Amaze-Learning-in-Lockdown-Report-Term-3-Sept-2020.pdf>
- Amaze, & Association for Children with a Disability (ACD). (2020). *Victorian students with disability during COVID-19 disruptions to schooling*. <https://www.amaze.org.au/wp-content/uploads/2020/08/Reflections-on-learnings-on-schooling-during-COVID-19-Amaze-and-ACD-Aug.pdf>
- American Psychiatric Association (APA). (2013). *Diagnostic and Statistical Manual of Mental Disorders*, 5th Edition: DSM-5.
- Ames, K., Harris, L. R., Dargusch, J., & Bloomfield, C. (2021). 'So you can make it fast or make it up': K-12 teachers' perspectives on technology's affordances and constraints when supporting distance education learning. *Australian Educational Researcher*, 48(2), 359-376. <https://doi.org/10.1007/s13384-020-00395-8>
- Armitage, J., & Loukomitis, S. (2020). *Remote and flexible learning. Qualitative research*. <https://www.education.vic.gov.au/Documents/about/department/covid-19/remote-and-flexible-learning-qualitative-research.pdf>
- Association for Children with a Disability (ACD) & Amaze. (2020). *Reflections & learnings on schooling during COVID-19 for students with disability*. <https://www.amaze.org.au/wp-content/uploads/2020/07/Reflections-on-remote-flexible-schooling-during-COVID-19-Amaze-and-ACD-June-2020.pdf>
- Australian Government. (2020). *Final Report of the 2020 Review of the Disability Standards for Education 2005*. <https://www.dese.gov.au/disability-standards-education-2005/2020-review-disability-standards-education-2005/final-report>
- Australian Institute for Teaching and School Leadership (AITSL). (2017). *Australian Professional Standards for Teachers*. <https://www.aitsl.edu.au/teach/standards>
- Australian Institute for Teaching and School Leadership (AITSL). (2020). *Inclusive education: Teaching students with disability*. <https://www.aitsl.edu.au/research/spotlights/inclusive-education-teaching-students-with-disability>
- Beattie, M., Wilson, C., & Hendry, G. (2021). Learning from Lockdown: Examining Scottish primary teachers' experiences of emergency remote teaching. *British Journal of Educational Studies*, 00(00), 1-18. <https://doi.org/10.1080/00071005.2021.1915958>
- Brown, N., te Riele, K., Shelley, B., & Woodroffe, J. (2020). *Learning at home during COVID-19: Effects on vulnerable young Australians. Independent Rapid Response Report*. (Vol. 1). https://www.utas.edu.au/_data/assets/pdf_file/0008/1324268/Learning-at-home-during-COVID-19-updated.pdf
- Bruck, S., Webster, A. A., & Clark, T. (2021). Transition support for students on the autism spectrum: a multiple stakeholder perspective. *Journal of Research in Special Educational Needs*. <https://doi.org/10.1111/1471-3802.12509>
- Catholic Schools New South Wales. (2020). *Catholic Schools NSW Submission 2020 Review of the Disability Standards for Education*. <https://www.dese.gov.au/system/files/documents/submission-file/2021-02/Submission%20-%20Catholic%20Schools%20NSW.pdf>
- Catholic Social Services Australia. (2020). *Catholic Social Teaching*. <https://cssa.org.au/catholic-social-teaching>
- The Centre for Inclusive Education. (2020). *Submission in response to the 2020 Review of the Disability Standards for Education 2005*. <https://research.qut.edu.au/c4ie/wp-content/uploads/sites/281/2020/09/The-Centre-for-Inclusive-Education-QUT-2020-Review-of-the-DSE-2005.pdf>
- Clare, C. W., Wong, S. W., Lo, F. S., So, R. C., & Chan, D. F. (2018). Study protocol: a randomized controlled trial study on the effect of a game-based exercise training program on promoting physical fitness and mental health in children with autism spectrum disorder. *BMC Psychiatry*, 18(1), 1-10. <https://doi.org/10.1186/s12888-018-1635-9>
- Cologon, K., & Lassig, C. (2020). Universal approaches to curriculum, pedagogy and assessment. In L. J. Graham (Ed.), *Inclusive education for the 21st Century: Theory, policy and practice* (pp. 179-207). Allen & Unwin.
- Colton, J. (2021). Digital technologies and inclusive literacy teaching: A response. *Literacy Learning: The Middle Years*, 29(1), 7-13. <https://search.informit.org/doi/abs/10.3316/informit.668551027370668>

- Commonwealth of Australia. (2016). *Access to real learning: The impact of policy, funding and culture on students with disability*. https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Education_and_Employment/students_with_disability/Report
- Cowden, G., Mitchell, P., & Taylor-Guy, P. (2020). *Remote learning. Rapid literature review*. <https://doi.org/https://doi.org/10.37517/978-1-74286-610-9>
- Cumming, T. M., & Strnadová, I. (2020). Tablet devices for students with disability in the inclusive classroom. In *Assistive technology to support inclusive education* (Vol. 14, pp. 93–107). Emerald Publishing Limited. <https://doi.org/10.1108/s1479-36362020000014009>
- de Bruin, C. L., Graham, L. J., & Gallagher, J. (2020). What is the NCCD and what does it mean for my practice? In L. J. Graham (Ed.), *Inclusive education for the 21st century: Theory, policy and practice* (pp. 122–155). Routledge. <https://doi.org/10.4324/9781003116073-8>
- Deloitte Access Economics. (2017). *Review of education for students with disability in Queensland state schools*. <https://education.qld.gov.au/student/Documents/disability-review-report.pdf>
- Dickinson, H., Smith, C., Yates, S., & Bertuol, M. (2020). *Not even remotely fair: Experiences of students with disability during COVID-19*. Children and Young People with Disability Australia (CYDA). https://www.cyda.org.au/images/pdf/not_even_remotely_fair_cyda_education_report.pdf
- Dickinson, H., Smith, C., Yates, S., & Tani, M. (2021). The importance of social supports in education: Survey findings from students with disability and their families during COVID-19. *Disability & Society*, 1–23. <https://doi.org/10.1080/09687599.2021.1994371>
- Disability Standards for Education [DSE]. (2005). <https://www.legislation.gov.au/Details/F2005L00767>
- Education Council. (2019). Alice Springs (Mparntwe) Education Declaration. <https://docs.education.gov.au/documents/alice-springs-mparntwe-education-declaration>
- Education Services Australia. (2022). Nationally Consistent Collection of Data on School Students with Disability: 2022 Guidelines. <https://www.nccd.edu.au/sites/default/files/2022%20NCCD%20Guidelines-final-revised-2.pdf>
- Ertmer, P. A., & Ottenbreit-Leftwich, A. T. (2010). Teacher technology change: How knowledge, confidence, beliefs, and culture intersect. *Journal of Research on Technology in Education*, 42(3), 255–284. <https://doi.org/10.1080/15391523.2010.10782551>
- Ewing, L. A., & Cooper, H. B. (2021). Technology-enabled remote learning during Covid-19: perspectives of Australian teachers, students and parents. *Technology, Pedagogy and Education*, 30(1), 41–57. <https://doi.org/10.1080/1475939X.2020.1868562>
- Gore, J., Fray, L., Miller, D., Harris, J., & Taggart, W. (2020). *Evaluating the impact of COVID-19 on NSW schools*. Teachers & Teaching Research Centre. https://www.newcastle.edu.au/_data/assets/pdf_file/0008/704924/Evaluating-the-impact-of-COVID-19-on-NSW-schools.pdf
- Graham, L. J., Medhurst, M., Tancredi, H., Spandagou, I., & Walton, E. (2020). Fundamental concepts of inclusive education. In L. J. Graham (Ed.), *Inclusive education for the 21st Century: Theory, policy and practice* (pp. 27–54). Routledge. <https://doi.org/10.4324/9781003116073-3>
- Heitink, M., Voogt, J., Fisser, P., Verplanken, L., & van Braak, J. (2017). Eliciting teachers' technological pedagogical knowledge. *Australasian Journal of Educational Technology*, 33(3), 96–109. <https://doi.org/10.14742/ajet.3505>
- Hosokawa, R., Kawabe, K., Nakachi, K., Yoshino, A., Horiuchi, F., & Ueno, S. (2021). Behavioral affect in children with autism spectrum disorder during school closures due to the COVID-19 pandemic in Japan: A case-controlled study. *Developmental Neuropsychology*, 46(4), 288–297. <https://doi.org/10.1080/87565641.2021.1939350>
- Hurwitz, S., Garman-McClaine, B., & Carlock, K. (2021). Special education for students with autism during the COVID-19 pandemic: "Each day brings new challenges." *Autism*, 26(4), 889–899. <https://doi.org/10.1177/13623613211035935>
- Main, S., O'Rourke, J., Morris, J., & Dunjey, H. (2016). Focus on the journey, not the destination: Digital games and students with disability. *Issues in Educational Research*, 26(2), 298–314. <https://www.iier.org.au/iier26/main.pdf>
- Mann, M. J., Smith, M. L., Kristjansson, A. L., Daily, S., McDowell, S., & Traywick, P. (2021). Our children are not "behind" due to the COVID-19 pandemic, but our institutional response might be. *Journal of School Health*, 91, 447–450. <https://doi.org/10.1111/josh.13016>

- Marella, M., Smith, F., Logam, L., Smith, C., Harrison, M., Devine, A., & Gibbs, L. (2020). *Submission to the Victorian Government's Response to the COVID-19 Pandemic: Impact of remote learning on families of students with disability in Victoria*. https://www.parliament.vic.gov.au/images/stories/committees/paec/COVID-19_Inquiry/Submissions/51a_Melbourne_School_of_Population_and_Global_Health_and_Melbourne_Graduate_School_of_Education_The_University_of_Melbourne.pdf
- Marsh, A., Spagnol, V., Grove, R., & Eapen, V. (2017). Transition to school for children with autism spectrum disorder: A systematic review. *World Journal of Psychiatry, 7*(3), 184–196. <https://doi.org/10.5498/wjp.v7.i3.184>
- McCorkell, L., & Lobo, L. (2021). Learning in lockdown: A small-scale qualitative study exploring the experiences of autistic young people in Scotland. *Educational and Child Psychology, Vol. 38*, pp. 75–89. <https://eric.ed.gov/?id=EJ1310159>
- Mete Yesil, A., Sencan, B., Omercioglu, E., & Ozmert, E. N. (2021). The Impact of the COVID-19 pandemic on children with special needs: A descriptive study. *Clinical Pediatrics, 61*(2), 141–149. <https://doi.org/10.1177/00099228211050223>
- Mishra, P., & Koehler, M. J. (2006). Technological Pedagogical Content Knowledge: A Framework for teacher knowledge. *Teachers College Record, 108*(6), 1017–1054. <https://doi.org/10.1111/j.1467-9620.2006.00684.x>
- Morando-Rhim, L., & Ekin, S. (2021). *How has the pandemic affected students with disabilities? A review of the evidence to date*. Center on Reinventing Public Education. <https://files.eric.ed.gov/fulltext/ED615189.pdf>
- National Center on Intensive Intervention (NCII), Center on Positive Behavioral Interventions and Supports, & Integrated Multi-Tiered Systems of Support Research Network. (2021). *Returning to school: Considerations for students with the most intensive behavioral needs. A guide to supporting students with disabilities, their families, and educators during the 2020–21 school year*. University of Oregon. <http://files.eric.ed.gov/fulltext/ED613480.pdf>
- New South Wales Audit Office. (2016). *Supporting students with disability in NSW public schools*. Audit Office of New South Wales. https://www.audit.nsw.gov.au/sites/default/files/pdf-downloads/2016_May_Report_Supporting_students_with_disability_in_NSW_public_schools.pdf
- Nuske, H. J., McGhee Hassrick, E., Bronstein, B., Hauptman, L., Aponte, C., Levato, L., Stahmer, A., Mandell, D., Mundy, P., Kasari, C., & Smith, T. (2019). Broken bridges—new school transitions for students with autism spectrum disorder: A systematic review on difficulties and strategies for success. *Autism, 23*(2), 306–325. <https://doi.org/10.1177/1362361318754529>
- Page, A., Charteris, J., Anderson, J., & Boyle, C. (2021). Fostering school connectedness online for students with diverse learning needs: inclusive education in Australia during the COVID-19 pandemic. *European Journal of Special Needs Education, 36*(1), 142–156. <https://doi.org/10.1080/08856257.2021.1872842>
- Pellicano, L., Brett, S., Den Houting, J., Heyworth, M., Iliana, M., Steward, R., Urbanowicz, A., & Stears, M. (2020). *"I want to see my friends": the everyday experiences of autistic people and their families during COVID-19*. University of Sydney. <https://www.sydney.edu.au/content/dam/corporate/documents/sydney-policy-lab/everyday-experiences-of-autistic-people-during-covid-19-report-july-2020.pdf>
- Renshaw, L., & Goodhue, R. (2021). *It's not our difference that is the disability: Impact of COVID-19 in Australia on children and young people with disability, and their families*. Report prepared by ARACY for the Australian Government Department of Social Services. ARACY. https://www.aracy.org.au/publications-resources/command/download_file/id/444/filename/COVID-19_and_children_&_young_people_with_disability_July_2021_ARACY_FINAL.pdf
- Royal Commission into Violence, Abuse, Neglect and Exploitation of People with Disability. (2021). *Public Hearing Report. Public hearing 7: Barriers experienced by students with disability in accessing and obtaining a safe, quality and inclusive school education and consequent life course impacts*. <https://disability.royalcommission.gov.au/publications/report-public-hearing-7-barriers-experienced-students-disability-accessing-and-obtaining-safe-quality-and-inclusive-school-education-and-consequent-life-course-impacts>

- Smith, C., Tani, M., Yates, S., & Dickinson, H. (2022). Successful school interventions for students with disability during Covid-19: Empirical evidence from Australia. *Asia-Pacific Education Researcher*. <https://doi.org/10.1007/s40299-022-00659-0>
- United Nations. (2016). General comment No. 4 (2016), Article 24: Right to inclusive education. *UN Committee on the Rights of Persons with Disabilities (CRPD)*, (September), 1–24. <http://www.refworld.org/docid/57c977e34.html>
- Webster, A., Cumming, J., & Rowland, S. (2017). Developing effective transition plans. In *Empowering parents of children with Autism Spectrum Disorder* (pp. 155–182). https://doi.org/10.1007/978-981-10-2084-1_9